

5-1-2015

The Effectiveness of an Evidenced-Based Decision Making Program in Criminal Justice Systems

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Recommended Citation

Keith, Tashina Lorraine, "The Effectiveness of an Evidenced-Based Decision Making Program in Criminal Justice Systems" (2015). *Doctor of Psychology (PsyD)*. Paper 166.
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The Effectiveness of an Evidenced-Based Decision Making Program
in Criminal Justice Systems

by

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Presented to the Faculty of the
Graduate Department of Clinical Psychology
George Fox University
in partial fulfillment
of the requirements for the degree of
Doctor of Psychology
in Clinical Psychology

Newberg, Oregon

November 14, 2014

The Effectiveness of an Evidenced-Based Decision Making Program in Criminal Justice Systems

BY

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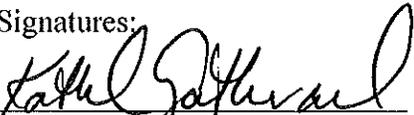
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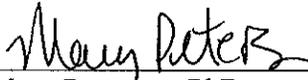
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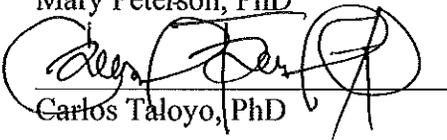
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The Effectiveness of an Evidenced-Based Decision Making Program
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Abstract

The National Institute of Corrections selected the Yamhill County Department of Corrections to implement a new evidenced-based decision making program within their criminal justice system. As part of the new program, every individual who was arrested and placed on probation went through a case analysis assessment and had their treatment programs approved by a judge prior to sentencing. In this study 20 randomly selected individuals who received their treatment programming prior to sentencing were matched to 20 randomly selected individuals who received treatment programs post-sentencing. The hypothesis of this study was that those probationers in the pre-sentencing group who had the case analysis assessment and probation treatment programs tailored to their needs and approved by the judge prior to sentencing would have better treatment outcomes than those who received the case analysis post-sentencing. The results of this study concluded that there was a significant difference between the 2 groups in the amount of time it took to complete the case analysis, the number of programs assigned to

individuals, and in the level of involvement between the 2 groups. Support was found for the hypothesis suggesting that probationers could be better served and cost-savings could be realized for departments with the full implementation of the pre-sentencing program.

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Chapter 1

Introduction

Offender recidivism is an issue that plagues criminal justice systems nationwide. The U.S. Department of Justice, Bureau of Justice Statistics reports that 67% of released offenders will be rearrested within three years of their initial release (Center for Effective Public Policy, 2010). “Among the current wave of released inmates are an increased number of ‘churners,’ offenders who cycle from institution, to community, to institution ‘ad infinitum’” (Golder et al., 2005, p. 101). Recidivism rates have remained stable for many years and are likely to increase without the enactment of a new system of reducing recidivism. It is imperative that psychosocial interventions are incorporated into criminal justice systems and that those interventions draw on evidenced-based guidelines and practices (Golder et al., 2005). Many empirical studies have been conducted that have identified strategies considered to be the most effective for reducing offender recidivism (e.g., Golder et al., 2005).

Research demonstrates that when the knowledge garnered from the empirical studies is applied to criminal justice systems, a reduction of approximately 30% in recidivism rates is possible (Center for Effective Public Policy, 2010). The reduction in recidivism rates is most commonly the result of client participation in policy-relevant programs; particularly cognitive-behavioral programs. In fact, one study found that approximately 63% of offenders will

recidivate within a 13-year follow-up, if they did not participate in a cognitive-behavioral program (Drake, Aos, & Miller, 2009).

Several other programs were found to help reduce the rate of recidivism as well, including drug treatment programs, vocational education programs, employment programs, and functional family therapy (Drake et al., 2009). Many studies have found that the most effective evidenced-based strategies include behavior changing programs for medium and high risk offenders, the use of structured assessment tools that predict pretrial misconduct and potential for re-offense, and the use of positive reinforcement in promoting behavior change (Center for Effective Public Policy, 2010).

Research also finds that, in addition to the reduction in recidivism rates, significant cost benefits are produced at city, county and state levels with money that would typically go toward the criminal justice system now being spent on other government programming (Center for Effective Public Policy, 2010). The reduction in recidivism rates benefits both tax payers and crime victims. (Drake et al., 2009). Therefore, the reduction in recidivism, which comes most often as a result of the treatment that individuals receive through the probation process, produces many benefits to individuals, counties, and states.

Risk Factors

One of the best ways to help reduce recidivism is to identify those who are most likely to reoffend. The most effective risk assessment tools are those that examine both static and dynamic risk factors. These types of assessments provide an overall risk level score that is determined by the number and severity of risk factors (Hildebrand, Hol, & Bosker, 2013). Static risk factors are those aspects that are unchangeable; such as gender, age, arrest history, and age

at first arrest. (Degiorgio & DiDonato, 2014). Dynamic factors, on the other hand, are the aspects of an offender that are considered to be changeable through treatment or intervention (Degiorgio & DiDonato, 2014). Examples of dynamic risk factors include, substance abuse, antisocial traits, victim empathy, denial, psychological issues, etc. (Degiorgio & DiDonato, 2014). Studies found that several dynamic risk factors correlate with recidivism more than static factors (Hildebrand et al., 2013). Further, several specific dynamic factors have been found to significantly predict the number of probation revocations (Degiorgio & DiDonato, 2014). The dynamic factors found to be most predictive of probation revocation or other forms of recidivism are: violence (e.g., use of physical force against another), stress risk (e.g., inability to cope with stressful events) substance abuse (e.g., significant drug or alcohol use), antisocial behavior (e.g., criminal activity, arrests, felonies, etc.), and dropout from psychological treatment (e.g., non-compliance with previous treatment assignments; Degiorgio & DiDonato, 2014; Hildebrand et al., 2013).

