

EFFECTS OF OCCUPATIONAL EDUCATION PROGRAMS OFFERED BY THE
OKLAHOMA DEPARTMENT OF CAREER AND TECHNOLOGY EDUCATION,
SKILLS CENTERS DIVISION, ON THE RECIDIVISM RATE OF SELECTED GROUPS
OF RELEASED OFFENDERS IN OKLAHOMA

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CHAPTER I

INTRODUCTION

It is unanimously conceded that idleness in prisons breeds disorder and aggravates criminal tendencies. If there is any hope for reformation and rehabilitation of individuals convicted of crimes, it is to be founded upon attainment, by the prisoner, of skills and knowledge required by industry to pursue a useful occupation. This was the rationale given by the U.S. Congress' Senate Judiciary Committee in 1930, authorizing prison industries within the federal government (*The Congressional Record*, 1930).

The United States prison system of today assumes the task of ending the pattern of criminal activities that are universal to its members. Unemployment, low level of education, low self-esteem, and lack of employable trade skills are some of the main factors that lead directly to the incarceration of most prisoners. According to the 2004 Bureau of Justice statistics, Oklahoma ranks fourth nationally in total incarceration numbers with 649 per 100,000, and ranks first in female incarceration with 129 per 100,000 of the population. (*Skills Centers Information Guide*, 2007).

Offenders often emerge from years of incarceration with little preparation for life outside prison walls. Besides having inadequate job skills, they may lack the ability to set and achieve goals, to get along with others or to manage their money. Fortunately, today this situation is becoming less common, as departments of corrections have begun

to recognize the vital role career and technical training can play in inmate rehabilitation (Schierhorn, 2000).

Problems in the Prison Environment

While career and technical training can aid inmate rehabilitation, it can be hampered by several aspects of the prison environment. Harer (1995) reported that as early as 1958, Sykes identified what he called five pains of imprisonment: “isolation from the larger community; lack of material possessions; blocked access to heterosexual relationships; reduced personal autonomy; and reduced security” (p. 3). Harer also reported that Sykes declared that being deprived as identified by the five pains promotes what is currently defined as *prisonization*, or alienation from prison staff and management, and from the larger society. Irwin and Cressey (1962) added that criminologists have argued that many inmates “bring to prison a commitment to criminal subcultures and criminal norms” (p. 1). Several specialists have agreed with this view of prison culture (eg. Kassebaum, 1971; Thomas & Foster, 1972; Thomas & Peterson, 1977; Thomas & Poole, 1975). Harer (1995) agreed that prison environment is unfavorable and asserted that the deprivations of imprisonment and the growth of inmate subcultures both favored “a normative orientation hostile to prison management and supporting continuation of criminal behavior after release from prison” (p.3).

Recidivism and Inmate Training Programs

Criminal behavior that continues after release from prison gives rise to the phenomenon known as *recidivism*. According to the National Institute of Justice, recidivism is one of the primary concepts in the American criminal justice system. It

refers to a former felon's relapse into criminal activities, after receiving prison time or undergoing intervention for a previous convicted crime (Bureau of Justice Special Reports, 1994). The National Institute of Justice confirmed that after three years of being released from prison, 52% of released inmates in a 1994 study were back in prison either because of a new crime or because of a parole violation. The post-incarceration recidivism rate was strongly related to arrest history: within three years of their incarceration, 41% of ex-felons with one prior arrest were re-arrested, but 82% of those with more than 15 prior arrests (18 % of all released inmates) were re-arrested (Bureau of Justice Special Reports, 1994).

Prisons of today are challenged to rehabilitate those individuals placed in their care and try to prevent recidivism. However, if while incarcerated, the inmates can learn a marketable employment trade, work ethics, and social skills, they might be able to return to society, secure meaningful employment, and avoid the pitfalls that would return them to prison. This possibility has led to the implementation of career and technical education (CTE) programs for prison inmates.

Many studies have supported this rationale and demonstrated positive effects of vocational/career/technical education upon the rate of recidivism. Extensive research and studies have been conducted to prove the validity and positive effects of educational and vocational programs for incarcerated individuals. "Research indicates that prison educational and vocational programs can improve behavior, reduce recidivism, and increase employment prospects upon release" (www.reentrypolicy.org, 2012). Reduction of recidivism is one of the most important results of offender training. Recidivism rates of vocational and job training programs have "been found to be 20% to 60% lower than

those of nonparticipants” (www.reentrypolicy.org, 2012). The results of the various studies are encouraging and hopefully motivating. All evidence points to the same conclusion, “inmates who complete programs are more successful after release than those who do not complete programs” (Florida Department of Corrections, 2012).

The Florida Department of Corrections analyzed 18,414 inmates released from prison during the 1996-97 fiscal year using a 24-month follow-up period. The resulting data reflected positively on vocational programs and training, indicating that almost 75% of vocational program completers were successful after release (Florida Department of Corrections, 2012). According to the analysis, the “recidivism rate for the 1,793 inmates who earned a vocational certificate was 26.0% compared to 35.4% for those who did not complete a program,” making completers “14.6% less likely to recidivate” whereas inmates who only completed a GED are only “8.7% less likely to recidivate” (Florida Department of Corrections, 2012). The reduction of recidivism “translates into approximately 169 inmates not returning to prison,” thus allowing the taxpayers of Florida to “avoid the cost of their re-incarceration for one year” and an estimated “cost savings of approximately \$3.2 million” (Florida Department of Corrections, 2012). Not all social and ethnic groups are equal in terms of incarceration and recidivism. Younger males, black offenders, and prior recidivists traditionally have higher recidivism and failure rates. “Vocational program impacts are found even among offender groups that normally have higher recidivism” (Florida Department of Corrections, 2012).

