The Ontario Domestic Assault Risk Assessment (ODARA): A Validation and Comparison Study for an Oregonian Law Enforcement Agency

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The Ontario Domestic Assault Risk Assessment (ODARA): A Validation and Comparison Study for an Oregonian Law Enforcement Agency

by

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George Fox University

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The Ontario Domestic Assault Risk Assessment (ODARA): A Validation and Comparison Study

for an Oregonian Law Enforcement Agency

by

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at the

Graduate School of Clinical Psychology

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Alexander Milkey, PsyD

Date: 5/11/15
Abstract

The predictive validity of intimate partner violence (IPV) risk measures continues to be a newer, but significant, area of research within the domain of violence risk assessment. This study describes local (Oregon) normative data for the ODARA (IPV risk measure) as well as investigate, for a specific law enforcement agency, which tool is a superior predictor for the agency, a general violence risk assessment tool, i.e., the LS-CMI (part one), or an IPV-specific risk tool, i.e., the ODARA. Archival data was obtained through a law enforcement agency’s research department. Descriptive and comparative analysis was done for the ODARA and LS/CMI (part one) that included: item analysis, tests of sensitivity and specificity and ROC curve analysis. Results indicated differences between the two measures regarding IPV recidivism detection, with the ODARA exhibiting poor predictive abilities and the LS/CMI demonstrating, overall (both general and specific violence recidivism identification) better predictive abilities than the ODARA. Looking ahead to the future for the law enforcement agency, specific implications and recommendations were proposed.
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Chapter 1
Introduction

The assessment of violence has been an area of continual focus and growth among researchers for several decades. Within this time-frame, violent risk assessment has evolved generationally; expanding to include several distinct target populations of varying ages (preadolescent, adolescent, adult), scope of behaviors (domestic violence, sexual assault, homicide, etc), settings (prison, forensic hospitals, etc.) as well as disparate assessors (clinicians, law enforcement, etc.) and information sources (perpetrator, victim, criminal record; Andrews, Bonita, & Wormith, 2006). In response to the need for assault risk evaluation, two historically prominent approaches have been utilized in order to measure future violence probability: clinical and actuarial appraisal (Hilton, Harris, & Rice, 2010).

Clinical appraisals have been conducted either as unstructured or structured clinical assessments. Unstructured clinical judgment relies on a clinician’s ability to determine the risk of an individual based on personal experience and knowledge. This includes gathering and analyzing client information from multiple sources and applying clinician’s knowledge of research literature, his or her clinical experience and theoretical mindset to evaluate risk (Hilton, Harris, & Rice, 2010; Kropp, 2008). Structured clinical judgment is the middle ground of actuarial and unstructured judgment, utilizing empirically-based items that are recommended for a clinician (based upon theoretical, clinical and statistical knowledge) to examine thoroughly and to which he or she applies in the decision making process (Kropp, 2008).
Actuarial risk assessment is an effort to eliminate the need for clinical judgements by creating assessment tools comprised of empirically tested and validated predictors. These factors have been found to be statistically related to violent offending. Once these predictors are summed together, the result yeilds an estimated outcome probability risk score (Kropp, 2008). Therefore, the resulting score is founded on statistical analysis as opposed to based upon logical judgment (Hilton, Harris, & Rice, 2010).

Although both clinical and actuarial methods are employed in the process of violence risk assessment, studies have revealed a difference in predictive accuracy. Research has shown the actuarial approach to be more accurate in assessing violence recidivism. Actuarial tools have been found to surpass structured clinical judgment, which in turn exceeds unstructured clinical judgment (Barbaree, Seto, Langton, & Peacock, 2001; Grove & Meehl, 1996; Grove, Zald, Lebow, Snitz, & Nelson, 2000; Hanson & Morton-Bourgon, 2004; Hilton et al., 2004; Quinsey, Harris, Rice, & Cormier, 2006). Despite the fact that actuarial assessments have been in existence for some time, the last several years have shown an increase in actuarial application for cases involving violent recidivism risk (Hanson, 2009).

Assessing General Violence Risk

Looking at the history of violence risk assessment, beginning in the 1950s and extending up to present day, the nature and objective of risk instruments have changed greatly. The first generation of risk assessment measures relied solely upon professtional judgment (unstructured clinical judgment; Bonta, 1996). The second generation risk assessments (Bonta, 2002) entailed acturial methods (evidence based tools), that were predominately comprised of static risk factors. Third generation risk measures (Andrews et al., 2006) remained evidence-based and also
included dynamic risk factors. Fourth generation violence risk instruments encompass the evaluation of risk (static and dynamic risk factors) as well as an additional focus on case management/planning and most appropriate level of treatment services (Andrews & Bonta, 2006; Andrews et al., 2006).

Concerning the leading methods for analyzing the predictive validity of violence, “ROC curve analysis continues to be the dominant statistical technique used to test instruments” (Singh & Petrilla, 2013, p. 3). The debut of receiver operating characteristic, ROC, curve analysis and area under the curve (AUC) parameter occurred decades ago (Mossman, 1994) and has since become the definitive approach for assessing predictive validity of violence risk measures. The ROC statistical method produces a graph figure that plots the values of sensitivity (true positive) against the values of specificity (false positive), therefore quantifying test accuracy. Additionally, the AUC describes the statistical chance of a randomly identified subject (violent) having a higher risk score than another randomly chosen subject who is non-violent (Singh & Petrilla, 2013).

Although this mode of analysis in the field of violence risk assessment test validation continues to be prevalent, Singh (2013) argues that ROC and AUC calculation answers only one component of predictive validity (discrimination) while missing another (calibration) and suggests that multiple performance measures be used to analyze the various dimensions involving the predictive validity of violence risk assessment tools (Singh, 2013).

Some prominent tools being used to assess general violence include the Violence Risk Appraisal Guide (VRAG), the Level of Service Inventory Revised (LSI-R), the Historical, Clinical, and Risk Management-20 scales, and the Hare’s Psychopathy Checklist-Revised (PCL-
The VRAG is a 12 item actuarial measurement that analyzes the likelihood of violence recidivism among men detained for criminal violence (Harris, Rice, & Quinsey, 1993) and has shown predictive accuracy for violent recidivism in the following populations: forensic and non-forensic psychiatric patients, sex offenders, released prisoners (Harris, Rice, Cormier, 2002; Harris et al., 2003; Harris, Rice, & Camilleri, 2004; Glover, Nicholson, Hemmati, Bernfeld & Quinsey, 2002; Rice, Harris, & Hilton, 2010).

The LSI-R is also an actuarial tool that is comprised of 54 questions that assess the risk and needs of offenders for the purpose of educating the criminal justice system as to appropriate treatment plan options (Andrews & Bonta, 1995). Through several decades of research on this tool (updated from LSI to LSI-R to LS/CMI), a meta-analysis done revealed 81.4% of the studies showed a statistically significant relationship between LSI total score and subject recidivism (Vose, Cullen & Smith, 2008). A meta-analysis completed by Yang, Wong, and Coid (2010) found the LSI-R to exhibit good predictability, with an AUC of .65. As for the HCR-20, it is a structured clinical judgment scale that consists of 20 variables. It was developed to assess a wide range of offender populations and to measure both the offender’s clinical state and effectiveness of risk management strategies (Gray et al., 2003). The PCL-R, a structured measurement tool, is a 20 item measure and serves as the standard for forensic evaluation of psychopathy (Hare, 2003).

Another risk tool that has received little attention within the research literature, but remains a prominent measure used within the correctional system is the Level of Service/Case Management Inventory (LS/CMI), which is based upon the LSI-R (Andrews, Bonta, & Wormith, 2004; Andrews & Bonta, 2006; Andrews & Bonta, 1995). The LS/CMI assesses general violence
and focuses on offender treatment planning/case management (fourth generation risk measure). The LS/CMI was normed on both a male and female offender population and is comprised of 11 sections in total (Andrews et al., 2004). One study conducted by Andrews et al. (2012) assessed the gender nutraility of the LS-CMI regarding its predictive accuracy, finding that composite scores for male cases were highly correlated with recidivism (mean $r = .39$; mean AUC = .746) and very highly correlated for female recidivism cases (mean $r = .53$; mean AUC = .827).

