

May 2015

Contrasting Perceptions of Motivation to Change: Clinicians and Substance Abuse Clients

Arthur Tabrizi

University of Nevada, Las Vegas, art@tabriziart.com

Follow this and additional works at: <https://digitalscholarship.unlv.edu/thesedissertations>

 Part of the [Psychology Commons](#), and the [Social Work Commons](#)

Repository Citation

Tabrizi, Arthur, "Contrasting Perceptions of Motivation to Change: Clinicians and Substance Abuse Clients" (2015). *UNLV Theses, Dissertations, Professional Papers, and Capstones*. 2436.

<https://digitalscholarship.unlv.edu/thesedissertations/2436>

This Thesis is brought to you for free and open access by Digital Scholarship@UNLV. It has been accepted for inclusion in UNLV Theses, Dissertations, Professional Papers, and Capstones by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.

CONTRASTING PERCEPTIONS OF MOTIVATION TO CHANGE: CLINICIANS
AND SUBSTANCE-ABUSE CLIENTS

By

Arthur Tabrizi

Bachelor of Arts in Psychology
University of Nevada, Las Vegas

2010

A thesis submitted in partial fulfillment of the requirements for the

Master of Social Work

School of Social Work

Greenspun College of Urban Affairs

The Graduate College

University of Nevada, Las Vegas

May 2015

Copyright by Arthur Tabrizi, 2015



We recommend the thesis prepared under our supervision by

Arthur Tabrizi

entitled

Contrasting Perceptions of Change: Clinicians and Substance Abuse Clients

is approved in partial fulfillment of the requirements for the degree of

Master of Social Work

School of Social Work

An-Pyung Sun, Ph.D., Committee Chair

William M. Epstein, Ph.D., Committee Member

Kathleen Bergquist, Ph.D., Committee Member

Chih-Hsiang Ho, Ph.D., Graduate College Representative

Kathryn Hausbeck Korgan, Ph.D., Associate Dean of the Graduate College

May 2015

Abstract

Substance abuse persists as one of the most costly, prevalent, and damaging health problems in the United States. As of 2012, an estimated 22 million individuals, approximately 8.9 percent of the total population, were diagnosed with substance abuse or dependence disorder. Considering the significant number of clients served, successful national completion rates among individuals utilizing outpatient care remain markedly low. In the state of Nevada, where the present study is conducted, successful intensive outpatient treatment (IOP) completion rate remains at an alarmingly low 20.1 percent. Early dropout is a particular concern in that duration of participation in treatment has been a reliable clinical and statistical predictor of positive treatment outcome. A myriad of factors including erosion of the therapeutic alliance between client and clinician, heterogeneity of client characteristics, and inadequate assessment are among factors that contribute to noncompliance with established treatment goals and premature termination. The extent to which external factors that hasten ingress to substance abuse treatment are perceived as coercive and diminish motivation has not been fully realized in empirical discourse.

Informed by the theoretical underpinnings of the self-determination theory (SDT), the present study aims to examine perceptions of motivation, readiness, and external coercive circumstances that trigger substance use treatment entry among clients seeking substance use treatment under legal coercion (criminal), formal/informal coercion (non-criminal), those seeking substance use treatment voluntarily and their respective clinicians during the initial stages of treatment in outpatient treatment settings. The study will test the hypothesis: That a significant divergence exists between clinicians' overall motivational

ratings of clients who enter treatment under criminal legal coercion, non-criminal formal and informal coercion, and clients' own ratings, as contrasted with ratings of voluntary groups. Utilizing convenience sampling, a total of 63 clients and 15 clinicians were recruited to participate in the study. One-way between subjects analysis of variance (ANOVA) were conducted to compare the effect of clients' as well as clinicians' perceptions of circumstances, motivation, and readiness in seeking treatment. Paired-samples t-tests were conducted to compare the clinicians' and clients aggregate scores for the circumstance, motivation, and readiness scores. Key outcome of the study supports the hypothesis that a significant disparity, as measured by the aggregate scores on the CMR, appears to exist in levels of perceived motivation between client and clinician groups. The finding does not support the sub-hypothesis that clinicians perceive voluntary groups as being more motivated than those seeking treatment under various forms social or legal of coercion. Whereas analyses of sub dimensions of the scale suggest a significant effect in clinicians' ratings of the readiness dimension between voluntary and (non-criminal) formal/informal coercion group, the clinicians and client groups did not differ in their appraisal of the circumstances dimensions.

The convergence of findings supports the major hypothesis and suggests that clinicians' overall assessments are consistently incongruent with clients' own perspectives.

Outcomes are congruent with SDT, which proposes that external pressures are not necessarily antagonistic to internal motivation—rather, external controls can differ in the extent to which they are perceived as self-determined, vis-à-vis controlled, depending on the degree to which they may be internalized by the individual. Research in this field must evolve in order to facilitate empirical examinations of the reciprocity between

internal and external pressures on treatment motivation, retention, and outcomes while making a concerted effort to withdraw from rendering generalizations strictly on the basis of referral source.

Keywords: perception, motivation, coercion, substance use, clients, clinicians

Table of Contents

Chapter 1: Introduction.....	1
Chapter2: Literature Review.....	4
2.1: Coercion.....	4
2.2: Motivation—A Theoretical Perspective.....	11
2.3: Comparative Studies.....	19
2.4: Treatment Expectations.....	23
2.5: Therapeutic Alliance.....	25
Therapeutic Alliance in Group Therapy.....	31
2.6: Organizational Context.....	33
Chapter 3: Rationale of the study.....	38
3.1: Research Question and Hypothesis.....	39
Chapter 4: Methods.....	41
4.1: The Instrument.....	41
4.2: Participants.....	43
4.3: Study Sample.....	45
4.4: Recruitment.....	46
4.5: Data Analysis.....	47
Chapter 5: Results.....	48
Chapter 6: Discussion.....	50
6.1: Overall Motivation.....	50
6.2: Circumstances.....	52
6.3: Readiness.....	55

Chapter 7: Limitations.....	57
Chapter 8: Conclusion.....	59
Appendices.....	63
Appendix 1. Original CMR Scale.....	63
Appendix 2. Modified CMR Scale, Client Version.....	65
Appendix 3. Modified CMR scale, Clinician Version.....	67
Appendix 4. Demographic Questionnaire, Client Version.....	69
Appendix 5. Demographic Questionnaire, Clinician Version.....	71
Appendix 6. Informed Consent, Client Version.....	73
Appendix 7. Informed Consent, Clinician Version.....	75
Appendix 8. Client Demographic Characteristics.....	77
Appendix 9. Clinician Demographic Characteristics.....	80
References.....	82
Curriculum Vitae.....	120

Chapter 1: Introduction

Substance abuse persists as one of the most costly, prevalent, and damaging health problems in the United States. According to the most recent figures, national costs of drug abuse and addiction are in excess of \$510 billion annually (Miller & Hendrie, 2008). The majority of economic expenditures associated with substance abuse are typically incurred through health care, crime, lost productivity, adjudication, and incarceration (National Institute on Drug Abuse, 2012). Economic costs notwithstanding, substance abuse exacts heavy tolls on social conditions including domestic violence, school failure, family disruptions, child abuse and financial adversities (National Institute on Drug Abuse, 2011). Presently, enacted federal spending on substance abuse treatment and treatment research for year 2014 is \$25.2 billion; for year 2015, requested federal spending is in excess of \$25.4 billion (Sacco & Finklea, 2014). According to Substance Abuse and Mental Health Services Administration (SAMHSA), as of 2012, an estimated 22 million individuals, approximately 8.9 percent of the total population, were diagnosed with substance abuse or dependence disorder—among those, 2.8 million relied on alcohol and illicit drugs, 4.5 million relied only on illicit drugs, and 14.9 million relied on alcohol only (2011).

In response to the magnitude and diversity of need to effectively manage the biological, psychological, financial and social costs of substance abuse, three major categories of treatment care have been nationally established and classified as follows: outpatient care, residential (non-hospital) treatment, and hospital inpatient treatment. Each general category is further differentiated by levels of care according to a variety of presenting clinical factors including, but not limited to, acuity, withdrawal potential, need

for medical management, comorbid factors and category of specific substance used. However, community based outpatient care is the exclusive focus of the present study and represents the target treatment category from which participating agencies and subjects were recruited—as such, a brief overview of this particular segment’s relevant client admission, discharge distribution, and service characteristics is presented. Specifically, whereas outpatient care is received by 90 percent of all clients in treatment, its two major subcategories: regular outpatient care and intensive outpatient treatment (IOP) account for 62 percent of the overall treatment services delivered (SAMHSA, 2011). Considering the significant number of clients served, successful national completion rates among individuals utilizing outpatient care remain markedly low. Specifically, in 2011, of those discharged from regular outpatient care, only 37 percent had successfully completed treatment; successful completion from IOP was even lower at 33 percent. In the state of Nevada, where the present study is conducted, although successful completion rate for regular outpatient care (39.4 percent) is comparable to the national average, successful IOP completion rate remains at an alarmingly low 20.1 percent (SAMHSA, 2011).

Despite general consensus about the effectiveness of psychotherapy for a wide range of disorders (eg: Chorpita et al., 2011; Fals-stewart, O’Farrell, Birchler, Cordova, & Kelley, 2005; Graves, 1993; Ryan, Nitsun, Gilbert, & Mason, 2005; Shedler, 2010; Watkins et al, 2011), large percentages of clients fail to benefit from the therapeutic process. The probability of dropout is greatest during the first month of treatment (DeLeon, 1985; Stevens, Radcliffe, Sanders & Hunt, 2008). Early dropout is a particular concern in that duration of participation in treatment has been a reliable clinical and

statistical predictor of positive treatment outcome (Etheridge, Craddock, Hubbard, & Round-Bryant, 1999; Hubbart, Craddock, Flynn, Andrson, & Ethridge, 1997; Simpson, Joe & Rowan-Szai; 1997). Relative to substance abuse, successful treatment completion is a normative process outcome measure in that it reliably forecasts long-term effects in assessing decreased recidivism, readmissions, and criminal activity as well as increased employment and income potential post treatment (Evans, Li, & Hser, 2009; Zarkin, Dunlap, Bray, & Wechsberg, 2002).

A myriad of factors including erosion of the therapeutic alliance between client and clinician, heterogeneity of client characteristics, and inadequate assessment are among factors that contribute to noncompliance with established treatment goals and premature termination (Mash & Hunsley, 1993). Motivational perspectives support the notion that social and psychological controls that promote perceived coercion may affect treatment-seeking behavior in more fundamental ways by subverting motivation and autonomy (Deci & Ryan, 2000). The extent to which external factors that hasten ingress to substance abuse treatment are perceived as coercive and diminish motivation has not been fully realized in empirical discourse.

The present study aims to examine perceptions of motivation, readiness, and external coercive circumstances that trigger substance use treatment entry among clients seeking substance use treatment under legal coercion (criminal), formal/informal coercion (non-criminal), those seeking substance use treatment voluntarily and their respective clinicians during the initial stages of treatment in outpatient treatment settings.

Chapter 2: Literature Review

Ingress to alcohol and drug treatment programs is often hastened by *legal* mandates from the justice system, *formal* directives from social assistance agencies and employers, and *informal* pressures, in form of ultimatums or interventions from family and friends (Klag, O’Callaghan, & Creed, 2005; Storbjork, 2007). Referrals from the criminal justice system have typically comprised a sizeable proportion of treatment seekers utilizing publicly funded programs (Maxwell, 2000). Most recent national data confirm this trend and suggest 40 to 50 percent of referrals to outpatient care are originated by the criminal justice system and close to 30% enter treatment under informal pressure; approximately 25% report entering treatment voluntarily (SAMHSA, 2011).

Motivation is presumed to be integral to the therapeutic process in treatment initiation, conformity with treatment goals, retention (Cahill, Adinoff, Hosig, Muller, & Pilliam, 2003) and reducing harmful behaviors (Dam, Hosman, & Keijsers, 2004). There is emerging evidence that suggest perceptions of the complex synergy between coercion (i.e., external conditions pressuring treatment engagement) and internal motivation (i.e., self-volition, autonomy) are essential—albeit often overlooked—considerations in clients’ level of commitment to engage in the process of change and success of treatment (Prendergast, Greenwell, Farabee, & Hser, 2009).

2.1: Coercion

In common nomenclature, the term coercion implies force or the threat of force, and is typically experienced as perceived loss of agency over personal decisions through threats, pressures, or persuasion exercised by an external “agent” (Carroll, 1991). The

concept of coercion, however, eludes an objective or ubiquitous definition—rather, it is contextually dependent, and may have subjective and perceptual elements (Winick, 1997). The term “perceived coercion” has been used to reflect the phenomenon that identical contingencies may or may not be perceived as coercive by different individuals (Cosden et al., 2006). For example, substantial numbers of clients and patients committed involuntarily to substance abuse and psychiatric treatment perceive their treatment as non-coercive, and large numbers of individuals seeking treatment voluntarily perceive being coerced into treatment. (e.g., Hiday, Swartz, Swanson, & Wagner, 1997; Rogers, 1993; Wild, Newton-Taylor, & Alletto, 1998; Prendergast, Greenwell, Farabee, & Hser, 2009).

Coercion, in the context of substance use treatment seeking behavior, presents a paradox in that while it may be perceived as intrusive and the antithesis to individual autonomy, it is a measure that necessitates some degree of volition on behalf of the client (Hall, 1997). Moreover, the medical conceptualization of addiction as a disease and the criminalized viewpoint represent antithetical methodologies for addressing the same problem, resulting in the contradiction between treatment and punishment (Tiger, 2011). A salient premise for coerced treatment among substance use populations is that by motivating the individual to comply with treatment, the undesirable consequences of the alternative will be realized; cognizance of the range of unfavorable repercussions will reinforce the value of seeking treatment and making the desired behavioral change (Sullivan et al., 2008). Another established rationale for coerced treatment is the notion that substance use among some offenders facilitates their engagement in the criminal activity they have been charged with; coerced treatment is imputed to present an effective

strategy to achieve abstinence and diminish criminal recidivism (Drug Courts Program Office, 2000). Thus, whereas the criminal justice perspective considers external coercion the principal constituent of rehabilitation, psychological frameworks underscore the centrality of choice and self-determination to achieving effective behavioral regulation (Winick, 2008).

The complex relationship between coercion and motivation is established to be fundamental to engagement and treatment among substance using populations (Wolfe, Kay-Lambkin, Bowman, & Childs, 2013). Specifically, whereas motivation is a fundamental component of client's' perception of recovery (DiClemente, Bellino, & Neavins, 1999; Nordfjaern, Rundmo, & Hole, 2010), external pressures that are perceived as coercive are presumed to diminish internal motivation (Deci & Ryan, 2000). Mitigating the complexities of a conceptual rendering of coercion is challenged by disparate interpretations of the construct and ambiguous operational definitions—complicating inferences and reliable conclusions about the effects of coercion on treatment (Wolfe et al., 2013; Young, 2002).

Terms such as *coercion*, *legal pressure*, *compulsory treatment*, *legally coerced*, *formal coercion*, and *court mandated* have often been used synonymously in reference to a broad variety of referrals originated by the justice system in relation to drug or alcohol related offenses (Farabee, Prendergast, & Anglin, 1998; Urbanoski, 2010). In their analysis of this topic, Klag et al. (2005) have identified two major classifications of legal coercion. Civil commitment, the more coercive form, is a compulsory form of treatment that relegates the substance-using felon to mandatory treatment, typically in a secure controlled environment for extended time period. The term legal coercion, which

encompasses diversionary programs adjudicated by the criminal justice system, represents treatment programs that allow for reduced or dismissed legal sanctions—including avoiding incarceration—in lieu of successful participation in a stipulated treatment modality. Considered the least coercive form of criminal justice coercion, majority of offenders under diversionary court programs consent to the mandate to seek treatment as a condition of parole or probation for offenses that range from substance use-specific offenses (e.g., driving while under the influence of alcohol or drugs) to crimes involving drug- or alcohol-related behaviors such as domestic violence, possession and sale of narcotics, or burglary (Hall, 1997). In their analysis, Miller and Flaherty (2000) emphasize the notion that coerced mandated treatment is not synonymous with forced compliance—rather, in practice, coercion is construed as a “form of mitigation.” In reality, though, they assert that coercion occurs when the individual must make the choice between compliance with treatment or undergo “alternative consequences” stipulated by the law.

Coercion, however, extends beyond jurisprudence. Wild (2006) differentiates between informal coercion and formal non-criminal coercion. Whereas informal coercion involves external pressures that are typically exerted by stakeholders in the individual’s social environment (i.e., friends, family, colleagues), formal non-criminal coercion involves pressures that are applied by social assistance agencies, employers, or other governmental entities to precipitate treatment entry. Although informal and non-criminal coercion yield considerable influence in hastening treatment entry among substance use groups and account for nearly half of all outpatient treatment admissions (SAMHSA,

2011), critical analyses of how those coercive measures are perceived by treatment seekers remain mostly absent from literature (Klag et al., 2005).

Within research and clinical communities, the assumption of whether or not a client is coerced into treatment is informed predominantly by the client's referral source (Klag, et al., 2005; Wild, Roberts, & Cooper, 2002). In other words, referral source has come to serve as a proxy for clinical assumptions frequently rendered about substance-abusing client groups' motivation, self-determination, and choice to engage in treatment seeking behavior. This reductionist conceptualization is problematic in that it presumptuously renders court-mandated clients as oppositional, being coerced into treatment, and lacking internal motivation, whereas voluntary treatment seekers are frequently perceived as volitional participants (Brecht & Anglin, 1993). The veracity and generalizability of these conclusions have been challenged on the grounds that they neglect to consider substance abuse client groups, by and large, experience a multitude of pressures from various sources—including internal demands to seek treatment (Marlowe, Kirby, Bonieskie, & Glass, 1996; Prendergast et al., 2009; Polcin & Weisner, 1999). Ultimately, inferences drawn about coercion strictly on the basis of referral source obviate the client's personal perceptions and psychological or cognitive experiences (e.g., readiness, efficacy, autonomy) associated with pressures that hasten treatment ingress and outcomes (Wild et al., 1998).

These exceptions bring under scrutiny not only the validity but also the potentially flawed conceptualization of empirical evaluations of the rationale and efficacy of mandated substance abuse treatment protocols. The most recent national statistics suggest that of those who did not successfully complete outpatient treatment, nearly 41 percent

were referrals by the criminal justice system, and 31 percent sought treatment under formal non-legal pressures (SAMHSA, 2011). Whether or not mandated or forced treatments are considered effectual and the extents to which they are perceived coercive are hotly disputed topics among researchers (Farabee, Pendergrast, & Anglin, 1998; Wild, 1999), thus rendering empirical analyses inconclusive, often contradictory and subject to interpretation.

For example, in predicting factors related to drug treatment entry, Hser et al. (1998) state although legal coercion may be influential in prompting treatment entry, court mandated individuals with more acute drug and or psychosocial problems are less likely to enter treatment. Whereas legal coercion is considered a requisite external instrument to stabilize clients' motivation to enter treatment, the authors nonetheless concede that psychological and family distress may be more antagonistic to motivation than coercion may be a protagonist. Similarly, Wolfe, Kay-Lambkin, Bowman, and Childs (2013) suggest that beyond potentiating entry to treatment, coercion does not have a significant effect in altering substance use behavior. Rather, they caution against deleterious consequences of clinicians' cynical expectations of mandated clients to treatment outcomes.