Many of these risk factors are considered strong predictors of both general recidivism as well as overall violence; this is especially true for the dynamic predictor of substance abuse (Louden & Skeem, 2013). It was found that individuals who complete substance abuse treatment are less likely to be re-incarcerated than those who do not complete treatment (Degiorgio & DiDonato, 2014). Those who need substance abuse treatment and do not complete a substance abuse program were found to be 1.28 times more likely to re-offend (Huebner & Cobbina, 2007). The ability to predict re-offense by assessing dynamic risk factors such as these can lead to better treatment recommendations for those who are more likely to re-offend, and more tailored treatment that suits the offender's learning style, ability level, and needs (Howard & Dixon, 2013).

Matching the Intensity of Risk and Intervention

Accurate identification of risk potential and factors associated with recidivism is necessary in order to provide the most useful and appropriate treatment that will meet the needs of each probationer (Degiorgio & DiDonato, 2014; Hildebrand et al., 2013). Treatment was most effective when it is delivered proportionally to the level of risk of the probationer, such that higher risk probationers receive higher intensity interventions (e.g., additional treatment programs, interventions tailored to needs, etc.) and lower risk probationers receive lower intensity interventions (Degiorgio & DiDonato, 2014; Hildebrand et al., 2013).

Assigning probationers to treatment programs that have been tailored to their specific needs or risk factors produces an increased likelihood of program completion (Howard & Dixon, 2013). The implementation of these kinds of evidenced based practices which provide focused treatment for probationers is likely to lead to a decrease in probation revocations, which in turn decreases the financial impact associated with incarcerating these individuals and also improves public safety overall (Degiorgio & DiDonato, 2014; Hildebrand et al., 2013).

Credibility of Decision Makers

In criminal justice cases there is always someone in a supervisory role making decisions regarding treatment and punishment of probationers. The trustworthiness of communication is an important aspect to consider in situations where someone is expected to abide by a decision that is being made for him or her. The decision to trust information can depend on a number of factors such as, who is providing the information, what the information is, when the information is given, why the information was produced, and the social context of the receiver of information, as well as many other variables (Toivonen & Denker, 2004).

In order for individuals to trust information being provided to them, they must first have reason to trust the provider of the information. Many factors influence the establishment of trust, for instance, an individual's integrity, reputation, credibility, and reliability all play a role in influencing a foundation of trust between individuals (Toivonen & Denker, 2004). This foundation of trust is important, especially in criminal justice settings, because the more trustworthy information is considered to be, the higher the impact it will have on the receiver (Toivonen & Denker, 2004). Therefore, it can be assumed that, if a judge, probation officer, or any individual in the supervisory role, is considered to be credible or trustworthy, then the decisions he or she hands down to probationers will be received better than coming from someone who the receiver does not consider to be an appropriate decision maker.

Studies conducted within mental health courts, in which the judge plays a direct role in determining treatment options for offenders, were found to be effective in creating a strong and trusting alliance between the offender and judge (Mahoney, 2013). In such cases, probationers have even considered the process of working directly with the judge and having personal interactions with him or her to be conducive to creating a "therapeutic environment" (Mahoney, 2013). Additionally, the results of such studies have found that when the probationer can work directly with the judge, he or she often views the judge as being caring, fair, and trustworthy (Mahoney, 2013).

Within the Yamhill County Department of Corrections new evidenced-based program, individuals determined to be either high- or medium- risk offenders were given an assessment which gages specific treatment needs. After completing this assessment, these individuals appeared before the judge who approved the specially tailored treatment "package" that was

determined to be most beneficial for the needs of the probationer. The way this program was structured, the probationers were receiving their treatment assignments directly from the judge, rather than from a probation officer. Therefore, when applying the trustworthiness theory to this design, it was assumed that if the probationers perceive the judge to be more credible or trustworthy than a probation officer, there would be a greater likelihood that the probationer would be more receptive of the information and better engaged in the rehabilitation process.

Purpose of the Study

A new evidence-based decision making initiative was implemented in Yamhill County and the true effectiveness of the new evidence-based program is unknown at this time. The Yamhill County Department of Corrections was one of seven counties in the nation selected by the National Institute of Corrections to implement an evidenced-based practice and decision making program within their criminal justice system. As part of the evidenced-based program, every individual who is arrested and placed on probation goes through a case analysis assessment that is used to track their progress and recidivism rates throughout the probation process. The current study examined the effectiveness of the case analysis process at reducing system costs and improving probation outcomes, including pretrial misconduct and post-conviction reoffending.

The hypothesis of this study was that those probationers in the presentencing group who have the Level of Service Case Management Inventory (LS/CMI) and probation treatment programs tailored to their needs and approved by the judge prior to sentencing would have better treatment outcomes than those who received the LS/CMI post sentencing.

Chapter 2

Method

Participants

Participants in this study were 40 individuals who were on felony probation with the Yamhill County Department of Corrections. The participants were in two matched samples, one of 20 individuals who had completed a case analysis assessment prior to sentencing and the other of 20 individuals for whom the same assessment was completed in the post-sentencing phase. The 20 individuals in the pre-sentencing group were randomly selected from a pool of approximately 25 individuals. The 20 individuals from the post-sentencing group were selected by the parole officer in charge of the case analysis program from a pool of approximately 750 individuals. The plan was that the two groups would be matched on sentencing risk score, however analysis revealed that five pairs were not match, such that four individuals with moderate risk rating and one with a very-high risk rating from group one were matched with people in the post-sentencing group who had high risk ratings. Of the 20 individuals in the pre-sentencing risk-assessment group, 13 were male (65%) and 10 were employed. Of the 20 individuals in the post-sentencing risk-assessment group, 10 were male (50%) and 9 were employed. Information about age, ethnicity, and crime type was not available in the database.