Another research study conducted by Wormith, Olver, Stevenson, and Girard (2007) assessed the prediction of offender recidivism, over a follow up period of 10 years, using the LS/CMI, PCL-R and DSM-III APD as the predictive measures. Results demonstrated that the three instruments of recidivism prediction did not vary beyond one another (produce an additional significance), instead they all revealed comparable predictive accuracy. A dissertation, completed by Holliday (2014), assessed the relationship between level of risk-need-responsivity model and recidivism (re-arrest). The LS/CMI was utilized to determine the effectiveness of the RNR model in reducing recidivism risk. The results revealed no significant relationship (even when controlling for overall risk level). Additionally, Holliday (2014) utilized the LS/CMI to determine if offenders self knowledge of risk factors is related to recidivism; findings showed no significant relationship.

**Predicting Intimate Partner Violence**

Although the rise in the application of actuarial risk evaluation has aided in the continuing growth in violent risk assessment, more specific domains of violence risk are not as advanced. A particularly emergent subset within the last several years has been the assessment of domestically violent men. Specifically, a surge of research within the last several years has
focused on the development and predictive accuracy of Intimate Partner Violence (IPV) measures (Hanson, Helmus, & Bourgon, 2007).

IPV is defined as inflicted violence or harm (physical, sexual or psychological) upon a woman or man by his or her intimate partner (spouse/marital, dating or co-habitating partner). IPV can occur among heterosexual or same-sex couples. (Bureau of Justice Statistics; Center for Disease Control and Prevention). Although the definition of IPV is inclusive of both genders, risk assessment measures have been largely developed/normed on men (Hilton, Popham, Lang, & Harris, 2014).

Statistically, intimate partner violence affects 30% of women worldwide (World Health Organization, 2013). A survey completed in 2010 by the National Intimate Partner and Sexual Violence Survey (NISVS) revealed that approximately 1 in 4 women have experienced severe physical violence from an intimate partner within their lifetime.

This is not to say that IPV is solely committed by men. Research involving female-perpetrated intimate partner violence is still in its infancy and has only recently been an area of focus in the realm of IPV. Furthermore, although studies have demonstrated an increase in the number of women arrested for IPV (Frye, Haviland, & Rajah, 2007; Simmons, Lehmann, & Cobb, 2008). Some researchers question whether female-perpetrated IPV is as uniform a concern as male perpetrated IPV (Archer, 2000; Downs, Rindels, & Atkinson, 2007; Henning, Martinsson, & Holdford, 2009).

As for measures that specifically assess intimate partner violence, some well known structured clinical tools include the: Spousal Assault Risk Assessment (SARA), the Danger Assessment scale (DA), and the Domestic Violence Screening Instrument (DVSI; Hanson et al.,
The SARA is a structured, 20 item measure that is designed to be scored by a variety of professionals (not solely psychologists) and applied to a range of settings such as pre-sentencing judgment, correctional intake and discharge, civil justice matters, etc. In its analysis of spousal assault, it evaluates a few domains; criminal history background, mental and emotional functioning, and current social adjustment. The SARA was shown to predict partner assault recidivism with a ROC area of .64 (Dutton & Kropp, 2000; Hilton et al., 2004; Kropp, Hart, Webster, & Eaves, 1999).

The DA is comprised of a victim interview as well as a 15-item, structured scale that measures spousal assault risk. The items assess the offender’s violence history, access to weapons, substance abuse history, tendency toward jealousy, incidents of sexual assault, threats, and the victim’s worry of being killed. Test–retest reliability has been at .89 or above and it has been shown to be predictive of partner assault recidivism (Campbell 1995; Hilton et al., 2004). As for the DVSI, it is a 12-item checklist that includes domestic violence and treatment histories as well as items that assess the current offender’s offense. Concerning accuracy, the DVSI predictive accuracy in research has been shown to have a ROC area of .60 (Williams & Houghton, 2004).

Regarding actuarial assessment within the intimate partner violence domain, one notable measure that provides an in-depth assessment for wife assault recidivism is the Domestic Violence Risk Appraisal Guide (DVRAG). The DVRAG was created by combining the 13 items from the Ontario Domestic Assault Risk Asseessment (ODARA) in addition to the score received from the PCL-R scale; altogether being a 14-item actuarial tool that assesses wife assault recidivism with males who have a correctional history (Hilton, Harris, Rice, Houghton, &
Eke, 2008). Results from Hilton et al. (2008) found that the DVRAG final scores exhibited good inter-rater reliability, and large, cross-validated effects in the prediction of partner assault recidivism. DVRAG predictive accuracy showed a ROC area of .71, and maintained predictive accuracy in a cross-validation sample exhibiting a ROC area of .64.

Research has shown that the DVRAG serves as a comprehensive actuarial approach that has predictive accuracy in assessing male intimate partner violence against women. However, as this tool is quite in-depth in nature and analyzes the psychosocial and clinical information that is more often available to mental health clinicians, its intended use is best suited for forensic professionals (Hilton et al., 2008). Developing and validating actuarial risk assessment measures to be applied in other criminal justice domains has been a particular concern for Hilton, Harris, & Rice (2010), who made the decision to expand the risk assessment system to the “front line,” that is, law enforcement officers.

In the efforts to not limit risk assessment to clinical professionals or actuaries, another tool was developed with the intention that the primary or principle users would be police officers. It was their hope that this interfacing at the criminal systems level could be done in a variety of ways: utilizing an intimate partner risk assessment measure to inform police officers decision making process for domestic violence cases regarding detainment, offering the victim additional protective services if need be, a means to inform court decisions about set bail, and assist courts with the conditions applied upon conditional release or sentencing (Hilton, Harris, & Rice, 2010).
Ontario Domestic Assault Risk Assessment (ODARA)

The ODARA, a straightforward actuarial domestic violence risk assessment tool to be used by police officers, service workers, courts, etc, is ideal for the “frontline” as the information required for analysis is more readily obtained via police records (Hilton et al., 2004). This 13-item scale was empirically created using information accessible to frontline police officers, during the time of their domestic violence investigation. Multiple regression analysis was employed in order to identify statistically significant and independent predictors from a sample of 589 male offenders, who were identified from police records. The 13-item outcome covers substance abuse, the offender’s previous history of violence (domestic and non-domestic), occurrence of threat and confinement during most current assault, the number of children in the family/relationship, and victim’s barriers to support (ODARA; Hilton et al., 2004).

The ODARA is scored by assigning a 0 or 1 to each item; the total score (0-13) indicates the probability of a future assault behavior against a domestic partner as well as the ratio of partner assaulters who evidence that level of risk (low, high, etc.). Regarding predictive ability, in the 5-year follow-up of one sample, the ODARA differentiated between the 175 recidivists and 414 non-recidivists with a ROC area of .77. In a second sample of 100 identified wife assaulters, the ODARA’s predictive validity continued to be significant, with a ROC area of .72 (ODARA; Hilton et al., 2004). Additionally, Hilton et al. (2008) assessed whether the predictive accuracy of the ODARA increased when additional clinical information is available. Of all the domestic violence risk assessment used to determine predictive validity, including the ODARA (PCL-R, DA, SARA, VRAG, & DVSI), the PCL-R was shown to best improve upon predictive accuracy of the ODARA.
A dissertation completed by Buchanan (2009) studied the predictive accuracy of the ODARA and DVSI-R, utilizing two samples, spousal assaulters (general) and Aboriginal spousal violence offenders (sub-sample). For the general sample, the ODARA and the DVSI-R demonstrated significant correlations with offender recidivism; ROC analysis for the ODARA showed a moderate predictive accuracy as opposed to the DVSI-R which was shown to be a slightly better than chance predictor. For the smaller sub-sample, both the ODARA and DVSI-R were marginally predictive.

Other ODARA studies have been conducted to access different male offender populations (community verses incarcerated). Hilton, Harris, Popham, and Lang (2010) accessed the predictive validity of the ODARA for incarcerated male domestic violence offenders. A sample of 150 offenders were followed for a mean of 8 years (follow up occurring in 6-month increments), resulting in a ODARA ROC of .64. In this study, the ODARA predicted recidivism significantly better than the LSI (general risk assessment). Also, Hilton and Harris (2009) performed a cross-validation study on a sample of 391 male offenders with less extensive criminal history’s, as compared to previous validation studies of the ODARA and found the ODARA to have a ROC area of .67 and a ROC area of .74, when excluding ambiguous non-recidivist offenders.