For many incarcerated individuals, educational success is something that had never before been achieved or accomplished. “Successfully completing a class...can help prisoners recognize that hard work leads to positive results” (Contardo & Erisman,

2005, p. 7). This resulting change in attitude can prove valuable after an individual is released and returns to society (Contardo & Erisman, 2005). Some critics have argued that inmates who pursue education are more motivated than inmates who choose not to attend educational programs and therefore less likely to recidivate regardless of whether they received education or not. Recently, studies have been performed trying to account for this effect by comparing inmates with similar backgrounds and motivation levels who participated in educational programs and those who did not. The study tracked over 3,000 ex-offenders from three states for a period of 36 months (Contardo & Erisman, 2005). The study concluded that “former prisoners who had participated in education programs were 29% less likely to have been sent back to prison at the end of the three year study” (Contardo & Erisman, p. 9). “Findings such as these provide evidence that the education itself, rather than the personal characteristics of the prisoners who take advantage of educational opportunities, leads to lower recidivism rates” (Contardo & Erisman, p. 9).

Research conducted by the Virginia Department of Correctional Education supported the conclusion that vocational education and training has a positive effect on recidivism rates. According to the study, 49.10% of inmates who had not participated in any educational programs were re-incarcerated, 38.2% who were enrolled in a program but did not complete were re-incarcerated, and only 19.1% of completers were re-incarcerated (Gordon & Weldon, 2003). This study showed that recidivism is drastically reduced when inmates complete educational programs, but recidivism is also reduced when they participate without completing. “Education is a change agent; incarceration is meant to change attitudes” (Gordon & Weldon, p. 4).

A 2007 study was conducted in Colorado to research the effects of educational programs for incarcerated mothers. Researchers found that the reduction of recidivism rates were not the only benefits when women participate in educational and vocational programs (*Recidivism Rates of Women Offenders and Participation of Education Programs in Prisons*, 2008). The study concluded with the following:

Educational programs in federal institutions have shown great promise. Prison administrators have reported distinctive, positive behavior changes among inmates. Consequently, inmates are posing less threat to prison officers. In addition, it has been observed that disciplinary problems among inmates who take part in educational programs tend to decrease. (p. 4)

Overall, these studies seem to conclude the same thing: educational and vocational training are beneficial to not only the inmate but to society itself. The Washington State Institute for Public Policy (WSIPP) conducted a systematic review of educational and vocational programs in 2006. It was concluded that “vocational training programs delivered in prison reduced recidivism an average of 9%” (Przybylski, 2008, p. 40). This reduction in recidivism determined that “prison-based vocational training programs provided an average of \$5.76 in taxpayer benefits for every \$1 of cost” (Przybylski, p. 40). It was further concluded that “vocational training increased the employment rates and reduced recidivism rates of program participants while correctional industries and other work programs did not” (Przybylski, p. 40). Gordon and Weldon (2003) concluded, “When society carefully considers the average cost to provide quality education against the cost of keeping an inmate adequately housed for additional years in

a state or federal institution, the question becomes, how can we afford not to educate” (p. 201).

These studies have demonstrated that trade skills and education experience combined with life and employability skills can aid many inmates in avoiding the barriers to successful reintegration. With little noticeable difference across these studies, the recidivism rate is reduced dramatically for those inmates who participate in and graduate from a vocational/technical training program while incarcerated. The recidivistic rate for participates has been shown to be as much as 17.25% less than for non-participants (Gordon & Weldon, 2003).

Oklahoma’s Skills Centers and Inmate Education Programs

In Oklahoma, the Oklahoma Department of Career and Technology Education (ODCTE) Skills Centers address the task of providing vocational/technical education opportunities to the state’s incarcerated. Today the Oklahoma Department of Corrections, (ODOC) has a daily incarceration of over 25,000, and approximately 25,000 additional offenders on probation. The primary mission of the ODCTE CareerTech Skills Centers is to prepare inmates for success in the work place and their community. The CareerTech Skills Centers began operations in February, 1971, as an inmate training division of what was then called the Oklahoma Department of Vocational and Technical Education. In 1971, the Oklahoma Department of Corrections incarcerated approximately 2,500 offenders, of which 17 completed vocational training programs (2010 Skills Centers Facts at a Glance). The Skills Centers system has evolved from a few inmate-training programs in fiscal year 2003-04, to a statewide system consisting of 2,086 students served in 59 programs, with an average daily enrollment of 935 students.

In 2010, the CareerTech Skills Centers division operated 14 campuses: three in juvenile facilities, three at community correction centers, and eight in Oklahoma State Correctional Facilities. For every Oklahoma tax dollar spent on Skills Centers operations and programs, there is a Return On Investment (ROI) of at least \$3.60 in five years (2010 Skills Centers Facts at a Glance). This ROI comes from improved employability of inmates who participate. It is the mission of the CareerTech Skills Centers to assure that, while incarcerated, Oklahoma inmates are given the opportunity to take advantage of CTE programs designed to teach marketable trade skills that increase job opportunities upon release. The CTE programs offer other valuable skills as well. Students are instructed in a variety of skills during the educational experience offered in Skills Centers. “SCSS plays a vital role in “workforce recovery” by preparing skilled workers to meet employment needs. Contrary to general perception, at least 95% of incarcerated offenders are released from prison and return to local communities” (Skills Centers Information Guide, 2007, p.2).

In Skills Centers programs inmates are taught to be self sufficient, act as team players, and develop social interaction skills, which many have never been taught. Along with trade skills, instruction in employability skills enhances the inmate’s self-perception through development of interpersonal communication skills, self-discipline, integrity, punctuality, and pride in performance. Together, these characteristics can affect not only inmates’ employability, but also every aspect of their lives.