Materials

The case analysis assessment examines the risk and needs of each felony probation case. The case analysis assessment consists of the following measures: employment status,

sanctions/interventions, UA log, treatment completion, restitution, community service, positive case closure, recidivism, and scores on the Level of Service Case Management Inventory (LS/CMI). In addition to the information gathered in the case analysis process, the Yamhill County Department of Corrections also tracks information such as recidivism, cost of supervision, violations, and program dropout rates of each probationer. This study compared the pre- and post-sentencing groups on the following seven variables: LS/CMI assessment, program dropout rates, violations, costs, positive case closure, recidivism, and an expert rating of progress.

Level of Service Case Management Inventory

The LS/CMI is an assessment that measures the risk and needs of offenders (Andrews, Bonta, & Wormith, 2004). It is administered to each offender and is used to determine the overall risk level to which he or she is assigned, which directs the terms of probation that are set for that individual. The internal consistency of the LS/CMI is reported to be high and very stable; The LS-CMI's Cronbach's alpha value in the normative correctional female sample is 0.91, and in the normative correctional male sample is 0.89 (Andrews et al., 2004). Predictive validity is reported to be strong and consistent, and particularly higher for general recidivism and re-incarceration than for violent recidivism (Andrews et al., 2004).

Program Completion

After the in-house probation officer suggested what type of program would be of greatest benefit to each offender who completed the case analysis assessment, that individual's supervising officer assigned the offender to specific programs (e.g., chemical dependency) as a condition of probation. The agency that runs each program tracked dropout and success rates of

each participant and reported attendance information to supervising officers. When an offender stopped attending, or completed his or her assigned program, that information went into his or her file.

Violations

Violations were imposed by each probationer's supervising officer and were tracked in their files. A violation was imposed whenever one of the conditions of probation was not met. There were standard conditions of probation which were applied to all cases, and special conditions that were added by the court (e.g., no contact order). Consequences for a violation were left to the discretion of the individual's supervising officer, with maximum punishment limits set by the state.

Costs

The cost for supervising each probationer was determined by the Yamhill County Department of Corrections and by the amount of state funding that is provided to the Department of Corrections. The state only pays the DOC for supervision of felony offenders, while the county pays for the supervision of misdemeanor offenders. The amount of funding the state provides per individual is based on the risk assessment, with high risk offender supervision being granted the most financial reimbursement per individual and low risk supervision being granted the least per individual.

Recidivism

The current definition of recidivism used by the Yamhill County Department of Corrections includes anyone convicted of a new felony offense after three years from the time her or his supervision expired. The state of Oregon tracks the number of individuals who

recidivate by the most recent 3-year mark, while Yamhill County Department of Corrections tracks the recidivism rates at the 3-, 5-, and 10-year marks. The current definition of recidivism does not account for misdemeanor convictions; therefore, only individuals with felony offenses are considered in the recidivism numbers. If an individual who is currently on probation commits another felony offense, he or she receives a new sentence and will have new probation requirements added to his or her current case. For individuals whose probation had expired at the time of the new felony offense, he or she would be required to begin the entire probation process over again.

Expert Ratings

Each participant's progress was rated by his or her individual probation officer. The probation officers were considered most suitable for this task due to their knowledge and personal interaction with the participants whom they supervised. The probation officers reviewed each participant's file and assigned a rating of the individual's engagement, progress, and success. The engagement score was based on the participant's *psychological engagement*; that is, the progress made toward transforming his or her life, whether he or she moved in stages of change, and whether he or she seemed to be motivated to change his or her present situation. The progress rating was based on *behavioral progress*; specifically, whether the individual signed up for and attended classes, whether he or she attended probation meetings, and whether he or she had any new arrests or probation violations. The success scale was based on everything the probation officer knew about the participant's case, and how successful the probation officer believes the individual will be in completing all the conditions of probation.

Procedures

Each week the Yamhill County in-house probation officer reviewed the list of individuals who were on the court docket for a sentencing hearing; he then submitted the names of all those who were recommended to felony probation to the district attorney, who in turn selected two of those individuals to undergo the case analysis process prior to their sentencing. All other individuals underwent the case analysis after being sentenced. After individuals were selected for the pre-sentencing case analysis, they had one to two weeks to complete the process and then return to court with the in-house probation officer's general recommendations for the participant's conditions of probation. The presiding judge chose which of the recommendations to accept or reject and the individual was then assigned to a supervising officer, based on the type of case and the geographic region in which the participant resided.

The initial information on each individual was kept in a hardcopy file; the file included such information as criminal history, all assessments that had been completed (e.g., LS/CMI, Eureka), and probation recommendations. Once the individual was assigned to a supervising officer, a new electronic file was created. In addition to the information that was in the hardcopy file, the electronic file also included all the information relevant to the individual's probation, including but not limited to: program referrals, grievances, pictures, probation violations, action plans, police reports, and assessments.

The Yamhill County in-house probation officer randomly selected 20 individuals from the pool of probationers who received the case analysis prior to sentencing. After selecting the 20 pre-sentencing individuals, the in-house probation officer then selected 20 individuals from the pool of probationers who received the case analysis after sentencing. The individuals from the

post sentencing group were matched to the individuals in the pre-sentencing group based on the level of risk assigned to those charges, as determined by the Department of Corrections' standardized risk level assessment.

The in-house probation officer had each randomly selected individual sign an informed consent form (see Appendix A). He then gathered the information contained in each individual's electronic files that would be used for comparison purposes between the two groups. The information that was examined included the LS/CMI assessment, program completion rates, violations, recidivism, and costs associated with the probation. In addition to the information that was found in the files, individual probation officers reviewed the progress being made by each individual and assigned numeric ratings to that individual. A statistical analysis was completed to establish any significant differences between the pre-sentencing and post-sentencing samples on each of the chosen variables. The statistical analysis was then used to determine the effectiveness of the new evidenced-based practice and decision making program.