The Current Research Problem

Considering the realm of intimate partner violence risk assessment, studies examining intimate partner violence have generally found that the risk factors associated with general violence are also predictive of domestic assault. The identified markers in the literature that have been correlated with both general violence and spousal assault risk include: young age, low SES,
background of criminal history, substance abuse history, and antisocial behaviors and attitudes (Harris, Hilton, & Rice, 2011; Hilton, Harris, & Rice, 2001). Therefore, a question remains within the literature and within law enforcement and corrections agencies: are specific (IPV) risk assessment tools necessary?

Another focal point entails the accessors risk appraisal by means of clinical or acuturial methodology. Generally, there are three models used for intimate partner risk evaluation: victim rating scales (generally clinical, unstructured judgement), risk scales devised to assess violence recidivism, and partner assault risk scales (both structured clinical judgment and actuarial analysis; Hanson et al., 2007). Additional areas of focus within the literature of IPV risk assessment include: the purpose of risk assessment (predict recidivism verses violence prediction and risk management; Douglas & Kropp, 2002), the setting and function of the risk assessment measure being utilized as well as the definition of intimate partner relationship (Messing & Thaller, 2013), and the time frame for follow up studies accessing recidivism (as most studies test within a 5 year period in spite of recidivism usually occurring more rapidly timewise; Hilton, Harris, Popham, et al., 2010). Lastly, the bulk of IPV risk measures are comprised of Static (fixed measures) and dynamic (changeable) risk factors, with risk assessment tools varying on the extent to which these factors are present within their measure (Guo & Harstall, 2008).

Present Study

The aim of this study was twofold. First, the study reports local Oregon norms for the ODARA, using a large metropolitan police department’s research database. This entails describing the means, reliability, and the predictive validity of the ODARA for an Oregon sample. Additionally, the current study investigates, for a specific law enforcement agency,
whether a general violence risk assessment tool such as the LS-CMI or an IPV-specific risk tool such as the ODARA is a better predictor and should be employed in this agency. Three hypothesis were proposed: firstly, for measuring general recidivism predictive accuracy, the LS/CMI would outperform the ODARA; secondly, for assessing IPV predictive accuracy, the ODARA would demonstrate good predictive ability; thirdly, the ODARA would outperform the LS/CMI regarding IPV recidivism detection.
Chapter 2

Methods

Participants

Archival data from a large metropolitan police department in the northwest was utilized for this study. The database contains risk assessment measure scores from intimate partner violence cases since the year 2010, and is comprised of demographic information including the subjects’ age, gender, and ethnicity, as well as information pertaining to total time served, number of re-bookings, criminal charge category (person, behavioral, property, drug & alcohol), charge class, supervision level, recidivism events (re-arrests), by July 2012, and disposition.

The participants for this study were a male, forensic population with a positive criminal history of domestic violence. The total sample size for the current study was 281 participants. However, 10 subjects were excluded due to missing data (more than five items missing for the ODARA); 3 additional participants were excluded as there was missing recidivism data for them. Therefore, the number of participants used for this study was 268 ODARA cases, 97 of whom also had LS/CMI scores.

The average age of participants in the sample was 35 years old, and for the subset with LS/CMI scores the average age was 34.9 years old. The sample was comprised of men of the following races: 53.1% Caucasian, 36.2% African American, 4.4% Hispanic, 3.3% Asian, and 3.0% Indian. In comparison to the population described by Multnomah County in their 2010 domestic violence fact sheet, the current research sample was significantly different, $X^2 (3) =$
9.87, p = .02, such that Hispanic/Latino offenders were under-represented in the current sample and African American and other race offenders were over-represented.

Materials

The Ontario Domestic Assault Risk Assessment (ODARA; Hilton et al., 2004) is a cross-validated actuarial assessment designed to estimate the risk of spousal/partner assault recidivism (see Appendix A). It is comprised of both static and dynamic risk factors. Additionally, the ODARA was developed for use by police officers in order to improve accuracy of risk assessment and overall collaboration among criminal justice and other agencies responding to wife/partner assault. Although the ODARA was designed for the for the criminal justice system (probation/parole officers, correctional officers, police officers, community service providers) other professionals besides the “frontline,” such as forensic clinicians, can employ this measure in order to assess IPV. User qualifications require minimal training for ODARA scorers/interpreters. The authors of the ODARA have provided training sessions as well as constructed a procedural manual in order to offer the necessary education training necessary to be a competent user of the ODARA.

The ODARA is comprised of 13 yes-or-no items evaluating such areas as the perpetrator’s history of prior domestic assaults, non-domestic assaults, substance abuse history, having a custodial sentence of 30 days or more, having more than one offspring, and so forth. This information is gathered from official criminal records. Each of the 13 items is scored as a 1 (for present), or 0 (for not present), or a ? (missing information) and the scores summed together account for the overall total prediction score, ranging from 0-13. Scores of 0 indicate the lowest risk or recidivism and scores of 7-13 represent the highest risk category. The ODARA’s
predictive effect size in the standardization sample was .77 (ROC area) and Cohen’s $d = 1.1$ in the construction of this measure and .72 in cross-validation on 100 new subjects (Hilton et al., 2004). Concerning inter-rater reliability, scores yielded a standard error of measurement of .48 between the research assistants group and the police officers group (with minimal training) (Hilton et al., 2004). The maximum number of missing items for scoring a valid ODARA is five, if five or more items are missing from the ODARA, it cannot be scored (Hilton, Harris, & Rice, 2010). The internal consistency of the ODARA within the current sample was moderate, Chronbach’s alpha = .66.

**The Level of Service/Case Management Inventory** (LS/CMI; Andrews et al., 2004) is a risk/needs assessment, comprised of static and dynamic risk factors and is used to assess general violence as well as assist with treatment planning/case management (see Appendix B). The LS/CMI was normed on both a male and female offender population and is valid for ages 16 and older. The LS/CMI contains 11 sections, the last three sections (9, 10, & 11) pertaining to case management protocol.

More specifically, Section 1 (43 items) assesses for general risk/need factors and includes the following sub-sections: employment/education, criminal history, family/marital, companions, recreation, drug/alcohol issues, antisocial history, and pro criminal attitude; Section 2 identifies specific need/risk factors pertaining to perpetration history and criminal behavior; Section 3 involves incarceration history, Section 4 assesses for other client issues such as physical health, financial status, and so forth; Section 5 takes into account professional opinion/clinical research as it pertains to responsivity; Section 6 provides a summary of the risk/need score; Section 7 is known as the risk/need profile and graphically summarizes the
risk/need level scores; Section 8 identifies appropriate program placement from subject. The last three Sections, 9, 10, and 11 involve treatment planning, based upon information gained from prior LS/CMI sections, as well as a progress record and discharge summary (Andrews et al. 2004).

User qualifications require that the test administrator have graduate training in test/measurement coursework or be trained by official LS/CMI trainer/training program (Andrews et al., 2004). If the test administrator does not meet one of these two criterion, he or she must be supervised by someone who does. Item coding for the LS/CMI entails either yes/no or a 4-point scale with 0 being very unsatisfactory and 3 being very satisfactory (Andrews & Bonta, 2006). Cut off scores identify risk/need classifications for the subject (very low (0-4), low (5-10), medium (11-19), high (20-29) and very high (30-43). Regarding test psychometrics, LS/CMI internal consistency (Cronbach’s alpha) ranges from between .89 and .94 for Section 1 and from .39 to .89 for Section 1 sub-sections. Test-retest/inter-rater reliability varies from poor to very good, depending on the subcomponent (i.e., criminal history sub-section = .91; procriminal orientation = .16) (Andrews & Bonta, 2006).

**Procedure**

As this study relies on sampling from a large metropolitan police department database, archival data was used. In order to gain access, permission from the police research department was granted. An electronic database, containing ODARA and LS/CMI (de-indentified and password protected) was provided. Additionally, information about charges, recidivism, and demographics were provided by the police research department.

The ODARA database was received in three files, one including information regarding subjects ID’s, subjects’ ODARA scores, supervision level, last updated ODARA test
administration, and demographic information; the second and third databases held information pertaining to subjects’ recidivism (re-arrest, conviction, number of re-bookings, charge category). The LS/CMI database (data corresponding to ODARA subject ID’s) was received in one file and included the following information: LS/CMI scores (first, last, average) and administration date. The data was compiled into a unified data set and was cleaned and recoded when necessary. For example, when subjects had missing ODARA data, their prorated ODARA score was calculated. Additionally, participants’ race, number of re-bookings/re-arrests, charge category, and current status, were all recoded to represent numeric data.