However, some researchers assert that legal mandates are indeed effective and a justifiable strategy since few chronic substance abusers are likely to be sufficiently motivated to voluntarily seek treatment. Arguments favoring the efficacy of legal mandates converge on the utility of threats associated with "legal sanction and the potential for incarceration" in persuading substance abusers to enter and remain in treatment (Chavaria, 1992). Results from one study examining effects of court-ordered

programs on mandated drug treatment seem to indicate legal status and legal pressure have significant effects on retention; more specifically, that greater perceived legal pressure appears to be correlated with increased retention in treatment (Maxwell, 2000). Further supporting the case for coerced treatment through the legal system is reflected in findings that suggest mandated clients show significant improvements similar, if not better, to those achieved by voluntary clients in levels of substance use and criminal activity (Brecht & Anglin, 1993; Collins & Allison, 1983). In their analysis, Nace et al. (2007) also endorse socially sanctioned coercive mechanisms as legitimate sources of external motivation based on a discussion of outcome studies that purport 70 percent increase in retention as well as substantial decrease in criminal recidivism among clients referred to treatment by the justice system.

In contrast, results of other studies challenge the accuracy of the notion that coercing individuals into treatment through formal social directives or the legal system can be effective and beneficial. Some cite the paucity of reliable empirical evidence, which not only cast doubts on the effectiveness and practicality of compulsory treatments but also raise ethical concerns (Platt et al, 1988; Wild, 1999). Others suggest that coerced treatment is either negatively correlated or entirely unrelated to treatment retention and outcome (Harford, Ungerer, & Kinsella; 1976). Similarly, following a meta-analysis of 129 studies comparing the effectiveness of mandatory and coerced substance abuse treatment, Parhar, wormith, Derkzen, and Beauregard (2008) conclude that not only mandated treatment is ineffective but also that the mere perception of coercion diminishes outcome effectiveness—even among those seeking treatment on a voluntary basis.

Focused interest in treatment retention rates associated with legal strategies is reflected in the paucity of reliable empirical assessments of ways in which individual perceptions of external pressures may or may not diminish motivation and readiness upon treatment entry. Research in this domain has, by and large, neglected to adequately consider critical variables such as severity of substance use independent of the criminal charge and the consequential severity of noncompliance with treatment (Young, 2002) (e.g., imprisonment, community service, monetary fine, loss of child custody, prolonged incarceration) in assessing the various tangible as well as perceptual dimensions of coercion potentially experienced by substance using offenders. Moreover, the need for a conceptual distinction between resistance and coercion (Longshore & Truya, 2006) as well as further differentiation between formal and informal sources of coercion (Klag et al., 2005)—i.e., family, social agencies, employers—among treatment seeking populations have been identified.

2.2: Motivation—A Theoretical Perspective

Although coercion may be instrumental in hastening entry into substance abuse treatment (Hser, Maglione, Polinsky, & Anglin, 1998), motivation is a requisite factor for treatment efficacy (Marlowe, Merikle, Kirby, Festinger, & McLellan, 2001). Despite empirical support for the centrality of motivation to retention and successful treatment outcomes (Prochaska, Diclemente & Norcross; 1992; Miller & Rollnick, 1991; Walitzer, Dermen, & Connors; 1999), the concept—similar to coercion—remains a profound abstraction in clinical settings, in part, due to lack of a definitional consensus and conceptual ambiguity, resulting in challenges to clinicians' assessments of client motivation and evaluations of motivational study outcomes (Drieschner, Lammers, Van

der Staak; 2004). Traditionally, clinicians have redundantly relied on behavioral conceptualizations and terminologies such as “active participation” or “open and honest communication” or “willingness to make sacrifices for treatment” to express and define presumed motivational behaviors among treatment seeking clients (Rosenbaum & Horowitz; 1983). However, in addition to being logically fallacious, restrictive definitions remain highly allegiant to early dichotomous conceptualizations wherein motivation is ascribed to either internal or external pressures. Presently, the preponderance of existing empirical research on the effects of internal and external motivation on treatment seeking behavior converge on the influences of objective external contingencies—specifically, coercive elements associated with legal mandates from the justice system and, albeit to a lesser extent, from formal directives such as those issued by employers, and informal pressures from family and friends (Groshkova, 2010; Gregoire & Burke, 2004).

Self-determination theory (SDT; Deci & Ryan, 1987; Deci & Ryan, 2000; Ryan & Deci, 2006) presents a comprehensive theoretical framework for understanding internal and external sources of motivation, their potential impact on maintenance and integration of therapeutic changes, and predicting differences in levels of motivation as a function of its source.

A motivational theory, SDT assumes a fundamentally organismic viewpoint and advances the dialectical relationship between human beings and their social milieu. As active and self-actualizing organisms, people are presumed to be innately motivated to grow, overcome peripheral challenges, and incorporate novel experiences into an integrated and well-articulated sense of self that is concordant with the social context.

Within this framework, the basal human motivation for growth and self-organization can be actualized exclusively in the presence of requisite supports from the social environment that satiate the three innate psychological *needs* for competence, relatedness, and autonomy. The three needs are defined as follows: competence denotes effectance-focused motivation for the achievement of valued outcomes, relatedness conveys the need for a mutual connection with others, and autonomy refers to volition and freedom to self-manage behavior consistent with one's integrated sense of self. The STD needs hierarchy, however, establishes autonomy as a core construct and a central human concern (Ryan & Deci, 2006). Carver and Baird (1998) concur with this premise and emphasize autonomy, or volition, as the essential factor in potentiating positive outcomes associated with well-being. Within this conceptualization, the presence of social and environmental conditions that support satisfaction of basic needs (i.e., goal pursuits, contexts, and relationships that foster effectance, choice, and relatedness) promote optimal functioning (Deci & Ryan; 2000), whereas controlling conditions (i.e., threat of punishment, perceived or actual coercion, external reward contingencies, surveillance, diminished choice) forestall needs satisfaction, subvert autonomy and pose a detriment to the full realization of one's potentials (Kasser & Ahuvia, 2002; Ryan, 2002). Moreover, the three psychological needs are inextricably linked to motivational processes and regulatory mechanisms that guide goal directed behavior.

SDT differentiates motivation to engage in goal directed behaviors along a continuum—extending from pursuits that are exclusively instituted and governed by extrinsic social constraints to behaviors that are motivated intrinsically and based on the individual's need for self-determination. In this conceptualization, intrinsically motivated

actions are the paradigm for self-determined behaviors in which people engage genuinely and of their own volition. This concept was previously articulated by DeCharms (1968) as the “internal perceived locus of causality” (I-PLOC). Whereas autonomy acts as the fundamental catalyst for intrinsic motivation, social and psychological controls—such as threats (Deci & Casico, 1972), surveillance (Lepper & Greene, 1975), all conditional material rewards (Deci, Koestner, & Ryan, 1999)—that promote perceived coercion tend to subvert personal autonomy, diminish internal motivation, and engender transition towards an external perceived locus of causality (E-PLOC). In a similar vein, contingencies that advance perceived incompetence or thwart a secure relational core diminish internal motivation and promote perceptions of being controlled. An expansive body of empirical research in laboratory as well as applied settings has reliably substantiated the extent to which an internal PLOC is instrumental in affecting persistence, performance, nature of motivation, and accrued outcomes (e.g., Deci, Connell, & Ryan, 1989; O’Connor & Vallerand, 1990; Ryan, Rigby, & King, 1994).

SDT offers a more differentiated conceptualization of extrinsically motivated behavior in proposing that external controls are not perpetually antagonistic to intrinsically motivated behavior—rather, external controls can differ in the extent to which they are perceived as self-determined, vis-à-vis controlled, depending on the degree to which they may be internalized by the individual. In line with the organismic dialectic, SDT considers internalization a naturally occurring adaptive process whereby individuals actively seek to incorporate social norms into the realm of their personal values. In theory, fully internalized values and conventions are endorsed and subsequently assimilated into individual’s sense of self. Procedurally, optimal

internalization allows for the individual to act with self-determination in response to external demands that would have otherwise been perceived as controlling. Thus, for those with an internal PLOC, motivation for behavior is sourced in one's personal choices, interests, and values.

In SDT, the varying degrees of self-determination are conceptualized along a continuum of motivational, self-regulatory, and perceived locus of causality bases of behaviors. Specifically, *external regulation* reflects extrinsically motivated behavior controlled by external exigencies, which typically impose either aversive consequences or material incentives, and is highly subversive to internal motivation (Deci, Koestner, & Ryan, 1999). *Introjected regulation* reflects fragmentary internalization but without assimilation of social norms or expectations, thus behavior is considered as non self-determined. This construct is characterized by internal conflicts between external demands and person's determination to engage in the target behavior. Introjection differs from external regulation in that it places the control of contingent reactions such as shame, guilt, anxiety, and pride within the person (Ryan, 1982). *Identified regulation* references acknowledgment and acceptance of the fundamental value of a behavior in a manner that is more consistent with the self. As such, although motivation is extrinsic, due to self-identification and endorsement of external commitments, the locus of causality is perceived as "somewhat" internal. The heightened level of internalization associated with identification is reliably reflected in enhanced behavior maintenance and commitment. Last, *Integrated regulation* represents the utmost degree to which extrinsic motivation is internalized. At this stage, the individual is intrinsically motivated, has a perceived internal locus of causality, and has fully identified and assimilated behaviors

and their salience with personal values such that actions are interpreted as internally uncontested.

In the context of treatment seeking behavior for substance use, SDT interprets external motivation as beliefs or the perception that the individual is coerced, demanded, or forced by external social contingencies to engage in treatment. Introjected motivation reflects internal conflicts emanating from guilt, shame, and anxiety relative to decision to seek treatment. Identified motivation represents commitment and identification with the goals of treatment as the basis for engaging in help seeking behavior. Integrated motivation occurs when the individual volitionally continues engagement in treatment and ultimately maintains desired treatment outcome, which in clinical contexts is typically operationalized as abstinence.

Thus, within this conceptual framework, the self-determination continuum represents the sine qua non for understanding the quality of behavioral regulation and motivated goal pursuits—namely the range of variance in each individual’s ability to merge social values or regulations into a unified sense of self, and the concomitant degrees of autonomy. However, the extent to which one’s natural tendency to internalize ambient values into autonomous motivation prove successful reflects, in part, on the content or nature of goals (Deci & Ryan, 2000; Sheldon, Ryan, Deci, & Kasser, 2004). In this regard, Kasser and Ryan (1996) draw a clear conceptual distinction between “intrinsic aspirations”—goals associated with personal growth, affiliation, and collective contribution—and “extrinsic aspirations”—goals aimed at achieving tangible or financial rewards, image, and prestige. In this conceptualization, the pursuit and attainment of intrinsic aspirations yield greater levels of needs satisfaction and are positively correlated

with personal development, well-being, and self-actualization. In contrast, extrinsic aspirations not only present lower potential for need satisfaction but also diminish flexibility and performance, particularly in behaviors that involve heuristic and complex functions (Kasser & Ryan, 1996; Utman, 1997). Therefore, within the SDT framework the reason why the goal is being pursued, the content of the goal, and the experienced level of autonomy establish the essential criteria for evaluating how perceptions of social events affect motivational processes.

A number of empirical perspectives support the relevance of PLOC, autonomy, and motivation to substance abuse treatment within clinical contexts. For example, Curry, Wagner, and Grothaus (1990) demonstrate a positive correlation between intrinsic reasons for seeking treatment and sustained abstinence; in a following study (1991) the same investigators show extrinsic incentives are less effective than an internally oriented motivational strategy. Similarly, Ryan, Plant and O'Malley (1995) demonstrate that high internalized motivation among treatment seeking clients is negatively correlated with dropping out and premature termination of treatment. In addition, the study shows a correspondence between internal and external motivation, since clients with both elevated internal and external motivation demonstrate higher persistence in treatment; however, external motivation is positively correlated to treatment outcomes strictly in the presence of internal motivation. In another study, Kennedy and Gregoire (2009) investigated the relationship between SDT and the transtheoretical model of change (TTM; DiClemente, 2003; Prochaska, 1979; Prochaska & DiClemente, 1983). Specifically, treatment seeking clients with higher levels of internal motivation demonstrate a higher tendency to be in the action stage rather than the precontemplation or contemplation stages of readiness to

change behavior. In a study exploring the role of autonomy in problem drinking patterns, Neighbors, Walker, and Larimer (2003) conclude that individuals who are less autonomous and more controlled by external contingencies are less likely to be self-determined and more likely to engage in alcohol abuse. Finally, findings from a study by Wild, Cunningham, and Ryan (2006) support the position that clients' personal reasons for engaging in treatment are significantly more predictive of engagement than controlling social contingencies, such as legal mandates from the justice system and informal social pressures. Similarly, volitional commitment to the goals of treatment appears to be associated with reduced substance use and increased interest in treatment.

Analyses of these arguments demonstrate the salience of perceived coercion and motivation to any critical discourse on treatment seeking behavior and suggest that each variable ought to be assessed independently, rather than inferred from treatment seekers' institutional circumstances. MacKain and Lecci (2010) assert that despite the availability of a range of psychometric assessment instruments to clinicians, few substance abuse treatment centers other than those affiliated with research institutions implement measures to evaluate perceived coercion or motivation among clients. This assertion was confirmed during the course of the present study. Specifically, neither of the outpatient facilities participating in the study reported using an established instrument to assess clients' perceptions of motivation or coercion independent of the referral source during the assessment or treatment process. Similarly, there is a paucity of empirical research on the association between social pressure, client motivation and engagement in the treatment process (Wild et al., 2006). For example, in their review of 11 published studies involving the relationship between various levels of pressure and substance abuse

treatment, Angelin et al. (1998) evidenced none had assessed motivational aspects of social pressure.

2.3: Comparative Studies

A thorough search of Internet empirical and professional literature database sites yield evidence of only a few relevant studies that have aimed to explore differences between the various treatment seeking client groups in community settings. For example, in comparing clients enrolled in a residential treatment setting, Kline (1997) emphasizes observed differences in the psychosocial and demographic characteristics between criminal-justice-system and voluntary clients. Results suggest that referrals from the criminal justice system may have better social and psychological adjustment and fewer social and drug related problems than voluntary groups. Although differences in profiles between the two groups may present valuable implications for targeted interventions, the scope of the study is inherently limited due, in part, to the design, which excludes perceived motivational factors relevant to participants' treatment seeking behavior. In a similar study conducted in outpatient setting, although analyses of the overall profiles of criminal justice- and noncriminal justice-referred substance users did not yield significant differences between groups, criminal justice-referred clients demonstrated significantly lower levels of motivation to engage in treatment based on assessments of perceived drug use problems, desire for help, and readiness for treatment (Farabee, Nelson, & Spence, 1993).

In a comparative study of participants referred to outpatient treatment by a drug court and a drug treatment court mandated through California's Substance Abuse Crime Prevention Act (SACPA), perceived motivation for treatment in both groups—assessed

by client-reported acknowledgement of problem severity and need for treatment—was positively associated with severity of drug use (Cosden et al., 2006). The study finding, although limited to criminal justice cases, is noteworthy in delineating potential differences relative to severity of substance use and criminal offense in the subgroups of offenders who seek treatment through court-based programs along motivational factors. Specifically, whereas drug court is available to individuals with a wide range of drug-related offenses, the SACPA court is available exclusively to offenders with simple drug possession or drug use charges. The study seems to support the notion that motivation is augmented by perceived need for change (Prochaska & Diclemente, 1983; Shen, McLellan, & Merrill, 2000), independent of severity of associated criminal offense.

In addition to a consistent association between better motivation with severity of substance use among voluntary and court referred client groups, Rapp, Li, and DeLiberty (2003) suggest a significant correlation between higher motivation and unemployment. Although the study did not take into account the formal and informal sources of coercive pressure that may have precipitated treatment entry, it is plausible that economic factors may be a salient correlate to perceived desire for help and treatment readiness among substance use treatment seeking groups. In comparing court-ordered and voluntary groups along the Stages of Change Scale (Prochaska & Diclemente; 1983), voluntary clients recently admitted to treatment in one outpatient facility were found to be more engaged in the change process than a contingent of court-ordered clients (O'Hare, 1996). Specifically, whereas court-order status was significantly correlated with a higher rating on the precontemplation subscale, measures of contemplation, action, and maintenance were consistently associated with voluntary treatment seekers. This study, however, is

hampered by methodological inconsistencies and is, to some extent, demonstrative of the conceptual problems in the research and current nascent state of relevant empirical knowledge. For example, court-ordered clients comprised only 20.7 percent of the total sample, and those seeking treatment through other referral sources, presumably through formal directives from social assistance agencies or employers, were entirely excluded from the sample. Thus, although the study may provide insight into readiness for change patterns of voluntary clients, the results fall short of providing a realistic between groups comparative analysis.

In a more recent study, Marshall and Hser (2002) compared perceived motivation between clients remanded to treatment by the criminal justice system (CJ-mandated), clients with criminal justice contact but seeking treatment voluntarily (CJ contact), and clients without legal involvement at program entry (No-CJ contact). Participants were sampled from all available treatment modalities (i.e., outpatient, residential, inpatient detoxification, day treatment, methadone maintenance). Results suggest CJ-mandated group reported significantly lower treatment motivation than the other two groups, whereas CJ contact and No-CJ contact groups did not differ in levels of perceived motivation. Similarly, the CJ mandated group reported significantly lower confidence in treatment and treatment satisfaction than the other two groups; no differences were observed on either dimension between the other two groups. The study outcomes are highly relevant in that they underscore potential perceived motivational commonalities between self-referred criminal justice clients and those without legal involvement at entry. The results are consistent with the assertion that those seeking treatment under mandates from the criminal justice system generally may have less insight or cognizance

of need for treatment (Farabee et al., 1993). Despite the rigors of the study, all three participating client groups reported high levels of prior or concurrent criminal justice system involvement. As such, the findings inform exclusively on the perceived treatment motivations and needs of groups with differential criminal justice system involvement. In a somewhat similar study, Stevens et al. (2006) explored readiness and motivation among a sample of 845 individuals who sought treatment for substance dependence in five European countries. The study sample was distributed evenly among voluntary participants and those who entered under quasi-compulsory treatment (QCT). Stevens et al. (2006) define QCT as “treatment of drug-dependent offenders that is motivated, ordered or supervised by the criminal justice system and takes place outside regular prisons.” QCT is differentiated from typical American drug courts in that they include “persistent offenders,” who are categorically excluded from majority of American drug courts. Motivation was inferred by assigning respondents to the various stages of change model (Prochaska & Diclemente, 1983). The quantitative component of the study did not yield significant differences in motivation or readiness between the two groups—rather, perceived quality of clinical services and available support were suggested as the critical factors in potentiating or diminishing motivation.

An intriguing outcome of the study suggest that relative to stages of change, perceived pressure from family or friends was associated with diminished likelihood of being in the action stage, whereas perceived pressures from medical professionals was correlated with greater likelihood of being in action or maintenance stage of readiness to change. The study findings are congruent with the notion that low motivation cannot be imputed to attendant legal pressures.

All literature reviewed thus far have compared samples of voluntary and legally referred clients on the basis of their psychosocial and treatment related beliefs (i.e., motivation or coercion) with the aim of better understanding substance use treatment receptivity and outcomes. While these efforts have advanced discourse on perceived coercion or motivation on the part of the client, they all lack a critical component, namely clinicians' perceptions of treatment entry pressures as they affect the therapeutic relationship. Another shortcoming of the existing literature is the exclusion of client groups who enter treatment under formal non-criminal coercion (e.g., pressured by social assistance agencies or employers), and—with the exception of the European study (Stevens et al., 2006)—those who enter treatment under informal coercion (e.g., pressured by friends or family). Accurate appraisal of treatment process and outcome is not likely possible without due consideration of the unavoidably differing perceptions of the full complement of substance using client groups and clinicians (Strupp & Hadley, 1977).