Chapter 3

Results

The individuals in the pre-sentencing risk-assessment group were assigned to $M = .95$ ($SD = .51$) programs, while those in the post-sentencing assessment group were assigned to $M = 1.90$ ($SD = 1.41$) programs. The post-sentencing group was assigned to attend significantly more programming, $t(23.89) = -2.83, p = .009$. Participants in the pre-sentencing group enrolled in or completed significantly more of the programs to which they were assigned ($M = .05, SD = .22$) than did the post-sentencing group ($M = .60, SD = .94$), $t(21.14) = -2.55, p = .019$. People in the pre-sentencing ($M = .90, SD = .55$) and the post-sentencing groups ($M = 1.30, SD = 1.03$) attended the same amount of programming, $t(29.08) = -1.53, p = .137$ when number of programs assigned is not factored into the equation.

The LS/CMI scores of the pre-sentencing ($M = 23.30, SD = 7.53$) and post-sentencing risk-assessment groups ($M = 23.60, SD = 4.52$) did not differ significantly, $t(31.13) = -1.53, p = .88$. This lack of difference in LS/CMI scores is to be expected because the groups were matched on risk-levels. The pre-sentencing risk assessment group completed their LS/CMI risk assessment in an average of 6.80 days ($SD = 9.89$) following their selection for the pre-sentencing assessment condition. The post-sentencing risk assessment group took significantly longer to complete the LS/CMI ($M = 185.85$ days ($SD = 135.85$), $t(19.20) = -5.88, p < .001$).

Individuals from the pre- and post-sentencing groups were matched on the number of days available to them to violate sanctions based on the number of days available to the person in the pre-sentencing group. This method of matching was necessary because participants in the post-sentencing assessment group had been on probation for a longer period of time, and therefore had more days available on which they had the opportunity to violate their sanctions. After the match, the pre-sentencing ($M = 1.25$, $SD = 2.17$) and the post-sentencing risk assessment groups ($M = 3.45$, $SD = 5.13$) did not differ significantly in the number of sanctions they received, $t(19) = -1.64$, $p = .12$. The same process was used to examine recidivism. Again, after the match there was no significant difference in the number of new arrests for the two groups. $\Phi = 0.28$, $p(\text{Fisher's exact}) = .115$, one-tailed. The data were examined a second time, this time without matching for the time available to reoffend. The results indicated that there was a trend toward the post-sentencing group having more sanctions over time $t(25.62) = -1.77$, $p < .089$, ($M = 1.25$, $M = 3.45$).

Expert ratings of program engagement, progress and success were provided by each individual's parole officer (See Table 1). The groups did not differ significantly on any of the ratings. The effect sizes of the ratings are small for engagement and success and large for progress.

Table 1

Expert Ratings of Program Engagement, Progress, and Success for Individuals in the Pre- and Post-Sentencing Risk Assessment Groups

	Pre-Sentencing		Post-Sentencing				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	ES (<i>d'</i>)
Engagement	4.20	2.88	5.65	3.08	-1.36	.191	.49
Progress	3.70	2.89	5.75	3.57	-1.73	.100	.97
Success	3.85	2.58	5.15	3.29	-1.25	..227	.44

Chapter 4

DISCUSSION

The National Institute of Corrections selected the Yamhill Department of Corrections to implement a new evidence based decision making program based on empirical research that found that treatment for offenders is more effective when it is directly related to their level of risk for re-offense and their current treatment needs (Howard & Dixon, 2013). Mahoney (2013) suggested that treatment recommendations that are approved by a judge are likely to be more influential and considered to be more trustworthy as an effective treatment than those recommendations made by a lesser authority figure. These hypotheses made in previous research experiments were the basis for the research conducted in this study.

Support for the hypotheses was mixed because several steps were involved that influenced the outcome. Common sense would suggest that the sooner probationers receive a treatment plan, the sooner they are able to receive the help they need to successfully complete their terms of probation and more importantly, learn the skills they need to prevent future offending. Entering programing involved completing the LS/CMI, having the judge assign a tailored programing plan, and engaging in the programs. The current results indicate that probationers in the pre-sentencing group completed the LS/CMI in significantly fewer days than those in the post-sentencing group. This provides the initial evidence that the timing of the

sequence is positive and probationers move toward a more timely program engagement when the LS/CMI is required prior to sentencing.

A second element of support for the process of pre-sentencing and tailored programming, is the difference in the number of programs assigned between the two groups. Probationers in the presentencing group are assigned to treatment groups that are tailored to meet their needs in less time, and are assigned to fewer programs. Those in the post-sentencing group wait a significantly longer amount of time to receive any kind of treatment that is directly related to their specific needs. Intervention programs, such as chemical dependency and cognitive behavioral training, were assigned during the pre-sentencing risk-assessment for the first group. The post-sentencing risk-assessment group received a standard package of programs which was modified after their sentencing. Individuals in the post-sentencing group who received the non-tailored probation programming were assigned to significantly more treatment programs than those in the pre-sentencing group who were assigned to treatment programming that was based on their needs as reported in the LS/CMI. Even though both groups attended the same amount of programming, the pre-sentencing group was able to begin making progress toward rehabilitation sooner, and assigning fewer programs would suggest cost-savings for the department.

Another important consideration is the probationers enrolling in and completing the programs. If treatment is assigned but without any engagement, there is a cost for running the program and a loss for not having the probationers receiving rehabilitative benefits for participation. Individuals in pre-sentencing group enrolled in and/or completed significantly more of the treatment programs to which they were assigned by the judge than individuals in the post-sentencing group. Even though individuals in both the pre-sentencing and post-sentencing

groups ended up attending the same amount of programming, this indicates another potential cost issue because the pre-sentencing group was assigned to fewer programs and attended most of what they were assigned to, while the post-sentencing group was assigned to more programs but did not attend to all assigned programs. Therefore, if fewer programs are necessary but engagement remains stable, the department can more efficiently budget and provide more effective rehabilitation.