Next, descriptive and comparative analysis were completed using the combined ODARA and LS/CMI database. Furthermore, item analysis on the ODARA was performed in order to measure internal consistency. To assess the validity of both the ODARA and LS/CMI, tests of sensitivity and specificity were done. This included measuring offender general recidivism (person, behavioral, property, drugs and alcohol, or other re-arrest charge) as well as offender IPV recidivism (person re-arrest charge). Succeeding this, ROC curve analysis was completed as a means of further testing ODARA and LS/CMI sensitivity and specificity. Again, this entailed analyzing offender general recidivism and offender domestic violence recidivism. Lastly, analysis was performed to access any potential correlation between missing test items (ODARA) and the ODARA total score (prorated).
Chapter 3

Results

The purpose of this study was, first, to describe local (Oregon) norms for the ODARA and secondly, to ascertain for a large, metropolitan police agency which IPV risk measure (ODARA vs. LS/CMI) most accurately predicts IPV recidivism.

Oregon Norms for the ODARA

Descriptive information for this sample is displayed in Table 1. The mean prorated total ODARA score in this sample was 7.18 (SD = 2.06; range 0-12). Lower scores on the ODARA indicate less risk of recidivism, while a prorated ODARA score of 7 or above indicates significant risk of re-offending. The distribution of prorated total ODARA scores is significantly skewed (skew = -.83, SE skew = .15), indicating that there are a few participants who had very low scores (i.e. minimal risk), but, the majority of participants have higher scores.

Participants often had taken the LSCMI several times over the course of their incarcerations. The mean of participants’ first LS/CMI in this sample was 22.25 (SD = 8.84). The mean for the total average score (i.e., the mean of LSCMI scores from all administrations) was 22.7 (SD = 8.04), and for the most recent LSCMI score was 21.25 (SD = 9.49).
Table 1

Descriptive Statistics for ODARA and LS/CMI

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<td>Total Time Served (days)</td>
<td>33.41</td>
<td>68.01</td>
<td>253</td>
</tr>
<tr>
<td>ODARA Pro-rated</td>
<td>7.75</td>
<td>2.23</td>
<td>271</td>
</tr>
<tr>
<td>SCORE</td>
<td>22.25</td>
<td>8.84</td>
<td>110</td>
</tr>
<tr>
<td>SCORE.last</td>
<td>21.24</td>
<td>9.49</td>
<td>106</td>
</tr>
<tr>
<td>SCORE.ave</td>
<td>22.65</td>
<td>8.04</td>
<td>105</td>
</tr>
</tbody>
</table>

An item analysis was conducted using responses to the 12 ODARA items. Each item (coded as risk or no risk) was correlated with the prorated total ODARA score (see Table 2). Missing data were excluded pairwise from the analysis. The results indicate that all of the items had a small or medium correlation with the prorated total ODARA score. Table 2 shows the inter-correlations among individual test items. Cronbach’s Alpha was used to assess the reliability of the ODARA for this local sample. For a subset of the total sample that answered
Table 2

*The correlations of each ODARA item with the prorated total score and all the other ODARA items FOR THE TOTAL SAMPLE.*

<table>
<thead>
<tr>
<th>ODARA</th>
<th>Item 1</th>
<th>Item 2</th>
<th>Item 3</th>
<th>Item 4</th>
<th>Item 5</th>
<th>Item 6</th>
<th>Item 7</th>
<th>Item 9</th>
<th>Item 10</th>
<th>Item 11</th>
<th>Item 12</th>
<th>Item 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>item 1</td>
<td>0.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 2</td>
<td>0.20</td>
<td>-0.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 3</td>
<td>0.18</td>
<td>0.19</td>
<td>0.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 4</td>
<td>0.22</td>
<td>-0.09</td>
<td>0.17</td>
<td>-0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 5</td>
<td>0.53</td>
<td>0.23</td>
<td>0.05</td>
<td>-0.08</td>
<td>-0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 6</td>
<td>0.57</td>
<td>0.31</td>
<td>0.00</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 7</td>
<td>0.28</td>
<td>0.21</td>
<td>0.00</td>
<td>-0.11</td>
<td>-0.08</td>
<td>0.12</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 8</td>
<td>0.52</td>
<td>0.27</td>
<td>-0.05</td>
<td>0.02</td>
<td>0.01</td>
<td>0.33</td>
<td>0.35</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 9</td>
<td>0.39</td>
<td>0.03</td>
<td>-0.16</td>
<td>-0.03</td>
<td>0.04</td>
<td>0.21</td>
<td>0.11</td>
<td>0.04</td>
<td>0.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 10</td>
<td>0.53</td>
<td>0.22</td>
<td>-0.05</td>
<td>-0.03</td>
<td>0.08</td>
<td>0.34</td>
<td>0.36</td>
<td>-0.01</td>
<td>0.91</td>
<td>0.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 11</td>
<td>0.35</td>
<td>0.02</td>
<td>0.04</td>
<td>0.02</td>
<td>0.02</td>
<td>0.16</td>
<td>0.18</td>
<td>0.07</td>
<td>0.00</td>
<td>0.06</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>item 12</td>
<td>0.32</td>
<td>0.17</td>
<td>-0.14</td>
<td>0.00</td>
<td>-0.03</td>
<td>-0.02</td>
<td>0.07</td>
<td>0.20</td>
<td>-0.03</td>
<td>0.15</td>
<td>-0.01</td>
<td>0.09</td>
</tr>
<tr>
<td>item 13</td>
<td>0.20</td>
<td>0.05</td>
<td>-0.15</td>
<td>-0.07</td>
<td>-0.23</td>
<td>-0.01</td>
<td>0.07</td>
<td>-0.01</td>
<td>-0.09</td>
<td>0.22</td>
<td>-0.09</td>
<td>-0.05</td>
</tr>
<tr>
<td>item 14</td>
<td>0.20</td>
<td>0.05</td>
<td>-0.15</td>
<td>-0.07</td>
<td>-0.23</td>
<td>-0.01</td>
<td>0.07</td>
<td>-0.01</td>
<td>-0.09</td>
<td>0.22</td>
<td>-0.09</td>
<td>-0.05</td>
</tr>
</tbody>
</table>

*Note.* item 1 = Prior assault against victim, child, or partner
item 2 = Offender threatened during the offense to harm or kill someone
item 3 = Victim fears assault to herself or children in the future
item 4 = Prevented victim from leaving the location during the index offense
item 5 = Prior prison or jail sentence of 30 days or more
item 6 = Disobeyed Prior bail, probation, parole or no-contact order
item 7 = Offender assaulted victim when she was pregnant
item 9 = Prior police contact for any violent offense
item 10 = Victim has children from a prior relationship
item 11 = Offender is violent to people other than the victim and their children
item 12 = Offender has more than one indicator of substance abuse problem
item 13 = Victim faces at least one barrier to support
item 14 = Victim and or offender have more than one child together
all of the ODARA item questions \((n = 54)\), internal consistency was moderate (Cronbach’s Alpha = .66). Internal consistency decreased (Cronbach’s Alpha = .40) for the entire sample \((n = 274)\) when the missing items were replaced with “no risk responses” (i.e., zeros). When the poorest correlated items with the prorated ODARA total score (items 2, 3, 4, and 14) were removed from the analysis, the internal consistency (Cronbach’s Alpha = .58) increased to a moderate level.

Additionally, a correlation analysis was performed to assess the relationship between ODARA missing items and the prorated ODARA total score. Results indicated no relationship \((r = -.01)\) between the number of missing items \((M = 1.62, SD = 1.30)\) and the prorated ODARA score. Therefore, the number of ODARA missing items within the current sample had no impact on the resulting ODARA total scores.

Comparing the Predictive Validity of the ODARA and LSCMI

To assess sensitivity and specificity of the ODARA, clinical cut-off for the ODARA was set at 7. Two separate analyzes were conducted to determine the ODARA’s predictive ability, one entailing general offender recidivism and the other predicted IPV offender recidivism. Regarding general recidivism (i.e., predicting all crime classes, including person, behavioral, property, drugs and alcohol, or other), the ODARA showed good sensitivity, 82.7\%, (95% CI: 74.0\% to 89.4\%) and very poor specificity, 25.9\%, (95% CI: 18.8\% to 34.2\%). Concerning IPV offender recidivism prediction for the ODARA (i.e., predicting only crimes against persons), the results revealed sensitivity to be 100.00\%, (95% CI: 76.7\% to 100.00\%) and specificity to be 23.10\% (95% CI: 18.10\% to 28.70\%). Thus, when it comes to general offender recidivism prediction, the ODARA demonstrated good sensitivity (i.e. it had few “misses”) and very poor
Running head: THE ONTARIO DOMESTIC ASSAULT RISK ASSESSMENT

specificity (i.e., it had too many “false alarms”); for IPV offender recidivism, the ODARA results again indicated very good sensitivity and very poor specificity.