2.4: Treatment Expectations

Early efforts to assess clients' and clinicians' perceptions of the dyadic therapeutic experience acknowledged the reality that for some clients a majority of their expectations will not be realized (Hornstein & Houston, 1976), resulting in unfavorable therapeutic outcomes (Pope, Siegman, Blass, & Cheek, 1972). Levitt (1966) articulated this phenomenon as “expectation-reality discrepancy” (ERD) while advancing the hypothesis that sufficient “disconfirmation” of clients' expectation of the therapeutic process will negatively impact treatment efficacy, thus potentiating premature termination by the service recipient. However, whereas Levitt was encouraging the

examination of divergent perceptions of the nature of the therapeutic process, and of variables of the client and therapist, his analysis did not offer particular factors or measurements for such evaluation. More recent studies have converged on several specific factors that potentially clarify the nature and extent of discrepant attitudes and beliefs between clients and clinicians. For example, a series of studies have demonstrated a consistent and significant divergence between client and clinician expectations about the duration and frequency of treatment (Mueller & Pekarik, 2000; Pekarik, 1985; Pekarik & Finney-Owen, 1987; Pekarik & Wierzbicki, 1986). Specifically, clinicians perceive length of treatment and continuance rates greater than that expected by clients, view the overall treatment process as being more positive, and underestimate dissatisfaction with duration of treatment as reason for dropout. These studies seem to confirm the 1:1 relationship between clients' anticipated attendance duration and actual attendance patterns. A similar pattern appears to exist in perceived attributes of the cause and source of lack of therapeutic progress. Whereas therapists ascribe the reason for client progress to their therapeutic relation with the client and support of the client, they perceive themselves as the least likely cause of their clients' lack of progress—rather, they ascribe lack of progress to client inefficacies (Kendall, Kipnis, & Otto-Salaj, 1992).

Clients, on the other hand, most often reference frustration with therapist or treatment as major contributors in their decision to abort treatment (Acosta, 1980; Baekeland & Lundwall, 1975; Krauskopf, Baumgardner & Mandracchia, 1981; Pekarik & Finney-Owen, 1987). In a similar vein, there is evidence that suggests differences between clients' and clinicians' expectations regarding treatment goals—inferred from reasons for treatment termination (Hunsley, Aubry, Verstervelt, & Vito, 1999).

Specifically, beyond not associating treatment discontinuance with client dissatisfaction, clinicians may egregiously underrate the extent to which clients abort treatment strictly due to attainment of desired therapeutic outcomes. Pekarik (1985) attributes this trend to clinicians' more stringent criteria for improvements; nonetheless he concedes that nearly 40 percent of clients labeled as dropouts by clinicians had indeed improved significantly. This inconsistency may be reconciled, to some extent, by the assertion that clinicians may also differ in their conceptualization of the clients' perceptions of their problems and desired status quo (Epperson, Bushway, & Warman, 1983). These findings may very well dispel the notion that clients who dropout of treatment or do not demonstrate sufficient progress lack motivation or are failures (Fierman, 1965).

Discordant client-clinician expectations of treatment duration and frequency, goals, and level of progress appear to have robust effects on treatment outcomes. However, this line of empirical inquiry has yet to be extended beyond general psychotherapy to the inclusion of substance use disorder treatment milieus and take into account the mediating effects of perceived motivation and coercion in treatment seeking behavior.

2.5: Therapeutic Alliance

Considering clinicians' potential to inadequately conceptualize clients' expectations at the outset of the therapeutic relationship and the concomitant risk of losing clients (Heine & Trosman, 1960), the exigency of a mutual collaborative approach to treatment cannot be overemphasized. Current thinking on therapeutic relationship places a premium on the relational context and the quality of the therapeutic alliance between client and clinician (Bordin, 1979; Norcross & Lambert, 2011). In this

conceptualization, alliance reflects mutual consensus and collaboration on the objectives and tasks of therapy in the context of a supportive affective partnership between the client and the provider (Bordin, 1979). The notion of client-therapist alliance has been recognized as a core constituent of the therapeutic process given the consistency of findings that suggest a positive association between alliance and treatment outcome (e.g., Al-Darmaki & Kivlighan, 1993; Horvath, Del Re, Fluckiger, & Symonds, 2011; Martin, Garske, & Davis, 2000). Among substance use populations, therapeutic alliance in the initial stages of treatment appears to be a particularly robust indicator of engagement and retention (Meier, Barrowclough, & Donmall, 2005). Not surprisingly, divergent perspectives on alliance between client and clinician have been suggested to be a precursor to therapeutic impasse leading to premature termination or lack of treatment efficacy (Hill, Nutt-Williams, Heaton, Thompson, & Rhodes, 1996).

In assessing alliance strictly from the perspective of clients' who present for substance use treatment under legal coercion, internal motivation to change appears to be positively correlated with therapeutic alliance, and changes in motivation resulting from treatment appear to be positively associated with the quality of alliance, whereas perceived coercion is at least partially associated with diminished therapeutic alliance and lower motivation (Brocato & Wagener, 2008; Wolfe et al., 2013). However, established measures of therapeutic alliance may not adequately assess intricacies of relational dynamics in mandated treatment in that they do not take into account the social control element intrinsic to those relationships (Skeem, Loudon, Polascheck, & Camp, 2007). More specifically, in the context of mandated treatment, Skeem et al. (2007) assert that clinicians are ascribed dual roles: to achieve positive clinical outcomes, and to exercise

control over clients to maintain compliance (e.g., periodic testing for chemical use, reporting non-attendance to parole or probation agent). In this context, moderating clinician's care or therapeutic role with the controlling or surveillance function may prove to be a highly challenging but vital aspect of engaging involuntary clients in collaborative efforts.

Similarly, Ross, Polascheck, and Ward (2008), advance the notion that therapeutic alliance in authoritarian treatment settings that emphasize client-clinician hierarchy or power differential—such as those serving mandated or criminal offenders—is inherently different from settings in which clients are presumed to be motivated and seeking treatment voluntarily, and where clinicians are solely devoted to the well-being of their clients without institutional pressures to act as enforcement agents. For clients who are required to participate in treatment, control (i.e., behavioral monitoring and influence) may become an important, albeit overlooked, component of the relationship. However, this is a significant omission in that mutual collaboration is the basic tenet of therapeutic alliance (Bordin, 1979). The extent to which clinician control can diminish client autonomy in negotiating the tasks and objectives of the alliance (Hatcher & Barends, 2006), especially among involuntary participants, may not only challenge the development and quality of the alliance but also detract from achieving the desired outcome. This position is fundamentally congruent with SDT (Deci & Ryan, 2000) in that whereas autonomy is conceptualized as a basic human need and essential “nutrient” for motivation, control mechanisms such as threats or surveillance tend to undermine autonomy and motivation.

Whether or not and how treatment mandates affect the matrix of the therapeutic relationship was the subject of a recent inquiry by Manchak, Skeem, & Rook (2014). Outcomes of the study suggest that mandatory treatment relationships incorporate significantly higher levels of clinician control and client submission (i.e., lack of autonomy taking) compared to voluntary treatment relationships, which are distinguished by clinician autonomy-granting, and reciprocal client disclosure and trust behavior. In their analysis, Manchak et al. (2014) impute the large effect size for therapist control to behavior monitoring, accountabilities to the justice system, and ensuring treatment compliance. In turn, clinician's controlling behavior may engender a sense of resistance, resentment, helplessness, or disengagement among clients who consequently may experience the therapeutic relationship as coercive. These negative psychological reactions (e.g., anger, passivity) are predicted and supported by the reactance theory, which posits: "Reactance is the motivational state that is hypothesized to occur when a freedom is eliminated or threatened with elimination" (Brehm & Brehm, 1981, p.37). Thus, excessive control by clinician may result in a state of psychological reactance prompting a response—in attitude and behavior—as to mediate the effects of loss of control or freedom. Despite the trend in high levels of therapist control and client submission in mandated therapeutic relationships, based on the outcome of their study, Manchak et al. (2014) add the caveat that high control and high affiliation can coexist. In rejecting the hypothesis that clinician directiveness is countervailed by diminished affiliation, the researchers suggest that a consistent dual role relationship, characterized by an authoritative style with high control and high affiliation, may promote healthy therapeutic attachment among involuntary treatment seeking groups. Despite its empirical

relevance and conceptual integrity, the study was based on a sample of individuals with serious mental disorder mandated to seek treatment through the criminal justice system. Given the differences between mandated mental health and substance use populations, between-group inferences from the results ought to be drawn with caution.

Results of a meta-analysis (Tryon, Blackwell, & Hammel, 2007) of studies conducted from 1985 to 2006 do, however, inform on significant moderators of the client-clinician alliance differences as they apply to substance using populations. Specifically, moderately disturbed clients (e.g., depression, anxiety and treated in outpatient settings) with substance use problem have larger client-therapist alliance discordance than moderately disturbed clients without substance use problem; clients with substance use problem have larger alliance discrepancy effect size with experienced therapists than clients without substance use, whereas clients without substance use working with experienced therapists have smaller alliance divergence than clients with novice therapists; clients with substance use problem treated with a range of therapeutic styles (e.g., cognitive-behavioral, humanistic, psychodynamic) have larger alliance divergences than clients without substance use; and clients with substance use yield consistently larger discrepancies across a range of alliance measures (e.g., Working Alliance Inventory and Working Alliance Inventory-Short version) than clients without substance use problem across multiple measures. Combined, these results suggest lack of clarity about what factors determine the quality of the alliance between substance using clients and clinicians.

In response, MacKain and Lecci (2010) have advanced the hypothesis that significant inconsistencies between substance use clients' and clinicians' perceptions of

coercion in the context of treatment seeking behavior may have marginalizing effects on the therapeutic relationship. In this case, results seem to indicate that whereas clinicians perceive external pressures to enter treatment as more coercive and convincing, clients view internal pressures or events as more coercive and instrumental in their determination to seek treatment. Thus, beyond superficial agreement on identifying the problem (i.e., substance use), clients and clinicians may differ appreciably in their conceptualization of motivational factors and readiness to change. The subjective differences potentially contribute to a mismatch between substance use treatment seekers and clinicians in the choice of approach, strategies, and tasks of treatment—leading to deterioration of the working alliance. Results of MacKain and Lecci's (2010) study render congruent client-clinician perceptions of coercion as a highly plausible but critically overlooked component of the therapeutic alliance.

Overall, these findings underscore the assertion that despite Bordin's (1979; 1994) widely referenced interpretation (presented above) and the sizeable body of research that emphasize the value of the therapeutic alliance, there remains a lack of consensus on its definition, components, measurement, exact mechanism of operation on the therapeutic process, (Elvins & Green, 2008) and the determinants of the quality of the relationship—particularly between substance use groups and clinicians (Meier, Barrowclough, & Donmall, 2005). For example, given the proliferation of measures to assess treatment alliance and the assortment of conceptualizations (e.g., California Psychotherapy Alliance Scales, Marmar, Weiss, & Gaston, 1989; The Therapeutic Bond Scales, Saunders, Howard & Orlinsky, 1989; Working Alliance inventory, Horvath and Greenberg, 1989), no single measure assesses all current definitional criteria in any single

participant population (Elvins & Green, 2008). In fact, Horvath & Symonds (1991) assert that the multiplicity of existing measures simply reflect inconsistencies in different definitions of working alliance and the ideal source of such an appraisal (i.e., clinician, client, or independent observer). Although there is evidence suggesting consistency among most measures (Safran & Wallner, 1991; Tichenor & Hill, 1989), clients' and clinicians' judgments of alliance derived from commonly used instruments do not appear to correlate with participants' understood views of alliance (Marmar, Weiss, & Gaston, 1989), suggesting limitations of the measures' conceptual framework (Bachelor, 2013; Hatcher & Barends, 1996; Gaston, 1991; Tracey & Kokotovich, 1989). Nonetheless, one point of convergence among researchers in this domain is the equivocal finding that, above all, clients' assessment of the alliance have the most consistent and strongest correlation with outcome—irrespective of whether outcome is evaluated by clients, therapists, or expert observers (Bachelor, 1991; Hatcher & Barends, 1996; Horvath & Symonds 1991; Saunders, Howard, & Orlinsky, 1989).

Therapeutic Alliance in Group Therapy. Considering the prevalence of group therapy in outpatient substance use treatment settings—either as an adjunct to individual treatment or as the exclusive treatment modality—analysis of participants' perceptions of the alliance within group settings is highly pertinent to the present discourse. In spite of the fact that group drug counseling is offered by 93 percent of substance use treatment programs in the United States (SAMHSA, 2010), it is with surprise that a thorough search of online databases yields only a few relevant studies that have explored the topic beyond merely articulating its clinical pertinence. Others have similarly noted the paucity of empirical information in this area (Bourgeois, Sabourin, & Wright, 1990; Budman et al.,

1989; Marziali, Munroe-Blum, & McCleary, 1997). For example, in a study that aimed to explore group alliance and cohesion at a residential substance use program (Gillaspy, Wright, Campbell, Stokes, & Adinoff, 2002), the researchers omitted to assess potential relations between group alliance and drug use—rather, the study was limited in scope to the predictive relationship between group alliance and psychological consequences (i.e., distress, depressive symptomology).

Nonetheless, the limited available evidence suggest that beyond a correlation between clients' perceptions of clinicians' use of techniques and level of control, there is no significant relation between client-clinician perceptions of the therapeutic relationship or therapist effectiveness (Swift & Callahn, 2009; Jenkins, Keefe, & Rosato, 1971). More specifically, group therapists do not demonstrate improved awareness of the group members' perception of them with the progression of treatment, and cumulative exposure does not result in a higher degree of congruence between clients' and clinicians' perceptions of the therapeutic alliance. Results of a more recent study (Chapman et al., 2012) confirm the finding that clinicians consistently render inaccurate perceptions of how clients perceive the quality of the therapeutic relationship in group therapy settings, and misjudge the number of clients who deteriorate during the course of therapy. Interestingly, clinicians appear to be particularly limited in their ability to accurately discern levels of negative relationship (i.e., conflict and hostility) experienced by group members, whereas clients tend to place a greater value on cooperation and are more reactive to indicators of deteriorating alliance than treatment providers (Bachelor 2013). It remains unclear as to whether these inconsistencies are a function of clinicians' tendency towards overconfidence in predicting favorable outcomes for clients, reticence,

or inability to identify deteriorating relationships (Hannan et al., 2005). In their analysis, McEvoy, Burgess, and Nathan (2014) expand on this theme and suggest that ambiguities in conceptual rendering of the therapeutic alliance in group treatment settings may be potentiating the observed discordance in client-clinician perspectives. Specifically, they underscore the complexity of accurately sifting through clients' relational perspectives towards the clinician, other members, and the group as a whole; the inconsistency is further compounded by the lack of distinction that is currently being made between group climate, group cohesion and the therapeutic alliance. Whether or not alliance in group therapy ought to be conceptualized as a multidimensional construct that encompasses the full array of interpersonal dimensions (i.e., client to clinician, client to client, group to therapist) or bilateral—limited to client and clinician—remains polarized. Whereas Gillaspay et al. (2002) advance the former concept, McEvoy et al. (2014) endorse the latter, suggesting the relationship between client and clinician as the basis for assessing therapeutic alliance in group counseling. The extent to which findings about therapeutic alliance in dyads can be generalized to substance use group treatment remains unknown (Fuhriman & Burlingame, 1990).

2.6: Organizational Context

Still, others emphasize inclusion of the treatment environment in rendering a more holistic conceptualization of the therapeutic relationship. In the social work lexicon, this concept, typically referred to as organizational culture, reflects: “The core values, beliefs, and assumptions that are held by the members of an organization and the way in which they guide behavior and facilitate shared meaning” (Denison, Nieminen, & Kotrba, 2014). In this regard, a fundamental consideration is the extent to which the management

cadre's perspectives can leverage organizational ethos and attitudes (Netting, Kettner, & McMurtry, 2008) as they affect treatment practices. Few studies have explored the potential that client perception of the treatment environment may be as equally robust predictor of the therapeutic relationship and treatment outcome as individual variables (Bromet, Moos, & Bliss, 1976; Cronkite & Moos, 1978). For example, in assessing the organizational context of treatment effectiveness between court-mandated and voluntary substance using clients, Howard and McCaughrin (1996) demonstrate organizations with a higher proportion of court-mandated clients have a significantly higher ratio of treatment failure than organizations with fewer court-mandated clients. However, a major finding of the study appears to suggest, not lack of client motivation—rather, the insidious effects of supervisors' biased view of court-mandated clients (i.e., non-treatable) on the clinicians' demeanor and treatment approach as a key variable influencing deficient treatment outcomes. In a similar vein, the study outcomes suggest a significant relationship between lack of administrative support for educating clinicians on nuances of addressing the therapeutic needs of court-mandated clients and the clients' inability to meet treatment goals. Overall, findings from the study allude to organizational indifference to adequately diversify treatment needs by facilities with high ratio of involuntary populations.

In a similar effort, Brener, Von Hippel, Von Hippel, Resnick, and Treloar (2010) assessed the prevalence of discriminatory attitudes in treatment settings for intravenous drug users and their impact on the quality of care. Results from the qualitative arm of the study reflect treatment seekers' unanimous experience with and exposure to chronic discrimination, not only in substance use treatment settings but also general health care

facilities. In this case, the participants expressed perceived discrimination as the reason for their decision to either forego treatment entirely or curtail engagement in treatment. Outcomes of the quantitative arm of the study are consistent with clients' observations and suggest greater perceived discrimination is a significant predictor of treatment dropout and, not surprisingly, greater treatment motivation is a significant predictor of successful treatment completion. These findings seem to suggest perceived discrimination is highly antagonistic to client motivation. This perspective is entirely supported by SDT's premise that intrinsic motivation is unlikely to flourish in contexts that are distinguished by a sense of insecure relatedness and lack of interpersonal coherence. To the extent that discriminatory and prejudicial contexts are considered non-supportive, they are predicted to thwart psychological needs, resulting in adaptive patterns of behavior that are not optimal to development and well-being. In another study, Conner and Rosen (2008) obtained nearly identical results among a sample of methadone maintenance clients. The most salient finding of the study, however, suggests that in conjunction with the stigma associated with addiction, treatment seekers routinely are subjected to multiple and concurrent sources of stigma (i.e., age, co-occurring disorder diagnosis, poverty, race, HIV status) by the general staff as well as counselors at the treatment facilities. Clinicians' stigmatizing attitudes towards substance using populations in treatment settings is further demonstrated in a study involving women with hepatitis C (Gifford, O'Brien, Bammer, Banwell, & Stoope, 2003). Specifically, women who did not declare substance use reported receiving referrals to specialist for further treatment with ease, whereas those who reported current substance use reported being more likely to be dissatisfied or very dissatisfied with the care received.

In their analysis of institutionalized stigmatization, Butt, Paterson, and McGuiness (2008) acknowledge the existence of structural constraints within treatment settings that, despite affirmative attitudes by treatment providers, precipitate prejudicial treatment towards clients. Irrespective of random individual propensities toward a bias, it is clear that stigmatization and discriminatory practices in treatment settings are to some extent socially and or politically contextualized; institutional cultures that normalize prejudicial attitudes and behaviors most likely provide the social impetus for treatment providers to stigmatize certain client groups (Wright, Linde, Rau, & Viggiano, 2003).

