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Predicting Modification and Revocation of Insanity Acquittees on Conditional Release Using the Short-Term Assessment of Risk and Treatability

Heidi Oliver

holiver12@georgefox.edu

This research is a product of the Doctor of Psychology (PsyD) program at George Fox University. Find out more about the program.

Predicting Modification and Revocation of Insanity Acquittees on Conditional

Release Using the Short-Term Assessment of Risk and Treatability

by

Heidi Oliver

Presented to the Faculty of the

Graduate Department of Clinical Psychology

George Fox University

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of the requirements for the degree of

Doctor of Psychology

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Newberg, Oregon

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Approval

The Short-Term Assessment of Risk and Treatability (START)

Can predict participant success and failure

in a forensic community-based setting.
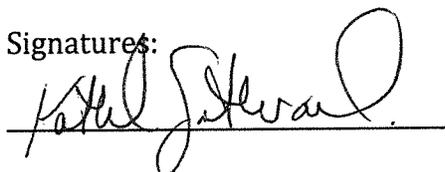
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has been approved

at the

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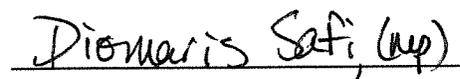
as a Dissertation for the PsyD degree

Signatures:

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Kathleen Gathercoal, PhD, Chair

Members:

_____

Mary Peterson, PhD

_____

Diomaris Safi, PsyD

Date: _February 6 2017_

Predicting Modification and Revocation of Insanity Acquittees on Conditional

Release Using the Short-Term Assessment of Risk and Treatability

Heidi Oliver

Graduate Department of Clinical Psychology at

George Fox University

Newberg, Oregon

Abstract

Violence risk assessment has evolved significantly over the past 50 years. The newest

generation of risk assessment tools is intended not only to assess risk but also to inform

treatment. The Short-Term Assessment of Risk and Treatability, i.e., the START, is an

example of a 4th generation tool that identifies risk and protective factors, highlighting the

dynamic variables that may decrease risk. As treatment for mentally ill offenders shifts

from inpatient hospital environments to community-based treatment settings, a focus on

dynamic risk factors is crucial for maintaining safety for patients and the community. This

study aimed to identify the predictive validity of START measures completed at time of

discharge on participants who were as adjudicated Guilty Except for Insanity (GEI) and

transitioning to conditional release under the Oregon Psychiatric Securities Review Board.

Using archival data, collected from PSRB files, 31 adjudicated GEI participants on

conditional release in the year 2013 were found to have completed START results and

records of positive, negative, and revocation outcomes. The static factors of Length of Time

in years from Date of Judgment to date of Conditional Release and Length of Sentence were not predictive of positive, negative, nor revocation outcomes. Dynamic factors of Strengths total scores and Vulnerabilities total scores were predictive of positive modifications, and revocation outcomes, respectively. Specifically, the ROC area Under the Curve (AUC value), used to predict the utility of forensic assessment tools, indicated that Strengths total scores had an AUC = 0.85 (good) when predicting positive modifications and the Vulnerabilities total scores had an AUC = .70 (fair) for negative modifications and AUC = .84 (good) for revocations. These results should be interpreted with some caution because of the limited sample size, but suggest that the dynamic factors of the START have predictive validity. These findings are discussed with regard to the practicality of assessing the START on a regular basis and directions for future research.

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Chapter 1

Introduction

Evolution of Risk Assessment

In 1974, Ennis and Litwack estimated that the rate of accurately predicting violence was less than 50%. Fortunately, violence risk assessment has progressed to be more accurate than the outcome of a coin flip. Typically, the base rates of violence among the general population, even among those with mental disorders are so low that the validity of risk assessment tools is not possible. However, the validity of risk assessment tools is vital when the risk for violence is assessed among mentally ill individuals who have already committed a crime. This study aimed to identify the predictive validity of a risk assessment tool completed at time of discharge on participants who were as adjudicated Guilty Except for Insanity (GEI) and transitioning to conditional release into community based settings under the monitoring of the Oregon Psychiatric Securities Review Board.

Theories of Risk Assessment

The first wave of risk assessment, prevalent in the 1970s, was often referred to as unstructured clinical judgment. Using subjective experience and knowledge of risk, clinicians made determinations regarding an individual's likelihood to re-offend. Narrow samples and poor measures of violence outcomes often contributed to inaccurate predictions such that the risk of continued violence was overestimated (Huss, 2014).

Second wave, actuarial approaches relied upon statistically significant predictors of risk.

These second generation tools provided an empirically driven prediction of future risk. A

third generation approach to risk assessment aimed to identify specific and contextual

variables related to an individual's risk of violence. Referred to as Structured Professional

Judgment (SPJ), this approach assesses risk by identifying "criminogenic needs" within a

structure of empirically derived risk factors. With the aim of reducing risk, treatment was

focused on the "risk-needs-responsivity" principle. SPJ approaches to risk incorporate

dynamic and static factors of violence and allow clinicians to include additional relevant

information pertaining to an individual's risk assessment. The latest development in the

field of risk assessment is the fourth generation of assessment tools, which intend to

predict, inform, and mitigate risk. Instruments developed to inform treatment and identify

areas of potential strengths and vulnerabilities include the Level of Service/Case

Management Inventory (LSI/CM) and the Short-Term Assessment of Risk and Treatability

(START). Developed within the SPJ framework, the START incorporates static and dynamic

factors of risk while identifying specific treatment targets to inform responsivity

(Campbell, French, & Gendreau, 2009; Huss, 2014).

Actuarial Risk Assessment

Actuarial approaches, i.e., second generational risk measures, employ empirical data

developed from statistically derived information about future prediction of risk. The most

frequently cited actuarial tool is the Violence Risk Appraisal Guide (VRAG). The VRAG

identifies 12 weighted items, which contribute to an overall score. Each score corresponds

with a percentage of risk of future violence (Monahan & Skeem, 2014a; Singh, Grann, &

Fazel, 2011). The MacArthur Risk Assessment Study was also developed through an

actuarial approach, following 951 psychiatric patients from 20 weeks after discharge and

again at one year. The MacArthur group established the Iterative Classification Tree (ICT)

to utilize a complex algorithm to identify the influence of 134 risk factors on violence

recidivism. Utilizing information from this research, software called Classification of

Violence Risk (COVR) was developed to run the complicated equation to classify

individuals in risk categories of "low" and "high" (Steadman et al., 2000). Identification of

specific risk factors contributing to violence is the focus of these heavily researched

actuarial measures. Specific population-based data was then used to make a prediction of

an individual's rate of recidivism based on nomothetic research (Hannah-Moffat, 2010;

Huss, 2014).

An argument against use of actuarial measures, such as the VRAG, the ICT, and

COVR, is based on the weight these tools place on historical factors that predict future

violence. Actuarial methods focus on static, unalterable factors and inadequate utility in

violence predictions in regards to individual cases. Use of actuarial assessments may result

in an inaccurate prediction of risk based solely on a history of past behaviors (McSherry,

2014). Some critics of actuarial methods cite concerns of bias in determining risk. Hannah-

Moffat (2010) identified that actuarial data is often derived from prison populations, which

disproportionately consist of minority groups. Further, actuarial tools are relied upon

heavily by researchers, leading to problems related to access and lack of clinical utility in

the "real-world." Actuarial assessments also tend to lack the ability to differentiate the

severity of future recidivism. Identifying recidivism as an outcome, without specifying

severity, such as rule violation as opposed to violent behavior, may distort risk ratings

(Hannah-Moffat, 2010). In addition, the idea of an unchangeable risk of violence or

"dangerousness" may lead to excessive hospitalizations and incarcerations as well as

possible increase of the present stigma on forensic patients (Hewitt, 2008; McSherry,

2014).

Clinical-Structural Professional Judgment

Clinical approaches to assessing violence, referred to as Structured Clinical

Judgment (SCJ) or Structured Professional Judgment (SPJ), utilize relevant research to

apply risk factors and identify relevancy of specific factors to an individuals' propensity to

act violently. For the purpose of this study, Structured Professional Judgment (SPJ) will be

used to refer to clinical approaches of violence risk assessment. The SPJ approach is unique

in its inclusion of both static and dynamic factors of risk as well as risk management items.

Risk management items focus on assessment of risk mitigation factors. The Historical,

Clinical, and Risk-20 items scale (HCR-20) and the Short-Term Assessment of Risk and

Treatability (START) are examples of SPJ assessment tools. Items included on both of these

measures identify factors that can be used for treatment targets as well as prediction of

future risk of violence (McSherry, 2014). The strength in using the SPJ methodology is the

emphasis on the dynamic, dispositional features that may directly influence a choice to act

violently. These factors may change, demonstrating the fluidity of risk of violence (Wilson,

Martin, Brink, Nicholls, & Desmarais, 2009).

Risk Research

As the field of risk research shifts from a prediction to a prevention model, there are many challenges. Kraemer, a risk researcher in the field of psychiatry, identified inconsistent language and corresponding descriptions to be a barrier to current risk research (Monahan & Skeem, 2014b). Attempting to minimize the inconsistencies and define risk factors more accurately, Monahan and Skeem (2014b) identify Kraemer's definition of a risk factor as changeable and demonstrating an empirically validated direct association to recidivism. Kraemer established categories of risk factors including: fixed marker, variable marker, variable risk factor, and causal risk factor. Translating these factors to the field of forensic psychology, Monahan & Skeem (2014a) view Kraemer's fixed marker factor to be a static risk factor, as it is an unchangeable, historical variable. Age is identified as a variable marker. Often, criminal behaviors decrease as a person ages. Although this marker is not influenced by treatment, this identifier is likely to change with or without intervention. Variable risk factor is a third type of risk factor that may be influenced by intervention. Although a variable risk factor may be altered, there may be no direct link to its influence on an individual's risk of recidivism. Monahan & Skeem (2014a) provide the example of employment to be a variable risk factor. Causal risk factors, a fourth type of risk factor, are influenced by intervention and directly impact recidivism. This type of factor is being heavily researched and often referred to in the research as a "need" or a treatment target.