Similarly, analysis of the sensitivity and specificity for the LS/CMI was performed (assessing both general offender recidivism and IPV offender recidivism), with the clinical cut off for the LS/CMI being a total score of 20. Results for general offender recidivism prediction indicated sensitivity to be 81.6% (95% CI: 68.0% to 91.2%) and specificity to be 52.2% (95% CI: 37.0% to 67.1%). The LS/CMI’s performance (specificity and sensitivity) for IPV recidivism detection was 83.3%, specificity (95% CI: 36.1% to 97.2%) and 35.6%, sensitivity (95% CI: 26.4% to 45.6%).

It was hypothesized that the LS/CMI would outperform the ODARA in general violence re-offense prediction, the ODARA would demonstrate good predictive accuracy in detecting IPV recidivism and the ODARA would show greater predictive ability in identifying IPV recidivist in comparison to the LS/CMI. When the ODARA and the LS/CMI were compared, both had equal ability to accurately predict general recidivism, yet the LS/CMI was superior when it came to accurate non-recidivism prediction (i.e. avoiding false alarms). For IPV recidivism prediction, the ODARA demonstrated better domestic violence re-offense detection, while the LS/CMI exhibited greater accuracy in avoiding false alarms.

In addition to the traditional sensitivity and specificity analyses, a Receiver Operating Characteristic (ROC) analysis was conducted to assess the predictive accuracy of the ODARA and the LS/CMI. ROC curve analysis has become the standard and preferred method, within the research community, for assessing the validity of violence risk assessments (Singh et al., 2013). Two prominent rationales for this are: the cut off threshold, which provides an account of the
trade-offs between specificity and sensitivity, and the protection against changes in the base rate of violence within the sample population (Singh, 2013).

ROC results for the ODARA and LS/CMI regarding the accurate prediction of general (person, property, behavioral, drugs and alcohol, and other charges) offender recidivism (see Figure 1) reveal that the area under the curve (AUC) was 0.54 (poor test) for the ODARA and 0.76 (fair test) for the LS/CMI. Thus, the LS/CMI is a significantly more effective measure in identifying general offender recidivism than is the ODARA. Furthermore, when comparing the total LS/CMI score (0.76; fair test) with the average LS/CMI score (0.83; good test), the latter proved to be more predictive. As for specific IPV (person charge) offender recidivism (see Figure 2), the ODARA prorated total score AUC equaled 0.57 (poor test) while the LS/CMI total score AUC equaled 0.61 (poor test). Although both the ODARA and the LS/CMI demonstrated poor predictive accuracy for IPV recidivism, the LS/CMI was slightly better at predicting domestic violence recidivism among the offender population.
Figure 1. ROC results for the ODARA and LS/CMI regarding the accurate prediction of general (person, property, behavioral, drugs and alcohol, and other charges) offender recidivism.
Figure 2. ROC results for the ODARA and LS/CMI regarding the accurate prediction of IPV-specific (person charges) offender recidivism.
Chapter 4
Discussion

The goals for this study were to ascertain local Oregon normative data as well as establish what the best predictor of IPV violence is for an Oregon police agency. It was predicted that the ODARA would demonstrate good predictive validity and surpass the LS/CMI in predictive accuracy, however, results from specificity/sensitivity and ROC analyses revealed the ODARA to have poor predictive ability for IPV recidivism detection as well as fall significantly behind the LS/CMI in IPV general re-offense identification. Prior results within the research literature contradict these results (Hilton, Harris, Popham, et al., 2010; Hilton et al., 2008; Hilton et al., 2004), showing the ODARA to have good predictive ability in accessing domestic violence recidivism (ROC = .64, ROC = .72; ROC = .77 in the three studies, respectively).

A possible reason for this inconsistency could involve agency procedures for administration and scoring of the ODARA. Although there has been limited research regarding the education of frontline users in ODARA protocol, the literature surrounding the necessary training for ODARA application has revealed important guidelines for users of the ODARA to pursue. For example, one study, conducted by Hilton, Harris, Rice, Eke, and Lowe-Wetmore (2007), assessed the impact of the training process on frontline (police officers) and other trainees (clinicians, probation, police officers, correctional institutions, hospitals) as it pertained to ODARA scoring accuracy. The findings revealed the first sample group (Study 1: police officers who received no training) were able to score the ODARA with perfect accuracy, when
they had the scoring booklet at their disposal. Without the ODARA instructional booklet, the subjects had an average scoring error of .5 to 1 point. It is important to note that the incorporation of pro-rating (method for dealing with missing items on the ODARA) was not included in Study 1; official documentation containing offender information was explicit in nature. In another study, participants were given five training sessions throughout the course of one day (i.e., with pre and post-test instruction, item by item discussion, instructional booklet, examples, question and answer time for subjects, interpretation information, statistical/graphics explanation, scoring and discussion of example video case). Results showed that training reduced participants’ scoring errors by 40% and reduced overall error to less than one point. In light of these studies, the researchers (Hilton, et al., 2007) concluded, “that the scoring booklet is necessary for accuracy” (p. 94). It is not clear how the officers who scored the archival data for the present study were trained or whether they had access to the scoring booklet during the coding process.

The research literature indicates the necessity of domestic violence instruction, as a lack of training can impede the standardized and evidence based practice of IPV risk assessment (Dimeff et al., 2009). Considering these current research results, a lack of training for users of the ODARA could be a possible reason for the ODARA’s poor predictive accuracy within this Oregonian police agency. Without proper training or access to necessary scoring materials (instructional booklet) accuracy and consistency in the scoring of the ODARA would be impacted, resulting in comprised reliability for the ODARA.

Hilton, Harris, & Rice (2010) discuss a standardized process in implementing the ODARA; “if cases are scored entirely from written documentation and without pressure of time
... perfect scoring can be obtained using the scoring instructions alone” (p. 110). However, the ODARA risk measure for this police agency may not have been implemented under ideal circumstances. Scorers may or may not have access to a scoring manual or choose to score the ODARA without the use of the instructional booklet. Additionally, as police officers job entails many duties (e.g., field work such as answering police calls or issue citations, making arrests, completing paperwork, etc.), frontline users may have limited time to score the ODARA as they try to balance their various work responsibilities.

Finally, the ease with which offenders’ information can be retrieved by this police agency could have significant impact on the accuracy of ODARA administration. Per the agencies report, certain criminal history information is not available in their electronic system. Therefore, to complete the scoring of the ODARA for a given offender, a police officer would have to search in other, non-electronic files for that needed information. Under these circumstances, ODARA scoring may be impacted. Therefore, an important issue to consider is the ease with which official criminal record information is accessible to ODARA-users within this agency. In summation, it is likely that the current research finding of the ODARA’s limited predictive validity was due to matters concerning preparedness (training, practice, etc) as well as the elements involving time constraints, use of instruction booklet, and limited information gathering systems.

**Implications**

In light of these current results, using both violence risk measures (i.e., both the ODARA and the LS/CMI) as a means for assessing IPV recidivism does not seem like the best use of agency resources or potential users’ time. Moving forward, it is recommended that this police
agency, especially users of the ODARA, complete official ODARA training. This would allow ODARA users to become familiar with the standardized practice/application for the ODARA and would increase scoring reliability and overall test efficiency. Regarding training opportunities, a study analyzing the difference between face-to-face training and electronic training for the ODARA (Hilton & Ham, 2015) found both conditions to be uniformly effective. The completion rate for those participating in face-to-face instruction was 100.00% compared to online training subjects who exhibited an 86% completion rate.

If providing ODARA training is not a possibility or desirable for this police agency, it is suggested that this agency solely employ the LS/CMI, as it was shown to have better predictive accuracy. User qualifications for the LS/CMI require that the test administrator have graduate training in test/measurement coursework or be trained by official LS/CMI trainer/training program (Andrews et al., 2004). If the test administrator does not meet one of these two criterion, he or she must be supervised by someone who does possess these qualifications. It is possible that the LS/CMI had better predictive accuracy for IPV re-offense identification as users are either more likely to have clinical training surrounding research methodology and an understanding of the importance of test standardization or be supervised by someone who meets these standards.