CTE programs offered to Oklahoma offenders while incarcerated aim to reduce recidivism rates by providing inmates with legitimate trade skills, which they can use to gain meaningful employment upon release from prison, along with skills required for

success outside the prison environment. As an employee of the Oklahoma Department of CareerTech, Skills, Centers Division, since 1999, this researcher has personally known numerous individuals in the prison system who have returned to prison only to find themselves serving second and third prison sentences due to continued criminal activity and lack of employable skills. It has been this researcher's professional experience that the CTE programs for incarcerated offenders not only provide employable skills, but can also reduce the occurrence of negative offenses committed by inmates enrolled in them. As a professional judgment, this is directly related to the programs' positive effect on the self-esteem of inmates, therefore reducing negative behaviors. It appears that inmates who receive CTE training have the opportunity to become self-supportive individuals who develop marketable job skills for life after incarceration and become productive members of society.

Some evidence supports a positive view of the outcomes of the Skills Centers CTE programs in Oklahoma. According to third party analysis, survival rate for male adult Skills Center completers was 78.8% after five years of freedom, compared to 69.6% for a matched sample taken from the general prison population (*SCSS Information Guide*, 2007). This finding fits well with general research indicating that inmates who participate in prison CTE training courses are less likely to recidivate: i.e., to be arrested and prosecuted for felonious offenses within three years of being released.

However, while many studies have demonstrated that positive affects that CTE programs have in lowering recidivism, systematic research has not been conducted in Oklahoma. The Oklahoma CareerTech Skills Centers programs are well developed and have compiled a significant database on the state's prison inmates, yet to date only

limited effort has been made to use this database to examine and describe in detail the effects of the Skills Centers programs on Oklahoma's incarcerated criminal offenders. This situation provided impetus and purpose for this study.

Problem Statement

Oklahoma's incarceration rates are proliferating; the state is number three in the nation in male incarceration and number one in female incarceration, and the number of offenders entering the State of Oklahoma Department of Corrections is persistently escalating (Oklahoma Department of Corrections, 2010). At the same time, Oklahoma state budgetary resources continue to decline due to the current economy of recession, making it difficult to address and perhaps decrease the State's incarceration problem. Lack of funding for CTE programs that teach inmates personal and technical skills in the prison system is depriving many offenders of the opportunity to learn a marketable employment trade necessary to find suitable and legal employment once released from prison and thus potentially reduce recidivism in the state.

The problem for this study is that the effect of intervention in the form of CTE training for Oklahoma's targeted incarcerated populations is not fully understood and systematically applied to address the problem of recidivism in the state. CareerTech and the Oklahoma Department of Corrections (ODOC) records contain a wealth of data that can be used to examine CTE training of the State's prison system, but such analysis has not been done. This lack of use of available data prevents targeting of Skills Centers efforts for maximum positive effects with the State's scarce resources.

By using the State's existing data to identify which CTE programs achieve the greatest reduction in recidivism, and what demographic groups contribute most to the recidivism increase, targeted CTE implementation can be developed which could maximize Oklahoma's limited budgetary resources, control the State's rate of recidivism, and increase the return on investment of Oklahoma taxpayer resources.

Purpose of Study

The purpose of this study was to describe the effects of career and technical education (CTE) on recidivism for offenders enrolled in the Oklahoma Department of Corrections CareerTech Skills Center School Systems (SCSS) programs.

Specifically, the study mined existing CareerTech and ODOC data to (a) compare the recidivism rate of inmates who participate in CTE programs while incarcerated with those who do not; (b) compare recidivism rates for various CTE programs; and (C) compare recidivism rates for CTE participation from selected demographic groups.

Research Questions

This study was guided by the following research questions:

1. What is the rate of recidivism for offenders who participate in Skills Centers programs while incarcerated in Oklahoma?
2. Is there a difference in recidivism rates among CTE programs offered to offenders while incarcerated?
3. Is there a difference in recidivism rates of offenders aged 18 to 29 who participate in CTE programs while incarcerated and offenders age 30 and above?

4. Is there a difference in recidivism rates of offenders who participate in CTE programs who have attained a GED or high school diploma and those offenders who have not?
5. Is there a difference among races in recidivism rates of offenders who participate in CTE programs?
6. Is there a difference between genders in recidivism rates of offenders who participate in CTE programs?
7. Is there a difference in recidivism rates of offenders who participate in CTE programs offered at community and minimum security levels with the Oklahoma Department of Corrections?
8. How do recidivism rates found in this study compare to national rates?

This study did not make a direct comparison of the recidivism rates of Skills Centers graduates to that of released offenders for the state of Oklahoma. The population for this study was deemed recidivists if they were returned to the Oklahoma prison system for any reason. Failure while on Oklahoma probation and parole system as well as commission and conviction of a new crime was included in this study.

The research questions were addressed by obtaining and data mining graduate information from the CareerTech Student Records system and the ODOC public records. This study was quantitative and *ex post facto* in design; it used descriptive statistics for data analysis. Data retrieved were compared with the national recidivism rate as provided by the Federal Bureau of Prison and Oklahoma Department of Corrections to

describe the effects of CTE programs upon the rate of recidivism for the demographic sample in Oklahoma. Table 1 lists the data sources and data analysis techniques for each research question in this study.