Often, a factor that influences risk but is not directly linked to recidivism may be referred to as a *risk factor* or *criminogenic need*. If there is no evidence revealing a

connection to a causal link of recidivism, Kraemer cites the need to differentiate dynamic

risk as variable risk factors unless there is research to show a causal effect (Monahan &

Skeem, 2014b). However, difficulty presents in the feasibility of research on causal risk

factors. Monahan & Skeem (2014b) suggest the unethical and impossible nature of

completing randomized clinical trials to directly link recidivism to casual risk factors.

Dynamic Risk

Focusing treatment on dynamic risk factors appears to be a new direction within

forensic psychology. "Dynamic" risk factors must demonstrate changeability; oscillations

must also be associated with risk of violence (Wilson, Desmarais, Nicholls, Hart, & Brink,

2010). Mills, Kroner, & Morgan (2011) state an accurately identified dynamic factor

statistically reveals change over a period of time with a direct causal relationship to a

specific outcome. Addressing the inconsistencies, Mills et al. (2011) also state this strict

definition of dynamic risk factors is rarely applied in risk research. Typically, within most

of the current dynamic risk research, a dynamic risk factor is described to have a potential

to influence a risk factor over time not necessarily a direct empirically validated impact on

an outcome (Mills et al., 2011).

Variable and causal risk factors are crucial for targeting effective, risk-reducing

interventions. However, additional research on variables within dynamic factors is needed

to identify multi-facets of causality. The focus on dynamic factors presents with many

challenges. The fluctuating aspect of dynamic risk leads to low reliability. Without the

ability to accurately identify reliability, the validity index of dynamic risk assessments may

be diminished or weakened. Due to these complexities, predictive power of these measures

may appear to be poor (Gendreau, Little, & Goggin, 1996). Dynamic factors have also been frequently identified to contribute to recidivism, without research support to suggest association with risk (Blumenthal, Huckle, Czornyj, Craissati, & Richardson, 2010). Differing definitions of "recidivism" also creates problems with assessing risk. Some studies use "re-arrest" or "revocation" as evidence for recidivism; however, revocation may not indicate the presence of violence, simply a behavior that may increase the likelihood of violence.

Time is a critical variable influencing dynamic risk factors, allowing for variability to occur. The effect of time on risk variables is crucial to determining if the predictive power is due to a particular factor or specific length of time (Philipse, Koeter, Van Den Brink, & Van Der Staak, 2004). A large amount of dynamic research is based on a single wave research design, assessing risk from one point in time. Multi-wave approaches allow for the continued evaluation of risk factors over a period of time (Brown, St. Amand, & Zamble, 2009).

A meta-analysis of violence risk assessment tools (Singh et al., 2011) revealed that actuarial measures and SPJ approaches are comparable in their accuracy of prediction of risk, especially when the studied sample more closely matched the demographic characteristics of the normed sample (Singh et al., 2011). Due to the nomothetic nature of actuarial assessment, the predictive validity of each measure is relevant to the sample and not necessarily equivalent in other settings. The strongest prediction of risk was achieved when both static and dynamic risk factors were combined (Morgan, Kroner, Mills, Serna, & McDonald, 2013).

Shift to Community-Based Case

Although risk of violence during inpatient hospitalization has been a past focus in forensic research, the shifting focus is evaluating forensic patients in community-based settings (McDermott, Edens, Quanbeck, Busse, & Scott 2008). As treatment of forensic patients in community settings becomes increasingly common, the focus on managing specific risk factors is pertinent to the success of the patient and the safety of the community (Huss, 2014). Many past risk assessment tools were developed with the intention of protecting the public, not focused on the needs and possible interventions of the individual offender (Webster, Nicholls, Martin, Desmarais, & Brink, 2006). As forensic treatment shifts from inpatient facilities to community based mental health services, the identification and management of dynamic risk factors is crucial. Although the concept of dynamic risk factors contains much variability, there are several specific indicators of risk, which suggest a contribution for an increase in violent behavior. Specifically, substance abuse is a risk factor for violence that generates the greatest consensus and concern (Coid, 1996; Skeem & Louden, 2006; Troquete et al., 2013). According to Skeem and Louden (2006), approximately 75% of incarcerated individuals with mental illness have a co-occurring substance abuse disorder.

Coid (1996) determined that active psychotic symptoms increased violence risk, however, Hewitt (2008) provides contradictory evidence, citing that psychosis has a weak correlation to violence. Coid's (1996) identification of the importance of managing symptoms of psychosis seems to be consistent with Skeem and Louden's (2006) research findings of reasons for supervision failure. Supervision or treatment failure may not

necessarily precipitate violence; however, it may be critical for management of risk in the community. Particular risks, such as medication compliance and substance use, may not be problematic in the inpatient setting, but may present significant risk for deterioration of an individual in a community setting. These dynamic risk factors may contribute to acceleration of mental deterioration, thus increasing a propensity for violent behavior to occur. Medication management is a critical risk factor for managing psychosis. Active, un-medicated psychosis may lead to problematic behaviors, inducing an individual's deterioration, which could contribute to de-stabilization, leading to re-arrest or revocation of community status (Skeem & Louden, 2006).

Public fear of violence tends to influence strict sanctions on offenders being treated in the community (Hewitt, 2008). Intensive supervision and continued evaluation of risk may create environments with reliable approaches to successful management of violence. While dynamic risk factors may contribute to a destabilizing mental state of a mentally ill offender, risk factors may fall under Kraemer's categories of "variable" or "causal" markers. Although research may never be sophisticated enough to determine that risk factors are directly causal, there is research supporting the influence of dynamic risk factors on overall functioning that is related to subsequent violent behaviors. The 20 dynamic variables of the START are correlated to success and failure in violence recidivism (O'Shea & Dickens, 2014). A primary goal of supervising entities is to ensure that treatment failure is minimal. Interventions are aimed at early dynamic risk factors, such as medication compliance, in order to alter a potentially dangerous trajectory towards violence or other harmful behaviors (Skeem & Louden, 2006). Regarding specific risk of conditional release failure,

dynamic variables are able to outperform static variables. Dynamic variables indicated to

be strong predictors include: employment status, marital support, perception of problems,

negative affect, substance abuse, social support, and perceived benefits from criminal

activities (Morgan et al., 2013).

Shift from Prediction to Prevention

The field of forensic psychology, specifically the assessment of violence, is advancing

from a prediction model to a prevention model (Blumenthal et al., 2010; Huss, 2014;

Wilson et al., 2010). Skeem and Monahan (2011) propose that the ceiling has been reached

with the ability to assess risk. The prediction of risk is effective, evidenced by numerous

studies that demonstrate the predictive validity of assessment measures (Singh et al.,

2011). Following his Coffee Can measure, Kroner, Mills, and Reddon (2005) call for the

development of a "risk construct" to create effective classification and focus on prevention

and interventions. Using an "assessment-prediction-intervention model," risk assessment

should go beyond assessment and inform treatment interventions (Lofthouse et al., 2014).

The reduction of risk through treatment-specific recommendations and management

strategies is the next direction in violence risk assessment (Hart, 1998; Skeem & Monahan

2011).

Although this is a fairly new shift in the risk assessment field, this concept is derived

from the correctional model of treatment using the "risk, need, and responsivity" (RNR)

construct (Andrews, Bonta, & Wormith, 2006). These treatment principles are designed to

match appropriate levels of treatment based on the identified risk, leading to the goal of

reducing recidivism. Undue amounts of treatment interventions may have iatrogenic

effects on individuals, leading to a possible increase in risk and proclivity to recidivate. RNR

focuses on addressing the greater risk, identifying treatment needs and applying treatment

strategies that are effective; tailored to meet an individual's specific strengths and needs.

The "strengths" component has recently been added to increase the likelihood of positive

response to treatment (Andrews et al., 2006). Strengths or "protective factors" that

contribute to diminishment of risk is an area of risk assessment that has not been heavily

researched (Wilson et al., 2010).

START

The Short-Term Assessment of Risk and Treatability (START), a fourth generation

assessment measure, was developed as an integrative tool, to predict and manage short-

term risk and identify treatment targets. Under the broader umbrella of the SPJ approach,

the goal of the START is to be a "clinical guide," formulated to inform treatment

recommendations. This measure aims to provide information about an individual's specific

areas of risk and needs on 20 dynamic factors, with two additional case-specific items,

available as needed. As specific targets are identified, crucial components are emphasized

to remain a focus throughout treatment. This measure characterizes the "risk –need–

responsivity" principle. An appropriate amount of services matches the predicted level of

risk, through means that are clinically, ethically, and financially responsible (Webster,

Martin, Brink, Nicholls, & Desmarais, 2009).

Designed in an inpatient setting in 2004, the START provides a structure for

conceptualizing aspects of risk. Risk is captured not just by violent behavior, but

incorporated into seven possible outcomes including risk of violence, self-harm, suicide,

unauthorized leave, substance abuse, self-neglect, and being victimized (O'Shea & Dickens, 2014). The manual emphasizes the need for effective communication between an interdisciplinary team to appropriately assess and manage risk. Providers in various disciplines provide information necessary for a "snapshot" of the patient's strengths and vulnerabilities. The patient is to be a part of this collaborative process, as his or her involvement in treatment planning will provide insight or highlight discrepancies, signaling a potential treatment need (Webster et al., 2009).

Compared to other SPJ assessment tools, the START is unique in its identification of protective factors. These 20 dynamic factors may be labeled as strengths on one side of the continuum or as vulnerabilities on the opposing side. The continuum captures the fluid nature of dynamic risk factors. Strength scales will highlight an individual's resources or assets while the Vulnerability scales identify potential problem areas, recognizing areas of greater treatment needs. Strengths and vulnerabilities are identified simultaneously. Both scales also have individual zero points and can be scored independent from the other. For research purposes, these items can be scored with strength scores ranging from 0-2 and vulnerability scores from 0-2. Key items that may be crucial to monitor can be marked on either side of the continuum. The START also identifies additional areas of concern, which may contribute to a patient's deterioration. Although a quantitative score can be derived for research purposes, in clinical practice, a determination of low, moderate, or high risk is determined with reliance on the overall accumulation of risk factors, not on an assigned numerical value (O'Shea & Dickens, 2014). Using the "T.H.R.E.A.T" acronym, "Threats of Harm that are Real, Enactable, Acute, and Targeted," clinicians can identify specific and

imminent risks, providing a framework, which aids in urgent decision-making (O'Shea &

Dickens, 2014). The START was designed to measure behaviors in the short-term,

predicting the likelihood of behaviors in a three-month period of time.