Limitations

In terms of the existing limitations for this current study, two factors come to mind. Firstly, the time frame for which IPV recidivism was tested (two years) was shorter in duration than the majority of other recidivism studies within the literature, most of which have a five-year follow-up. One could argue that this briefer time period for follow up may have not provided a significant amount of time or opportunity for offenders to re-offend. On the other hand, this current study did provide important knowledge regarding shorter time frame follow up for IPV
recidivism, which is meaningful as recidivism usually occurs more rapidly timewise; Hilton, Harris, Popham, et al., 2010).

Secondly, the coding of the recidivism data (“person crime”) is a potential study limitation. Is a “person crime” the same as IPV? Is a person crime accurately representing the act of IPV? In defining person crimes the following crimes were present among offenders: rape 1, assault II, assault III, assault IV, and coercion. More information regarding the kind of violence toward others is necessary to absolutely determine the equivalency of person crime and IPV. Also, it was unclear/ not identified within the database who the assaulted person was (intimate partner, stranger, friend, etc). Therefore, the lack of information regarding who the assaulted person was, IPV (intimate partner) or non-intimate assault, is a study deficiency. These issues together raise a potential concern as to whether this study fully assessed IPV recidivism.

**Future Research**

Additional research involving the applied assessment of IPV within this agency would be beneficial in order to provide additional clarity into these current research findings as well as aid the police agency in efficient and optimal service outcomes. Potential areas of further research should focus on the agency’s application of the ODARA and LS/CMI. This could be assessed in a number of ways, one, being the evaluation of rater/ inter-rater reliability to see who has received official ODARA training (comparing researcher scores to ODARA users scores). This information would be beneficial as it would confirm or negate the present hypothesis that a lack of training negatively impacted the ODARA’s predictive accuracy and shed additional light on ODARA and LS/CMI users scoring accuracy.
Secondly, information gathering pertaining to the police agencies data system and the accessibility of criminal information to police officers (both electronic and non-electronic files used for ODARA) would be valuable. Although missing items on the ODARA were shown to not significantly impact the ODARA total score (prorated), data on the ODARA users’ experience, when it comes to availability of necessary criminal information, is significant, as the current set up may serve as a possible barrier to optimal procedural efficiency.

Other areas of future research focus include: test completion time, users of the ODARA in comparison to the LS/CMI (Section 1), and the number of ODARA users who utilized the instructional booklet when scoring the ODARA. Receiving information along these lines would give further understanding to the inconsistent predictive accuracy findings of the ODARA found in this current study as these all pertain to measurement standardization which impacts ODARA measure accuracy.
References


Appendix A

ODARA Item Summary
Do not use without full scoring instructions.

Name: ____________________________________________
Case #: ______________________

Score each item:
1 if present
0 if not present
? if missing

1. Prior domestic incident of assault in a police or criminal record
2. Prior non-domestic incident of assault in a police or criminal record
3. Prior custodial sentence of 30 days or more
4. Failure on prior conditional release
5. Threat to harm or kill at the index assault
6. Confinement of the victim at the index assault
7. Victim concern about future assaults
8. More than one child
9. Victim’s biological child from a previous partner
10. Prior violent incident against a non-domestic victim
11. Two or more indicators of substance abuse
12. Assault on the index victim when she was pregnant
13. Barriers to victim support

Raw Score (sum of items scored 1)
Final score

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## Appendix B

### LS/CMI (Section 1) Coding Worksheet

<table>
<thead>
<tr>
<th>Database CODE</th>
<th>Question #</th>
<th>Answer Selection</th>
<th>LS/CMI Coding Worksheet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Section 1.1</strong></td>
<td></td>
<td><strong>Criminal History</strong></td>
</tr>
<tr>
<td>150</td>
<td>1</td>
<td>YES/NO</td>
<td>Any prior youth dispositions (number__) or adult convictions (number__)?</td>
</tr>
<tr>
<td>151</td>
<td>2</td>
<td>YES/NO</td>
<td>Two or more prior youth adult dispositions/convictions?</td>
</tr>
<tr>
<td>152</td>
<td>3</td>
<td>YES/NO</td>
<td>Three or more prior youth/adult dispositions/convictions?</td>
</tr>
<tr>
<td>153</td>
<td>4</td>
<td>YES/NO</td>
<td>Three or more present offences (number__)?</td>
</tr>
<tr>
<td>154</td>
<td>5</td>
<td>YES/NO</td>
<td>Arrested or charged under age 16?</td>
</tr>
<tr>
<td>155</td>
<td>6</td>
<td>YES/NO</td>
<td>Ever incarcerated upon conviction?</td>
</tr>
<tr>
<td>156</td>
<td>7</td>
<td>YES/NO</td>
<td>Ever punished for institutional misconduct or a behavior report (number__)?</td>
</tr>
<tr>
<td>157</td>
<td>8</td>
<td>YES/NO</td>
<td>Charge laid probation breached, or parole suspended during community supervision? Strength__</td>
</tr>
<tr>
<td></td>
<td><strong>Section 1.2</strong></td>
<td></td>
<td><strong>Education/Employment</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>When in the labor market (either in the community or long-term imprisonment with work opportunities)</em>:</td>
</tr>
<tr>
<td>158</td>
<td>9</td>
<td>YES/NO</td>
<td>Currently unemployed?</td>
</tr>
<tr>
<td>159</td>
<td>10</td>
<td>YES/NO</td>
<td>Frequently unemployed?</td>
</tr>
<tr>
<td>160</td>
<td>11</td>
<td>YES/NO</td>
<td>Never employed for a full year?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>School or when in school:</em></td>
</tr>
<tr>
<td>161</td>
<td>12</td>
<td>YES/NO</td>
<td>Less than regular grade 10 or equivalent?</td>
</tr>
<tr>
<td>162</td>
<td>13</td>
<td>YES/NO</td>
<td>Less than regular grade 12 or equivalent?</td>
</tr>
<tr>
<td>163</td>
<td>14</td>
<td>YES/NO</td>
<td>Suspended or expelled at least once.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>For the next three questions, if the offender is a homemaker or pensioner, complete question 15 only. If the offender is in school or working, complete 15, 16, and 17. If the offender is available for the labor market but is unemployed and not in school, rate 0 for 15-17</em></td>
</tr>
<tr>
<td>164</td>
<td>15</td>
<td>3, 2, 1, 0</td>
<td>Participation/Performance.</td>
</tr>
<tr>
<td>165</td>
<td>16</td>
<td>3, 2, 1, 0</td>
<td>Peer interactions.</td>
</tr>
<tr>
<td>166</td>
<td>17</td>
<td>3, 2, 1, 0</td>
<td>Authority interaction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strengths? _____</td>
</tr>
</tbody>
</table>
### Section 1.3 Family/Marital

<table>
<thead>
<tr>
<th>Section</th>
<th>Item</th>
<th>Dissatisfaction with marital or equivalent situation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>167</td>
<td>18</td>
<td>3, 2, 1, 0</td>
</tr>
<tr>
<td>168</td>
<td>19</td>
<td>Nonrewarding, parental.</td>
</tr>
<tr>
<td>169</td>
<td>20</td>
<td>Nonrewarding, other relative.</td>
</tr>
<tr>
<td>170</td>
<td>21</td>
<td>YES/NO Criminal--family/spouse.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strength?__</td>
</tr>
</tbody>
</table>

### Section 1.4 Leisure/Recreation

<table>
<thead>
<tr>
<th>Section</th>
<th>Item</th>
<th>Absence of recent participation in an organized activity.</th>
</tr>
</thead>
<tbody>
<tr>
<td>171</td>
<td>22</td>
<td>YES/NO</td>
</tr>
<tr>
<td>172</td>
<td>23</td>
<td>3, 2, 1, 0 Could make better use of time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strength?__</td>
</tr>
</tbody>
</table>

### Section 1.5 Companions

<table>
<thead>
<tr>
<th>Section</th>
<th>Item</th>
<th>Some criminal acquaintances.</th>
</tr>
</thead>
<tbody>
<tr>
<td>173</td>
<td>24</td>
<td>YES/NO</td>
</tr>
<tr>
<td>174</td>
<td>25</td>
<td>3, 2, 1, 0 Some criminal friends.</td>
</tr>
<tr>
<td>175</td>
<td>26</td>
<td>YES/NO Few anticriminal acquaintances.</td>
</tr>
<tr>
<td>176</td>
<td>27</td>
<td>3, 2, 1, 0 Few anticriminal friends.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strength?__</td>
</tr>
</tbody>
</table>

### Section 1.6 Alcohol/Drug Problems

<table>
<thead>
<tr>
<th>Section</th>
<th>Item</th>
<th>Alcohol problem ever.</th>
</tr>
</thead>
<tbody>
<tr>
<td>177</td>
<td>28</td>
<td>YES/NO</td>
</tr>
<tr>
<td>178</td>
<td>29</td>
<td>YES/NO Drug problem ever.</td>
</tr>
<tr>
<td>179</td>
<td>30</td>
<td>3, 2, 1, 0 Alcohol problem currently.</td>
</tr>
<tr>
<td>180</td>
<td>31</td>
<td>3, 2, 1, 0 Drug problem, currently [specify type of drug(s)].</td>
</tr>
</tbody>
</table>

If a current alcohol/drug abuse problem exists, complete the following.