Table 1

Research Questions, Data Source, and Statistical Tools for this Study

Research Question	Data Source	Planned Analysis
1. What is the rate of recidivism for offenders who participate in Skills Centers programs while incarcerated in Oklahoma?	CareerTech Records System ODOC Records Public Domain	Descriptive Statistics
2. Is there a difference in recidivism rates within Career and Technical programs offered to offenders while incarcerated?	CareerTech Records System ODOC Records Public Domain	Descriptive Statistics
3. Is there a difference in recidivism rates of offenders age 18 to 29 who participate in CTE programs while incarcerated and offenders age 30 and above?	CareerTech Records System ODOC Records Public Domain	Descriptive Statistics
4. Is there a difference in recidivism rates of offenders who participate in CTE programs who have attained a GED or high school diploma and those offenders who have not?	CareerTech Records System ODOC Records Public Domain	Descriptive Statistics
5. Is there a difference among races in recidivism rates of offenders who participate in CTE programs?	CareerTech Records System ODOC Records Public Domain	Descriptive Statistics

6. Is there a difference between genders in recidivism rates of offenders who participate in Career and Technical Education programs?	CareerTech Records System ODOC Records Public Domain	Descriptive Statistics
7. Is there a difference in recidivism rates of offenders who participate in CTE programs offered at community and minimum security levels with the Oklahoma Department of Corrections?	CareerTech Records System ODOC Records Public Domain	Descriptive Statistics
8. How do recidivism rates found in this study compare to national rates?	CareerTech Records System ODOC Records Public Domain Federal Bureau of Prisons	Descriptive Statistics

Delimitations, Limitations and Assumptions

The following delimitations and limitations were accepted for this research:

- Offender participation in prison programs other than CTE programs was not considered.
- Offender internal motivation was not considered.
- No direct contact with the subjects was made for any follow-up. Conclusions were drawn solely from existing quantitative data.
- Subjects of the study were tracked for no more than three years following release date.
- The effects of post-release program participation or non-participation were not taken into consideration.

- Marital status, family support, economic status, or pre-incarceration histories were not considered or evaluated.
- This study was limited to the State of Oklahoma. If Oklahoma releases recidivated inmates to another state, this information would have been unknown to the researcher, yet may have affected true recidivism rates.
- The study was limited to inmates released between 2003 and 2008.

The delimitations and limitations affected the scope of conclusions that could be drawn from the study and the generalizations of its findings. The study was essentially a “snapshot” of a limited group of inmates within a limited geographical location and a limited time period.

The following assumptions were accepted for this research:

- The researcher assumed that the cost of effective rehabilitative programming is a significant social objective for corrections.
- The researcher assumed that all data recorded in the ODCTE and data reports by other public sources in this study are complete and accurate.

Definitions of Selected Terms for this Study

The following terms and definitions were used within this research:

Conceptual Definitions

1. Academic Training: Trade-specific educational subjects such as trade skill math, assigned technical readings, and blueprint readings.
2. Behaviorism : A learning theory based on observable and recognizable changes in a person's behavior.
3. Career and Technical Education (CTE): Formerly vocational education. Career and technical skills are the focus of the curriculum that is experientially based to demonstrate how education relates to the workplace and life (National Council for Accreditation of Teacher Education, 2001).
4. Constructivism: A learning theory based on the principle that human beings construct their individual perspective of the world and how it relates to them.
5. Curriculum: Courses, experiences, and assessments necessary to prepare candidates to teach or work with students of a particular age or at a specific subject level (National Council for Accreditation of Teacher Education, 2001).
6. Employability Training: Training that enables the ex-offender to seek and secure employment upon release.
7. Laboratory Training: Training consisting of actual hands on learning performed in shop areas or actual on-the-job-training.
8. Life Skills: Designed to address skill deficiencies that might hinder offenders' ability to function successfully in everyday life.

9. Non-participant: An incarcerated individual who has not enrolled or participated in a career and technical education program.
10. Recidivism: The prevalent use of the term “recidivism,” and the one used in this study refers to the “recurrence of crime by an individual known to have previously committed a crime” (Tewksberry, 1997, p. 476). This “recurrence” is qualified herein as ex-offenders who return to prison for committing new crimes or for parole or probation violations, or for simple re-arrest within three years of release. (MTC Institute, 2003, p. 1).

Operational Definitions

1. CareerTech Skills Center (CTSC): A division of the Oklahoma Department of Career and Technology Education (ODCTE) responsible for providing technical training to incarcerated individuals preparing them for return to the workforce and their communities (Oklahoma Department of Career and Technology Education).
2. CTSC Graduate: An individual completing program requirements for an Oklahoma CareerTech Skills Center course
3. CTSC Instructor: A person teaching technical skills to incarcerated students, preparing them for reentry into the workforce (Oklahoma Department of Career and Technology Education).

4. Ex-Felon: An individual having been convicted of a felonious offense within the State of Oklahoma and having served and discharged a prescribed sentence by the Oklahoma Court System.
5. High Risk Offender: A convicted felon between the ages of 18 and 35 years (U.S. Department of Justice, 2006).
6. Juvenile Offender: A convicted felon whose age is between 7 and 18 years (Bohm & Haley, 1997, p. 435).
7. Minimum Security Level: Minimum security institutions have dormitory housing, a relatively low staff to inmate ratio, and limited or no perimeter fencing. These institutions are work and program oriented and many are located adjacent to larger institutions where inmates help to serve the needs of the larger institutions.(U.S. Bureau of Prisons, 2012)
8. Community Security Level: Community corrections refers to the supervision of criminal offenders in the resident population, as opposed to confining them in secure correctional facilities. (Bureau of Justice Statistics, 2012)
9. Non-Graduate: An individual who enrolled but for any reason did not complete a CareerTech Skills Center course.
10. Offender: An individual incarcerated in the State of Oklahoma, Department of Corrections system at various security levels.
11. Recidivism Rate: Rate at which CTSC graduates return to prison.

12. Sex Offender: A convicted felon imprisoned for the crimes of Sexual Abuse, Child Molestation or Rape or any other sexually-related crime as define by the State of Oklahoma.
13. Youthful Offender: A convicted felon whose age is 18 – 25 years. (Wilkinson, Bucholtz, & Vasquez, 2006).