An obvious shortcoming of the empirical studies that delve into exploring organizational or environmental attitudes is the tendency to focus exclusively on the clients' perspective. In one study, however, Friedman, Glickman, and Kovach (1986) countered this trend and simultaneously evaluated both client and clinician perspectives on environmental variables. In this case, clinicians consistently rendered more positive ratings of the environment compared to the clients. Although results confirm a significant inverse relationship between discrepant client-clinician perceptions of the environment and treatment outcome, the investigators remain highly skeptical of the potential for a causal relationship between negative client perceptions of the treatment environment and poor treatment outcome. Rather, poor treatment outcome is attributed to clients' more than likely "generalized negative or antisocial or antiauthority" attitudes towards treatment environments and rehabilitative programs (Friedman et al., 1986). Moreover, the argument is advanced that clients' may simply lack motivation and be resistant to treatment, which will not only lead to a negative appraisal of the treatment environment and poor treatment outcomes but also account for the observed divergence with the

staff's perceptions of the environment. This argument, however, is presumptive and further underscores the empirical and clinical utility of a systematic approach to assessing clients' perceived motivation to engage in substance use treatment.

Chapter 3: Rationale of the study

The extant empirical research demonstrates a predilection for analyses of legal coercion in articulating its potential to reduce assorted costs of addictive behavior, in no small part due to escalating rates of incarceration of drug-related offenders and the paucity of treatment options in prison settings ((Belenko & Peugh, 2005; Wild, 1999). The narrow empirical focus has resulted in four specific limitations that motivate the present study. First, studies of informal and formal social pressures on coercion in substance use treatment have been grossly neglected and remain at best rudimentary, despite assertions that informal mechanisms may be more ubiquitous than legal coercion (Polcin & Weiner, 1999) and potentially more influential in precipitating ingress into treatment (Marlowe et al., 1996). Second, very little is known about the service providers' and treatment seekers' viewpoint on the issue of coerced treatment, and the merits of treatment under legal, formal, and informal social controls to each stakeholder (Wild, 2006). Third, continued reliance on the referral source—in lieu of an independent measure of coercion or motivation—as the explanatory factor to assess whether or not coercion in substance use treatment is effective, despite findings that suggest a general lack of correlation between referral source and perceived coercion or motivation for treatment (Wild, 1999). Fourth, a virtual absence of empirical analyses of potential variances in subjective perceptions of motivation and coercion between substance use treatment seekers and clinicians in how events that hasten ingress into treatment are interpreted. Conceptual abstractions as well as inconsistencies in the operational definitions of motivation and coercion persist in further exploiting these limitations in both empirical and clinical domains.

The present study aims to bridge this gap by examining potential divergence in the perceptions of motivation, readiness, and external coercive circumstances that trigger treatment entry among three conceptually distinguishable client groups: (1) clients seeking substance use treatment under legal coercion (criminal), (2) clients seeking substance use treatment under formal/informal coercion (non-criminal), (3) clients seeking substance use treatment voluntarily, and their respective clinicians during the initial stages of treatment in outpatient treatment settings.

3.1: Research Question and Hypothesis

While congruence between client and clinician perspectives may be desirable and likely to promote the therapeutic relationship, to date, no known study has simultaneously investigated perceived levels of motivation, readiness, and external coercion among three conceptually distinct substance use treatment-seeking groups (i.e., criminal legal coercion, non-criminal formal and informal coercion, voluntary) and their clinicians during the initial stages of treatment in outpatient clinical settings. The present study will attempt to answer the question: How are clients' and clinicians' subjective appraisals of events that hasten treatment entry (i.e., motivation, readiness, coercion) correlated? Quantitatively, the study will test the hypothesis:

That a significant divergence exists between clinicians' overall motivational ratings of clients who enter treatment under criminal legal coercion, non-criminal formal and informal coercion, and clients' own ratings, as contrasted with ratings of voluntary groups.

The hypothesis is advanced based on two perspectives. First, from the clinicians' perspective, clients seeking treatment under mandates are likely to be inaccurately

perceived as being coerced and less prepared to make changes or engage in treatment to alter problem behavior compared to voluntary treatment seekers. The inherent bias is potentially due to the clinicians' engrossment of coercion as the exclusive event that triggers entry of mandated clients to treatment, thereby underestimating clients' concurrent internal motivations and readiness for change. From the clients' perspective, however, in line with SDT's conceptualization of motivation, internalized reasons for engaging in treatment are likely to be more predictive of engagement than controlling social contingencies such as legal mandates from the justice system and informal social pressures. The extent to which clients identify with the value of treatment and perceive themselves as entering treatment with a measure of autonomy and self-determination are expected contributing factors to the potential divergence between client-clinician perspectives.

Chapter 4: Methods

4.1: The Instrument

The Circumstance Readiness Motivation Scale (CMR; Deleon, Melnick, Kressel, & Jainchill, 1994) has been shown to be an appropriate instrument for measuring motivation and readiness for treatment and to predict retention in treatment among substance abuse clients. The instrument is comprised of four factor derived scales, Circumstances 1 (external influences to enter or remain in treatment, e.g., I am sure I would go to jail if I did not enter treatment), Circumstances 2 (external influences to leave treatment, e.g., I am worried I will have serious money problems if I stay in treatment), Motivation (internal recognition of the need to change, e.g., It is more important to me than anything else that I stop using drugs), and Readiness (for treatment, e.g., I came to this program because I really feel that I am ready to deal with myself in treatment). The CMR has been used as an intake device, clinical treatment planning tool, and research instrument. Circumstances 1 consists of questions 4, 10, 18; Circumstances 2 consists of questions 3, 7, 16; Motivation consists of questions 1, 6, 12, 15, 17 and Readiness consists of questions 2, 5, 8, 9, 11, 13, 14.

Cronbach's alpha for the Total score is reported to be in the .70s and .80s across 30 separate studies involving a wide variety of client populations and treatment settings. Validity for the CMR is measured by two distinct criteria, the capacity to differentiate between groups and the prediction of retention. Prior studies have demonstrated that the instrument differentiates between groups entering a detoxification program, a street sample, respondents of a waiting list to enter a residential therapeutic setting (Lipton,

Morales & Goldsmith, 1991) and drug using homeless women who refused treatment and those entering a treatment program (Erikson, Stevens, McKnight & Figueredo, 1995). Prior retention studies have demonstrated a linear relationship between score category and 30-day retention with retention on each of the scales and the Total Score (Deleon, et al., 1994). Further studies with adolescents have shown the scale predicts retention in treatment across age groups (Melnick, 1999; Melnick, et al., 1997). Studies among prison-based populations have shown that the instrument predicts entry into aftercare, post release (De Leon, et al., 2000).

The present study incorporates two versions of the CMR scale modified by the author; one specific to the client group and one adapted for the clinician group. The scale was modified in two distinct ways. First, in order to minimize tendency for response set, the order of the questions as they appear in the original version (Appendix 1) were randomly reassigned. Second, whereas the client group version (Appendix 2) is identical in content to the original scale, the clinician version has been paraphrased to place the questions within the context of the clinician's perception of the client (Appendix 3). Specifically, in each question, the first-person singular "I" has been replaced with the hypothetical androgynous subject name "Chris" to denote a client. This measure was included to avoid any potential confusion and to ensure that clinicians would base their responses strictly on their personal assessment of the client. For example, the question: "Lately, I feel if I don't change, my life will keep getting worst" has been rephrased on the clinician version as follows: "Lately, Chris feels if he/she does not change, his/her life will keep getting worst." The scales are otherwise identical. The instrument is a Likert type scale comprised of 18 items and utilizes a 5-point ordinal scale to rate each

statement ranging from 1 (strongly disagree) to 5 (strongly agree). Each item may also be rated as Not Applicable. Participants were asked to circle the number that most accurately describes their viewpoint.

Scoring involves reversing the score values for questions 3, 7, 9, and 16—scores of 5=1, 4=2, 3=3, 2=4 and 1=5. The individual score values of each scale are summed to obtain the scale values. The individual score values are then summed to attain the Total Score. Responses marked Not Applicable are recoded to the client's or clinician's mean score for the scale in which the response falls. To ensure anonymity, no names or identifying information other than basic demographics were recorded for the purposes of the study.

In addition to the CMR, the study utilized two general demographic questionnaires, one for client groups (Appendix 4) and one for clinician group (Appendix 5). Questions pertaining to referral status and primary drug used were omitted from clinicians' version of the questionnaire; contents were otherwise identical. All participants (i.e., clients and clinicians) completed the general demographic questionnaire.

4.2: Participants

Ten outpatient alcohol and substance use treatment facilities in the Las Vegas, Nevada area were solicited via phone and email for their participation in the study. Three facilities responded and agreed to consider the study. Pursuant to formal face-to-face presentation of the research protocol conducted on-site with administrators and clinicians,

all three facilities consented to participate in the study. However, one facility declined to respond to scheduling requests and ultimately did not participate in the study.

Client participants were classified into three groups according to referral status. The “mandated legal coercion” group represents those participants referred by the criminal justice system who were convicted of a drug or alcohol related offense, were required to participate in treatment to avoid incarceration or rearrest, and were diagnosed with a DSM-IV-TR diagnosis for substance use disorder. The “informal/formal coercion” group is used to distinguish noncriminal participants with a diagnosed substance use disorder seeking treatment through other judiciary but without the threat of incarceration (i.e., family court or child protective services) as a condition of family reunification, maintaining child custody, or visitation rights; those referred through employee assistance programs (EAP); government assistance programs; or friends and family. The informal and formal coercion groups were combined due to insufficient number of participants in each respective category. The “voluntary” group represents participants with a diagnosed substance use disorder seeking treatment volitionally for self-improvement. Whereas reconciliation of the inconsistent conceptualization of coercion remains beyond the scope of the current study, the outcomes may contribute to a more specific classification of extraneous circumstances that impact individual motivational processes.

To ensure integrity of information, the present study determined referral source and potential criminal justice system involvement via client self-report as well as confirmation from referring clinician.

To qualify for the study, clients were required to be 21 years of age or older, have a DSM-IV-TR diagnosis for substance abuse, and attended fewer than four individual treatment sessions. A researcher provided clients with literacy and or physical deficits with assistance to complete the survey. There was no cost or compensation to participate in the study. All participants completed the study in its entirety. Clients were administered the survey questionnaires individually in a private setting within their respective facilities.

To qualify for the study, clinicians were required to be 21 years of age or older and qualified as a substance abuse treatment provider by the agency. Clinicians were administered the survey questionnaires in a private setting, following the client's departure from the facility. To maintain confidentiality, clients' responses were not shared with the clinicians or other staff and vice versa.

4.3: Study Sample

Utilizing availability sampling, a total of 63 clients (54% male, 46% female) were recruited to participate in the study (Appendix 8). The sample consisted of 19 legally coerced, 22 informal and formal coerced, and 22 voluntary clients. Relative to ethnicity, 37 (59%) were white, 12 (20.6%) were black, six (9.5%) were Hispanic, and seven (11%) were two or more races. Relative to age, 8 (12.7%) were in the 21-26 bracket, 7 (11.1%) were in the 27-32 bracket, 16 (25.4%) were in the 33-38 bracket, 11 (17.5%) were in the 39-44 bracket, 9 (14.3%) were in the 45-50 bracket, 10 (15.9%) were in the 51-56 bracket, and 2 (3.2%) were in the 57-62 bracket.

Utilizing availability sampling, a total of 15 clinicians (20% male, 80% female) were recruited to participate in the study (Appendix 9). Relative to ethnicity, six (40%)

were white, four (26.7%) were black, two (13.3%) were Hispanic, and three (20%) were two or more races. Relative to age, 3 (20%) were in the 21-26 bracket, 1 (6.7%) was in the 27-32 bracket, 4 (26.7%) were in the 33-38 bracket, 4 (26.7%) were in the 39-44 bracket, 1 (6.7%) was in the 45-50 bracket, 1 (6.7%) was in the 51-56 bracket, 1 (6.7%) was in the 57-62 bracket, and 1 (6.7%) was 63 or above. Education levels are reflected as follows: one (6.7%) had a two-year college degree, nine (60%) had a four-year college degree and five (33.3%) had a master's degree. Ten (66%) were certified alcohol and drug counselors and five (33.3%) did not have a certificate.

4.4: Recruitment

Outpatient community treatment facilities, which represent the most frequently utilized service milieu nationwide, were targeted as the setting for the present study to allow maximum heterogeneity among treatment seekers relative to referral source, legal status, acuity of presenting clinical factors, and demographics. Directors of participating agencies were informed of the nature of the study, and their cooperation was requested. Clinicians at the agency were apprised of the scope of the study and invited to refer clients who met the criteria for inclusion in the study to participate. There was no cost or compensation to participate in the study. In order to minimize response bias, the clients were not informed of the referring clinicians participation in the study. The study utilized two informed consent forms, one identifying the client as the participant (Appendix 6) and one identifying the clinician as the participant (Appendix 7). In order to participate in the study, all subjects (i.e., clients and clinicians) were asked to sign informed consent forms and received verbal clarification of the contents. The consent process included strict confidentiality of client responses among the research team as well as the voluntary

nature of participation. All participating clients agreed to consent protocols. The study received ethics approval from the University of Nevada, Las Vegas (UNLV) Office of Research Integrity—Human Subjects and supported buy the UNLV Institutional Review Board (IRB).

4.5: Data Analysis

One-way between subjects analysis of variance (ANOVA) were conducted to compare the effect of clients' as well as clinicians' perceptions of circumstances, motivation, and readiness in seeking treatment. Paired-samples t-tests were conducted to compare the clinicians' and clients aggregate scores for the circumstance, motivation, and readiness scores.

Chapter 5: Results

One-way between subjects ANOVAs were conducted to compare the effect of clients' perceptions of circumstance, motivation, and readiness in seeking treatment. One way analyses of variance yielded no significant difference between the three client groups' overall scores, $F(2, 60) = .634, p = .534$; no significant difference between the three client groups' circumstance scores, $F(2, 60) = 1.018, p = .367$; no significant difference between the three client groups' motivation scores, $F(2, 60) = .881, p = .420$; and no significant difference between the three client groups' readiness scores, $F(2, 60) = .461, p = .633$. One-way analyses of variance yielded no significant difference between the clinician groups' overall scores, $F(2, 60) = 1.871, p = .163$; no significant difference between the clinicians' circumstance scores, $F(2, 60) = .416, p = .661$; no significant difference between the clinicians' motivation scores, $F(2, 60) = 1.60, p = .210$; there was, however, a significant difference between the clinicians' readiness scores, $F(2, 60) = 3.994, p = .024$. Post hoc comparisons using the Tukey test indicated that the clinicians' mean score on the readiness dimension for the voluntary group ($M = 27.20, SD = 4.76$) was significantly different than for the formal/informal group ($M = 22.95, SD = 5.16$).

Paired-samples t-tests were conducted to compare clients' and clinicians' aggregate scores across all three dimensions. There were significant differences in the scores for client motivation ($M = 22.45, SD = 2.94$) and clinician ratings of client motivation ($M = 17.99, SD = 3.82$); $t(62) = 7.06, p < .001$; significant differences in the scores for client readiness ($M = 30.53, SD = 4.49$) and clinician rating of client readiness ($M = 25.19, SD = 5.26$); $t(62) = 5.87, p < .001$; significant differences in the client overall scores ($M = 74.16, SD = 8.99$) and clinician overall scores ($M = 63.24, SD =$

10.09); $t(62) = 7.20, p < .001$. There was no significant difference in the scores for client circumstance ($M = 21.19, SD = 3.54$) and clinician rating of client circumstance ($M = 20.07, SD = 3.96$); $t(62) = 1.68, p = .098$.

Chapter 6: Discussion

The present study has addressed the paucity of empirical evidence relative to perceived factors that regulate treatment-seeking behavior among substance using populations during the initial stages of treatment, along with clinicians' perceptions of triggers that potentially motivate conceptually different client groups' to seek treatment.

6.1: Overall Motivation

Key outcome of the study supports the hypothesis that a significant disparity, as measured by the aggregate scores on the CMR, appears to exist in levels of perceived motivation between client and clinician groups. T-test analyses suggest that compared to client groups, clinicians significantly underestimate, ignore, or are unable to assess the effects of intrinsic factors (i.e., motivation and readiness) relative to clients' treatment seeking behavior. ANOVA results support and further extend this finding by demonstrating that clinicians' overall ratings of legally coerced, informal/formal coerced, and voluntarily client groups' motivation did not yield significant differences between groups. Similarly, aggregate scores from clients' self-ratings of motivation failed to demonstrate any significant differences between the three groups. Combined, the outcomes suggest that beyond initial assessment of substance use disorder, clinicians appear to have a generic perspective of clients' treatment seeking motivations.

The finding, however, does not support the sub-hypothesis that clinicians perceive voluntary groups as being more motivated than those seeking treatment under various forms social or legal of coercion. The observed divergence in scores may be indicative of a tendency by clinicians to perceive substance use treatment seekers as a homogeneous group and to categorically underestimate interest and initial level of commitment to

treatment, regardless of referral source. Whereas this outcome is inconsistent with findings from previous studies (e.g., DiClemente, Bellino, Neavins, 1999; Evans, Li, & Hser, 2009; Taft, Murphy, Elliot, & Morell, 2001) that generally impute low motivation to compulsory treatment seeking groups, it does offer a plausible explanation for reported similarity in outcomes among different treatment seeking groups in meeting the goals of their treatment (Howard & McCaughrin, 1996; Snyder & Anderson, 2009). The observed divergence of the results from prior studies that have suggested a direct relation between low motivation and compulsory treatment may be indicative of the extent to which inconsistencies in the operationalization of the three conceptually different client groups can affect outcomes. In other words, given that prior efforts have principally omitted informal and formal coercion as a distinct group, combined with the tendency to merge those seeking treatment under legal and other non-legal social pressures into one general category, it is not surprising that a realistic distribution of the treatment seeking samples into three groups, as opposed to two groups (i.e., voluntary and coerced), would yield a relatively even distribution of motivation scores between groups, supporting the null hypothesis.

In the context of the present study, although it is conceivable that clinicians' low assessment of motivation during the initial stages of treatment may be attributable to lack of familiarity with clients, this perspective is nonetheless problematic in that frequency of treatment does not appear to ameliorate client-clinician perceptual divergence (Swift & Callahan, 2009; Tryon, Blackwell, & Hammel, 2007). The sizeable discrepancy may be indicative of systematic clinical renderings of clients' as merely going through the motions and not actively engaged in the therapeutic process. Clinicians' ambivalence to

correlate treatment attendance with treatment engagement—based on perceived lack of motivation and self-determination—may account for some of the difficulties in the development of positive therapeutic relationships, resulting in low retention rates. The results underscore the need for more systematic integration of the concepts of self-determination and autonomy into future research so as to better differentiate treatment seeking behavior on the basis of personal commitment or volition vis-à-vis coerced treatment, the impact of perceived coercion on individual clients decision making process and treatment systems, and potential effects on short- and long-term treatment outcomes.