The Present Study

This present study aimed to identify the influence of the 20 dynamic items of the

START, analyzing the influence of these particular components of risk on the success and

treatment failures of conditionally released forensic patients in a community based

treatment setting. Progress was monitored by positive modifications (extended curfew,

reduction of supervision requirements, additional privileges, etc.). Additional restrictions,

such as an increase in supervision requirements, or a loss or privileges were viewed as a

negative or more restrictive modification. A revocation, a loss of condition release resulting

in a higher level of care, such as a return to the hospital or other treatment setting, was

viewed as a setback in achieving an eventual goal of success in treatment. However, due to

physical health or community placement setting, reasons for revocation could be

influenced by external factors, unrelated to a participants' treatment progress. Analyzing

the influence of particular items on success and failure of conditionally released patients

provided information to community providers about key dynamic factors that need to be

specifically targeted in treatment as well as frequently assessed.

Hypotheses

Dynamic risk factors present differently in inpatient setting and in the community.

Based on research of dynamic risk and knowledge of reasons for revocations, it was

anticipated the Strengths total score would predict positive outcomes, as measured by

positive modifications, i.e. decreased supervision requirements and increased privileges. It was also hypothesized that the Vulnerabilities total score would predict restrictive outcomes as measured by restrictive modifications, i.e. increased supervision requirements or a loss or privileges or ultimately, revocation of conditional release. Finally, it was hypothesized that specific START items, Item #8: Substance Abuse, and Item #14: Medication Adherence would be significantly correlated with restrictive modifications or revocation of conditional release.

Chapter 2

Method

Participants

This study employed archival data from the Oregon Psychiatric Securities Review Board (PSRB). This data included a completed Short-Term Assessment of Risk and Treatability (START) summary sheet, completed on individuals adjudicated Guilty Except for Insanity (GEI) who were discharged from the Oregon State Hospital under the jurisdiction of the PSRB in 2013. Created in 1977, the PSRB currently supervises approximately 700 individuals adjudicated GEI, serving the maximum possible penalty for their criminal offenses. Statistics from 2011 reveal that approximately 300 of Oregon adjudicated GEI patients receive treatment at Oregon State Hospital (OSH) and approximately 400 adjudicated GEI patients are managed in community-based settings on conditional release under the jurisdiction of the PSRB. Prior to discharge into the community, interdisciplinary teams at OSH intend to complete a START on every adjudicated GEI patient within three months of a patient's discharge, i.e., within the recommended time constraints the START manual endorses to be valid. Approval to use the archival PSRB data for this study was obtained from the Institutional Review Board (IRB) of George Fox University.

Each START received by the PSRB at the time of an individual's discharge from OSH was included in this study, regardless of whether completion falls within a three-month

time frame. Of the 42 participants adjudicated GEI released on conditional release in the

year 2013, 31 had completed START results in the chart. One participant was discharged to

the community from a facility other than Oregon State Hospital; therefore a START was not

completed on this participant. Of the patients who had a START, Most were male (90.3%)

and White (80.6%) and their mean age was 45.67 years (SD = 12.58).

Materials

      Short-Term Assessment of Risk and Treatability (START; Wilson et al., 2009).

The START (see Appendix A) is an SPJ measure of dynamic risk factors intended to inform

treatment for offenders who have employed the insanity defense. Appendix A is an example

of the original START scoring sheet implemented by British Columbia Mental Health and

Substance Abuse Services and St. Joseph's Healthcare. An initial administration of the

START requires, on average, 30 minutes. The START is designed for administration by an

interdisciplinary team, including medical professionals, mental health professionals, and

direct-care staff (Wilson et al., 2009).

      The aim of the START is to rate seven measures of risk as low, medium, or high

including: violence, self-harm, suicide, unauthorized leave, substance abuse, self-neglect,

and being victimized along with the option to include case specific risk factors. Violence,

self-harm, and suicide are rated to identify if imminent risk is present. Because the

measure is aimed to predict seven possible outcomes, internal consistency may not

necessarily be expected. Prediction risk assessment measures are often not found to be

internally consistent (O'Shea & Dickens, 2014). Twenty dynamic-risk items are coded as a

Strength (on a 0-2 scale) and Vulnerability (on a 0-2 scale). However, total scores on the

Strength or Vulnerability scales are typically not calculated in clinical practice and not intended to inform the seven measures of risk. Similar to other SPJ measures, the Strength and Vulnerability total scores may be calculated and used for research purposes.

In their recent meta-analysis of the START, O'Shea and Dickens (2014) identified the START demonstrated strong internal consistency and overall convergent validity. Significant positive correlations of convergent validity of the total score on the Strength scale of the START and the Structured Assessment of Protective Factors (SAPROF) were identified. Additionally, the total score of the Strength scale was also positively correlated with the Risk Management subscale of the HCR-20. Positive correlations were also noted in the total score of the Vulnerabilities scale when compared to the total score and all subscale scores of the HCR-20, total score and all subscale scores of the Suicide Risk Assessment and Management Manual (SRAMM), and the total score of the Psychopathy Checklist: Screening Version (PCL: SV; O'Shea & Dickens, 2014).

Predictive validity of the START suggests stronger predictive ability of Strength items, Vulnerability items, and total score for violence over other indices. Self-harm is significantly predicted as a specific risk item but not identified through a Strength or Vulnerability score. There is insufficient evidence from current available research to determine predictive ability of specific risk outcomes related to suicidality, self-neglect, and victimization. Overall, the largest effect size was indicated in verbal aggression and physical aggression, contributing to a significant utility of the START in predicting aggression and violence (O'Shea & Dickens, 2014).

Procedure

This study employed archival data, collected from PSRB files of active adjudicated

GEI participants. Several charts of participants were excluded for reasons including: an

individual's jurisdictional discharge, an inability to locate a completed START, or a

discharge from a facility other than OSH. As part of the conditional release preparation, a

valid START summary sheet (completed within 90 days before discharge from OSH) was

presented to the PSRB upon each patient's discharge. As PSRB patients were monitored in

the community, their progression through the system was identified by a community

placement's monthly progress reports and through court orders send to PSRB for requests

of modifications or revocations of an individual's conditional release plan. Modifications

were viewed as positive or restrictive in nature. Modifications identifying a patient's

positive implementation of change could result in the permission of additional privileges or

reduced supervision requirements. Modifications could also be identified as restrictive,

indicating a possible concern about an increase in risk, resulting in additional restrictions

or a revocation of conditional release. Revocations were viewed as adverse and frequently

include a return admission to OSH, due to concerning conduct, which results in a higher

level of care, or an inability to comply that might create a risk of harm, i.e. refusal to take

necessary medications. Additional reasons for revocations, while still adverse, could be

unrelated to mental health, due to physical health deterioration that required a hospital

level of care.

Upon discharge from OSH, START summary sheets were sent to PSRB and were

used as a baseline measurement of a patient's functioning as the patient transitioned into

the community. As patients presented to the PSRB with modifications or revocations, their

identified risk factors were used to assess whether the patient could continue to live in a

community setting.

          START summary sheets and records of modifications or revocations were collected

and regularly updated by PSRB. PSRB staff collected these records in participant charts.

Data was collected at the PSRB offices directly from the available participant charts. Using

an existing list of individuals adjudicated GEI discharged on conditional release in the year

2013 obtained by PSRB, extensive background information was received on participant's

age, gender, offense ranking, conditional release date, as well as the classification of a

facility or placement an individual transitioned to on conditional release. Participant charts

were reviewed and the most recently completed START from the time of discharge was

located. Available START data was transferred into a corresponding excel spreadsheet. In

addition, court documents were reviewed and the request for modifications or revocations

was classified and transferred to the excel spreadsheet.

Analyses

          The present study used chi-square analyses to examine the relationship between

the total score on START Strength Items, and total score on START Vulnerability Items as

well as individual START items and participants' movement in PSRB community-based

placements. The outcome measure was patient's movement through the PSRB system of

care, i.e., modifications identified as treatment successes (positive modifications) or

concerns of increasing risk (restrictive modifications), and revocations of conditional

release identified as an adverse outcome. Receiver operating characteristic (ROC) statistics

were calculated to describe utility of the Strengths total score and the Vulnerability total

score in predicting participants' movement.

Chapter 3

Results

The purpose of this study was to identify the predictive validity of the Short-Term Assessment of Risk and Treatability (START) measures completed on individuals found Guilty Except for Insanity (GEI) under Psychiatric Security Review Board (PSRB) jurisdiction prior to discharge from Oregon State Hospital in 2013.

Demographic Data- Comparing Groups With Starts and Without STARTs

Of the 42 participants adjudicated GEI released on conditional release in the year 2013, 31 had completed START results in their chart and 11 did not have a START (including one participant who was discharged to the community from a facility other than Oregon State Hospital and therefore a START was not completed on this participant). Table 1 contains descriptive information comparing participants with a discharge START to those either not reviewed or those without a START. Each participant's chart indicated a rating of "Class A, Class B, Class C or Unspecified" to indicate the most serious crime class in which their charged offense(s) belong.

Table 1

Demographic Information for Participants with and without a Discharge START.