Theoretical and Conceptual Framework

The theoretical and conceptual frames for this study stem from three primary theories: Behaviorism, Constructivism, and Maslow’s Hierarchy of Needs. The establishment of a theoretical framework to support the concept of rehabilitation of convicted individuals must first look at the philosophical perspectives of Behaviorism and Constructivism. The prison environment is a model application of the theory and philosophy of Behaviorism. As stated by psychologist B.F. Skinner (1974), “The human species like all other species is the product of natural selection. Each of its members is a extremely complex organism, a living system, the subject of anatomy and physiology” (p.37).

Using Behaviorist principles made famous by Skinner, in the prison system, offenders are trained and conditioned to follow rules and directives from prison officials and to obey the underlying penal code of prison society. This is accomplished through a system of reward and punishment. Institutionalization occurs in the prison system when offenders learn the limitations of their prison environment and conform to its rules and organizational structure.

Incarcerated persons lead a highly Behaviorist existence. They are controlled in all aspects of their lives; their lives are under the complete authority and management of prison officials. Inmates are not to question authority of those in power in the prison system; they are to follow orders and any deviation of those orders will result in a loss of privileges. Inmates are to follow a strict set of rules and remain in authorized areas of the institution. Individual movement is only allowed during certain times of the day and at all times under the watchful eye of a gun tower or monitored cameras. An inmate's behavior is under the complete authority and influence of the prison system; the only choice that an incarcerated individual has is to conform to the system or rebel. Good behavior is rewarded, or "reinforced" in Behaviorist terms, with more privileges and reduction of sentence length. Bad behavior is punished by the removal of privileges and restriction of movement. According to Skinner (1974) if individuals have been punished by their peers, they are said to feel shame; if they have been punished by a religious agency, they are said to feel a sense of sin; and if they have been punished by a governmental agency, they are said to feel guilt. If they act to avoid further punishment, they may moderate the condition felt as shame, sin or guilt, but they do not act because of the punishing contingencies to which they have been exposed.

Behaviorism as a learning theory is based on observable and recognizable changes in a person's behavior. At the core of Behaviorism is the belief that a new pattern of behavior will be established from repetition until it becomes an automatic response (Mergel, 1998). Behaviorists' approach to learning is that events in the environment predict a person's behavior, not thoughts, feelings, or other events that take place inside the person. Behaviorism emphasizes basic principles of conditioning,

reinforcement, and punishment to provide explanations of why people behave the way they do and how they choose between different possible courses of action. Operant conditioning is the process, through which a person comes to deal effectively with a new environment. Things in the environment in which a person exists, such as food and water, sexual contact, and escape from harm, are crucial for the survival of the individual. Behaviors that help to produce these objects consequently have survival value. (Skinner, 1974).

The Behaviorist model promotes learning in isolation, memorization of facts, and use of rote memory techniques and requires little independent thought processing as the majority of items to be learned are directed and facilitated by an outside entity. The outcome of Behaviorist learning need only be the expected actions of the subjects (Mergel, 1998). The Behaviorist model experienced by those who are incarcerated, programs prison inmates in a structured type of existence in which all decisions are made for the offender and extremely strict patterns of behavior are taught and reinforced using reward and punishment. The prison arrangement is heavily dependent on the effectiveness of the Behaviorist system. The ratio of offenders to correctional officers is approximately seventy-to one (Mills, 2009). Without the acceptance and effectiveness of the Behaviorist system in prisons, maintaining order and control would be a physical impossibility and could cost many lives of both staff and offenders. Through the process of operant conditioning, desired behavior is rewarded and so becomes more likely to occur. The behavior is said to be strengthened by its consequences, and for that reason, consequences themselves are called “reinforcers” (Skinner, 1974).

Several anecdotal observations from the researcher's professional experience relate the prison environment strongly to Behaviorism. Behavior modification while incarcerated occurs directly in the Segregated Housing Unit or SHU, called "The shoe" by inmates, if offenders do not conform to prison rules regarding their individual or group conduct. Behavior can be appropriately rewarded or punished in the SHU, illustrating Skinner's (1974) explanation that, "[t]he frequency, severity and schedule of punishment generate other aspects of behavior often attributed to feelings or traits of character. In many instances, behavior has both punishing and reinforcing consequences" (p.70). Incarcerates are placed on different levels of security – maximum, medium, minimum, and community work centers – depending on behavior while incarcerated, type of crime, and sentence length. Behavior modification is continually maintained and manipulated through the earned credit level system with a level of one through four, with four being the highest level, allowing more privileges. Privileges are earned through good behavior and outstanding monthly evaluations, based on a day-by-day behavioral account of actions of offenders.

Inmates who learn to function well in a Behaviorist system thrive. They create an acceptable lifestyle to exist in the prison environment. Inmates who do not adapt endure many hardships that eventually produce a change in their behavior: they "lay down" or conform to the system. Institutionalization, or becoming accustomed to prison culture and structure, happens to inmates, very quickly for most. Prison life becomes a highly routine and regimented existence as a prisoner does more time and becomes accustomed to life inside, leaving behind the outside world. Some inmates experience what Skinner (1974) described in his book *About Behaviorism*: "[e]xcessive punishment is said to make

a shortage of positive reinforcement more critical and leave a person more vulnerable to severe depression and to giving up” (p. 70).

While incarcerated, individuals must not only adhere to the rules of the penal system but also to a strict system of prisoner codes or subculture rules, which are also highly Behaviorist. Prison justice is swift and sometimes deadly. No “ratting” (telling on another inmate), no stealing property from another inmate’s cell, no stealing from elderly convicts, and no betraying of friends are only a few of the inner penitentiary behavior codes well known to this researcher. Prison gangs consisting of different groupings of Black, Whites, Indians, and Hispanics usually arrange punishment or “hold court” for unacceptable behavior and deal with their own justice or reparations among members to avoid conflicts with other rival prison gangs.