6.2: Circumstances

Another key finding of the study demonstrates that clinicians and client groups did not differ in their appraisal of the circumstances dimensions. Although the results do not support the hypothesis, the finding is highly significant in that not only it demonstrates that different client groups experienced similar levels and sources of external pressures in seeking treatment, but also perceived coercion did not, per se, diminish motivation or readiness between groups. From the clinicians' perspective, however, the same external pressures or circumstances seem to have been perceived as more coercive, potentially diminishing clinicians' appraisals of client motivation and readiness. Lack of a significant divergence in client-clinician ratings of circumstances dimension is not surprising in that external pressures (e.g., financial problems, legal problems) are considerably more objective, concrete, and readily available to clinicians based on information clients were required to disclose. For example, client demographics, which in the case of the present study suggest nearly half of all client participants were at or below poverty income level and a combined 65% were seeking treatment based on

legal and formal/informal social pressures, were known to clinicians during the initial intake or assessment phase. Mutual awareness of those objective indicators may partially account for the client-clinician congruence on the circumstances dimension. However, initial level of client internal motivation and the intrinsic reasons for seeking treatment are more reliable predictors of commitment to treatment than external objective measures (Wild et al., 2006). Beyond descriptive objective features, coercion presents a significant subjective contextual component (Winick, 2008), which most likely accounts for the observed client-clinician divergence in perceived motivation and readiness ratings.

More fundamental, however, ANOVA outcome suggests that voluntary client group's experience of external coercive influences to enter or remain in treatment as well as external pressures to leave treatment were not significantly different than other groups. This finding is highly salient in that it underscores the flawed assumption in much of the extant literature that coercion can be imputed to referral source (Wild et al., 1998). The narrow interpretation of coercion is reflected in the tendency to emphasize the source, in lieu of the treatment seeker's experience and individual client's perceptions, relative to pressures that precipitate treatment seeking behavior. Results of the present study facilitate a more complex understanding of the function of coercion by suggesting that referral source, or the lack of in case of voluntary clients, is not analogous to psychological processes (e.g., motivation, or interest) typically associated with coercion. The consistency of results may be expounded in a number of ways. One interpretation of this finding may be that, as predicted by SDT, perceived autonomy does potentially mitigate perceptions of coercion associated with various social pressures such that the choice to enter treatment is perceived, to varying degrees, as volitional. However, an

alternate interpretation would entertain the potential that voluntary clients might be seeking treatment to avoid impending legal or formal retaliations, thus experiencing similar levels of coercion as the other client groups. Similarly, pressures in form of ultimatums or interventions from family and friends may yield influences that are not significantly different than those imposed by the legal system or other formal pressures on clients' treatment seeking behavior patterns. It is also plausible that participants in the study may have had a realistic assessment of the severity of their substance use disorder and as such did not perceive external pressures to enter treatment as coercive. Being the only dimension in which there was no significant difference between client-clinician ratings, results may be indicative of clinicians' proficiency in accurately gauging the nuances of external circumstances that precipitate treatment seeking behavior across different client groups during early stages of the therapeutic relationship.

Despite the observed consistency in levels of perceived external pressures among the three client groups, the study findings draw attention to utility of a notional distinction between objective legal pressures and perceived aspects of formal and informal sources of social pressure in conceptualizing coercion among different groups of treatment seekers. The differentiation is important in that the concept of coercion involves both legal and psychological dimensions that exist in varying degrees; whether or not legal or social pressures are perceived as coercive may not be adequately assessed without an understanding of the subjective psychological component (Winick, 2008). Ultimately, whereas different dimensions of coercion may hasten treatment-seeking behavior among all client groups, readiness and internal motivation appear to be inextricable in decision to remain in treatment.

6.3: Readiness

ANOVA results from the readiness dimension partially support the hypothesis. Whereas outcomes did not reflect any significant difference in clinicians' ratings of the client groups' motivation and circumstances, there was a significant effect in clinicians' ratings of the readiness dimension. Post hoc comparisons using the Tukey test indicated that clinicians' mean score for voluntary group was significantly higher than informal and formal coerced group. This result is intriguing and may suggest that clinicians perceive pressures from social assistance agencies or employers, and ultimatums from family and friends as yielding influences that are significantly different than those imposed by legal mandates, and that non-criminally coerced clients, as a group, are perceived as most resistant or least prepared to make changes in behavior. Although this outcome is consistent with the finding that relative to stages of change, perceived pressure from family or friends is associated with diminished likelihood of being in the action stage (Stevens et al., 2006), there is evidence of poor agreement between clients' and clinicians' appraisal of readiness to change on categorical methods which ascribe clients to one particular stage of change—as opposed to more consistent results obtained by continuous measures such as the Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES; Miller & Tonigan, 1996)—(Hodgins, 2001). In this case, participating facilities were Substance Abuse Prevention and Treatment Agency (SAPTA) affiliates and implemented identical protocols in assessing client readiness by using a categorical classification, which relied exclusively on clinicians' appraisal to assess readiness. A potential confound in assessing the outcomes from the readiness dimension in the present study arise from uncertainty as to precisely how client and

clinician groups may have interpreted readiness—specifically, readiness to change or readiness for treatment. For example, it is plausible that client groups, by virtue of actively participating in treatment, may have ascribed readiness to treatment whereas clinicians may have conceptualized and assessed readiness strictly in terms of change in behavior. This may prove to be a subtle but crucial distinction in general assessment of readiness to change in that, ideally, treatment ought to be congruent with the clients' perceived readiness for change (Lam & Hilburger, 1996).

The consistency of the readiness and motivational ratings among clients, however, provides more evidence for a tentative complimentary relationship between STD and TTM, as suggested by Kennedy & Gregoire (2009). This is a critical consideration since, in clinical settings, motivation is typically imputed to cognitions of readiness to alter problem behavior primarily on the basis of TTM (Marlow et al., 2001). However, exclusive reliance on the stages of change model is inadequate, as TTM neither explicates reasons an individual may be motivated for change nor does it prescribe how to maintain an unmotivated individual in treatment. Clinical perspectives informed by both theoretical frameworks might enhance therapeutic alliance by promoting congruence between clients' and clinicians' perceptions of the psychological processes as well as the extraneous pressures that induce clients to initiate behavioral change within the temporal context of motivation (i.e., particular stage of change).

Chapter 7: Limitations

The findings of the present study need to be interpreted with consideration for several limitations. Although participants are evenly distributed among client groups, sample size is relatively small and the study relies on data obtained from only two outpatient facilities. Additionally, due to lack of feasibility of obtaining a random sample, availability sampling procedure was utilized, thus potentially limiting the generalizability of the resulting data. The limited sample size necessitated combining the informal and formal coercion groups into a single category. Acquisition of large samples from community-based substance use treatment settings is a frequent problem encountered by researchers engaged in this field (Wolfe et al., 2013). Limitations of the sample size, however, are most prominent in the number of clinicians who participated in the study. Specifically, compared to 63 client participants, a contingent of 15 clinicians comprised the clinician sample. Although the client-clinician ratio is a realistic representation of staff caseloads in outpatient treatment facilities, potential statistical implications of this limitation are realized. To address this concern and maintain integrity of the outcomes, all group means analyses were conducted using Paired-Sample t tests.

These limitations reflect on the challenges of conducting research projects by outside evaluators in outpatient clinical settings where agency administrators may be neither interested nor invested in advancing research initiatives, and by clinicians who may be ambivalent to collaborate with researchers. Academic-community research collaborations are demonstrated to be frequently challenged due to “lack of trust and perceived lack of respect’ between researchers and participants (Israel, Schultz, Parker, & Becker, 1998), lack of shared values and concerns by agency personnel about lack of

reimbursement for expended time or effort (Gonzalez et al., 2012), and sentiment that research is fundamentally exploitative of clients and the facility (Sullivan, et al., 2001). These observations may to some extent explain the paucity of relevant empirical studies that have been conducted in community outpatient treatment settings.

Chapter 8: Conclusion

The convergence of findings supports the major hypothesis and suggests that clinicians' overall assessments are consistently incongruent with clients' own perspectives. The degree of consistency between the three treatment seeking groups' self-ratings provide some evidence for the possibility that clients, in general, may be more closely matched in their level of motivation or readiness, if assessed independent of the referral status and that voluntary clients may conceivably experience similar levels of external pressure to attend and remain in treatment as groups seeking treatment under legal, informal/formal coercion. In this case, client-clinician ratings across the circumstances, motivational, and readiness dimensions as well as overall ratings failed to predict treatment status. Outcomes are consistent with SDT, which proposes that external pressures are not necessarily antagonistic to internal motivation—rather, external controls can differ in the extent to which they are perceived as self-determined, vis-à-vis controlled, depending on the degree to which they may be internalized by the individual. The results are congruent with the premise that individuals with both high internal and external motivation are most likely to demonstrate higher treatment engagement rates (Ryan et al., 1995). These findings, however, are inconsistent with the notion that motivation per se can be inferred from substance use or referral source and potentially challenge the prevalent empirical assumptions that legal referrals to treatment are generally interpreted as coercive and construed negatively by treatment seekers (Groshkova, 2010). The overall results appear to provide support for the premise that perceived coercion and motivation ought to be assessed independently, rather than inferred from treatment seekers' institutional or social circumstances.

The analysis presents several practice and policy implications. Fundamentally, it is speculated that a mutual interpretation of reasons for which individuals seek treatment may be critical for orienting treatment strategies, and attending to clients' reasons for seeking treatment is likely to improve receptivity and the probability of completing treatment (Cunningham, Sobell, Sobell, & Gaskin, 1994). Clinicians' deficient assessment of internal motivation in the initial stages of treatment could present as highly problematic given that perceived lack of motivation is correlated with shorter retention (Simpson & Joe, 1993) and the potential for dropout is greatest during the first three months of treatment (Deane, Wootton, Hsu & Kelly, 2012; Deleon, 1985; Stevens, Radcliffe, Sanders & Hunt, 2008). This trajectory may be explained by findings that suggest exclusive focus on external motivation is likely associated with low therapeutic alliance and diminished client initiative, whereas perceived internal motivation appears to be related to clients' and clinicians' perceptions of a positive dyadic therapeutic experience (Wolfe et al., 2013). Thus, given the observed discordance in the appraisal of events that trigger treatment seeking behavior, clinicians' ability to foster engagement in treatment appears an unlikely proposal.

Precise reasons for disparities between clinicians and client groups remain unknown and present a salient subject for future research. However, it can be speculated that clinicians in outpatient community treatment settings may be highly susceptible to socially institutionalized stigmatizing attitudes towards substance using population, thereby diminishing their perceptions of clients' self volition to engage in treatment. Organizational indifference to adequately diversify assessment and treatment needs based on identified evidence-based interventions that address and enhance motivation may be

another factor. The extent to which staff educational levels diminish systematic implementation of theoretical perspectives that recognize perceived coercion and internal motivation as separate constructs may also contribute to narrow clinical perspectives. For example, in the present study, whereas only 33 percent of the clinicians had attained a master's degree, about 67 percent had completed a 4-year college degree or less but were certified alcohol and drug abuse counselors (CADC). In the state of Nevada, only a high school diploma or equivalent is required to enlist in the CADC internship program. Educational levels appear to be robustly correlated with clinicians' forward attitudes towards incorporating evidence-based practices in treatment settings, thus recruitment of therapists with higher educational levels may moderate the disparity between what is disseminated in advanced academic curricula and what is actualized in clinical practice (Krull, Lundgren, & Beltrame, 2014).

Beyond increasing organizational capacity and workforce development, treatment facilities may address client-clinician perceptual inconsistencies by implementing a standardized and validated assessment tool to measure treatment seekers' perceptions of external and internal motivation as an integral component of existing assessment protocols. The present study concedes to the lack of a consensus on terminology and operationalization of motivation and coercion. These observations highlight a need for future efforts to advance measurement instruments and research methodologies that allow for a more consistent conceptualization of these profound abstractions. Efforts to develop future assessment protocols must remain cognizant of the potential utility of moving beyond instruments that are designed from the outset to assess single groups (i.e., clinicians or clients). The present study sought to address the specific limitation by

modifying the CMR into distinct client and clinician versions to diminish potential ambiguity in the interpretation of survey. Proliferation of valid, reliable, and culturally sensitive assessment instruments designed to include both clients and clinicians is in turn likely to encourage more robust research designs. Presently, there is a virtual absence of measurement instruments designed to discretely assess both client and clinician groups' perspectives.

Research in this field must evolve in order to facilitate empirical examinations of the reciprocity between internal and external pressures on treatment motivation, retention, and outcomes and make a concerted effort to withdraw from rendering generalizations strictly on the basis of referral source.

Appendices

Appendix 1. Original CMR Scale

Instructions: Carefully consider each of the questions below and indicate how closely they describe your own thoughts and feelings.

Circle the number that best describes your response. If not applicable, please circle N/A.

1	2	3	4	5	Not Applicable
Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	N/A

- | | | |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 1. | I am sure that I would go to jail if I didn't enter treatment. | 1----2----3----4----5----N/A |
| 2. | I am sure that I would have come to treatment without the pressure of my legal involvement. | 1----2----3----4----5----N/A |
| 3. | I am sure that my family will not let me live at home if I did not come to treatment. | 1----2----3----4----5----N/A |
| 4. | I believe that my family/relationship will try to make me leave treatment after a few months. | 1----2----3----4----5----N/A |
| 5. | I am worried that I will have serious money problems if I stay in treatment. | 1----2----3----4----5----N/A |
| 6. | Basically, I feel I have too many outside problems that will prevent me from completing treatment (parents, spouse/relationship, children, loss of job, loss of income, loss of education, family problems, loss of home/place to live, etc.) | 1----2----3----4----5----N/A |
| 7. | Basically, I feel that my drug use is a very serious problem in my life. | 1----2----3----4----5----N/A |
| 8. | Often I don't like myself because of my drug use. | 1----2----3----4----5----N/A |
| 9. | Lately, I feel if I don't change, my life will keep getting worst. | 1----2----3----4----5----N/A |
| 10. | I really feel bad that my drug use and the way I've been | 1----2----3----4----5----N/A |

living has hurt a lot of people.

- | | | |
|-----|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| 11. | It is more important to me than anything else that I stop using drugs. | 1-----2-----3-----4-----5-----N/A |
| 12. | I don't really believe that I have to be in treatment to stop using drugs, I can stop anytime I want. | 1-----2-----3-----4-----5-----N/A |
| 13. | I came to this program because I really feel that I'm ready to deal with myself in treatment. | 1-----2-----3-----4-----5-----N/A |
| 14. | I'll do whatever I have to do to get my life straightened out. | 1-----2-----3-----4-----5-----N/A |
| 15. | Basically, I don't see any other choice for help at this time except some kind of treatment. | 1-----2-----3-----4-----5-----N/A |
| 16. | I don't really think I can stop my drug use with the help of friends, family or religion, I really need some kind of treatment. | 1-----2-----3-----4-----5-----N/A |
| 17. | I am really tired of using drugs and want to change, but I know I can't do it on my own. | 1-----2-----3-----4-----5-----N/A |
| 18. | I'm willing to enter treatment as soon as possible. | 1-----2-----3-----4-----5-----N/A |

Appendix 2. Modified CMR Scale, Client Version

Instructions: Carefully consider each of the questions below and indicate how closely they describe your own thoughts and feelings.

Circle the number that best describes your response. If not applicable, please circle N/A.

	1	2	3	4	5	Not Applicable
	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	N/A
1.	Lately, I feel if I don't change, my life will keep getting worst.					1-----2-----3-----4-----5-----N/A
2.	I don't really think I can stop my drug use with the help of friends, family or religion, I really need some kind of treatment.					1-----2-----3-----4-----5-----N/A
3.	Basically, I feel I have too many outside problems that will prevent me from completing treatment (parents, spouse/relationship, children, loss of job, loss of income, loss of education, family problems, loss of home/place to live, etc.)					1-----2-----3-----4-----5-----N/A
4.	I am sure that my family will not let me live at home if I did not come to treatment.					1-----2-----3-----4-----5-----N/A
5.	I'll do whatever I have to do to get my life straightened out.					1-----2-----3-----4-----5-----N/A
6.	Often I don't like myself because of my drug use.					1-----2-----3-----4-----5-----N/A
7.	I believe that my family/relationship will try to make me leave treatment after a few months.					1-----2-----3-----4-----5-----N/A
8.	I came to this program because I really feel that I'm ready to deal with myself in treatment.					1-----2-----3-----4-----5-----N/A

- | | | |
|-----|-------------------------------------------------------------------------------------------------------|------------------------------|
| 9. | I don't really believe that I have to be in treatment to stop using drugs, I can stop anytime I want. | 1----2----3----4----5----N/A |
| 10. | I am sure that I would go to jail if I didn't enter treatment. | 1----2----3----4----5----N/A |
| 11. | I'm willing to enter treatment as soon as possible. | 1----2----3----4----5----N/A |
| 12. | It is more important to me than anything else that I stop using drugs. | 1----2----3----4----5----N/A |
| 13. | Basically, I don't see any other choice for help at this time except some kind of treatment. | 1----2----3----4----5----N/A |
| 14. | I am really tired of using drugs and want to change, but I know I can't do it on my own. | 1----2----3----4----5----N/A |
| 15. | I really feel bad that my drug use and the way I've been living has hurt a lot of people. | 1----2----3----4----5----N/A |
| 16. | I am worried that I will have serious money problems if I stay in treatment. | 1----2----3----4----5----N/A |
| 17. | Basically, I feel that my drug use is a very serious problem in my life. | 1----2----3----4----5----N/A |
| 18. | I am sure that I would have come to treatment without the pressure of my legal involvement. | 1----2----3----4----5----N/A |

Appendix 3. Modified CMR Scale, Clinician Version

Instructions: Carefully consider each of the questions below and indicate how closely they describe your own thoughts and feelings.

Circle the number that best describes your response. If not applicable, please circle N/A.

1	2	3	4	5	Not Applicable
Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	N/A

1. Lately, Chris feels if he/she does not change, his/her life will keep getting worst. 1-----2-----3-----4-----5----N/A
2. Chris does not really think he/she can stop his/her drug use with the help of friends, family or religion, he/she really needs some kind of treatment. 1-----2-----3-----4-----5----N/A
3. Basically, Chris feels he/she has too many outside problems that will prevent him/her from completing treatment (parents, spouse/relationship, children, loss of job, loss of income, loss of education, family problems, loss of home/place to live, etc.) 1-----2-----3-----4-----5----N/A
4. Chris is sure that his/her family will not let him/her live at home if he/she did not come to treatment. 1-----2-----3-----4-----5----N/A
5. Chris will do whatever he/she has to do to get his/her life straightened out. 1-----2-----3-----4-----5----N/A
6. Often Chris does not like himself/herself because of his/her drug use. 1-----2-----3-----4-----5----N/A
7. Chris believes that his/her family/relationship will try to make him/her leave treatment after a few months. 1-----2-----3-----4-----5----N/A
8. Chris came to this program because he/she really feels ready to deal with himself/herself in treatment. 1-----2-----3-----4-----5----N/A

9. Chris does not really believe he/she has to be in treatment to stop using drugs, he/she can stop anytime he/she wants. 1-----2-----3-----4-----5-----N/A
10. Chris is sure he/she would go to jail if he/she didn't enter treatment. 1-----2-----3-----4-----5-----N/A
11. Chris is willing to enter treatment as soon as possible. 1-----2-----3-----4-----5-----N/A
12. It is more important to Chris than anything else that he/she stop using drugs. 1-----2-----3-----4-----5-----N/A
13. Basically, Chris doesn't see any other choice for help at this time except some kind of treatment. 1-----2-----3-----4-----5-----N/A
14. Chris is really tired of using drugs and wants to change, but he/she knows it can't be done on his/her own. 1-----2-----3-----4-----5-----N/A
15. Chris really feels bad that his/her drug use and the way he/she have been living has hurt a lot of people. 1-----2-----3-----4-----5-----N/A
16. Chris is worried that he/she will have serious money problems if he/she stays in treatment. 1-----2-----3-----4-----5-----N/A
17. Basically, Chris feels that his/her drug use is a very serious problem in his/her life. 1-----2-----3-----4-----5-----N/A
18. Chris is sure that he/she would have come to treatment without the pressure of his/her legal involvement. 1-----2-----3-----4-----5-----N/A

Appendix 4. Demographic Questionnaire, Client Version

Instructions: Please check the appropriate response for each question.