	With Start [a]		Without Start [b]			
	Mean	*SD*	Mean	*SD*	Effect Size	
Age	45.67	12.58	40.16	11.34	$d' = 0.46$	Medium
%M	90.30	--	72.70	--	Cramer's V = .22	Small
%EH	80.60	--	72.70	--	Cramer's V = .58	Large
DOJ to CR	3.74	3.09	3.14	1.28	$d' = .28$	Small
%A Felony	48.40	--	18.00	--	Cramer's V = .47	Medium
%B Felony	32.30	--	18.00	--	Cramer's V = .47	Medium
%C Felony	16.10	--	63.60	--	Cramer's V = .47	Medium

Note. [a] n = 31; [b] n = 11; Age at release reported in years. %M=Percentage of Male. %EH= Percentage of European Heritage; DOJ to CR= Length of time in years from Date of Judgement to date of Conditional Release; %A= Percentage of Class A Felonies, %B= Percentage of Class B Felonies, %C= Percentage of Class C Felonies

The A, B, and C, class-felony structure is a tiered system where Class A felonies are the most serious crimes and Class C felonies are the least serious. Individuals with Class A felonies could be considered a higher risk group as their charges indicate greater severity. A significant difference between groups is evident as the group with STARTs has more participants with a Class A felony rating and the group without STARTs has a greater number of participants with a Class C felony rating ($x^2 (3) = 9.16$, *p* = .03). There were no significant differences between the group for age (t(40) = -1.28, p = .08), gender ($x^2 (1) =$

2.05, p = .15), ethnicity (x^2 (1) = .302, p = .58) or the length of time between Date of

Judgment and the Date of Conditional release (t(38.81) = -0.63, p = .54).

Charts not reviewed or without a completed START may be due to participants'

charts being inactive or at the end of PSRB jurisdiction. Participants with Class A ratings

would have longer jurisdictional sentences than Class C, and participants with Class C

ratings would be more likely to have shorter length of judgments compared to Class A or

Class B.

Descriptive Data- Comparing Groups with No Revocations vs. Revocations

Within the sample of 32 reviewed participant charts, eight indicated revocation of

conditional release. One participant's chart that indicated revocation did not have a START

completed at the time of discharge and was not included in this comparison. The group of

24 participant charts compared to the group of 7 participants charts that indicated

revocation reveals no significant differences across demographic variables. Descriptive

data comparing the revocation group to the non-revocation group can be found in Table 2.

No significant differences between groups are found for age at release (t(30) = .36, p

= .85), length of sentence (t(30) = .49, p = .63), and date of judgment (t(30) = -1.13, p = .27).

Chi-Square results indicate no significant difference between groups comparing gender (x^2

(1) = 1.10, p = .29), ethnicity (x^2 (1) = .27, p = .60), and number of Class A felonies (x^2 (3) =

1.23, p = .75). Significant differences were found between groups for the total score of

Strength Items on the START (t(29) = 4.27, p < .001), which was significantly higher for the

group without revocations, and the total score of Vulnerability Items on the START (t(29) =

-3.00, *p* < .005) , which was significantly higher for the group with revocations. Both of

these differences represented large effect sizes.

Table 2

Demographic Information for Participants with and without a Revocation of Conditional Release

	No Revocations[a]		Revocations[b]		
	Mean	*SD*	Mean	*SD*	*d'*
Age	45.73	13.28	45.44	10.71	-.02
%M	87.5	--	100.00	--	
%EH	79.2	--	87.50	--	
DOJ to CR	3.47	3.20	4.68	2.66	.39
Length of Sentence	239.00	237.69	207.43	86.18	-.15
Strengths Total Score	30.75	5.31	21.14	4.95	-1.46
Vulnerabilities Total Score	7.75	4.95	14.29	5.53	1.15

Note. [a] n = 24; [b] n = 7; Age at release reported in years. %M = Percentage of Male. %EH = Percentage of European Heritage; DOJ to CR = Length of time in years from Date of Judgement to date of Conditional Release; Length of Sentence reported in months.

Item Analysis

        Descriptions for each item are found in Table 3. Items 21 and 22 are case-specific

items that can be written in by a treatment team if additional factors are believed to

contribute to risk. Case-specific item 21 was used occasionally and did not reveal any

significance in the chi-square analysis. Case specific item 22 was never used and, thus, was a constant.

Table 3

START Item Descriptions, Scored as Either Strengths or Vulnerabilities

Item 1: Social Skills

Item 2: Relationships

Item 3: Occupational

Item 4: Recreational

Item 5: Self-Care

Item 6: Mental State

Item 7: Emotional State

Item 8: Substance Use

Item 9: Impulse Control

Item10: External Triggers

Item 11: Social Support

Item 12: Material Resources

Item 13: Attitudes

Item 14: Medication Adherence

Item 15: Rule Adherence

Item 16: Conduct

Item 17: Insight

Item 18: Plans

Item 19: Coping

Item 20: Treatability

Item 21: Case Specific: _____

Item 22: Case Specific: _____

Participant progression in PSRB resulting in additional privileges or reduction of

supervision requirements was categorized as positive. Movement in the PSRB system

resulting in a revocation of conditional release and a return to Oregon State Hospital for

increased supervision and treatment was considered adverse. Reasons for revocation

included treatment failure, as well as medical reasons that led to deterioration in mental

health. Prior to revocation, a restrictive modification was sometimes attempted in order to

thwart a return to Oregon State Hospital. Restrictive modifications resulting in a decrease

in privileges or increased supervision, short of hospitalization, were also considered

adverse.

An item analysis conducted on the 20 standard START items. Each item was

correlated with the participant's movement through the PSRB system. Results from this

item analysis are displayed in Table 4. Results labeled as "S" 1-21 indicate the items coded

as strengths. Results labeled as "V" indicate the score for that item as a vulnerability.

Several of the START items revealed statistically significant relationships with

participant movement through the PSRB system. Specifically, Positive Modifications (i.e.,

additional privilege modifications) and individual START items coded as strengths showed

significant relationship for Item 1: *Social Skills* (x^2 (1) = 6.98, *p* = .01) and Item 16: *Conduct*

(x^2 (1) = 7.44, *p* = .01). Positive Modifications and START items coded as a vulnerabilities

were significant for Item 2: *Relationships* (x^2 (1) = 7.44, *p* = .01) and Item 16: *Conduct* (x^2 (1)

= 8.27, *p* = .01).

Table 4

Relationships between START items and outcomes.

	Positive Mods				Restrictive Mods				Revocations			
	Chi ^{2}	df	Sig		Chi ^{2}	df	Sig		Chi ^{2}	df	Sig	
S1	6.98	1	<0.01	**	3.11	1	0.08		4.21	1	0.04	*
S2	1.95	1	0.16		2.40	1	0.12		2.84	1	0.09	
S3	1.54	2	0.46		3.07	2	0.22		2.55	2	0.28	
S4	4.91	2	0.09		0.25	2	0.88		3.31	2	0.19	
S5	5.24	1	0.02		0.10	1	0.75		0.86	1	0.35	
S6	2.47	2	0.29		9.67	2	<.01	**	8.79	2	0.01	**
S7	1.95	1	0.16		0.10	1	0.75		2.84	1	0.09	
S8	7.50	2	0.03	*	3.18	2	0.20		11.55	2	0.01	**
S9	5.26	2	0.07		11.64	2	<.01	**	8.02	2	0.02	*
S10	2.04	2	0.36		2.40	2	0.30		2.92	2	0.23	
S11	4.31	2	0.12		0.17	2	0.92		5.10	2	0.08	
S12	3.67	2	0.16		4.60	2	0.10		6.36	2	0.04	*
S13	6.44	2	0.04	*	3.98	2	0.14		8.91	2	0.01	**
S14	0.57	2	0.75		9.71	2	<.01	**	5.58	2	0.06	
S15	5.56	2	0.06		1.44	2	0.49		5.16	2	0.08	
S16	7.44	1	0.01	**	1.41	1	0.24		1.85	1	0.17	
S17	2.17	2	0.34		4.31	2	0.12		2.40	2	0.30	
S18	0.42	1	0.52		0.19	1	0.67		7.45	1	<.01	**
S19	6.13	2	0.05	*	9.67	2	<.01	**	8.79	2	0.01	**
S20	1.99	2	0.37		9.71	2	<.01	**	8.12	2	0.02	*
S21	0.32	2	0.85		0.32	2	0.85		1.13	2	0.57	
S22	constant				constant				constant			
V1	3.64	1	0.06		3.54	1	0.06		5.04	1	.03	*
V2	7.44	1	<.01	**	.935	1	<.01	**	1.85	1	0.17	

Table 4 continued

	Positive Mods				Restrictive Mods				Revocations			
	Chi ^{2}	df	Sig		Chi ^{2}	df	Sig		Chi ^{2}	df	Sig	
V3	3.51	2	0.17		1.45	2	0.49		2.64	2	0.27	
V4	3.16	1	0.08		0.01	1	0.90		1.85	1	0.17	
V5	1.87	1	0.17		0.10	1	0.75		0.86	1	0.35	
V6	0.84	2	0.68		0.96	2	0.62		1.43	2	0.49	
V7	5.19	2	0.08		2.74	2	0.26		1.28	2	0.53	
V8	5.44	2	0.07		0.26	2	0.88		3.41	2	0.18	
V9	4.09	2	0.13		1.83	2	0.40		2.69	2	0.26	
V10	1.95	2	0.38		0.87	2	0.65		1.03	2	0.60	
V11	5.20	2	0.07		1.13	2	0.57		3.67	2	0.16	
V12	1.49	2	0.47		0.24	2	0.89		7.52	2	0.02	*
V13	6.26	2	0.04	*	1.13	2	0.57		1.45	2	0.49	
V14	0.80	2	0.67		9.75	2	<.01	**	4.65	2	0.10	
V15	3.29	2	0.19		6.31	2	0.04	*	5.07	2	0.08	
V16	8.27	1	<.01	**	0.22	1	0.64		6.18	1	0.01	**
V17	2.17	2	0.34		0.97	2	0.62		2.64	2	0.27	
V18	4.09	2	0.13		1.83	2	0.40		2.69	2	0.26	
V19	3.64	1	0.06		3.54	1	0.06		5.04	1	0.03	*
V20	1.95	2	0.38		0.87	2	0.65		8.02	2	0.02	*
V21	4.44	2	0.11		1.91	2	0.39		0.18	2	0.92	
V22	constant				constant				constant			

Restrictive Modifications and individual START items coded as strengths revealed significant relationship with Item 9: *Impulse Control* (x^2 (2) = 11.64, *p* = <.01), Item 14: *Medication Adherence* (x^2 (2) = 9.71, *p* = <.01), and Item 20: *Treatability* (x^2 (2) = 9.71, *p* =

<.01). Similar to results comparing Revocations, Restrictive Modifications and individual START items coded as strengths revealed a significant relationship with Item 6: *Mental State* (x^2 (2) = 9.76, *p* = <.01) and Item 19: Coping (x^2 (1) = 9.67, *p* = <.01). In addition, Restrictive Modification and the individual START Item 14: *Medication Adherence* coded as a vulnerability revealed a significant relationship (x^2 (2) = 9.75, *p* = <.01).