When inmates leave prison, their environment changes dramatically. American society in its current state does not exist in a Behaviorist manner. In the United States, freedom, individual rights, and autonomy are encouraged, guaranteed by the Constitution and the Bill of Rights. Individuals released from prison, who have become institutionalized by the prison system, lose the regimented and controlled uniformity they have become accustomed to and are in a state of confusion as to how to function in a system where they have no governing structure telling them every microscopic detail of their lives and behavior. The hierarchy that existed for inmates in prison is gone once they are released, but the institutionalization remains. There is currently no organization in place to aide released inmates in the re-integration process and help them deal with the pressures and fears of life on the outside.

Individuals released from prison into today's public must be prepared to participate in the fast paced, industrious society that the world has become. Individuals must possess the skills to create and shape their own future and destiny. The Constructivist approach to learning encourages such action and supports the requirements for our current culture.

Frederick Bartlett pioneered what became Constructivism. Constructivists believe that learning is a process of constructing meaning: it is how people make sense of their experiences (Steffe & Gale, 1995, as cited by Merriam & Caffarella, 1999). From a Constructivist view point, "What someone knows is grounded in perception of the physical and social experiences which are comprehended by the mind" (Jonasson, 1991, as cited by Mergel, 1998, p. 8).

Constructivism as a learning theory is based on the principle that human beings construct their individual perspective of the world and how it relates to them. It is developed through individual experiences and internalized mental schema. Steffe and Gale (1995) asserted that the basic assumption of Constructivism is that learning is a process of constructing meaning and letting people make sense of their experiences. Constructivist focus is on preparation of learners to identify and solve problems in ambiguous or unclear situations (Schuman, 1998). Constructivist learners attempt to become autonomous and self-sufficient in everyday situations. While these ideas characterize life on the outside of prison walls, they clearly are in contrast to what inmates learn inside the walls.

While they approach the influence of individuals' background and environment very differently, both Behaviorism and Constructivism support its importance. Jarvis (1987) claimed that adult development and learning rarely occurs "in splendid isolation from the world in which the learner lives;...it is intimately related to that world and affected by it" (Merriam & Cafferalla, 1999, p. 11). Driver et al. (1994) explained that in social constructivism, "learning is seen as the process by which individuals are introduced to a culture by a more skilled member" (p. 7). According to Naisbitt and Aburdene (1990), learning needs and opportunities are predominately determined by the society in which one lives. The inevitable contradiction and tension between the environment and society inside and outside of prison reflects the tensions between Behaviorism and Constructivism and make both realities important to the theoretical framework for this study.

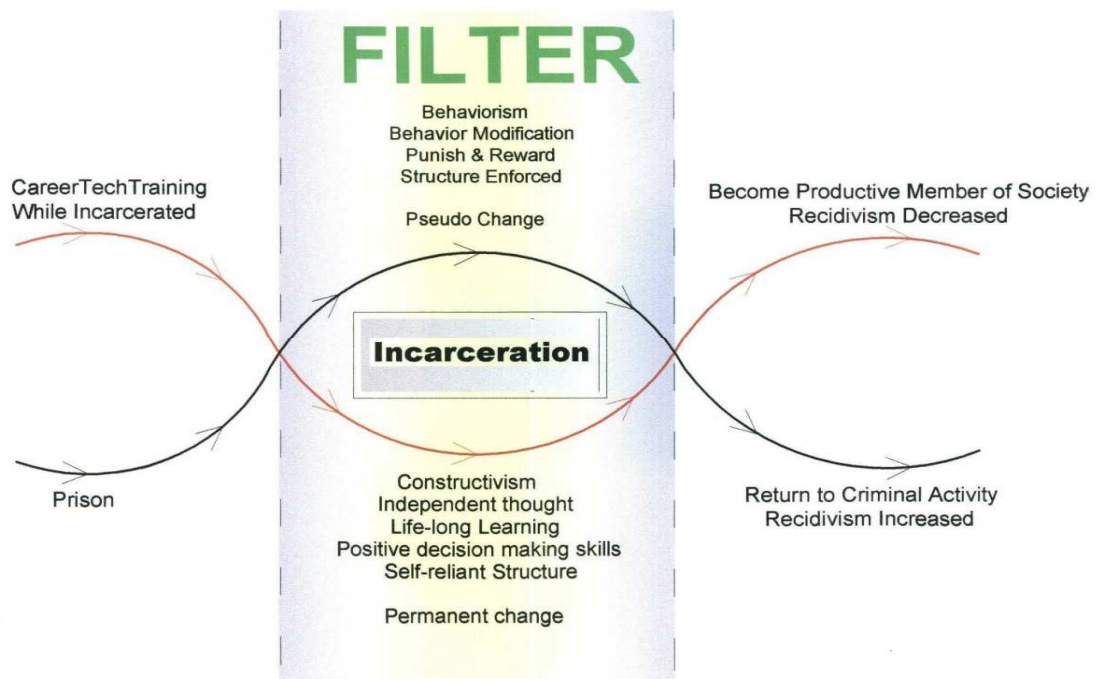
In today's society, productive citizens must possess the ability to function and prosper in the world of employment and in their personal lives. It is a required component of our society for our citizens to possess the Constructivist skills of critical thinking, self-direction, and self-reliance. This is very different from the controlled Behaviorist world of prisons.