1. **Your Status:**

- | | |
|-----------------------------------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> Mandated by court/judicial system | <input type="checkbox"/> Voluntary/self referred |
| <input type="checkbox"/> Referred by welfare office | <input type="checkbox"/> Referred by homeless shelter |
| <input type="checkbox"/> Referred by employer | <input type="checkbox"/> Referred by spouse/family |
| <input type="checkbox"/> Other. Please state original referral source | _____ |

2. **Your Primary Drug:**

- | | |
|-------------------------------------------------------------|--------------------------------------------|
| <input type="checkbox"/> Heroin | <input type="checkbox"/> Alcohol |
| <input type="checkbox"/> Hypnotics/Sedatives | <input type="checkbox"/> Amphetamines |
| <input type="checkbox"/> Non-crack cocaine | <input type="checkbox"/> Crack Cocaine |
| <input type="checkbox"/> Opiates | <input type="checkbox"/> Marijuana/Hashish |
| <input type="checkbox"/> LSD/Psychedelics | <input type="checkbox"/> Barbiturates |
| <input type="checkbox"/> More than one of the above per day | <input type="checkbox"/> Other: _____ |

3. **Your Ethnicity:**

- | | |
|-----------------------------------|----------------------------------------------------------------------|
| <input type="checkbox"/> White | <input type="checkbox"/> Native American |
| <input type="checkbox"/> Black | <input type="checkbox"/> Asian/Pacific Islander/ Indian subcontinent |
| <input type="checkbox"/> Hispanic | <input type="checkbox"/> Two or more races |

4. **Your Gender:**

- | | | |
|-------------------------------|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Male | <input type="checkbox"/> Female | <input type="checkbox"/> Transgender |
|-------------------------------|---------------------------------|--------------------------------------|

5. **Your Age:**

- | | |
|--------------------------------|--------------------------------------|
| <input type="checkbox"/> 21-26 | <input type="checkbox"/> 45-50 |
| <input type="checkbox"/> 27-32 | <input type="checkbox"/> 51-56 |
| <input type="checkbox"/> 33-38 | <input type="checkbox"/> 57-62 |
| <input type="checkbox"/> 39-44 | <input type="checkbox"/> 63 or above |

6. **What is the highest level of education you have completed?**

- | | |
|------------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> Less than High School | <input type="checkbox"/> 4-Year College Degree(BA,BS) |
| <input type="checkbox"/> High School/GED | <input type="checkbox"/> Master's Degree |
| <input type="checkbox"/> Some College | <input type="checkbox"/> Doctoral Degree |
| <input type="checkbox"/> 2-Year College Degree | |

7. What is your monthly income?

- No income
- Less than \$100.00
- \$100-\$600
- \$700-\$1,200
- \$1,300-\$2,000
- \$2,100-\$2,900
- \$3,000 or more

8. What is your current marital status?

- Single, Never Married
- Married
- Separated
- Divorced
- Widowed

9. What is your religious affiliation?

- | | |
|------------------------------------------------|-----------------------------------------|
| <input type="checkbox"/> Protestant Christian | <input type="checkbox"/> Roman Catholic |
| <input type="checkbox"/> Evangelical Christian | <input type="checkbox"/> Jewish |
| <input type="checkbox"/> Muslim | <input type="checkbox"/> Hindu |
| <input type="checkbox"/> Buddhist | <input type="checkbox"/> Other: _____ |

Appendix 5. Demographic Questionnaire, Clinician Version

Instructions: Please check the appropriate response for each question.

1. **Your Ethnicity:**

- | | |
|-----------------------------------|----------------------------------------------------------------------|
| <input type="checkbox"/> White | <input type="checkbox"/> Native American |
| <input type="checkbox"/> Black | <input type="checkbox"/> Asian/Pacific Islander/ Indian subcontinent |
| <input type="checkbox"/> Hispanic | <input type="checkbox"/> Two or more races |

2. **Your Gender:**

- | | | |
|-------------------------------|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Male | <input type="checkbox"/> Female | <input type="checkbox"/> Transgender |
|-------------------------------|---------------------------------|--------------------------------------|

3. **Your Age:**

- | | |
|--------------------------------|--------------------------------------|
| <input type="checkbox"/> 21-26 | <input type="checkbox"/> 45-50 |
| <input type="checkbox"/> 27-32 | <input type="checkbox"/> 51-56 |
| <input type="checkbox"/> 33-38 | <input type="checkbox"/> 57-62 |
| <input type="checkbox"/> 39-44 | <input type="checkbox"/> 63 or above |

4. **What is the highest level of education you have completed?**

- | | |
|------------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> Less than High School | <input type="checkbox"/> 4-Year College Degree(BA,BS) |
| <input type="checkbox"/> High School/GED | <input type="checkbox"/> Master's Degree |
| <input type="checkbox"/> Some College | <input type="checkbox"/> Doctoral Degree |
| <input type="checkbox"/> 2-Year College Degree | |

5. **What is your monthly income?**

- No income
- Less than \$100.00
- \$100-\$600
- \$700-\$1,200
- \$1,300-\$2,000
- \$2,100-\$2,900
- \$3,000 or more

6. **What is your current marital status?**

- Single, Never Married
- Married
- Separated

Divorced

Widowed

7. What is your religious affiliation?

Protestant Christian

Roman Catholic

Evangelical Christian

Jewish

Muslim

Hindu

Buddhist

Other: _____

Appendix 6. Informed Consent, Client Version



INFORMED CONSENT

Department of Social Work

TITLE OF STUDY: Contrasting Perceptions: Treatment Entry and Outcomes Between Mandated and Voluntary Substance Abuse Clients.

INVESTIGATOR(S): An-Pyng Sun, Ph.D., LCSW and Arthur Tabrizi, B.A., MSW student.

For questions or concerns about the study, you may contact: **An-Pyng Sun, Ph.D., LCSW (702) 895-4349.**

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted, contact **the UNLV Office of Research Integrity – Human Subjects at 702-895-2794, toll free at 877-895-2794 or via email at IRB@unlv.edu.**

Purpose of the Study

You are invited to participate in a research study. The purpose of this study is to determine perceptions of indicators for change.

Participants

You are being asked to participate in the study because you fit the following criteria: You are an adult diagnosed with substance use disorder and have volunteered or been mandated to enroll in a substance abuse program.

Procedures

If you volunteer to participate in this study, you will be asked to do the following: Complete a survey assessing the factors that have influenced your current readiness to change and a demographic questionnaire, which asks for your age, gender, race, substance abuse history and a few other items of personal interest.

Benefits of Participation

There may be no direct benefits to you as a participant in this study. However, we hope to learn how your perceptions of the factors that prompt seeking treatment influence recovery outcome. The information gained will help to improve quality of treatment delivery.

Risks of Participation

There are risks involved in all research studies. This study has only minimal risks. You may become uncomfortable answering certain questions. It is expected that you will experience no greater discomfort

than what is ordinarily encountered in daily life. Benefits obtained in this study are expected to outweigh any foreseeable risks.

Cost /Compensation

There will be no financial cost to you to participate in this study. The study will take about 15 minutes of your time. You will not be compensated for your time.

Confidentiality

All information gathered in this study will remain confidential among the research the team. No reference will be made in written or oral materials that could link you to this study. All records will be stored in a locked facility at UNLV for 3 years after completion of the study. After the storage time the information gathered will be destroyed.

Voluntary Participation

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may choose to answer all, some, or none of the questions in the questionnaire. You may withdraw at any time without prejudice to your relations with this agency, referral source, or sponsor. You are encouraged to ask questions about this study at the beginning or any time during the research study.

Participant Consent:

I have read the above information and agree to participate in this study. I have been able to ask questions about the research study. I am at least 18 years of age. A copy of this form has been given to me.

Signature of Participant

Date

Participant Name (Please Print)

Appendix 7. Informed Consent, Clinician Version



INFORMED CONSENT Department of Social Work

TITLE OF STUDY: Contrasting Perceptions: Treatment Entry and Outcomes Between Mandated and Voluntary Substance Abuse Clients.

INVESTIGATOR(S): An-Pyng Sun, Ph.D., LCSW and Arthur Tabrizi, B.A., MSW student.

For questions or concerns about the study, you may contact: **An-Pyng Sun, Ph.D., LCSW (702) 895-4349.**

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted, contact **the UNLV Office of Research Integrity – Human Subjects at 702-895-2794, toll free at 877-895-2794 or via email at IRB@unlv.edu.**

Purpose of the Study

You are invited to participate in a research study. The purpose of this study is to determine perceptions of indicators for change.

Participants

You are being asked to participate in the study because you fit the following criteria: You are a substance abuse treatment provider.

Procedures

If you volunteer to participate in the study, you will be asked to do the following: Complete a survey assessing your clients' current readiness to change and a demographic questionnaire, which asks for your age, gender, race, and a few other items of personal interest.

Benefits of Participation

There may be no direct benefits to you as a participant in this study. However, we hope to learn how your perceptions of the factors that prompt seeking treatment influence recovery outcome. The information gained will help to improve quality of treatment delivery.

Risks of Participation

There are risks involved in all research studies. This study has only minimal risks. You may become uncomfortable answering certain questions. It is expected that you will experience no greater discomfort than what is ordinarily encountered in daily life. Benefits obtained in this study are expected to outweigh any foreseeable risks.

Cost /Compensation

There will be no financial cost to you to participate in this study. The study will take about 15 minutes of your time. You will not be compensated for your time.

Confidentiality

All information gathered in this study will remain confidential among the research the team. No reference will be made in written or oral materials that could link you to this study. All records will be stored in a locked facility at UNLV for 3 years after completion of the study. After the storage time the information gathered will be destroyed.

Voluntary Participation

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may choose to answer all, some, or none of the questions in the questionnaire. You may withdraw at any time without prejudice to your relations with this agency, referral source, or sponsor. You are encouraged to ask questions about this study at the beginning or any time during the research study.

Participant Consent:

I have read the above information and agree to participate in this study. I have been able to ask questions about the research study. I am at least 18 years of age. A copy of this form has been given to me.

Signature of Participant

Date

Participant Name (Please Print)

Appendix 8. Client Demographic Characteristics

Characteristics	n	Percentage
Gender		
Male	34	54
Female	29	46
Status		
Legal coercion	19	30.2
Formal and informal coercion	22	34.9
Voluntary	22	34.9
Primary Drug		
Heroin	3	4.8
Cocaine/crack cocaine	7	11.1
Opiates	1	1.6
Alcohol	12	19
Amphetamines	15	23.8
Marijuana	4	6.3
More than one of the above per day	21	33.3
Ethnicity		
White	37	58.7
Black	13	20.6
Hispanic	6	9.5
Two or more races	7	11.1
Age		

21-26	8	12.7
27-32	7	11.1
33-38	16	25.4
39-44	11	17.5
45-50	9	14.3
51-56	10	15.9
57-62	2	3.2
63 or above	0	0

Education Completed

Less than High School	12	19
High School/GED	22	34.9
Some college	19	30.2
2-year college	5	7.9
4-year college	4	6.3
Masters degree	1	1.6

Monthly Income

No income	39	61.9
Less than \$100	2	3.2
\$100-\$600	6	9.5
\$700-\$1,200	8	12.7
\$1,300-\$2,000	4	6.3
\$2,100-\$2,900	2	3.2
\$3000 or more	2	3.2

Marital Status

Single/never married	36	57.1
Married	6	9.5
Separated	6	9.5

Divorced	14	22.2
Widowed	1	1.6
Religious Affiliation		
Protestant Christian	10	15.9
Evangelical Christian	7	11.1
Muslim	0	0
Buddhist	1	1.6
Roman Catholic	7	11.1
Jewish	0	0
Other	38	60.3

Appendix 9. Clinician Demographic Characteristics

Characteristics	n	Percentage
Gender		
Male	3	20
Female	12	80
Ethnicity		
White	6	40
Black	4	26.7
Hispanic	2	13.3
Two or more races	3	20
Age		
21-26	3	20
27-32	1	6.7
33-38	4	26.7
39-44	4	26.7
45-50	1	6.7
51-56	1	6.7
57-62	1	6.7
63 or above	1	6.7
Education Completed		
Less than High School	0	0
High School/GED	0	0
Some college	0	0
2-year college	1	6.7
4-year college	9	60

Masters degree	5	33.3
Monthly Income		
No income	0	0
Less than \$100	0	0
\$100-\$600	0	0
\$700-\$1,200	1	6.7
\$1,300-\$2,000	3	20
\$2,100-\$2,900	5	33.3
\$3000 or more	6	40
Marital Status		
Single/never married	5	33.3
Married	5	33.3
Separated	0	0
Divorced	5	33.3
Widowed	0	0
Religious Affiliation		
Protestant Christian	4	26.7
Evangelical Christian	0	0
Muslim	0	0
Buddhist	0	0
Roman Catholic	1	6.7
Jewish	0	0
Other	10	66.7

References

- Abouguendia, M., Joyce, A. S., Piper, W. E., & Ogradniczuk, J. S. (2004). Alliance as a mediator of expectancy effects in short-term group psychotherapy. *Group Dynamics, 8*(1), 3-12. doi:10.1037/1089-2699.8.1.3
- Acosta, F. X. (1980). Self-described reasons for premature termination of psychotherapy by mexican american, black american, and anglo-american patients. *Psychological Reports, 47*(2), 435-443. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1981-26219-001&site=ehost-live>
- Al-Darmaki, F., & Kivlighan, D. M. (1993). Congruence in client-counselor expectations for relationship and the working alliance. *Journal of Counseling Psychology, 40*(4), 379-384. doi:10.1037/0022-0167.40.4.379
- Anglin, M.D., Prendergast, M., & Farabee, D. (1998). The effectiveness of coerced treatment for drug-abusing offenders: *Office of National Drug Control Policy's Conference of Scholars and Policy Makers*. Washington, D.C. Retrieved from <https://www.ncjrs.gov/ondcppubs/treat/consensus/anglin.pdf>
- Bachelor, A. (1991). Comparison and relationship to outcome of diverse dimensions of the helping alliance as seen by client and therapist. *Psychotherapy: Theory, Research, Practice, Training, 28*(4), 534-549. doi:10.1037/0033-3204.28.4.534
- Bachelor, A. (2013). Clients' and therapists' views of the therapeutic alliance:

Similarities, differences and relationship to therapy outcome. *Clinical Psychology & Psychotherapy*, 20(2), 118-135. doi:10.1002/cpp.792

Baekeland, F., & Lundwall, L. (1975). Dropping out of treatment: A critical review. *Psychological Bulletin*, 82(5), 738-783. doi:10.1037/h0077132

Ball, S. A., Carroll, K. M., & Canning-Ball, M. (2006). Reasons for dropout from drug abuse treatment: Symptoms, personality, and motivation. *Addictive Behaviors*, 31(2), 320-330. doi:10.1016/j.addbeh.2005.05.013

Belenko, S., & Peugh, J. (2005). Estimating drug treatment needs among state prison inmates. *Drug & Alcohol Dependence*, 77(3), 269-281. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=cin20&AN=2005086944&site=ehost-live>

Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice*, 16(3), 252-260. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1980-23666-001&site=ehost-live>

Bordin, E. S. (1994). Theory and research on the therapeutic working alliance: New directions. In A. O. Horvath, & L. S. Greenberg (Eds.), (pp. 13-37). Oxford, England: John Wiley & Sons.

Bourgeois, L., Sabourin, S., & Wright, J. (1990). Predictive validity of therapeutic

alliance in group marital therapy. *Journal of Consulting and Clinical Psychology*, 58(5), 608-613. doi:10.1037/0022-006X.58.5.608

Brecht, M., & Anglin, M. D. (1993). Treatment effectiveness for legally coerced versus voluntary methadone maintenance clients. *American Journal of Drug & Alcohol Abuse*, 19(1), 89-106. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=9409010035&site=ehost-live>

Brehm, S. S., & Brehm, J. W. (1981). *Psychological reactance :A theory of freedom and control*. New York: Academic Press.

Brener, L., Von Hippel, W., Von Hippel, C., Resnick, I., & Trelor, C. (2010). Perceptions of discriminatory treatment by staff as predictors of drug treatment completion: Utility of a mixed methods approach. *Drug & Alcohol Review*, 29(5), 491-497. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=63544747&site=ehost-live>

Brocato, J., & Wagner, E. F. (2008). Predictors of retention in an alternative-to-prison substance abuse treatment program. *Criminal Justice and Behavior*, 35(1), 99-119. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2008-00078-007&site=ehost-live>

- Bromet, E. J., Moos, R. H., & Bliss, F. (1976). The social climate of alcoholism treatment programs. *Archives of General Psychiatry*, 33(8), 910-916. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1976-30463-001&site=ehost-live>
- Budman, S. H., Soldz, S., Demby, A., & Feldstein, M. (1989). Cohesion, alliance and outcome in group psychotherapy. *Psychiatry: Interpersonal and Biological Processes*, 52(3), 339-350. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1990-05387-001&site=ehost-live>
- Butt, G., Paterson, B. L., & McGuinness, L. K. (2008). Living with the stigma of hepatitis C. *Western Journal of Nursing Research*, 30(2), 204-221. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=cin20&AN=2009800753&site=ehost-live>
- Cahill, M. A., Adinoff, B., Hosig, H., Muller, K., & Pulliam, C. (2003). Motivation for treatment preceding and following a substance abuse program. *Addictive Behaviors*, 28(1), 67. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=8762022&site=ehost-live>
- Carroll, J. S. (1991). Consent to mental health treatment: A theoretical analysis of coercion, freedom, and control. *Behavioral Sciences & the Law*, 9(2), 129-142.

Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=16405235&site=ehost-live>

Carver, C. S., & Baird, E. (1998). The American dream revisited: Is it what you want or why you want it that matters? *Psychological Science (Wiley-Blackwell)*, 9(4), 289.

Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=892716&site=ehost-live>

Chapman, C. L., Burlingame, G. M., Gleave, R., Rees, F., Beecher, M., & Porter, G. S. (2012). Clinical prediction in group psychotherapy. *Psychotherapy Research*, 22(6), 673-681. doi:10.1080/10503307.2012.702512

Chavaria, F. R. (1992). Successful drug treatment in a criminal justice setting: A case study. *Federal Probation*, 56(1), 48. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=f5h&AN=9205184278&site=ehost-live>

Chorpita, B. F., Daleiden, E. L., Ebesutani, C., Young, J., Becker, K. D., Nakamura, B. J., . . . Starace, N. (2011). Evidence-based treatments for children and adolescents:

An updated review of indicators of efficacy and effectiveness. *Clinical*

Psychology: Science and Practice, 18(2), 154-172. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2011-12041-009&site=ehost-live>

[live](http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2011-12041-009&site=ehost-live)

- Collins, J. J., & Allison, M. (1983). Legal coercion and retention in drug abuse treatment. *Hospital & Community Psychiatry, 34*(12), 1145-1149. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1984-21435-001&site=ehost-live>
- Conner, K. O., & Rosen, D. (2008). "You're nothing but a junkie": Multiple experiences of stigma in an aging methadone maintenance population. *Journal of Social Work Practice in the Addictions, 8*(2), 244-264. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=sih&AN=33881840&site=ehost-live>
- Cosden, M., Basch, J. E., Campos, E., Greenwell, A., Barazani, S., & Walker, S. (2006). Effects of motivation and problem severity on court-based drug treatment. *Crime & Delinquency, 52*(4), 599-618. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=eric&AN=EJ798063&site=ehost-live>; <http://dx.doi.org.ezproxy.library.unlv.edu/10.1177/0011128705284287>
- Cronkite, R. C., & Moos, R. H. (1978). Evaluating alcoholism treatment programs: An integrated approach. *Journal of Consulting and Clinical Psychology, 46*(5), 1105-1119. doi:10.1037/0022-006X.46.5.1105
- Cunningham, J. A., Sobell, L. C., Sobell, M. B., & Gaskin, J. (1994). Alcohol and drug abusers' reasons for seeking treatment. *Addictive Behaviors, 19*(6), 691-696. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1995-22902-001&site=ehost-live>

Curry, S., Wagner, E. H., & Grothaus, L. C. (1990). Intrinsic and extrinsic motivation for smoking cessation. *Journal of Consulting & Clinical Psychology, 58*, 310-316.

doi:10.1037/0022-006X.58.3.310

Curry, S., Wagner, E. H., & Grothaus, L. C. (1991). Evaluation of intrinsic and extrinsic motivation interventions with a self-help smoking cessation program. *Journal of Consulting & Clinical Psychology, 59*, 318-324. doi:10.1037/0022-006X.59.2.318

Dam, Esther Allart-vanHosman, Clemens M.H.Keijsers, Ger P.J. (2004). A new instrument to assess participant motivation for involvement in preventive interventions. *Journal of Clinical Psychology, 60*(6), 555-565. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=tfh&AN=13088047&site=ehost-live>

Deane, F. P., Wootton, D. J., Hsu, C., & Kelly, P. J. (2012). Predicting dropout in the first 3 months of 12-step residential drug and alcohol treatment in an Australian sample.

Journal of Studies on Alcohol and Drugs, 73(2), 216-225. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2012-05605-006&site=ehost-live>

De Leon, G. (1985). The therapeutic community: Status and evolution. *International*

Journal of the Addictions, 20(6-7), 823-844. Retrieved from
<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1986-28232-001&site=ehost-live>

De Leon, G., Melnick, G., Kressel, D., & Jainchill, N. (1994). Circumstances, motivation, readiness, and suitability (the CMRS scales): Predicting retention in therapeutic community treatment. *American Journal of Drug & Alcohol Abuse*, 20(4), 495-515. Retrieved from
<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=9501041110&site=ehost-live>

De Leon, G., Melnick, G., Thomas, G., Kressel, D., & Wexler, H. K. (2000). Motivation for treatment in a prison-based therapeutic community. *American Journal of Drug & Alcohol Abuse*, 26(1), 33. Retrieved from
<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=2877051&site=ehost-live>

DeCharms, R. (1968). *Personal causation; the internal affective determinants of behavior*. New York: Academic Press.

Deci, E. L., Cascio, W. F., & Rochester Univ., N. (1972). *Changes in intrinsic motivation as a function of negative feedback and threats*. Retrieved from
<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=eric&AN=ED063558&site=ehost-live>

- Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology, 74*(4), 580. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=bsh&AN=5112914&site=ehost-live>
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin, 125*(6), 627-668. doi:10.1037/0033-2909.125.6.627
- Deci, E. L., & Ryan, R. M. (1987). The support of autonomy and the control of behavior. *Journal of Personality and Social Psychology, 53*(6), 1024-1037. doi:10.1037/0022-3514.53.6.1024
- Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=buh&AN=3926504&site=ehost-live>
- Denison, D., Nieminen, L., & Kotrba, L. (2014). Diagnosing organizational cultures: A conceptual and empirical review of culture effectiveness surveys. *European Journal of Work & Organizational Psychology, 23*(1), 145-161. doi:10.1080/1359432X.2012.713173
- DiClemente, C. C. (2003). *Addiction and change: How addictions develop and addicted people recover*. New York, NY, US: Guilford Press.

DiClemente, C. C., Bellino, L. E., & Neavins, M.T. (1999). Motivation for change and alcoholism treatment. *Alcohol Research & Health*, 23(2), 86. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=2738913&site=ehost-live>

Drieschner, K. H., Lammers, S. M. M., & Van, D. S. (2004). Treatment motivation: An attempt for clarification of an ambiguous concept. *Clinical Psychology Review*, 23(8), 1115-1137. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2004-10785-005&site=ehost-live>

Elvins, R., & Green, J. (2008). The conceptualization and measurement of therapeutic alliance: An empirical review. *Clinical Psychology Review*, 28(7), 1167-1187. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2008-12391-009&site=ehost-live>

Epperson, D. L., Bushway, D. J., & Warman, R. E. (1983). Client self-terminations after one counseling session: Effects of problem recognition, counselor gender, and counselor experience. *Journal of Counseling Psychology*, 30, 307-315.
doi:10.1037/0022-0167.30.3.307

Erickson, J. R., Stevens, S., McKnight, P., & Figueredo, A. J. (1995). Willingness for treatment as a predictor of retention and outcomes. *Journal of Addictive Diseases*,

14(4), 135-150. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1996-02804-008&site=ehost-live>

Etheridge, R. M., Craddock, S. G., Hubbard, R. L., & Rounds-Bryant, J. (1999). The relationship of counseling and self-help participation to patient outcomes in DATOS. *Drug & Alcohol Dependence*, 57(2), 99-112. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=cin20&AN=2003151175&site=ehost-live>

Evans, E., Li, L., & Hser, Y. (2009). Client and program factors associated with dropout from court mandated drug treatment. *Evaluation & Program Planning*, 32(3), 204-212. doi:10.1016/j.evalprogplan.2008.12.003

Fals-Stewart, W., O'Farrell, T. J., Birchler, G. R., Córdova, J., & Kelley, M. L. (2005). Behavioral couples therapy for alcoholism and drug abuse: Where we've been, where we are, and where we're going. *Journal of Cognitive Psychotherapy*, 19(3), 229-246. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=19722659&site=ehost-live>

Farabee, D. J., Nelson, R., & Spence, R. (1993). Psychosocial profiles of criminal justice- and noncriminal justice-referred substance abusers in treatment. *Criminal Justice and Behavior*, 20(4), 336-346. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=19722659&site=ehost-live>

ry.unlv.edu/login.aspx?direct=true&db=psyh&AN=1994-15107-001&site=ehost-live

Farabee, D., Prendergast, M., & Anglin, M. D. (1998). The effectiveness of coerced treatment for drug-abusing offenders. *Federal Probation*, 62(1), 3-10. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1998-11198-001&site=ehost-live>

Fierman, L. B. (1965). Myths in the practice of psychotherapy. *Archives of General Psychiatry*, 12(4), 408-414. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1965-10365-001&site=ehost-live>

Friedman, A. S., Glickman, N. W., & Kovach, J. A. (1986). Comparisons of perceptions of the environments of adolescent drug treatment residential and outpatient programs by staff versus clients and by sex of staff and clients. *The American Journal of Drug and Alcohol Abuse*, 12(1-2), 31-52.

Fuhriman, A., & Burlingame, G. M. (1990). Consistency of matter: A comparative analysis of individual and group process variables. *Counseling Psychologist*, 18(1), 6-63. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=eric&AN=EJ409881&site=ehost-live>

Garnick, D. W., Horgan, C. M., Acevedo, A., Lee, M. T., Panas, L., Ritter, G. A., . . .

Wright, D. (2014). Criminal justice outcomes after engagement in outpatient substance abuse treatment. *Journal of Substance Abuse Treatment, 46*(3), 295-305. doi:10.1016/j.jsat.2013.10.005

Gaston, L. (1991). Reliability and criterion-related validity of the California

psychotherapy alliance Scales—patient version. *Psychological Assessment: A Journal of Consulting and Clinical Psychology, 3*(1), 68-74. doi:10.1037/1040-3590.3.1.68

Gifford, S. M., O'Brien, M. L., Bammer, G., Banwell, C., & Stooze, M. (2003).

Australian women's experiences of living with hepatitis C virus: Results from a cross-sectional survey. *Journal of Gastroenterology & Hepatology, 18*(7), 841-850. doi:10.1046/j.1440-1746.2003.03077.x

Gillaspy, J. A., Wright, A. R., Campbell, C., Stokes, S., & Adinoff, B. (2002). Group

alliance and cohesion as predictors of drug and alcohol abuse treatment outcomes.

Psychotherapy Research, 12(2), 213-229. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2002-01849-006&site=ehost-live>

Gonzalez, J., Cortés, D., Reeves, T., Whitley, R., Lopez, L., Bond, G., . . . Miller, A.

(2012). Community mental health agency views of research. *Community Mental Health Journal, 48*(2), 223-231. doi:10.1007/s10597-011-9397-6

- Graves, J. S. (1993). Living with mania: A study of outpatient group psychotherapy for bipolar patients. *American Journal of Psychotherapy*, 47(1), 113-126. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=9703070459&site=ehost-live>
- Gregoire, T. K., & Burke, A. C. (2004). The relationship of legal coercion to readiness to change among adults with alcohol and other drug problems. *Journal of Substance Abuse Treatment*, 26(1), 35-41. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2004-12986-004&site=ehost-live>
- Groshkova, T. (2010). Motivation in substance misuse treatment. *Addiction Research & Theory*, 18(5), 494-510. doi:10.3109/16066350903362875
- Hall, W. (1997). The role of legal coercion in the treatment of offenders with alcohol and heroin problems. *Australian & New Zealand Journal of Criminology (Australian Academic Press)*, 30(2), 103-120. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=sih&AN=58775735&site=ehost-live>
- Hampton, A. S., Conner, B. T., Albert, D., Anglin, M. D., Urada, D., & Longshore, D. (2011). Pathways to treatment retention for individuals legally coerced to substance use treatment: The interaction of hope and treatment motivation. *Drug and Alcohol Dependence*, 118(2-3), 400-407. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2011-24530-041&site=ehost-live>

Hannan, C., Lambert, M. J., Harmon, C., Nielsen, S. L., Smart, D.W., Shimokawa, K., Sutton, S.W. (2005). A lab test and algorithms for identifying clients at risk for treatment failure. *Journal of Clinical Psychology, 61*(2), 155-163.
doi:10.1002/jclp.20108

Harford, R. J., Ungerer, J. C., & Kinsella, J. K. (1976). Effects of legal pressure on prognosis for treatment of drug dependence. *The American Journal of Psychiatry, 133*(12), 1399-1404. Retrieved from
<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1977-11079-001&site=ehost-live>

Hatcher, R. L., & Barends, A. W. (1996). Patients' view of the alliance in psychotherapy: Exploratory factor analysis of three alliance measures. *Journal of Consulting and Clinical Psychology, 64*(6), 1326-1336. doi:10.1037/0022-006X.64.6.1326

Hatcher, R. L., & Barends, A. W. (2006). How a return to theory could help alliance research. *Psychotherapy: Theory, Research, Practice, Training, 43*(3), 292-299.
doi:10.1037/0033-3204.43.3.292

Heine, R. W., & Trosman, H. (1960). Initial expectations of the doctor-patient interaction as a factor in continuance in psychotherapy. *Psychiatry: Journal for the Study of*

Interpersonal Processes, 23, 275-278. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1962-06637-001&site=ehost-live>

Hiday, V. A., Swartz, M. S., Swanson, J., & Wagner, H. R. (1997). Patient perceptions of coercion in mental hospital admission. *International Journal of Law and Psychiatry*, 20(2), 227-241. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1997-06428-005&site=ehost-live>

Hill, C. E., Nutt-Williams, E., Heaton, K. J., Thompson, B. J., & Rhodes, R. H. (1996). Therapist retrospective recall impasses in long-term psychotherapy: A qualitative analysis. *Journal of Counseling Psychology*, 43(2), 207-217. doi:10.1037/0022-0167.43.2.207

Hodgins, D. C. (2001). Stages of change assessments in alcohol problems: Agreement across self- and clinician-reports. *Substance Abuse*, 22(2), 87-96. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=flh&AN=MRB-FSD0294627&site=ehost-live>

Horenstein, D., & Houston, B. K. (1976). The expectation-reality discrepancy and premature termination from psychotherapy. *Journal of Clinical Psychology*, 32(2), 373-378. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=15828506&site=ehost-live>

Horvath, A. O., Del Re, A. C., Fluckiger, C., & Symonds, D. (2011). Alliance in individual psychotherapy. *Psychotherapy, 48*(1), 9-16. doi:10.1037/a0022186

Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the working alliance inventory. *Journal of Counseling Psychology, 36*(2), 223-233. doi:10.1037/0022-0167.36.2.223

Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology, 38*(2), 139-149. doi:10.1037/0022-0167.38.2.139

Howard, D. L., & McCaughrin, W. C. (1996). The treatment effectiveness of outpatient substance misuse treatment organizations between court-mandated and voluntary clients. *Substance use & Misuse, 31*(7), 895-926. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1996-06223-005&site=ehost-live>

Hser, Y., Maglione, M., Polinsky, M. L., & Anglin, M. D. (1998). Predicting drug treatment entry among treatment-seeking individuals. *Journal of Substance Abuse Treatment, 15*(3), 213-220. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1998-04047-006&site=ehost-live>

live

- Hubbard, R. L., Craddock, S. G., Flynn, P. M., Anderson, J., & Etheridge, R. M. (1997). Overview of 1-year follow-up outcomes in the drug abuse treatment outcome study (DATOS). *Psychology of Addictive Behaviors, 11*(4), 261-278. doi:10.1037/0893-164X.11.4.261
- Hunsley, J., Aubry, T. D., Verstervelt, C. M., & Vito, D. (1999). Comparing therapist and client perspectives on reasons for psychotherapy termination. *Psychotherapy: Theory, Research, Practice, Training, 36*(4), 380-388. doi:10.1037/h0087802
- Israel, B., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: Assessing partnership approaches to improve public health. *Annual Review of Public Health, 19*(1), 173. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=829215&site=ehost-live>
- Jenkins, J. L., Keefe, T., & Rosato, L. W. (1971). Therapists' awareness of how group therapy patients perceive them. *Corrective Psychiatry & Journal of Social Therapy, 17*(1), 17-24. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1972-04960-001&site=ehost-live>
- Kasser, T., & Ahuvia, A. (2002). Materialistic values and well-being in business students. *European Journal of Social Psychology, 32*(1), 137-146. doi:10.1002/ejsp.85

- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality & Social Psychology Bulletin*, 22, 280-287. doi:10.1177/0146167296223006
- Kendall, P. C., Kipnis, D., & Otto-Salaj, L. (1992). When clients don't progress: Influences on and explanations for lack of therapeutic progress. *Cognitive Therapy and Research*, 16(3), 269-281. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1992-40009-001&site=ehost-live>
- Kennedy, K., & Gregoire, T. K. (2009). Theories of motivation in addiction treatment: Testing the relationship of the transtheoretical model of change and self-determination theory. *Journal of Social Work Practice in the Addictions*, 9(2), 163-183. doi:10.1080/15332560902852052
- Kermani, E. J., & Castaneda, R. (1996). Psychoactive substance use in forensic psychiatry. *American Journal of Drug & Alcohol Abuse*, 22(1), 1-27. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=9603280435&site=ehost-live>
- Klag, S., O'Callaghan, F., & Creed, P. (2005). The use of legal coercion in the treatment of substance abusers: A an overview and critical analysis of thirty years of research. *Substance use & Misuse*, 40(12), 1777-1795. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.libra>

ry.unlv.edu/login.aspx?direct=true&db=aph&AN=9705282634&site=ehost-live

- Lepper, M. R., & Greene, D. (1975). Turning play into work: Effects of adult surveillance and extrinsic rewards on children's intrinsic motivation. *Journal of Personality and Social Psychology*, 31(3), 479-486. doi:10.1037/h0076484
- Levitt, E. E. (1966). Psychotherapy research and the expectation-reality discrepancy. *Psychotherapy: Theory, Research & Practice*, 3(4), 163-166. doi:10.1037/h0087922
- Lipton, D.S., Morales, E., & Goldsmith, D. S. (1991). Pathways into Treatment: A study of the drug treatment entry process. Final Project Report. Rockville, MD: National Institute on Drug Abuse.
- Longshore, D., & Teruya, C. (2006). Treatment motivation in drug users: A theory-based analysis. *Drug & Alcohol Dependence*, 81(2), 179-188. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=cin20&AN=2009110701&site=ehost-live>
- Mackain, S. J., & Lecci, L. (2010). Perceived coercion in substance abuse treatment: The eye of the beholder? *Journal of Substance use*, 15(1), 24-30. doi:10.3109/14659890902966414
- Manchak, S. M., Skeem, J. L., & Rook, K. S. (2014). Care, control, or both? characterizing major dimensions of the mandated treatment relationship. *Law and Human Behavior*, 38(1), 47-57. doi:10.1037/lhb0000039
- Marlowe, D. B., Kirby, K. C., Bonieskie, L. M., & Glass, D. J. (1996). Assessment of

coercive and noncoercive pressures to enter drug abuse treatment. *Drug and Alcohol Dependence*, 42(2), 77-84. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1997-07490-001&site=ehost-live>

Marlowe, D. B., Merikle, E. P., Kirby, K. C., Festinger, D. S., & McLellan, A. T. (2001).

Multidimensional assessment of perceived treatment-entry pressures among substance abusers. *Psychology of Addictive Behaviors*, 15(2), 97-108.

doi:10.1037/0893-164X.15.2.97

Marmar, C. R., Weiss, D. S., & Gaston, L. (1989). Toward the validation of the california

therapeutic alliance rating system. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 1(1), 46-52. doi:10.1037/1040-3590.1.1.46

Marshall, G. N., & Hser, Y. (2002). Characteristics of criminal justice and noncriminal

justice clients receiving treatment for substance abuse. *Addictive Behaviors*, 27(2),

179-192. doi:10.1016/S0306-4603(00)00176-3

Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance

with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 68(3), 438-450. doi:10.1037/0022-006X.68.3.438

Marziali, E., Munroe-Blum, H., & McCleary, L. (1997). The contribution of group

cohesion and group alliance to the outcome of group psychotherapy. *International Journal of Group Psychotherapy*, 47(4), 475-497.

Mash, E. J., & Hunsley, J. (1993). Assessment considerations in the identification of failing psychotherapy: Bringing the negatives out of the darkroom. *Psychological Assessment, 5*(3), 292-301. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1994-15966-001&site=ehost-live>

Maxwell, S. R. (2000). Sanction threats in court-ordered programs: Examining their effects on offenders mandated into drug treatment. *Crime & Delinquency, 46*(4), 542-563. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2000-02698-002&site=ehost-live>

McEvoy, P. M., Burgess, M. M., & Nathan, P. (2014). The relationship between interpersonal problems, therapeutic alliance, and outcomes following group and individual cognitive behaviour therapy. *Journal of Affective Disorders, 157*, 25-32. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2014-08505-006&site=ehost-live>

Meier, P. S., Barrowclough, C., & Donmall, M. C. (2005). The role of the therapeutic alliance in the treatment of substance misuse: A critical review of the literature. *Addiction, 100*(3), 304-316. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=16258292&site=ehost-live>

Melnick, G. (1999). Assessing Treatment Readiness in Special Populations: Final Report of Project Activities, NIDA Grant Number 2 R01 DA07377-03. Rockville, MD: National Institute on Drug Abuse.