Some START items coded as strengths had a significant relationship with Revocations. For example, Item 6: *Mental State* (x^2 (2) = 8.79, *p* = .01), Item 8: *Substance Use* (x^2 (2) = 11.55, *p* = .01), Item 13: *Attitudes* (x^2 (2) = 8.91, *p* = .01), Item 18: *Plans* (x^2 (1) = 7.45, *p* = < .01), and Item 19: *Coping* (x^2 (1) = 8.79, *p* = .01) were all significantly predictive of revocations. Revocation and START items coded as a vulnerabilities were significant only for Item 16: *Conduct* (x^2 (1) = 6.18, *p* = .01).

Comparing the Predictive Validity of the START and Participant Movement

A Receiver Operating Characteristic (ROC) analysis was completed to assess the predictive validity of the START and participant progress in the community. ROC curve analysis is regarded as the standard method of analysis for violence risk assessments in the field of forensic psychological research (Singh et al., 2011). An ROC analysis was conducted to determine if the total score on items coded as "Strengths" and the total score for items coded as "Vulnerabilities" could predict a participant's progression through the PSRB system of care. Validity is measured by the area under the curve (AUC) in an ROC curve. An area under 0.6 is not considered predictive, while an AUC of 0.6 - 0.7 is rated as a poor predictor, 0.7 - 0.8 is a fair predictor, 0.8 - 0.9 is a good predictor, and 0.9 – 1.0 is an excellent predictor.

ROC results identifying positive or additional privileges modifications are found in Figure 1. The AUC for the Strengths total score and positive modifications was 0.85 (good) suggesting that the total Strengths score is able to predict positive progression. The AUC for the Vulnerabilities total score was 0.13 (fail) indicating that the Vulnerabilities score is not a predictor of progress.

ROC results identifying negative or more restrictive modifications can be found in Figure 2. This analysis revealed an AUC of 0.31 (fail) for Strengths total score and an AUC of 0.70 (fair) for Vulnerabilities total score, suggesting that the total score on Strengths is not predictive of negative modifications while the total score of Vulnerabilities items has some utility to predict negative modifications.

Finally, ROC results showing the ability of the START to predict revocations are found in Figure 3. The AUC was 0.10 (fail) for the Strengths total score, suggesting that the total Strengths score does not predict revocation. However, the AUC for the Vulnerabilities total score and revocations was 0.84 (good) suggesting that the total Vulnerabilities score has the ability to predict revocations.
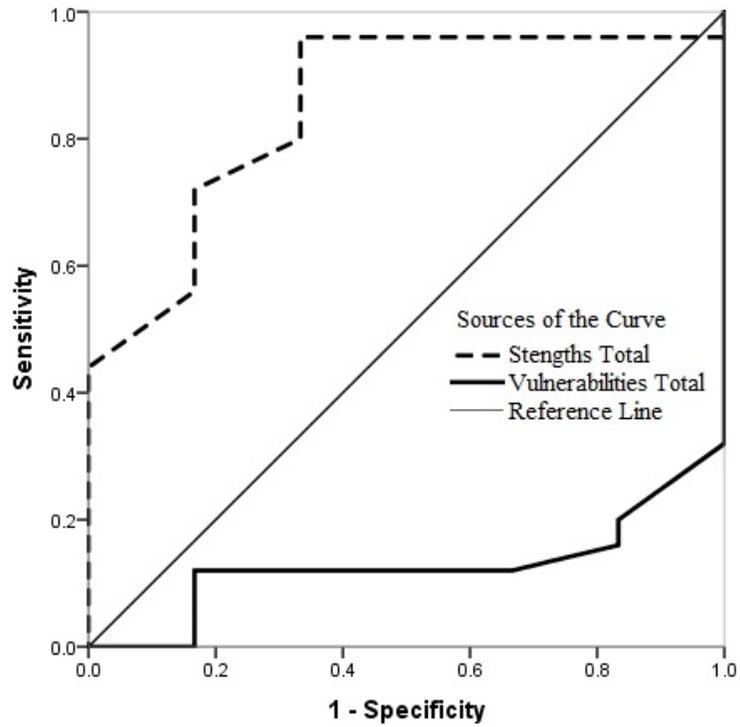
Figure 1. *An ROC using START to predict positive modifications.*
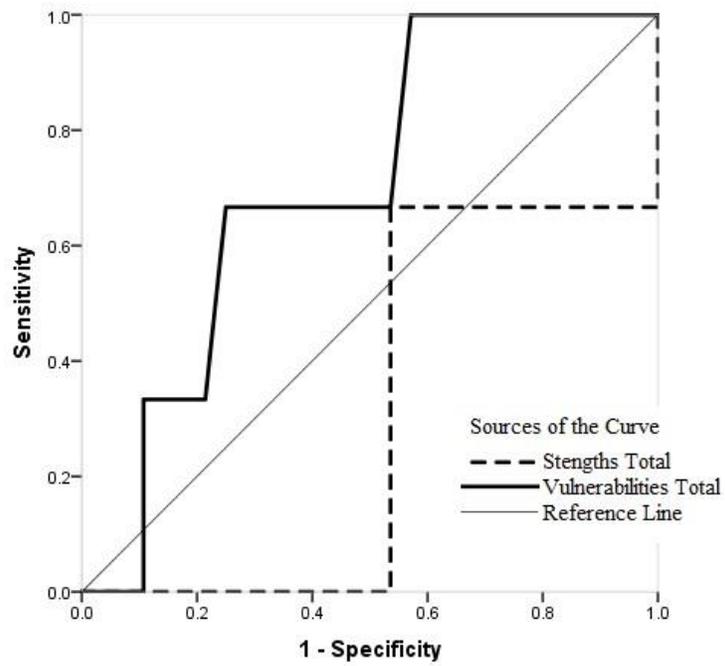
Figure 2. An ROC using START to predict negative modifications.
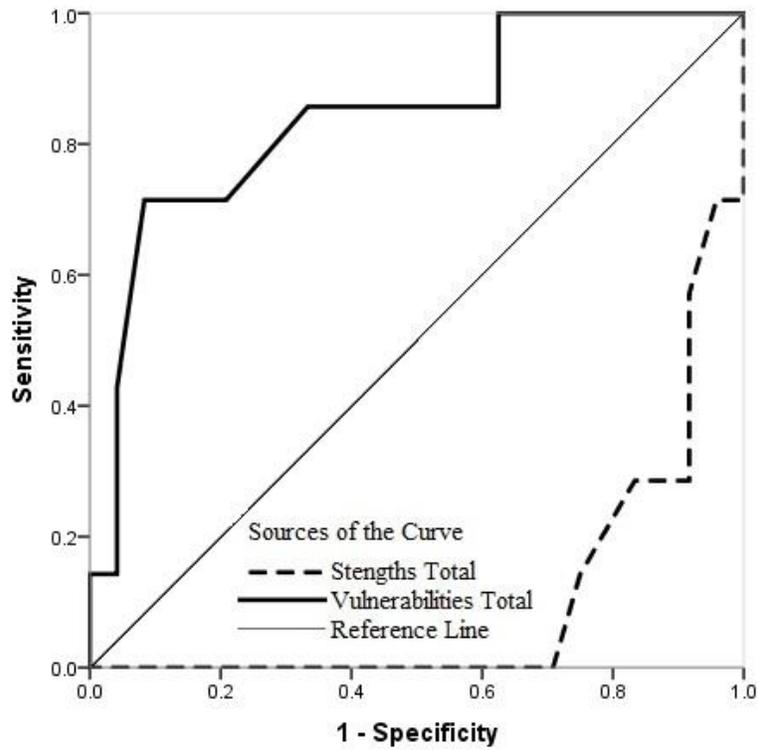
Figure 3. An ROC using START to predict PSRB revocations.

Chapter 4

Discussion

The goal of this study was to identify the predictive validity of the START in describing patients' movement through a community-based system of care supervised by the PSRB. Overall, the ROC results revealed the Strengths total score is predictive of positive progression and the Vulnerabilities total score is predictive of revocations with some ability to predict negative or more restrictive modifications. The Strengths total score demonstrated "good" utility in predicting positive or less restrictive modifications (AUC = 0.85). While the Vulnerabilities total score demonstrated "good" utility in predicting revocations of conditional release (AUC = 0.84), the Vulnerabilities total score demonstrated "fair" utility in predicting restrictive modifications (AUC = 0.70).

Additionally, analyses on individual START items carried most of the predictive value in the Strengths and Vulnerabilities scales. Specifically, Item 1: *Social Skills* and Item 16: *Conduct* coded as Strengths were most predictive of positive modifications. Coded as a vulnerability, Item 16: *Conduct* was predictive of revocation.

Overall, these results are consistent with past research. Much of the literature on the START is completed in inpatient settings. Community-based placements are not recommended for comparison with inpatient settings (Wilson et al., 2010). However, Community-based outcome studies on the START are not available at this time and

community placements within the PSRB represent a wide range from secure residential

treatment facilities, residential treatment facilities, and adult foster homes to independent

living. Wilson et al. (2010) demonstrated the inverse Strengths total score and the

Vulnerability total score predicted aggressive behaviors of 30 male forensic psychiatric

patients in an inpatient setting. Following these 30 males for a 12-month duration, 4 file-

based START assessments were completed retrospectively on male patient at three-month

intervals. Initial AUC scores ranging from 0.74- 0.70 in this study were predictive of

"physically or sexually inappropriate behaviors against others" in the first three months

following completion of the first START. Within the three to six months following the initial

START, AUC values increased for both the inverse Strength total score and the Vulnerability

total score (AUC = 0.81). The strongest predictive AUC values of inverse Strength total

scores and Vulnerability total scores were found for the START measures completed during

the fourth and last interval, when the predictive validity of START Strength and

Vulnerability total scores ranged from AUC of 0.86- 0.87. It is not surprising that the

highest validity scores were found in the assessment period closest in time to the

measurement of the outcome.