Inmates are taken out of society and sent to prison for incorrectly participating in the system society has deemed lawful. They leave the Constructivism of free society and acclimate to the Behaviorism of the prison world. They are released from prison back into the Constructivist society when they have served the required length of sentence or are granted parole. These changes of environment predictably produce significant contradiction and disruptions for inmates.

The conflict for inmates is basically a dilemma of shifting needs. This brings Maslow's theory of human needs into the framework for this study. The Hierarchy of Needs developed by Abraham Maslow (1954, 1968, 1970) asserts that human beings are motivated by certain needs and that these needs are prioritized by significance. It also posits that higher – level needs, such as knowledge, aesthetics, and self-actualization, cannot be addressed until lower level needs, such as physical needs, security, belonging, and self-esteem are met. The prison environment and culture creates a carefully bounded and controlled set of needs for surviving and thriving, and when inmates attempt to leave this culture and return to the Constructivist needs of open society, they can encounter difficulty and failure. Without intervention, this failure can result in persistent institutionalization and recidivism.

The Behaviorist, Constructivist, and human needs theories that form the underpinning for this study come together in a concept scenario that leads to a working hypothesis for the study. Convicted felons leave the Constructivist environment of a free society and enter the rigidly controlled Behaviorist world of prison. While incarcerated, inmates may experience only the enforced Behaviorism and behavior modification of the prison and experience only the pseudo-change of conformity to meet the needs imposed by prison culture. Alternatively, inmates may participate in an intervention in the form of education programs – particularly CareerTech CTE programs – that encourage and facilitate Constructivist personal and occupational skills that lead to permanent changes. Upon release, if ex-offenders who have received training in CTE programs employ their skills in business and industry, those ex-offenders can provide for and meet basic needs of free society as identified by Maslow's needs hierarchy theory (1954, 1968, 1970) for

themselves and their families. This may decrease the likelihood of their return to prison. Incarcerated individuals who do not experience the intervention of CTE programs may be more likely to experience post-release failure that results in their return to the prison system, thus causing recidivism (the dependent variable for this study) to rise. This theoretical/conceptual framework and working hypothesis are shown in Figure 1.



Needs

Figure 1: Theoretical / Conceptual Framework

Significance of Study

This study addressed the effectiveness and efficiency of providing career and technical education (CTE) as an intervention strategy to selected demographic offender populations incarcerated in Oklahoma. The results of this study will provide data that may allow for adjustments in CTE targeting and methodology with CareerTech Skills Centers located in prisons throughout the State of Oklahoma. Findings will provide CareerTech and Department of Corrections administrators, as well as legislators, the necessary data to assess and substantiate the beneficial effects of career and technical education to this population as they undertake the return from a prison – enforced Behaviorist culture to the Constructivist world of free society. The study can provide justification for continued funding allocations as well as continued focused efforts toward this population. The study may support direct interventions with this group in cooperation with the offenders' Department of Corrections articulated incarceration and reintegration plans. The bottom line may be more effective use of state finances and higher Return on Investment (ROI) on the tax dollars of Oklahoma's citizens.

CHAPTER II

REVIEW OF LITERATURE

This study described the effects of career and technical education (CTE) on recidivism for offenders enrolled in Oklahoma Department of Corrections CareerTech Skills Center School Systems programs. Behaviorist, Constructivist, and Hierarchy of Needs theories provided the framework foundation for this study. These theories were merged in a conceptualized model that provided a representation of the rehabilitation actions attempted by correctional institutions. This theoretical representation formed a working hypothesis for the study. It was posited that individuals convicted of felonious acts are taken from the Constructivist environment of a free society and are placed into the strictly controlled Behaviorist environment. While incarcerated, the institutionalization process occurs where learned responses and behaviors become the core foundation of the lives of the incarcerated. Upon release back into the Constructivist environment, former felons must attempt to restore their former lives beginning with the most basic needs of food and shelter and endeavor to ascend to higher functioning needs as described in Maslow's hierarchy.

Upon release, if ex-offenders who have received training in CTE programs employ their skills in business and industry, those ex-offenders can provide for and meet basic needs as identified by Maslow's theory for themselves and their families. This may decrease the likelihood of their return to prison. Incarcerated individuals who do not

experience CTE programs may be more likely to experience post-release failure that results in their return to the prison system, thus causing recidivism to rise.

This chapter reviews literature supporting this proposed model. The review presents literature relevant to (a) the theoretical components of the study, (b) Oklahoma's CareerTech Skills Centers and their programs, and (c) recidivism.

Theoretical Components for this Study

The theoretical framework for this study integrated three theory components: Behaviorism, Constructivism, and Maslow's Hierarchy of Human Needs. The establishment of a theoretical framework to support the concept of rehabilitation of convicted individuals must first look at the philosophical perspective of Behaviorism. In the prison environment, through the utilization of behaviorist principals incarcerated offenders are trained and conditioned to follow rules and directives from prison officials and the underlying penal code of prison society. This is accomplished through a system of reward and punishment. Institutionalization occurs in the prison system when offenders learn the limitations of their prison environment and conform to its rules and organizational structure.

While incarcerated, offenders are offered, and sometimes adjudicated to, program participation. These programs are offered in the format of training and education, reintegration and life skills, substance abuse, anger management and treatment for sexual predators. There are qualities that are unique to each incarcerated individual and these characteristics make up the intervening variables that can play a role in determining the positive or negative outcome of participation in prison programs and thus the degree to which rehabilitation is possible.

While incarcerated, offenders are given the opportunity to prepare for their release into society. Upon release, ex felons have the option of participation in aftercare programs and support groups designed to facilitate the re-integration process and to talk with others who are in similar circumstances. Most ex-offenders must obtain employment to sustain themselves after release from prison. Employment is a key factor in becoming self-sufficient and self-reliant in a free, Constructivist world.