An important measure of success would include additional violations and arrests. It is desired that effecting rehabilitation of probationers served in a timely manner would decrease sanctions and arrests. The results do not fully support this hypothesis. Time in the community is an important variable. The longer a probationer has been in the community, the increased possibility of violations. Therefore the individuals in this research were matched for the amount of time available to receive a sanction or commit a new crime. Because the pre-sentencing group had shorter time within the community, matching was based upon them. There was no difference between the pre-sentencing group and post-sentencing group in the number of sanctions or new arrests. However, when the two groups were not matched on time available to receive a new sanction, there was a trend toward the post-sentencing group receiving more sanctions. When all elements of this program are considered, the pre-sentencing and judge approved tailor programming appears to have the potential for cost saving and more effective treatment delivery. The results emphasize the importance of the impact of completing the risk assessment in a timely manner in order for probationers to receive tailored treatment that provides the best long-term results for them.

This research is complex with several factors that must be in place and measured to provide strong evidence that pre-sentencing has a cost benefit for the department and rehabilitation improvements for the participants. These findings are noteworthy because they demonstrate that the individuals receiving the treatment that has been tailored to meet their needs, in a timely manner, are not being assigned to treatments that are likely unnecessary for them, or are excessive or redundant. For any type of programing to be effective, participants must be engaged. These results suggest that this may be occurring for those in the pre-sentencing group who are actually completing more of their treatment programs than those in the post-sentencing group.

One finding that needs further understanding is the ratings of the probationers' engagement, progress and success provided by the person's parole officer. These ratings did not differ between the two groups. Given the small n, the investment of the parole officer in the probationer, and the lack of precision of the ratings, it is difficult to determine what these results suggest about tailored programing or evidence-based decision-making. This is a key factor that deserves additional investigation.

The results of this study are similar to those of Howard and Dixon (2013) who found that assigning probationers to treatment programs that have been tailored to their specific needs/risk factors produces an increased likelihood of program completion. Although further measurements are needed to verify outcomes, the trend from these results toward fewer sanctions, support previous studies which found that similar evidenced-based decision making practices that provide focused treatment for probationers are likely to lead to a decrease in probation

revocations, which in turn decrease the financial impact associated with incarcerating individuals and improves public safety (Degiorgio & DiDonato, 2014; Hildebrand et al., 2013).

Several positive implications from these initial results may contribute to further changes.. For instance, corrections departments using presentencing assessment and judge approved assignment would be able to budget, both financially and with personnel resources, for treatment programming more effectively. Effective programing that leads to rehabilitation through improved skills and support would reduce costs to counties in multiple ways. Thus programing in which the participants are engaged, find value and applicable, and provides support and skills could increase individual success. The inclusion of a measure of attitude or behavior change between the two groups which evaluates engagement, value and learning could be beneficial in determining the overall effectiveness of the treatment programs within each group.

One final implication is in regard to the authority of the judge. One important difference between the two groups in this study was that the judge was responsible assigning the programming to one group and not the other. Given the results found between the two groups, this could imply that hearing the treatment assignment from the judge rather than a probation officer could make a difference in the motivation to comply with and complete the assigned programming. Further measurement of the impact of the authority of the judge in prescribing programs would be beneficial.

Limitations

There were several limitations to this study including; (a) the number of individuals in each comparison group was small, and (b) the infancy of evidence-based decision making programs for probationers. Because the evidenced-based decision making program is relatively

new, there pool of potential participants was small; therefore, we limited our participants to 20 individuals in each group. A greater pool of participants may have enabled more in-depth comparisons between the two groups, and potentially a more precise understanding of differences between the groups on the multiple variables involved in pre-sentencing tailored programing.

Due to the infancy of the evidence-based decision making program, the individuals in the pre-sentencing group had only been on probation for a short period of time, typically between 1 to 11 months; while those in post-sentencing group were involved in probation for much longer, typically between 2 months to 5 years. The post-sentencing group individuals had a longer time before programing began and also more time available to be sanctioned or to be charged with a new crime was typically much greater than the time available to those in the presentencing group. It would be beneficial, and likely more representative of true re-offense frequency, to examine this data again after the presentencing group has been involved in the program for a longer period of time.

An ideal design for this study would have allowed for a completely matched sample, in which participants from both groups were able to be matched on numerous factors, such as: time available to reoffend, crime type, number of violations, and level of risk. Having the two groups matched on as many factors as possible would be beneficial for determining whether differences between the groups is due entirely to the new evidence-based decision making program or to other variables.

Conclusion

Overall, the results of this study are positive but mixed. Individuals in the presentencing group who have the LS/CMI completed prior to sentencing, probation treatment programs tailored to their needs and approved by the judge prior to sentencing had higher rates of compliance than those who receive the LS/CMI post sentencing. The results of this study suggest that individuals are likely more motivated to enroll in and complete programming assigned in a timely manner, that targets their specific needs rather than simply being given a generic assignment to various programs that are provided for all probationers regardless of sentence, personal characteristics, skill base, or risk level.

Additionally, the evidenced-based decision making program examined in this study included the approval of the judge for the treatment programs assigned to those in presentencing group. This element of the sequence led to the completion of the LC/CMI in a significantly shorter period of time. As a result, these findings may suggest motivation, either on the part of the probationers or the probation officers, to encourage participation in the programming that has been approved by the judge. The implications of this could be that treatment assigned by the judge is more effective in overall compliance, and therefore, the possibility of reducing the number of reoffenders may be a benefit.