   Following these same 30 male inpatient forensic patients, Wilson, Desmarais,

Nicholls, Hart, & Brink., 2013 conducted a prospective, longitudinal study beginning with

the file-based START measures completed at the fourth and last interval of the 2010 study

(Wilson et al., 2010). They continued to follow the inpatients for 12 months following

completion of the START measures and found the inverse Strengths total score AUC was

0.84 and the Vulnerability total score AUC was 0.82 when predicting physically or sexually

inappropriate behaviors against others, suggesting these START scores have predictive

validity for a period of time longer than the suggested 3-month re-evaluation period.

Counter to the *a priori* hypotheses, START items, Item 8: *Substance Abuse*, and Item

#14: *Medication Adherence* were not predictive of restrictive modifications or revocation of

conditional release. Interestingly, Item 16: *Conduct* was predictive of positive modifications

when it was recorded as a Strength and was predictive of revocations when it appeared as

a Vulnerability.

Implications

The START has many unique qualities. The START assesses dynamic risk variables

and allows for inclusion of specific factors relevant to an individual's perceived level of risk.

As the START has demonstrated utility in predicting movement through the PSRB,

utilization of the START among community-based providers may allow for a more

comprehensive, objective rating system to report patient progression. Currently, most

community-based providers utilize a narrative monthly report to identify patient progress.

Some providers reporting to PSRB are using the START to track patient progress along with

a monthly report. In this sample of individuals found GEI on conditional release since 2013,

one chart revealed STARTs completed by community-based providers. While many

community-based providers have and use their own rating scale or behaviorally based

systems within their program, utilization of a measure such as the START, could provide

objective ratings to inform progression.

Incorporation of the START throughout a system of care could potentially decrease

clinical bias and create a uniform structure to evaluate progress. Recommended for

completion with a team of providers, the START emphasizes the important of

communication of risk and an accurate representation of risk in multiple setting. The

language of risk research may also influence variability in how community-based programs

interpret and formulate risk of GEI individuals. Levels of understanding may also fluctuate

based on provider differences or understanding of the risk research. Implementing a

measure like the START through a community based system of care, may create a more

objective method of evaluating progression.

Criticisms of the START include the lengthy amount of time, suggesting on average

approximately 45 minutes to 1 hour when first implementing this tool as well as relatively

stable item selection on many items due to the frequent completion of the measure

(Crocker et al., 2011). Research supports the START's predictive validity of the measure

completed within the 3-month guideline. However, this research as well as additional

research, does support the START's utility to predict risk outside of those guidelines.

Hanson and Harris (2000) identified dynamic risk factors to be either stable dynamic or

acute dynamic. Stable dynamic factors are consistent factors that may influence perpetually

influence risk. Acute dynamic risk, such as substance intoxication, may present with an

immediate risk of recidivism. Factors such as medication compliance are likely to increase

risk overall but may not present as an immediate threat. Many of the individual START

items may fall into the stable dynamic factors category. The Threat category identified by a

low, medium, or high score may best evaluate acute dynamic risk of historical items. Items

1-20 may not necessarily present with the same fluctuation as the Threat category. If the

length of time guideline was altered, it appears as though the ecological utility of the

measure may increase.

Limitations

Limitations to this study include utilization of a small sample of 30 participant

charts. In addition, the sample population lacks ethnic diversity, representing a majority of

European Heritage participants. The START measures completed on participant charts

were completed by treatment teams prior to a patient's discharge, regardless of validation

within the three-month recommended guidelines according to the START manual.

Participant progression was tracked from their release in the year of 2013 to October 2015,

providing limited opportunity to progress through positive or restrictive modifications.

Modifications presented with great variability. Participants' medical challenges, which

resulted in revocations, were due to changes outside of treatment compliance. Neutral

modifications, including program changes or availability of placements, were not coded due

to concerns of possible confounding results. In addition, provider differences in requesting

modifications were apparent throughout the comprehensive chart review process.

Future Research

Dynamic risk research could benefit from incorporation of stable dynamic risk and

acute dynamic risk, identifying measures to evaluate and inform specific treatment targets.

The START is unique in its intent to inform treatment. Research evaluating treatment

informed specifically by the START may also improve the START's utility as a guide to

formulating risk and treatment. Evaluating decreased risk on specific areas will enhance

the utilization of the START. Additional research on dynamic risk in the community is

necessary as there is limited information with which to compare this study.

References

Andrews D. A., Bonta, J., & Wormith, J. S., (2006). The recent past and near future of risk

and/or need assessment. *Crime & Delinquency, 52*(1), 7-27. doi:

10.1177/0011128705281756

Blumenthal, S., Huckle, C., Czornyj, R., Craissati, J., & Richardson,P. (2010). The role of affect

in the estimation of risk. *Journal of Mental Health, 19*(5), 444-451. doi:

10.3109/09638231003728083

Brown, S. L., St. Amand, M. D., & Zamble, E. (2009). The dynamic prediction of criminal

recidivism: A three-wave prospective study. *Law and Human Behavior, 33*, 25-45.

doi: 10.1007/s10979-008-9139-7

Campbell, M.A., French, S., & Gendreau. P. (2009). The prediction of violence in adult

offenders: A meta-analytic comparison of instruments and methods of assessment.

Criminal Justice and Behavior, 36(6), 567-590. Doi: 10.1177/0093854809333610

Coid, J. W. (1996). Dangerous patients with mental illness: increased risks warrant new

policies, adequate resources, and appropriate legislation. *British Medical Journal*,

312, 965-966. Retrieved from

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2350759/

Crocker, A.G., Braithwaite, E., Laferriere, D., Gagnon, D., Venegas, C., & Jenkins, T. (2011).

START changing practice: Implementing a risk assessment management tool in a

civil psychiatric setting. *International Journal of Forensic Mental Health, 10*(1), 13-

28. doi: 10.1080/14999013.2011.553146

Ennis, B. J., & Litwack, T. R. (1974). Psychiatry and the presumption of expertise: Flipping

coins in the courtroom. *California Law Review, 62,* 693–752. Retrieved from

http://scholarship.law.berkeley.edu/californialawreview/vol62/iss3/2/

Gendreau, P., Little, T., & Goggin, C. (1996) A meta-analysis of the predictors of adult

offender recidivism: What works! *Criminology, 34*(4), 575-601. doi: 10.1111/j.1745-

9125.1996.tb01220.x

Hannah-Moffat, K. (2010, September). *Actuarial sentencing: An "unsettled" proposition.*

Symposium conducted at the University at Albany Symposium on Sentencing,

Albany, NY. Retrieved from http://www.albany.edu/scj/documents/Hannah-

Moffatt_RiskAssessment_000.pdf

Hanson, R.K. & Harris, A.R. (2000). Where should we intervene? Dynamic predictors of sex

offense recidivism. *Criminal Justice and Behavior, 27,* 6-35.

Hart, S.D. (1998). The role of psychopathy in assessing risk for violence: Conceptual and

methodological issues. *Legal and Criminological Psychology, 3,* 121-137.

Hewitt, J. L. (2008). Dangerousness and mental health policy. *Journal of Psychiatric and

Mental Health Nursing, 15*, 186-194. doi: 10.1111/j.1365-2850.2007.01188.x

Huss, M. T. (2014). *Forensic psychology: Research, clinical practice, and applications*. (2nd

ed.) Hoboken, NJ: Wiley.

Kroner, D. G., Mills, J. F., & Reddon, J. R. (2005). A coffee can, factor analysis, and prediction

of antisocial behavior: The structure of criminal risk. *International Journal of Law

and Psychiatry, 28,* 360-374. doi: 10.1016/j.ijlp.2004.01.011

Lofthouse, R. E., Totsika, V., Hastings, R. P., et al. (2014). How do static and dynamic risk

    factors work together to predict violence amongst offenders with an intellectual

    disability? *Journal of Intellectual Disability Research, 58,* 125-133.

McDermott, B. E., Edens, F., Quanbeck, C. D., Busse, D., & Scott, C. L., (2008). Examining the

    role of static and dynamic risk factors in the prediction of inpatient violence:

    Variable and person-focused analyses. *Law and Human Behavior*, *32*, 325-338. doi:

    10.1007/s10979-007-9094-8

McSherry, B. (2014). Throwing away the key: The ethics of risk assessment for preventive

    detention schemes. *Psychiatry, Psychology and Law, 21*(5), 779-790. doi:

    10.1080/13218719.2014.893551

Mills, J. F., Kroner, D. G., & Morgan, R. D. (2011). *Clinician's guide to violence risk assessment.*

    New York, NY: Guilford Press.

Monahan, J., & Skeem, J. L. (2014a). The evolution of violence risk assessment. *CNS*

    spectrums, 19(5), 419-424. doi: 10.1017/S1092852914000145

Monahan, J., & Skeem, J. L. (2014b). Risk redux: The resurgence of risk assessment in

    criminal sanctioning. *Federal Sentencing Reporter, 26*(3), 158-166. doi:

    10.1525/fsr.2014.26.3.158

Morgan, R. D., Kroner, D. G., Mills, J. F., Serna, C., & McDonald, B. (2013). Dynamic risk

    assessment: A validation study. *Journal of Criminal Justice, 41,* 115-124.

O'Shea, L. E. & Dickens, G. L. (2014). Short-term assessment of risk and treatability

    (START): Systematic review and meta-analysis. *Psychological Assessment, 26*(3),

    990-1002. doi: 10.1037/a0036794

Philipse, M. W. G., Koeter, M. W. J., Van Den Brink, W., & Van Der Staak, C. P. F. (2004). The

      structural coherence of clinically derived dynamic indicators of reoffending risk.

      Criminal Behaviour and Mental Health, 14, 263-279. doi: 10.1002/cbm.593

Singh, J. P., Grann, M., & Fazel, S. (2011). A comparative study of violence risk assessment

      tools: A systematic review and metaregression analysis of 68 studies involving

      25,890 participants. *Clinical Psychology Review, 31*, 499-513. doi:

      10.1016.j.cpr.2010.11.009

Skeem, J. L., & Louden, J. E. (2006). Toward evidence-based practice for probationers and

      parolees mandated to mental health treatment. *Psychiatric Services, 57*(2), 333-342.