Melnick, G., De Leon, G., Hawke, J., Jainchill, N., & Kressel, D. (1997). Motivation and readiness for therapeutic community treatment among adolescents and adult substance abusers. *American Journal of Drug & Alcohol Abuse*, 23(4), 485-506.

Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=9712014598&site=ehost-live>

Miller, N. S., & Flaherty, J. A. (2000). Effectiveness of coerced addiction treatment (alternative consequences): A review of the clinical research. *Journal of Substance Abuse Treatment*, 18(1), 9-16. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1999-15757-002&site=ehost-live>

Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York: Guilford Press.

Miller, W. R., & Tonigan, J. S. (1996). Assessing drinkers' motivation for change: The stages of change readiness and treatment eagerness scale (SOCRATES).

Psychology of Addictive Behaviors, 10(2), 81-89. doi:10.1037/0893-164X.10.2.81

Mueller, M., & Pekarik, G. (2000). Treatment duration prediction: Client accuracy and its relationship to dropout, outcome, and satisfaction. *Psychotherapy: Theory, Research, Practice, Training*, 37(2), 117-123. doi:10.1037/h0087701

Nace, E. P., Birkmayer, F., Sullivan, M. A., Galanter, M., Fromson, J. A., Frances, R. J., . . . Westermeyer, J. (2007). Socially sanctioned coercion mechanisms for addiction treatment. *American Journal on Addictions*, 16(1), 15-23. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=24232797&site=ehost-live>

National Institute on Drug Abuse. Understanding Drug Abuse and Addiction. Retrieved from <http://www.drugabuse.gov/publications/drugfacts/understanding-drug-abuse-addiction>

Neighbors, C., Walker, D. D., & Larimer, M. E. (2003). Expectancies and evaluations of alcohol effects among college students: Self-determination as a moderator. *Journal of Studies on Alcohol*, 64(2), 292. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=f5h&AN=9501551&site=ehost-live>

Netting, F. E., Kettner, P. M., & McMurtry, S. L. (2008). *Social work macro practice* (4th ed.). Boston: A&B/Pearson.

Norcross, J. C., & Lambert, M. J. (2011). Psychotherapy relationships that work II. *Psychotherapy*, 48(1), 4-8. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2011-04924-002&site=ehost-live>

Nordfjern, T., Rundmo, T., & Hole, R. (2010). Treatment and recovery as perceived by patients with substance addiction. *Journal of Psychiatric & Mental Health Nursing*, 17(1), 46-64. doi:10.1111/j.1365-2850.2009.01477.x

O'Connor, B. P., & Vallerand, R. J. (1990). Religious motivation in the elderly: A French-Canadian replication and an extension. *Journal of Social Psychology*, 130(1), 53-59. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=9707104014&site=ehost-live>

O'Hare, T. (1996). Court-ordered versus voluntary clients: Problem differences and readiness for change. *Social Work*, 41(4), 417. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=f5h&AN=9607070634&site=ehost-live>

Orne, M. T., & Wender, P. H. (1968). Anticipatory socialization for psychotherapy: Method and rationale. *The American Journal of Psychiatry*, 124(9), 1202-1212. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1968-10684-001&site=ehost-live>

- Parhar, K. K., Wormith, J. S., Derkzen, D. M., & Beauregard, A. M. (2008). Offender Coercion in Treatment: A meta-analysis of effectiveness. *Criminal Justice & Behavior, 35*(9), 1109-1135. doi:10.1177/0093854808320169
- Pekarik, G. (1985). Coping with dropouts. *Professional Psychology: Research and Practice, 16*(1), 114-123. doi:10.1037/0735-7028.16.1.114
- Pekarik, G. (1992). Relationship of clients' reasons for dropping out of treatment to outcome and satisfaction. *Journal of Clinical Psychology, 48*(1), 91-98. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=tfh&AN=9208314992&site=ehost-live>
- Pekarik, G., & Finney-Owen, K. (1987). Outpatient clinic therapist attitudes and beliefs relevant to client dropout. *Community Mental Health Journal, 23*(2), 120-130. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1988-30930-001&site=ehost-live>
- Pekarik, G., & Wierzbicki, M. (1986). The relationship between clients' expected and actual treatment duration. *Psychotherapy: Theory, Research, Practice, Training, 23*(4), 532-534. doi:10.1037/h0085653
- Platt, J. J., Buhringer, G., Kaplan, C. D., Brown, B. S., & Taube, D. O. (1988). The prospects and limitations of compulsory treatment for drug addiction. *Journal of*

Drug Issues, 18(4), 505-525. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1989-23774-001&site=ehost-live>

Polcin, D. L., & Weisner, C. (1999). Factors associated with coercion in entering treatment for alcohol problems. *Drug & Alcohol Dependence*, 54(1), 63-68.

Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=cin20&AN=2003137774&site=ehost-live>

Pope, B., Siegman, A. W., Blass, T., & Cheek, J. (1972). Some effects of discrepant role expectations on interviewee verbal behavior in the initial interview. *Journal of Consulting and Clinical Psychology*, 39(3), 501-507. doi:10.1037/h0034046

Prendergast, M., Greenwell, L., Farabee, D., & Hser, Y. (2009). Influence of perceived coercion and motivation on treatment completion and re-arrest among substance-abusing offenders. *The Journal of Behavioral Health Services & Research*, 36(2), 159-176. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2009-05227-006&site=ehost-live>

Prochaska, J. O. (1979). *Systems of psychotherapy: A transtheoretical analysis*. Oxford, England: Dorsey.

- Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology, 51*(3), 390-95. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=eric&AN=EJ283694&site=ehost-live>
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist, 47*(9), 1102-1114. doi:10.1037/0003-066X.47.9.1102
- Rapp, R. C., Li, L., Siegal, H. A., & DeLiberty, R. N. (2003). Demographic and clinical correlates of client motivation among substance abusers. *Health & Social Work, 28*(2), 107-115. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=11853361&site=ehost-live>
- Rogers, A. (1993). Coercion and "voluntary" admission: An examination of psychiatric patient views. *Behavioral Sciences & the Law, 11*(3), 259-267. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=12147312&site=ehost-live>
- Rosenbaum, R. L., & Horowitz, M. J. (1983). Motivation for psychotherapy: A factorial and conceptual analysis. *Psychotherapy: Theory, Research & Practice, 20*(3), 346-354. doi:10.1037/h0090205
- Ross, E. C., Polaschek, D. L. L., & Ward, T. (2008). The therapeutic alliance: A

theoretical revision for offender rehabilitation. *Aggression & Violent Behavior*, 13(6), 462-480. doi:10.1016/j.avb.2008.07.003

Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43(3), 450-461. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1983-07280-001&site=ehost-live>

Ryan, R. M., & Deci, E. L. (2006). Self-regulation and the problem of human autonomy: Does psychology need choice, self-determination, and will? *Journal of Personality*, 74(6), 1557-1586. doi:10.1111/j.1467-6494.2006.00420.x

Ryan, M., Nitsun, M., Gilbert, L., & Mason, H. (2005). A prospective study of the effectiveness of group and individual psychotherapy for women CSA survivors. *Psychology & Psychotherapy: Theory, Research & Practice*, 78(4), 465-479. doi:10.1348/147608305X42226

Ryan, R. M., Plant, R. W., & O'Malley, S. (1995). Initial motivations for alcohol treatment: Relations with patient characteristics, treatment involvement, and dropout. *Addictive Behaviors*, 20, 279-297. doi:10.1016/0306-4603(94)00072-7

Ryan, R. M., Rigby, S., & King, K. (1993). Two types of religious internalization and their relations to religious orientations and mental health. *Journal of Personality & Social Psychology*, 65(3), 586. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=f5h&AN=9401313932&site=ehost-live>

Sacco, L., & Finklea, K. (2014). Reauthorizing the Office of National Drug Control Policy: Issues for Consideration. *Congressional Research Service*. Retrieved from <http://fas.org/sgp/crs/misc/R41535.pdf>

Safran, J. D., & Wallner, L. K. (1991). The relative predictive validity of two therapeutic alliance measures in cognitive therapy. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 3(2), 188-195. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1991-26247-001&site=ehost-live>

Saunders, S. M., Howard, K. I., & Orlinsky, D. E. (1989). The therapeutic bond scales: Psychometric characteristics and relationship to treatment effectiveness. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 1(4), 323-330. doi:10.1037/1040-3590.1.4.323

Shedler, J. (2010). The efficacy of psychodynamic psychotherapy. *American Psychologist*, 65(2), 98-109. doi:10.1037/a0018378

Sheldon, K. M., Ryan, R. M., Deci, E. L., & Kasser, T. (2004). The independent effects of goal contents and motives on well-being: It's both what you pursue and why you pursue it. *Personality and Social Psychology Bulletin*, 30(4), 475-486. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2004-12227-007&site=ehost-live>

Shen, Q., McLellan, A. T., & Merrill, J. C. (2000). Client's perceived need for treatment and its impact on outcome. *Substance Abuse, 21*(3), 179-192. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=cin20&AN=2001014827&site=ehost-live>

Simpson, D. D., & Joe, G. W. (1993). Motivation as a predictor of early dropout from drug abuse treatment. *Psychotherapy: Theory, Research, Practice, Training, 30*(2), 357-368. doi:10.1037/0033-3204.30.2.357

Simpson, D. D., Joe, G. W., & Rowan-Szal, G. (1997). Drug abuse treatment retention and process effects on follow-up outcomes. *Drug and Alcohol Dependence, 47*(3), 227-235. doi:10.1016/S0376-8716(97)00099-9

Skeem, J. L., Loudon, J. E., Polaschek, D., & Camp, J. (2007). Assessing relationship quality in mandated community treatment: Blending care with control. *Psychological Assessment, 19*(4), 397-410. doi:10.1037/1040-3590.19.4.397

Snyder, C. M. J., & Anderson, S. A. (2009). An examination of mandated versus voluntary referral as a determinant of clinical outcome. *Journal of Marital & Family Therapy, 35*(3), 278-292. doi:10.1111/j.1752-0606.2009.00118.x

Stevens, A., Berto, D., Frick, U., Hunt, N., Kersch, V., McSweeney, T., . . . Werdenich, W. (2006). The relationship between legal status, perceived pressure and

motivation in treatment for drug dependence: Results from a European study of quasi-compulsory treatment. *European Addiction Research*, 12(4), 197-209.

doi:10.1159/000094422

Stevens, A., Radcliffe, P., Sanders, M., & Hunt, N. (2008). Early exit: Estimating and explaining early exit from drug treatment. *Harm Reduction Journal*, 5, 1.

doi:10.1186/1477-7517-5-13

Storbjörk, J. (2006). The interplay between perceived self-choice and reported informal, formal and legal pressures in treatment entry. *Contemporary Drug Problems*,

33(4), 611-643. Retrieved from

<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=25818500&site=ehost-live>

Strupp, H. H., & Hadley, S. W. (1977). A tripartite model of mental health and therapeutic outcomes: With special reference to negative effects in psychotherapy.

American Psychologist, 32(3), 187-196. doi:10.1037/0003-066X.32.3.187

Substance Abuse and Mental Health Services Administration, *Treatment Episode Data*

Set (TEDS): 2010. Discharges from Substance Abuse Treatment Services. BHSIS

Series S 70, HHS Publication No. (SMA) 14-4846. Rockville, MD: Author

Substance Abuse and Mental Health Services Administration, *Treatment Episode Data*

Set (TEDS): 2011. Discharges from Substance Abuse Treatment Services. BHSIS

Series S 70, HHS Publication No. (SMA) 14-4846. Rockville, MD: Author

Sullivan, M., Kone, A., Senturia, K. D., Chrisman, N. J., Ciske, S. J., & Krieger, J. W.

(2001). Researcher and researched-community perspectives: Toward bridging the gap. *Health Education & Behavior*, 28(2), 130-149. Retrieved from <http://articles.sirc.ca/search.cfm?id=S-675056>;
<http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=SPHS-675056&site=ehost-live>;
<http://articles.sirc.ca/search.cfm?id=S-675056>

Sullivan, M. A., Birkmayer, F., Boyarsky, B. K., Frances, R. J., Fromson, J. A., Galanter, M., . . . Westermeyer, J. (2008). Uses of coercion in addiction treatment: Clinical aspects. *American Journal on Addictions*, 17(1), 36-47. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=28605146&site=ehost-live>

Swift, J., & Callahan, J. (2009). Early psychotherapy processes: An examination of client and trainee clinician perspective convergence. *Clinical Psychology & Psychotherapy*, 16(3), 228-236. doi:10.1002/cpp.617

Taft, C. T., Murphy, C. M., Elliott, J. D., & Morrel, T. M. (2001). Attendance-enhancing procedures in group counseling for domestic abusers. *Journal of Counseling Psychology*, 48(1), 51-60. doi:10.1037/0022-0167.48.1.51

Tichenor, V., & Hill, C. E. (1989). A comparison of six measures of working alliance. *Psychotherapy: Theory, Research, Practice, Training*, 26(2), 195-199.
doi:10.1037/h0085419

Tiger, R. (2011). *Drug courts and the logic of coerced treatment* Wiley-Blackwell.

doi:10.1111/j.1573-7861.2010.01229.x

- Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the working alliance inventory. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 1(3), 207-210. doi:10.1037/1040-3590.1.3.207
- Tryon, G. S., Blackwell, S. C., & Hammel, E. F. (2007). A meta-analytic examination of client-therapist perspectives of the working alliance. *Psychotherapy Research*, 17(6), 629-642. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2007-16460-001&site=ehost-live>
- Urbanoski, K. A. (2010). Coerced addiction treatment: Client perspectives and the implications of their neglect. *Harm Reduction Journal*, 7, 13. doi:10.1186/1477-7517-7-13
- Utman, C. H. (1997). Performance effects of motivational state: A meta-analysis. *Personality & Social Psychology Review (Lawrence Erlbaum Associates)*, 1(2), 170. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=7460114&site=ehost-live>
- Walitzer, K. S., Dermen, K. H., & Connors, G. J. (1999). Strategies for preparing clients for treatment. *Behavior Modification*, 23(1), 129. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=7460114&site=ehost-live>

[ry.unlv.edu/login.aspx?direct=true&db=tfh&AN=1394190&site=ehost-live](http://ezproxy.library.unlv.edu/login.aspx?direct=true&db=tfh&AN=1394190&site=ehost-live)

- Watkins, K. E., Hunter, S. B., Hepner, K. A., Paddock, S. M., de, I. C., Zhou, A. J., & Gilmore, J. (2011). An effectiveness trial of group cognitive behavioral therapy for patients with persistent depressive symptoms in substance abuse treatment. *Archives of General Psychiatry*, 68(6), 577-584. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2011-16595-005&site=ehost-live>
- Wild, T. C. (1999). Compulsory substance-user treatment and harm reduction: A critical analysis. *Substance use & Misuse*, 34(1), 83-102. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=1999-10103-006&site=ehost-live>
- Wild, T. C. (2006). Social control and coercion in addiction treatment: Towards evidence-based policy and practice. *Addiction*, 101(1), 40-49. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=s3h&AN=19149365&site=ehost-live>
- Wild, T. C., Cunningham, J. A., & Ryan, R. M. (2006). *Social pressure, coercion, and client engagement at treatment entry: A self-determination theory perspective*. Netherlands: Elsevier Science. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2006-11975-011&site=ehost-live>

live

Wild, T. C., Newton-Taylor, B., & Alletto, R. (1998). Perceived coercion among clients entering substance abuse treatment: Structural and psychological determinants. *Addictive Behaviors, 23*(1), 81-95. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2012-22653-011&site=ehost-live>

Wild, T. C., Roberts, A. B., & Cooper, E. L. (2002). Compulsory substance abuse treatment: An overview of recent findings and issues. *European Addiction Research, 8*(2), 84-93. doi:10.1159/000052059

Winick, B. J. (1997). Coercion and mental health treatment. *Denver University Law Review, 74*(4), 1145-1168. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=lpb&AN=502426974&site=ehost-live>

Winick, B. J. (2008). A therapeutic jurisprudence approach to dealing with coercion in the mental health system. *Psychiatry, Psychology & Law, 15*(1), 25-39. doi:10.1080/13218710801979084

Wolfe, S., Kay-Lambkin, F., Bowman, J., & Childs, S. (2013). To enforce or engage: The relationship between coercion, treatment motivation and therapeutic alliance within community-based drug and alcohol clients. *Addictive Behaviors, 38*(5), 2187-2195. doi:10.1016/j.addbeh.2013.01.017

- Wright, E. R., Linde, B., Rau, L., Gayman, M., & Viggiano, T. (2003). The effect of organizational climate on the clinical care of patients with mental health problems. *JEN: Journal of Emergency Nursing*, 29(4), 314. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=cin20&AN=2003156960&site=ehost-live>
- Young, D. (2002). Impacts of perceived legal pressure on retention in drug treatment. *Criminal Justice and Behavior*, 29(1), 27-55. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=psyh&AN=2002-00244-002&site=ehost-live>
- Zarkin, G. A., Dunlap, L. J., Bray, J. W., & Wechsberg, W. M. (2002). The effect of treatment completion and length of stay on employment and crime in outpatient drug-free treatment. *Journal of Substance Abuse Treatment*, 23(4), 261. Retrieved from <http://ezproxy.library.unlv.edu/login?url=http://search.ebscohost.com.ezproxy.library.unlv.edu/login.aspx?direct=true&db=aph&AN=8669136&site=ehost-live>

Curriculum Vitae

Arthur Tabrizi

3148 Whitfeild Avenue Henderson, Nevada 89044

(702) 755-5133

art@tabriziart.com

EDUCATION

University of Nevada, Las Vegas, NV

Masters of Social work, May 2015

Master's Thesis: "Contrasting Perceptions of Motivation to Change: Clinicians and Substance-Abuse clients," passed November 2014

Thesis committee Chair: An-Pyng Sun, Ph.D.

University of Nevada, Las Vegas, NV

B.A. in Psychology, December 2010

PROFESSIONAL EXPERIENCE

August 2014 to present

Graduate Assistant, school of Social work, University of Nevada, Las Vegas. Duties: Research current trends in substance abuse and treatment for curriculum development; tutor students in research methods, conduct statistical analysis and curriculum evaluation for Outcomes Committee; oversee SPSS and Statistics Lab and provide individual and group instruction to undergraduate and masters level students.

RESEARCH EXPERIENCE

University of Nevada, Las Vegas. Psychology Department.

Research Assistant. August 2008-2010

CONFERENCE PRESENTATIONS

Tabrizi, A. (2014). *Comparing Perceptions of Motivation to Change: Clinicians Versus Their Substance-Abuse*. Poster presented at 5th Annual Greenspun College of Urban Affairs Graduate Research Symposium, University of Nevada, Las Vegas.

MANUSCRIPTS UNDER REVIEW

Tabrizi, A. (2015). Contrasting Perceptions of Motivation to Change: Clinicians and Substance-Abuse Clients. *Journal of Substance Abuse and Treatment*.

ASSOCIATION MEMBERSHIPS

National Association of Social Workers

Phi Kappa Phi Honor Society