Overall, the results of this study suggest that it could potentially be highly beneficial to have a judge assign probationers to treatment programs that have been specifically tailored to their individual needs so that the individuals are receiving treatment in a timely manner. In doing so, the county could benefit from cost savings by having better developed programs that are more frequently utilized. Additionally, with the timeliness of the tailored treatment assignments,

it could be expected that more probationers would follow through with their treatment, and therefore lower the likelihood of re-offense and ultimately reduce the overall crime rate in Yamhill County. Ultimately, these positive outcomes could be better understood with the help of additional research at a greater depth and with a longer timeline in which to examine the data.

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Mahoney, M. (2013). Procedural justice and the judge-probationer relationship in a co-occurring disorders court. *Journal of Law and Psychiatry*, <http://dx.doi.org/10.1016/j.ijlp>. 2013. 11.022.

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Appendix A

Informed Consent

The Effectiveness of an Evidenced-Based Decision Making Program in Criminal Justice Systems
A study is being conducted on the effectiveness of the new evidenced-based decision making initiative that is being implemented within the Yamhill County Department of Corrections.

Extreme caution will be used to protect your privacy, and you will not be identified in any way. Your anonymity is guaranteed in responding, in later analysis of your responses, and in any presentation of the research.

The information contained in your file that is relevant to the evidenced-based program is being made available for the purpose of this study. You are not required to participate in this study. If you elect to participate, you are free to change your mind and withdraw from the study at any time.

Any inquiries concerning the procedures of this study can be discussed with the researcher, Tashina Keith, MA, Graduate Department of Clinical Psychology, George Fox University, Newberg, OR. The guidelines for protecting the rights of human participants that are in operation in this study may be found in the APA Code of Ethics.

Tashina Keith, MA
George Fox University
Graduate Department of Clinical Psychology
Newberg, Oregon 97132

I have read and understand the above statement and give my voluntary consent for participation in the research project entitled: *The Effectiveness of an Evidenced-Based Decision Making Program in Criminal Justice Systems*. (Please sign below.)

Participant's Signature

Date

Appendix B**Curriculum Vitae****Tashina L. Keith**

EDUCATION

2010 to 2015	George Fox University Doctor of Psychology in Clinical Psychology	Newberg, Oregon
2010 to 2012	George Fox University Master of Arts in Clinical Psychology	Newberg, Oregon
2008 to 2010	California Baptist University Master of Arts in Forensic Psychology	Riverside, California
2004 to 2008	Northwest Nazarene University Bachelor of Arts in Psychology Minors: Criminal Justice, Political Science	Nampa, Idaho

PROFESSIONAL AFFILIATION

2008 to Present	American Psychology-Law Society <i>Student Member and Campus Representative 2012-2013</i>
2010 to Present	American Psychological Association <i>Student Member</i>
2012 to Present	Society of Clinical Child and Adolescent Psychology <i>Student Member</i>

DOCTORAL LEVEL TRAINING EXPERIENCE

July 2014 to Jul. 2015	State Hospital South <i>Psychology Intern</i> Supervisor: Richard Baker, Ph.D. Setting: <i>State Hospital South is a 136-bed inpatient psychiatric facility providing assessment, diagnosis, treatment and psychosocial rehabilitation services to mentally ill members of Idaho communities whose care could not be appropriately provided in a less restrictive setting. Individuals served by SHS range in age from 10 years through adulthood and meet legal and departmental criteria for hospitalization.</i>	Blackfoot, Idaho
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Main Responsibilities: Provided psychological services to severely mentally ill individuals. Responsible for psychodiagnostic and cognitive testing requested by the patient's treating psychiatrist to aid in treatment planning. Forensic evaluation for the purpose of determining competency to stand trial and competency restoration treatment was regularly conducted. Completed malingering testing as needed. Participated in multidisciplinary treatment team meetings to discuss patients' treatment needs and progress. Led weekly stress management, grief and loss, and women's trauma groups for patients on various hospital units. Aided in supervision of university practicum students. Participated in weekly individual supervision with a licensed clinical psychologist.

Jan. 2015 to Jul. 2015

Allies Family Solutions

Pocatello, Idaho

Psychology Intern

Supervisor: Cheri Atkins, Ph.D.

Setting: *Allies Family Solutions is a community-based mental health clinic and developmental disabilities agency. Allies offers a wide range of services to a diverse population. Psychological assessment, individual therapy, family therapy/Parent Child Interaction Training, and couples counseling are offered through the mental health clinic. For the more chronically mentally ill, psychosocial rehabilitation is offered in addition to counseling.*

Main Responsibilities: Conducted psychological assessment primarily for the purpose of determining cognitive deficiencies and learning disabilities in children and adolescents. Provided evidence-based treatments to children and their families in the form of individual and family therapy. Provided psychological assessment services at the local juvenile detention center to aid in the treatment of incarcerated adolescents. Attended weekly individual supervision with a licensed clinical psychologist and weekly organization-wide staff meetings.

July 2014 to Jan. 2015

Pocatello Family Medicine

Pocatello, Idaho

Psychology Intern

Supervisor: John Dickey, Ph.D.

Setting: *Pocatello Family Medicine is the principal outpatient teaching clinic for the family practice residency program at Idaho State University. The clinic is multidisciplinary in nature, also serving as a training site for clinical psychologists, clinical pharmacists, nurses, and diet/nutrition consultants. The clinic provides primary medical care, including psychological services,*

to a diverse population of individuals, families, children, teens, and seniors from all over Southeastern Idaho.

Main Responsibilities: Provided psychological services to patients between the ages of 5 and 70. Conducted regular ADHD assessments, as well as other psychodiagnostic and learning disability evaluations with accompanying reports. Maintained long and short term individual therapy client load with patients with a wide array of mental health diagnoses. Completed clinical interviews, diagnosis, treatment planning, intervention, and termination with therapy patients. Consulted with primary care physicians regarding best treatment for our patients. Attended weekly individual supervision with a licensed clinical psychologist. Observed and participated in designated examiner evaluations to determine qualification for civil commitment of patients on the behavioral health unit of a local hospital.