<table>
<thead>
<tr>
<th>Section</th>
<th>Item</th>
<th>Marital/Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>181</td>
<td>32</td>
<td>YES/NO Law violations.</td>
</tr>
<tr>
<td>182</td>
<td>33</td>
<td>YES/NO Medical or other clinical indicators? Specify__</td>
</tr>
<tr>
<td>183</td>
<td>34</td>
<td>YES/NO School/Work</td>
</tr>
<tr>
<td>184</td>
<td>35</td>
<td>YES/NO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strength?__</td>
</tr>
</tbody>
</table>

### Section 1.7 Procriminal Attitude/Orientation

<table>
<thead>
<tr>
<th>Section</th>
<th>Item</th>
<th>Supportive of crime.</th>
</tr>
</thead>
<tbody>
<tr>
<td>185</td>
<td>36</td>
<td>3, 2, 1, 0</td>
</tr>
<tr>
<td>186</td>
<td>37</td>
<td>3, 2, 1, 0 Unfavorable toward convention.</td>
</tr>
<tr>
<td>187</td>
<td>38</td>
<td>YES/NO Poor toward sentence/offence.</td>
</tr>
<tr>
<td>188</td>
<td>39</td>
<td>YES/NO Poor, toward supervision/treatment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strength?__</td>
</tr>
<tr>
<td>Section 1.8</td>
<td>Antisocial Pattern</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>189 40</td>
<td>YES/NO Specialized assessment for antisocial pattern.</td>
<td></td>
</tr>
<tr>
<td>190 41</td>
<td>YES/NO Early and diverse antisocial behavior. <em>Item a, plus at least one of b,c, or d. Indicate all that apply.</em></td>
<td></td>
</tr>
<tr>
<td>191 a</td>
<td>YES/NO Severe problems of adjustment in childhood, as indicated by school and social welfare records, or arrests or charged under age 16 (5).</td>
<td></td>
</tr>
<tr>
<td>192 b</td>
<td>YES/NO Official record of assault/violence.</td>
<td></td>
</tr>
<tr>
<td>193 c</td>
<td>YES/NO Escape history from a correctional facility, unlawfully-at-large.</td>
<td></td>
</tr>
<tr>
<td>194 d</td>
<td>YES/NO Charge laid, probation breached, or parole suspended during prior community supervision [Q8]</td>
<td></td>
</tr>
<tr>
<td>195 42</td>
<td>YES/NO Criminal attitude. <em>At least one of the following items. Indicate all that apply.</em></td>
<td></td>
</tr>
<tr>
<td>196 a</td>
<td>YES/NO Supportive of crime. [Q36]</td>
<td></td>
</tr>
<tr>
<td>197 b</td>
<td>YES/NO Unfavorable toward convention [Q37]</td>
<td></td>
</tr>
<tr>
<td>198 c</td>
<td>YES/NO Poor toward supervision/treatment. [Q39]</td>
<td></td>
</tr>
<tr>
<td>199 43</td>
<td>YES/NO Pattern of generalized trouble. <em>At least four of the following items. Indicate all that apply.</em></td>
<td></td>
</tr>
<tr>
<td>200 a</td>
<td>3, 2, 1, 0 Financial Problems.</td>
<td></td>
</tr>
<tr>
<td>201 b</td>
<td>YES/NO 3 or more address changes last year (Q5)</td>
<td></td>
</tr>
<tr>
<td>202 c</td>
<td>YES/NO Never employed for a full year [Q11]</td>
<td></td>
</tr>
<tr>
<td>203 d</td>
<td>YES/NO Less than regular grade 10 or equivalent. [Q12]</td>
<td></td>
</tr>
<tr>
<td>204 e</td>
<td>YES/NO Suspended or expelled at least once. [Q14]</td>
<td></td>
</tr>
<tr>
<td>205 f</td>
<td>YES/NO Nonrewarding, parental [Q19]</td>
<td></td>
</tr>
<tr>
<td>206 g</td>
<td>YES/NO Could make better use of time [Q23]</td>
<td></td>
</tr>
<tr>
<td>207 h</td>
<td>YES/NO Few anticriminal friends. [Q27]</td>
<td></td>
</tr>
</tbody>
</table>

Appendix B: LS/CMI (Section 1) Coding Worksheet is property of Oregonian Law Enforcement Agency. Reprinted with permission.
Appendix C

Curriculum Vitae

Jennifer Ulmer

Address: 819 S. Meridian St. Newberg, Or 97132
Email: julmer09@georgefox.edu
Phone: 503-703-6162

Education

2009 - Present  
Student in Doctorate of Clinical Psychology Program  
Graduate School of Clinical Psychology, APA Accredited  
George Fox University, Newberg, Oregon  
GPA 3.88  
Degree anticipated May 2015

2008  
Bachelor of Science, Psychology  
George Fox University, Newberg, Oregon

Honors and Awards

2008  
George Fox University Cum Laude  
2008  
George Fox University, Outstanding Student Psychology Award  
2004-2008  
Elizabeth Carey Minas Scholarship

Supervised Clinical Experience

7/2013-6/2014  
Pre-Doctoral Intern: Immaculata University Internship Consortium: Joseph J. Peters Institute: Adult out patient clients who are mandated or voluntarily seeking sexual offense specific treatment.

Duties:

- Short and long-term individual psychotherapy focused on the treatment of paraphilias as well as various co-morbid mental health diagnosis’ (depression, anxiety, personality disorder, substance abuse, etc). With all clients responsibilities included maintaining communication with parole/probation officer, collaborating with group/individual therapist, developing individualized treatment plans, providing resources, and delivering psychotherapy to assist clients in
maintaining an offense free lifestyle and developing treatment and life goals.

- Conducted initial intake and annual biopsychosocial evaluations to address risk for re-offense, identify diagnostic issues, and provide recommendations regarding the form and nature of treatment.

- Participation in group and individual supervision

- Led two, weekly, sex offender treatment groups that focused on psycho-education and process oriented work surrounding members sexual offenses. Facilitation of sex offense specific treatment groups utilized primarily CBT methods within a Relapse Prevention and Good Lives Model.

- Participation in multi-disciplinary consultation and collaboration through treatment team meetings involving clients’ probation/parole officer, psychiatrist, family/spouse/intimate partner, as well as other mental health professionals currently treating the client.

Supervisor: Barry Zakireh, PhD

Secondary Supervisor: Matthew Schaffer, PsyD

9/2012-5/2013

Pre-Intern Student: Oregon State Hospital: Forensic, Inpatient Hospital

Duties:

- Long-term and brief individual psychotherapy
- Forensic psychological evaluations including personality, cognitive/intellectual and neuropsychological assessment
- Participation in multi-disciplinary consultation and collaboration through Interdisciplinary team meetings
- Participation in individual and group supervision
- Participation in bi-monthly training seminars on various clinical issues
- Patient documentation
  - Behavior, Intervention, Outcome, and Recommendation (BIO-R)
- Co-lead and lead patient group therapy on the following topics: emotion regulation, distress tolerance and interpersonal effectiveness.
- Completed violence risk assessment evaluation
- Received training on the administration and scoring of Rorschach

Supervisor: Nicole Ball, JD; PhD
8/2011-6/2012  **Practicum II Student:** Portland State University, Center for Student Health and Counseling Services: University counseling center

**Duties:**

- 5 Axis diagnosis
- Assessment training
- Specific focus on anxiety, depression, ADHD, Autism, and LD and their impact on college students functioning
- Provided psychological evaluations for students in a diverse college population to assess for possible learning disabilities and/or ADHD.
- Conducted semi-structured interviews to acquire medical, educational, family, and social history information as well as a self-report of functioning.
- Performed a full battery of tests to assess for cognitive functioning, academic achievement, personality functioning, and neurological functioning.
- Wrote comprehensive and integrated reports identifying strengths, weaknesses, and discrepancies for the purpose of academic accommodations and disability diagnosis.
- Provided a feedback session of results and recommendations.