      Retrieved from

      http://search.proquest.com/docview/213078608?accountid=11085

Skeem, J. L., & Monahan, J. (2011). Current directions in violence risk assessment. *Current

      Directions in Psychological Science, 20*(1), 38-42. doi: 10.1177/0963721410397271

Steadman, H. J., Silver, E., Monahan, J., Appelbaum, P. S., Robbins, P. C., Mulvey, E. P., …

      Banks, S. (2000). A classification tree approach to the development of actuarial

      violence risk assessment tools. *Law and Human Behavior, 24*(1), 83-100. doi:

      10.1023/A:1005478820425

Troquete, N. A., van den Brink, R. S., Beintema, M., Mulder, T., van Os, T. W., & Schoevers, R.

      A. (2013). Risk assessment and shared care planning in out-patient forensic

      psychiatry: Cluster randomized controlled trial. *British Journal of Psychiatry, 202,*

      365-371.

Webster, C. D., Martin, M. L., Brink, J., Nicholls, T. L., & Desmarais, S. L. (2009). *Manual for the Short-Term Assessment of Risk and Treatability (START)* (Version 1.1). Coquitlam, Canada: British Columbia Mental Health & Addiction Services.

Webster, C. D., Nicholls, T. L., Martin, M., Desmarais, S. L., & Brink, J. (2006). Short-term assessment of risk and treatability (START): The case for a new structured professional judgment scheme. *Behavioral Sciences and the Law, 24*, 747-766. doi: 10.1002.bsl.737Wilson, C. M., Desmarais, S. L., Nicholls, T. L., & Brink, J. (2010). The role of client strengths in assessments of violence risk using the short-term assessment of risk and treatability (START). *International Journal of Forensic Mental Health, 9*, 282-293. doi: 10.1080/1499913.2010.534694

Wilson, C. M., Desmarais, S. L., Nicholls, T. L., Hart, S. D., & Brink, J. (2013). Predictive validity of dynamic factors: Assessing violence risk in forensic psychiatric inpatients. *Law and Human Behavior, 37*(6), 377-388. doi: 10.1037/lhb0000025

Wilson, C. M., Martin, M., Brink, J., Nicholls, T. L., & Desmarais, S. L. (2009). *Short-Term Assessment of Risk and Treatability (START) (Version 1.1).* Hamilton: St. Joseph's Healthcare Hamilton, Forensic services.

Appendix A

START

BC MENTAL HEALTH & SUBSTANCE USE SERVICES
An agency of the Provincial Health Services Authority

St. Joseph's Healthcare Hamilton

Name: _____
            Last   First   Middle
Record # _____
Male ☐ Female ☐ D.O.B: _____

START Summary Sheet ©

Diagnoses:	DSM-V ☐	ICD-10 ☐	1 _____	2 _____
3 _____			4 _____	5 _____

STATUS: ☐ HOSPITAL   ☐ COMMUNITY   ☐ CORRECTIONS
            Status: _____   Status: _____   Status: _____

PURPOSE: ☐ REFERRAL   ☐ ADMISSION   ☐ REVIEW   ☐ OTHER
                                            Specify: _____   Specify: _____

START Time Frame: _____
                        days / weeks / months

Key Item	Strengths 2	1	0	START Items	Vulnerabilities 0	1	2	Critical Item	SIGNATURE RISK SIGNS
○	☐	☐	☐	1. Social Skills	☐	☐	☐	○	
○	☐	☐	☐	2. Relationships (TA:Y/N)*	☐	☐	☐	○	
○	☐	☐	☐	3. Occupational	☐	☐	☐	○	
○	☐	☐	☐	4. Recreational	☐	☐	☐	○	**SPECIFIC RISK ESTIMATES**
○	☐	☐	☐	5. Self-Care	☐	☐	☐	○	Hx□ / Risks / T.H.R.E.A.T. / Low / Mod / High
○	☐	☐	☐	6. Mental State	☐	☐	☐	○	○ Violence No☐ Yes☐ ☐ ☐ ☐
○	☐	☐	☐	7. Emotional State	☐	☐	☐	○	○ Self-Harm No☐ Yes☐ ☐ ☐ ☐
○	☐	☐	☐	8. Substance Use	☐	☐	☐	○	○ Suicide No☐ Yes☐ ☐ ☐ ☐
○	☐	☐	☐	9. Impulse Control	☐	☐	☐	○	○ Unauthorized Leave ☐ ☐ ☐
○	☐	☐	☐	10. External Triggers	☐	☐	☐	○	○ Substance Abuse ☐ ☐ ☐
○	☐	☐	☐	11. Social Support (PPS:Y/N)‡	☐	☐	☐	○	○ Self-Neglect ☐ ☐ ☐
○	☐	☐	☐	12. Material Resources	☐	☐	☐	○	○ Being Victimized ☐ ☐ ☐
○	☐	☐	☐	13. Attitudes	☐	☐	☐	○	○ Case Specific: ☐ ☐ ☐
○	☐	☐	☐	14. Med. Adherence (N/A ☐)†	☐	☐	☐	○	_____
○	☐	☐	☐	15. Rule Adherence	☐	☐	☐	○	**CURRENT MANAGEMENT MEASURES**
○	☐	☐	☐	16. Conduct	☐	☐	☐	○	
○	☐	☐	☐	17. Insight	☐	☐	☐	○	
○	☐	☐	☐	18. Plans	☐	☐	☐	○	
○	☐	☐	☐	19. Coping	☐	☐	☐	○	
○	☐	☐	☐	20. Treatability	☐	☐	☐	○	**Current Management Plan:**
○	☐	☐	☐	21. Case Specific:	☐	☐	☐	○	
○	☐	☐	☐	22. Case Specific:	☐	☐	☐	○	

Health Concerns/Medical Tests: _____

Risk Formulation: *what factors/predict-explain/which person/will carry out/what act/when?*
_____
_____

Completed by (Pls print): _____ **Date:** _____

*TA - Therapeutic Alliance ‡PPS - Positive Peer Support †N/A – Not Applicable □Hx - Historical   Version 1.3 © 2014

Appendix B

Curriculum Vitae

Heidi Oliver
3380 Fred George Rd. Apt. 412
Tallahassee, Florida 32303
301-800-5250
heidi.a.oliver@gmail.com

Educational History_____

George Fox University, Newberg, OR
Graduate Department of Clinical Psychology: APA Accredited
      M.A. in Clinical Psychology   May 2014
      Psy.D. Clinical Psychology   Anticipated May 2017
        Assessment Emphasis

Indiana Wesleyan University, Indianapolis, IN
Division of Graduate Counseling: CACREP & COAMFTE Accredited
      M.A. in Marriage and Family Therapy   Dec 2009
      Additional specializations:
      Addictions & Clinical Mental Health Counseling

Taylor University, Upland, IN
      B.A. in Christian Educational Ministries   May 2007

Professional Credentials _____

Licensed Marriage and Family Therapist   (Indiana)   Jul 2012

Clinical Training Experience _____

Pre-Doctoral Psychology Intern: Florida State Hospital   Aug 2016- Present
Chattahoochee, FL
- Complete forensic evaluations of competency to proceed with patients adjudicated Incompetent to Proceed (ITP) and risk evaluations with patients adjudicated Not Guilty by Reason of Insanity (NGI) using the HCR-20.
- Attend Florida Adult Forensic Examiner Training led by Randy Otto, Ph.D. in Sept 2016.

- Administer cognitive and psychological evaluations to assess intellectual and cognitive functioning, performance validity, symptom validity, and additional diagnostic testing as necessary (i.e. WAIS, RBANS, DRS-2, TOMM, M-FAST, SIRS-2, ILK, etc.)
- Provide individual and group psychotherapy to patients adjudicated ITP and NGI.
- Provide individual competency restoration to patients adjudicated as ITP with factual and rational barriers to competency.
- Consult and collaborate with treatment teams of multidisciplinary professionals.

Team Coordinator: Behavioral Health Crisis Consultation Team   Feb 2014- Jul 2016
Newberg & McMinnville, OR
- Manage on-call coverage for team of 18 Behavioral Health Crisis Consultants and provide additional support and emergency coverage to consultants.
- Develop documentation and hospitalization protocols, train consultants in documentation procedures utilizing electronic medical records.
- Recruit and train crisis consultants to evaluate suicide risk, psychosis, cognitive problems and risk of harm to others.
- Coordinate with Emergency Department physicians and licensed clinical supervising psychologists to organize orientation trainings and continued educational trainings.
- Develop tracking forms for data repository and later analysis of crisis consults; manage insurance information for private pay reimbursements.

Behavioral Health Crisis Consultant   Feb 2013- Jul 2016
Providence Newberg Medical Center, Newberg, OR
Willamette Valley Medical Center, McMinnville, OR
- Provide on-call Behavioral Health Crisis Consultation services for 16-hour weekly shifts and holiday coverage.
- Conduct evidence-based suicide risk assessments, brief neuropsychological screenings, and crisis interventions of individuals at risk of harm to self and others in various hospital departments.
- Collaborate with medical staff, facilitate transfer to placements including: psychiatric hospitals, sub-acute hospitals, detoxification placements, etc.
- Participate in weekly, modified Grand Rounds presentations, including formal presentation of patient cases; facilitate group discussions of diagnosis, risk and protective factors.

Practicum Student: **Kaiser Permanente Northwest**   Jun 2015- Jan 2016
Skyline Mental Health Clinic, Salem, OR
- Provide culturally competent evidence-based practice interventions and assessments to individuals, families, and groups in an outpatient, co-located care setting for adolescents and adults from a Cognitive Behavioral Therapy framework, employing Dialectical Behavioral Therapy skills for a variety of complex medical and mental health disorders.

- Complete neuropsychological assessments; develop symptom specific test batteries within a process approach, provide patients and providers with feedback and recommendations.
- Assess suicide risk and recommend level of care based on risk, provide crisis stabilization for suicide and other risk related issues; develop coping strategies plans.