Sept. 2013 to June 2014

Oregon State Hospital

Salem, Oregon

Pre-Intern Therapist

Supervisor: Kim McCollum, Psy.D.

Setting: *Oregon State Hospital is a 704 bed inpatient psychiatric hospital serving individuals who have been civilly or forensically committed for treatment. Civil commitment patients have been found by the court to be a danger to themselves or others, or unable to provide for their own basic needs, such as health and safety, because of a mental disorder. Forensic commitment patients are individuals who have been charged with or convicted of criminal behavior related to their mental illness. Forensic patients are referred to Oregon State Hospital for treatment to become competent to stand trial or are admitted after they have been found guilty except for insanity.*

Main Responsibilities: Provided psychological assessment and evaluation for patients court ordered to the hospital pursuant to Oregon Law ORS 161.370, indicating the patient's inability to aid and assist in his or her own defense. Conducted assessments to determine special needs or considerations in treatment planning for the purpose of competency restoration and produced accompanying reports. Assessments also served to assist forensic evaluators in determining a patient's level of competency to stand trial. Provided weekly individual legal skills training with patients requiring focused attention. Co-facilitated legal skills training groups. Participated in interdisciplinary team meetings with nurses, psychiatrists, social workers, and case workers to collaborate on

interventions and discuss progress of clients on our unit. Observed and discussed evaluations performed by Forensic Evaluation Services. Attended weekly individual supervision and weekly group supervision and didactic training with licensed clinical psychologists.

Aug. 2012 to June 2013

Lutheran Community Services Northwest McMinnville, OR
Practicum II Therapist

Supervisor: Joshua Payton, Psy.D.

Setting: *Lutheran Community Services Northwest's (LCSNW) McMinnville office is a non-profit, outpatient community mental health facility serving children, adults and families throughout Yamhill County. LCSNW is an Oregon Health Plan provider, catering to low-income children and families. Counseling services, immigration counseling and advocacy, anger management and domestic violence evaluation and classes, and parenting classes are some of the primary services provided at LCSNW's McMinnville office.*

Main Responsibilities: Provided psychological services, including individual, couples, group and family psychotherapy and psychological assessment. Provided services to clients between the ages of 5 and 65. Psychotherapy included diagnostic interview, diagnosis, treatment planning, intervention, and termination with the primary therapeutic approach being Cognitive Behavioral Therapy. Co-facilitated a weekly domestic violence group, and conducted court-ordered domestic violence evaluations. Psychological assessments performed included the use of cognitive/intellectual, personality, and behavioral measures, depending on the referral question. Attended weekly individual supervision with a licensed clinical psychologist and weekly organization-wide staff meetings focused on training and program development.

Sept. 2011 to July 2012

Clark County Juvenile Court Vancouver, Washington
Practicum I Therapist

Supervisors: Shirley Shen, Ph.D., Christine Krause, Psy.D.

Setting: *Clark County Juvenile Court is a restorative juvenile justice program serving teens charged with civil and criminal offenses. The Clark County Detention Center is an 80-bed facility consisting of four living units housed within the juvenile court. The detention center houses juvenile offenders unable to be in the community who are awaiting court dates or serving sentences received in court.*

Main Responsibilities: Provided short term therapy to adjudicated teens serving time in the detention center. Facilitated weekly group therapy sessions with an average of eight members per session. Provided psychological assessment as needed. Psychological assessments performed included the use of cognitive, personality, behavioral, achievement, and projective measures, depending on the referral question. Worked with the Domestic Minor Sex Trafficking program serving youth who have self-disclosed, or been assessed as being at risk or involved in sex trafficking. Attended weekly individual and group supervision and didactic trainings with two licensed clinical psychologists. Recorded and presented recordings of therapy sessions for evaluation by peers and supervisors.

Jan. 2011 to May 2011

George Fox University GDGP

Newberg, Oregon

Pre-Practicum Therapist

Supervisors: Mary Peterson, Ph.D., Rachel Mueller, Psy.D.

Main Responsibilities: Provided individual psychotherapy to two undergraduate students within a university counseling center setting. Psychotherapy included diagnostic interview, diagnosis, treatment planning, intervention, and termination with the primary therapeutic approach being Client Centered Therapy. Attended weekly group supervision with an advanced graduate student who was supervised by a licensed clinical psychologist. Reviewed videotaped sessions and presented cases.

MASTERS LEVEL TRAINING EXPERIENCE

Sept. 2009 to Apr. 2010

Riverside County Probation Department Riverside, California

Practicum Student

Supervisor: Ana Gamez, Ph.D.

Setting: *The Van Horn Youth Center is a 44-bed boot camp style residential treatment facility for boys aged 13 to 18, provided and administered by Riverside County Probation Department. Cadets in the program have been ordered to participate in the program by the Juvenile Courts of Riverside County.*

Main Responsibilities: Provided assistance at Van Horn Youth Center through the Riverside probation department. Assisted students and teachers in the classroom and on the units. Provided educational assistance to students in need of individualized educational services. Worked with staff to supervise cadets in their

daily activities. Provided mentoring to cadets as requested by individuals and staff.

UNDERGRADUATE LEVEL TRAINING EXPERIENCE

Sept. 2007 to Dec. 2007 **Snake River Correctional Institution** Ontario, Oregon
 Supervisor: Brad Holt, Ph.D.
Setting: *SRCI is the largest prison in Oregon with 2,336 medium security beds, 154 minimum security beds and 510 Special Housing beds (e.g. Administrative Segregation, Disciplinary Segregation, Intensive Management, and Infirmary). The intensive management unit (IMU) is designated for maximum security inmates who demonstrate the need for maximum custody housing by demonstrating behaviors that cannot be controlled in other housing such as high severity and/or chronic misconduct sanctions, escape activity, or security threat group activities causing serious management concerns.*

Main Responsibilities: Worked alongside the Intensive Management Unit supervisor. Observed individual client therapy and psychiatric sessions. Attended individual treatment planning sessions with clients and case managers. Observed and helped lead group therapy sessions.