**Supervisor:** Michelle Conley, PsyD

10/2011-6/2012  **Supplemental Practicum:** Clark County Juvenile Court: Youth Detention Center

**Duties:**

- Services provided include:
  - Intake interviews

- Provided individual therapy with Juvenile Recovery Court clients: adolescents involved in the substance abuse recovery program.
  - Short-term
  - Long-term

- Client Documentation
  - SOAP progress notes

- Attended bi-monthly Juvenile Recovery Court Program meetings

**Supervisor:** Dr. Shen PhD
Practicum I Student: Clark County Juvenile Court: Youth Detention Center

Duties:

• Services provided include:
  o Intake interviews
  o Mental Status Exams
  o Youth Safety Review (suicide evaluations)
  o Administered screening tool to identify adolescents involved in domestic minor sex trafficking.

• Provided individual therapy
  o Long-term
  o Short-term
  o Crisis support

• Led therapeutic groups: male and female
  o Skills Training: emotion regulation and interpersonal effectiveness.
  o WhyTry Program

• Client documentation
  o Youth Safety Review Sheet
  o SOAP progress notes

• Participated in weekly didactic seminar
  o Rorschach Training
  o Consultation
  o Case Presentations
  o Training sessions on various treatment modalities and topics

• Assessment
  o Projective (Rorschach, TAT, Rotter Incomplete Sentence)
  o IQ (WAIS)
  o Personality (MMPI)

Supervisors: Dr. Shen, PhD (primary) and Dr. Krause, PsyD

Pre-practicum Student: George Fox University, Newberg, OR

Duties:

• Provided outpatient individual psychotherapy with two university students practicing client-centered approaches

• Services provided included intake interviews, mental status exams, individual psychotherapy, diagnosis, and treatment planning
• SOAP progress notes
• Weekly tape review of clinical skills, both individual and group supervision.
• Participated in clinical didactic seminars and presentations, clinical team case presentations, and consultation

Supervisor: Rachel Kerns, MA; Mary Peterson, PhD

Research Experience

2/2012-6/2013 Student Representative of the Human Subjects Review Committee
George Fox University

2010-Present Research Vertical Team
• Assisted team members in design of various research projects
• Provide bi-monthly updates on dissertation topic and receive feedback from advisor and RVT members
• Participate in supplemental research with fellow RVT members

Doctoral Dissertation: ODARA: A Validation Study
Current Status: Data Analysis

9/2007- 12/2007 Undergraduate Research
Relationship between parenting style and adolescent creativity: A Correlational Study.
George Fox University, Newberg, OR
Supervisor: Sue O’Donnell, PhD

7/2007- 8/2007 Qualitative and Quantitative Data Analysis and Coding
Child and Adolescent Physical Abuse
Supervisor: Teresa Baker, Research Administrator; Sue Skinner, MD
Teaching Experience

9/2011-12/2011  **George Fox University**, Newberg, OR  
Graduate School of Clinical Psychology  
Teaching Assistant, *Abnormal Psychology*

**Duties:**
- Planning and Presentation of class lecture on DSM-IV TR diagnosis
- Graded classroom assignments and examinations
- Assisted the professor in preparation of classroom materials

Publications/Presentations


Work Experience

11/2010-12/2011  **Cascadia Behavioral Healthcare, Rain Garden:** Residential living for adults with severe mental illness.  
*Residential Counselor II, On-call*

**Duties:**
- Provided clinical support and crisis intervention
- Trained on medication administration
- Provided therapeutic interventions with residents as directed
- Led recreational and life skills groups
- Billed for therapeutic services

Supervisor: Kirsten LaGrande-Rostad, MA, Program Manager II
5/2008- 12/2009   **Northwest Behavioral Healthcare Services:** Dual Diagnosis residential treatment facility for adolescents.  

*Adolescent Counselor*

**Duties:**

- Involved in direct care of clients; guided and supervised adolescents as they attended mental health and addiction treatment therapy groups
- Employed behavioral modification and solution-focused techniques
- Aided clients in completing their weekly treatment objectives and assessed and approved clients treatment assignments
- Charted using SOAP progress notes
- Attended Multi-disciplinary treatment meetings for clients

Supervisor: Hannah Plant, Program Manager

8/2007- 1/2008  **Mid-Valley Rehabilitation, Inc.:** Day program for adults with developmental disabilities

*Support Staff*

**Duties:**

- Assisted in development of individual support plans
- Updated and recorded individual program data through client charting
- Constructed client’s daily schedule and supervised program participants to ensure they reached their targeted goals
- Provided physical assistance with eating and personal hygiene

Supervisor: Katie Mahlow, Program Manager

**Memberships and Professional Affiliations**

2010 - Present  American Psychological Association, Student Affiliate

**Assessment Training**

| Cognitive |
Montreal Cognitive Assessment (MoCA)
- Wechsler Adult Intelligence Scale – IV (WAIS-IV)
- Wechsler Intelligence Scale of Children- IV (WISC-IV)
- Wide Range Intelligence Test (WRIT)
- Woodcock-Johnson III, Tests of Cognitive Ability (WJ-III, Cognitive)
- Kaufman Brief Intelligence Test, Second Edition (KBIT2)

**Memory**

- California Verbal Learning Test-II (CVLT-II)
- Wide Range Assessment of Memory and Learning- II (WRAML-II)
- Wechsler Memory Scale-IV (WMS-IV)
- Wechsler Memory Scale-IV: Flexible Approach
- Wechsler Memory Scale-IV: Test of Pre-morbid Functioning

**Malingering**

- Test of Memory Malingering (TOMM)

**Emotional / Personality**

- Minnesota Multiphasic Personality Inventory II (MMPI-II)
- Minnesota Multiphasic Personality Inventory-Adolescent (MMPI-A)
- 16PF 5<sup>th</sup> Ed.
- Millon Clinical Multiaxial Inventory- III (MCMI-III)
- Personality Assessment Inventory (PAI)
- Adult Manifest Anxiety Scale (AMAS)
- Beck Depression Inventory (BDI)
- Beck Hopelessness Scale (BHS)
- Beck Anxiety Inventory (BAI)
- Penn State Worry Questionnaire (PSWQ)
- Zung Anxiety Scale

**Academic**

- Wechsler Individual Achievement Test (WIAT-II)
- Wide Range Achievement Test- IV (WRAT-IV)
- Peabody Picture Vocabulary Test- III (PPVT-III)
- Gray Oral Reading Test-4 (GORT-4)
- KeyMath3 Diagnostic Assessment
- Woodcock-Johnson III, Tests of Achievement (WJ-III, Achievement)
### Neuropsychological

**Executive Functioning**
- DKEFS-Trail Making
- DKEFS- Verbal Fluency
- Stroop Color and Word Test
- Integrated Visual and Auditory (IVA)
- Wisconsin Card Sorting Test (WCST)

**Visual-Spatial/ Constructive**
- Rey Complex Figure Test (RCFT)

### Behavior/ Symptom
- Mini Mental Status Exam (MMSE)
- Barkley Adult ADHD Rating Scale-IV (BAARS-IV): Childhood and Current Symptoms: Self & Other Report
- Brown Attention-Deficit Scales (Brown ADD Scales)
- Adult-Attention Deficit Disorders Evaluation Scale (A-ADDES) Self and Home Versions
- Integrated Visual and Auditory (IVA) Continuous Performance Test (CPT)

### Projective
- Thematic Apperception Test (TAT)
- Rotter Incomplete Sentence
- Rorschach: Scoring

### Risk Assessment
- **STATIC-99R**
- Hare Psychopathy Checklist, Revised (*PCL-R*)
- Historical, Clinical, Risk Management –20 (HCR-20)
- Sexual Violence Risk-20 (SVR-20)
References

Dr. Matthew Schaffer, PsyD
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mschaffer@jjp.org
(215) 665-8670

Dr. Michelle Conley, PsyD
1880 SW 6th Ave.
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(503) 725-2583

Dr. Nancy Thurston, PsyD
414 N. Meridian St.
Newberg, OR 97132
nthurston@georgefox.edu
(503) 554-2378