Practicum Student: **Oregon State Hospital**   Aug 2014- Aug 2015
Salem, OR
- Provide individual therapy from a Cognitive Behavioral Therapy for Psychosis orientation for patients with severe and persistent mental illness on a medium security unit determined to be Guilty Except for Insanity by the Oregon Psychiatric Security Review Board.
- Collaborate with interdisciplinary team of psychiatric, nursing, mental health, and social work providers to coordinate patient care.
- Conduct brief and comprehensive psychological and neuropsychological assessments on patients presenting with a variety of psychotic disorders, intellectual, and cognitive deficits, provide feedback and recommendations to unit staff and interdisciplinary team.
- Complete violence risk assessments from a Structured Professional Judgment approach, use the HCR-20 v3 to evaluate risk of future violence, provide recommendations of risk, and interventions to effectively manage risk.
- Engage in weekly individual supervision with primary supervisor, weekly group supervision, and didactic trainings on Malingering, Competency to Stand Trial, Criminal Responsibility, Violence Risk Assessment and other forensic related topics.

Practicum Student: **Clark County Juvenile Detention**   Sep 2013- May 2014
Vancouver, WA
- Provide individual and group therapy, suicide, and violence risk assessments to incarcerated adolescents in the juvenile justice system from a Trauma-Focused Cognitive Behavioral Therapy orientation.
- Complete brief and comprehensive psychological testing, provide feedback, and recommendations to juvenile corrections staff.
- Provide psychological consultation to probation officers and specialty mental health probation teams.

Professional Experience _____

Assessment Specialist: **Resolute Treatment Facility**   Jun 2012- Aug 2012
Admissions Department
Indianapolis, IN
- Complete comprehensive psychosexual risk assessments to evaluate risk, needs, and responsivity for adolescent males, ages 10-18.

- Conduct a clinical interview with adolescent and family; perform psychological assessments and symptom specific assessments to identify conduct disordered and maladaptive sexual behaviors.

Clinical Therapist: **Resolute Treatment Facility**   Jun 2009- Jun 2012
Indianapolis, IN
- Provide individual, family and group psychotherapy for sexually maladaptive behaviors in male adolescents, ages 10-18 in secure residential treatment settings within a Multisystemic Therapy Model.
- Use Trauma- Focused Cognitive Behavioral Therapy and Functional Family Therapy to treat conduct disorder behaviors, sexually maladaptive behaviors, and comorbid disorders.
- Conduct daily psychoeducational groups and relapse prevention planning, facilitate process groups.
- Coordinate care with multidisciplinary team of professionals including: psychiatry, nursing, education staff, direct care staff, and community based therapists.
- Engage in professional consultation with Indiana Juvenile Justice system and Indiana Department of Child Services; collaborate with probation staff and caseworkers.
- Provide court testimony in routine review hearings and sex offender registry hearings.

Supervision Experience _____

Oversight Supervisor   Aug 2015- May 2016
George Fox University, Newberg, OR
- Provide weekly supervision of second year Psy.D. student in Practicum 1 placement
- Support development of clinical and assessment skills, aid in exploration of theoretical orientation, areas of interest, consult on case conceptualization, and provide feedback
- Obtain weekly supervision of supervisory skills by licensed clinical psychologist.

Teaching Experience _____

Graduate Teaching Assistant
Graduate Department of Clinical Psychology
George Fox University, Newberg, OR
    Comprehensive Psychological Assessment   Fall 2015
- Course provides students an understanding of psychological assessment and report writing procedures.
- Edit and provide feedback of comprehensive psychological reports written by students.

Adjunct Professor
Masters in Counseling Program
George Fox University, Portland, OR

  Theories of Personality and Counseling   Summer 2015
- Course is an introduction to major contemporary theories of counseling and personality development with particular emphasis on etiology, assessment and treatment within various theoretical frameworks.
- Develop and teach lectures on major theoretical orientations, develop case study examples to engage students in direct application of theories.
- Grade student presentations and written assignments, provide feedback to students.

  Interpersonal Neurobiology and Psychopharmacology Spring 2015
- Course intends to increase students' knowledge of neurological functioning and its influence on cognitive, affective, and behavioral functioning,
- Provide student with an overview of neuro-anatomy and advances in interpersonal neurobiology confirming the role of attachment relationships in brain development, and the role of interpersonal relationships and pharmacology in altering brain functioning.
- Develop and teach lectures on neuro-anatomy and psychopharmacology involved in psychological disorders including Schizophrenia, Depression, Childhood Disorders, etc.
- Evaluate and provide feedback on student projects and writing assignments.

Other Clinical Experience _____

Clinical Teams, George Fox University
- Engage in weekly clinical team trainings, comprised of 1st-4th year students facilitated by licensed clinical supervising psychologists, rotate teams yearly.
- Present clinical therapy and assessment cases from practicum experiences; discuss diagnosis and treatment planning from different theoretical orientations.

Assessment Trainings
- Hare Psychopathy Checklist- Revised Training   Oct 2015
  Robert Hare, Ph.D. & Matt Logan, Ph.D., Portland, OR
- Violence Risk Assessment: HCR-20 Version 3   Sep 2014
  Stephen James, Ph.D. & Brian Hartman, Psy.D.,
  Oregon State Hospital, Salem, OR
- Using Tests of Effort in a Psychological Assessment   May 2013
  Paul Green, Ph.D., Newberg, OR
- Assessing Mild Cognitive Impairment and Dementia   May 2013
  Mark Bondi, Ph.D., ABPP, Newberg, OR

Forensic Trainings

- Guilty Except for Insanity: From Admission to Conditional Release   Oct 2014
  Simrat Sethi, M.D., Oregon State Hospital, Salem, OR
- Washington State Becca Conference: A Restorative Approach to Truancy   Oct 2013
  Center for Children and Youth Justice, Vancouver, WA
- Keys to Success: A Community-Based Approach for Addressing   Jun 2011
  Sexual Harm by Youth, Joann Schladale, M.S., LMFT
  Indiana Association of Juvenile Sexual Offender Practitioners (INAJSOP)
- Assessing Risk: A Conceptual Model of Risk and Risk Assessment   Jun 2011
  Douglas Epperson, Ph.D., INAJSOP Annual Conference
- Level 1: Clinical Credential   Apr 2011
  Credentialed Sexually Abusive Youth Clinician Training, INAJSOP
  +60 hours of advance training in treating adolescent sexual behavior problems

Additional Trainings

- Behavioral Health Bootcamp   Aug 2015
  George Fox University, Newberg, OR
  +50 hours of integrated behavioral health care training
- American Psychological Association Annual Conference   Aug 2015
  Toronto, ON
- Screening, Brief Intervention and Referral to Treatment (SBIRT)   May 2015
  Jim Winkle, MPH, Oregon Health & Science University
- American Psychological Association Annual Conference   Aug 2014
  Washington, D.C.
- Motivational Interviewing Clinical Training   May 2011
  Eric Comstock, LMFT & George Brenner, LCSW, LMFT, LCAC
  Indy Motivational Interviewing, Indianapolis, IN
- EMDR Institute Basic Training Course, Weekend 2   Oct 2009
  Kay Werk, LISW, Cincinnati, OH

Leadership and Involvement _____

Member: Gender, Sexuality, and Identity Student Interest Group   Aug 2013- May 2016
George Fox University

Admissions Panel: Graduate Department of Clinical Psychology   Feb 2013
George Fox University

Student Representative
Indiana Association for Marriage and Family Therapy Board   2009

Member: Chi Sigma Iota   2008- 2009
Indiana Wesleyan University

Vice President: Iota Omega Upsilon 2008
Indiana Wesleyan University

Research Experience _____

Dissertation Project – Principal Investigator Anticipated Completion: Feb 2017
Predictive Validity of Short-Term Assessment of Risk and Treatability (START) with a
Forensic Population determined Guilty Except for Insanity (GEI) in Community Based
Treatment Settings.

Research Assistant Aug 2015- Jan 2016
Embedded Effort Indices within the Delis-Kaplan Executive Function System (D-KEFS)

Research Project Member Oct 2014- Aug 2015
Predictors of Success in a Graduate Clinical Psychology Program

Principal Investigator Oct 2014- Aug 2015
Program Evaluation of Yamhill County Mental Health "Collaborative Assessment and
Management of Suicidality" (CAMS) Training

Research Project Member Oct 2014- Aug 2015
Comparison of community crisis workers determining suicide risk using case vignettes
before and after suicide assessment training

Professional Presentations _____

Oliver, H., Smith, C., Olsen, D., Lowen, J., Hartman, T., Song, C. (August 2015). *A training
evaluation of county mental health workers participating in a CAMS training.* Poster
presented at the 122nd annual convention of the *American Psychological Association,
Division 27: Community Psychology*. Toronto, Ontario.

Shen, S. & **Oliver, H**. (October 2013). *The Psychology of Failure*. Professional presentation at
Washington State Becca Conference: A Restorative Approach to Truancy. Vancouver,
Washington.

Smith, C., **Oliver, H.,** Olsen, D., Lowen, J., Hartman, T. (August 2015). *A comparison of
community crisis workers determining suicide risk using case vignettes*. Poster
presented at the 122nd annual convention of the *American Psychological Association,
Division 27: Community Psychology*. Toronto, Ontario.

Smith, C., Lowen, J., **Oliver, H.,** Peterson, M., Theye, A., Lee, J., . . . Drake, G. (August 2015).
Predictors of success in a graduate clinical psychology program. Poster presented at

the 122nd annual convention of the *American Psychological Association, APAGS,* Toronto, Ontario.

Community Presentations _____

Adverse Childhood Experiences Scale and Developmental Assets: Why there is Hope for Change (October 2013). Presentation at 2013 Clark County Juvenile Justice Connections Staff Retreat. Camas, Washington.

Depression Panel: What is Depression? (October 2014). Panel presentation for undergraduate students at George Fox University. Newberg, Oregon.

Cognitive Behavioral Therapy for Psychosis (October 2015). Presentation for Cognitive Behavioral Therapy Course for 2nd year doctoral students. George Fox University, Graduate Department of Clinical Psychology Program. Newberg, Oregon.