TEACHING EXPERIENCE

Aug. to Dec. 2013 George Fox University Newberg, Oregon
Graduate Teaching Assistant for Paul Stoltzfus, PsyD
 Course: Forensic Psychology
Main Responsibilities: *Assisted professor in structuring the class and developing the syllabus. Researched and provided resources for each class session. Graded students' reports and assignments. Co-facilitated group discussions and taught a lecture on psychopathy.*

Oct. 2013 George Fox University Newberg, Oregon
Guest Lecturer
 Course: Introduction to Psychology Topic: Operant Conditioning

Mar. 2013 George Fox University Newberg, Oregon
Guest Lecturer
 Course: Social Psychology Topic: Aggression

- Oct. 2012/ Mar. 2013 Lutheran Community Services McMinnville, Oregon
Community Outreach Program Instructor
Course: Parenting Traumatized Children
Main Responsibilities: *Co-taught fall and spring sessions of a class designed for parents and foster parents of children who have experienced traumatic events, particularly physical or sexual abuse and neglect.*
- Aug. to Dec. 2012 George Fox University Newberg, Oregon
Graduate Assistant for Kristina Kays, PsyD
Course: Advanced Counseling
Main Responsibilities: *Supervised a group of four undergraduate students. Taught therapy skills, led mock therapy activities, reviewed and graded mock therapy videos. Provided and received feedback individually and as a group. Took part in process meetings with supervisor and other graduate assistants.*

RESEARCH EXPERIENCE

- Oct. 2013 George Fox University
Research Assistant
Title: *Impact of mild to moderate hearing loss on memory*
Supervisor: Heather Paige-Demming, M.A.
- April 2013 George Fox University
Consultation Team
Title: *Psychology in palliative care: A consultation service*
Supervisor: Marie-Christine Goodworth, Ph.D.
Presented at the APA 2013 Annual Convention
- April 2010 California Baptist University
Master's Thesis
Title: *Edward Gein: An Analysis of Antecedents of Deviant Behavior*
Supervisor: Gary Collins, Ph.D.
- Sept. 2008 to Apr. 2010 California Baptist University
Research Team
Title: *Job Satisfaction, Cynicism, and Humor Styles among Law Enforcement Officers*
Supervisor: Ana Gamez, Ph.D.

Sept. 2007 to May 2008 Northwest Nazarene University
Research Assistant
Title: *Educational Motivation of Latin American Adolescents.*
Supervisor: Julie Au, Ph.D.

April 2006 Northwest Nazarene University
Undergraduate Thesis
Title: *Presidential elections: The impact of gender on votes*
Supervisor: Glenna Andrews, Ph.D.

DISSERTATION

The Effectiveness of an Evidence-Based Decision Making Program in Criminal Justice Systems
Supervisor: Kathleen Gathercoal, Ph.D.

Description of Research: *The Yamhill County Department of Corrections is one of seven counties in the nation that has been selected by the National Institute of Corrections to implement an evidenced-based practice and decision making program within their criminal justice system. As part of the evidenced-based program, every individual who is arrested and placed on probation goes through a case analysis assessment that is used to track their progress and recidivism rates throughout the probation process. This study examines the effectiveness of the case analysis process at reducing system costs and improving probation outcomes, including pretrial misconduct and post-conviction reoffending.*

PUBLICATION

Kays, K., Keith, T., & Broughal, M. (2012). Best practice in online survey research with sensitive topics. In Sappleton, N. (Ed.) *Advancing Research Methods with New Technologies*. UK: Information Science Reference.

Description of Research: *This chapter addresses the main considerations in online survey research with sensitive topics. Advances in technology have allowed numerous options in addressing survey design, and thus created a need to evaluate and consider best approaches when using online survey research. This chapter identifies subjects such as item non-response in online survey research. In addition, this chapter includes a description of the differences in researching non-sensitive topics versus sensitive topics, and then lists a number of best practice strategies to reduce item non-response and improve the quality of survey data obtained. Included are specific considerations for defining sensitive topics and addressing gender differences when surveying more sensitive material.*

PROFESSIONAL PRESENTATION OF RESEARCH

Krusezwski, A., McConnell, C., **Keith, T.**, Hovda, S., Gathercoal, K. (2013). *Fees paid and therapeutic satisfaction in community mental health*. Poster presented at the American Psychological Association annual conference. Honolulu, Hawaii.

Hovda, S., Hottenstein, J., **Keith, T.**, & Goodworth, M.C. (2013). Psychology in palliative care: A consultation service. Poster presented at the American Psychological Association annual conference. Honolulu, Hawaii.

Paige-Demming, H., Lloyd, C, Kunze, K., **Keith, T.**, Krusezwski, A., & Gathercoal, K. (2012). *Mentoring patterns for graduate and undergraduate students: A validation of the network-mentoring model*. Poster presented at that Oregon Psychological Association annual conference. Portland, Oregon. Received the Education and Systems Award.

Keith, T. (2010). *Edward Gein: An Analysis of Antecedents of Deviant Behavior*. Presentation given at the California Baptist University Forensic Masters Candidates Spring Colloquia. Riverside, California.

Keith, T. (2006). *Presidential Elections: The Impact of Gender on Votes*. Poster presented at the Northwest Nazarene University Psychology Research Forum. Nampa, Idaho.

UNIVERSITY INVOLVEMENT

2012 to 2013	George Fox University Graduate Department of Clinical Psychology <i>Admissions Committee Member</i>
2010 to 2013	George Fox University Graduate Department of Clinical Psychology <i>Admissions Student Interviewer</i>
2010 to 2011	George Fox University Graduate Department of Clinical Psychology <i>Peer Mentor</i>
2008 to 2010	California Baptist University <i>Forensic Research Team</i>