This researcher has learned from professional experience that success for incarcerated individuals entails the acquisition of skills from training or life experiences while imprisoned. After release from prison, an ex-felon must be able to meet his or her basic life needs, and they must be able to make good moral decisions and have basic reasoning skills. The Hierarchy of Needs developed by Abraham Maslow (1968) affirms that human beings are motivated by certain needs and that these needs are prioritized by significance. According to May et al .(1986), Maslow supported a political view that encourages all citizens to participate and draw on their talents to develop and improve the conditions in which they exist. For incarcerated inmates, improving their conditions entails adapting to a highly Behavioristic environment.

Behaviorism

The theory of Behaviorism considers the obvious behaviors associated with certain stimuli that can be measured and observed (Good & Brophy, 1990). Behaviorism as a learning theory is based on a definition of learning as an observable change in behavior (Skinner, 1974). John B. Watson was an American psychologist who applied the principals of Behaviorism to human behavior and its conditioning (Mergel, 1998). Watson believed that human beings were born with only a small number of reflexes and

the emotions of love and rage. According to Watson, all other behaviors are established in the course of stimulus-response associations through conditioning that gradually shapes behavior into desired patterns (Mergel 1998). Watson's work demonstrated the role that conditioning assumes in the development of emotional responses to certain stimuli. John Watson has been given the credit for creating the term Behaviorism (Mergel, 1998).

Burrhus Frederic (B.F.) Skinner was a celebrated psychologist who, like Watson, believed in the stimulus-response pattern of conditioned behavior. Skinner's entire behavior system is based on the theory of operant conditioning (Boeree, 2006). Simply stated, operant conditioning means "reinforce what you want the individual to do again and ignore what you want the individual to stop doing" (Grippen & Peters, 1984, p. 2). At the heart of operant conditioning Behaviorism is the belief that a new pattern of behavior will be established from repetition until it becomes an automatic response (Mergel, 1998; Skinner, 1974). Boeree (2006) explained:

During this "operating," the organism encounters a special kind of stimulus called a reinforcing stimulus, or simply a reinforcer. This special stimulus has the effect of increasing the operant -- that is, the behavior occurring just before the reinforcer. This is operant conditioning: the behavior is followed by a consequence, and the nature of the consequence modifies the organism's tendency to repeat the behavior in the future. (p. 2)

Behavior modification through operant conditioning while incarcerated directly occurs in the Segregated Housing Unit (SHU), called "the shoe" by inmates, if offenders do not conform to prison rules regarding their individual or group conduct. Use of the

SHU to shape or condition inmates' behavior illustrates the Behaviorists' approach to learning which asserts that events in the environment predict a person's behavior, not thoughts, feelings, or other events that take place inside the person. The core of Behaviorist research emphasizes that basic principles of conditioning, reinforcement, ignoring, and punishment can provide explanations of why people behave the way they do and how they choose between different possible courses of action (Mergel, 1998; Skinner, 1974).

Constructivism

In contrast to Behaviorists, researchers working from a Cognitivist perspective favor Constructivism as a learning model. The cognitive/constructivist branch of learning psychology focuses not on external behavior but on internal mental processes. Work on cognitive development has been grounded primarily in the work of Jean Piaget (1896-1980), a professor of psychology at the University of Geneva from 1929 to 1964. Piaget was a French Swiss developmental psychologist who is best known for organizing human cognitive development into a series of stages based on age and mental development. Numerous researchers and theorists from a variety of disciplines and interests with the same interests in human cognitive development have devised other developmental models that differ in details yet are similar to Piaget's. Cognitivist psychologists are interested not in behavior, but in how the mind makes sense out of stimuli in the environment—how information is processed, stored, and retrieved (Mergel, 1998). This orientation is especially evident in the study of adult learning from a developmental perspective. The prominent concepts of the various Cognitivist theories and models can be summed up in a single major perspective on cognitive development as

the process of coming to know and the stages humans move through as they gradually acquire this ability (Merriam & Caffarella, 1999).

Also in contrast to Behaviorism, and part of the cognitivist/constructivist school of thought, is the Humanistic philosophy and orientation to learning. Here the emphasis is on understanding the conscious mind, free will, human dignity, and the capacity for self-reflection and growth. An alternative to psychoanalysis and behaviorism, humanistic psychology became known as the “the third force” (Merriam & Caffarella, 1999). The cornerstone of this orientation is Humanist philosophy and psychology with its emphasis on individual growth, development, and achievement (Merriam & Caffarella). Maslow’s hierarchy of needs (1968) supports this Humanist psychology as evidenced in Maslow’s statement that “there is a basic human impulse to grow toward health, full humanness, self-actualization, or perfection” (1968, p. 117). Rogers, as a major proponent of Humanism, contended that “significant learning” results in a more mature self who is open to experiences, to “new people, new situations, new problems” (1961, p. 115). Knowles’ (1980) model of andragogy and adult learning is written explicitly from the humanistic perspective, holding that adult learning is a “process that is used by adults for their self-development” (p. 25) and “to mature” (p. 28). Kegan (1994) took a slightly different direction, stating that higher and adult education’s mission is to “assist adults in creating the orders of consciousness the modern world demands” (p. 287). In this view, Humanism and cognitive development join with Behaviorist rewards and punishments in a person’s environment to shape that person’s behavior.

Social learning theory is a member of cognitive/constructivist/humanism/adult learning family, but it differs from the others in its focus on the social setting in which

learning occurs. From this perspective, four factors are necessary for a person to learn through observation and then imitate a behavior: attention, retention, reproduction, and motivation. First, the learner must pay attention to the crucial details of behavior; the learner must be able to retain all this information in memory until it is time to use it. Social learning theories contribute to adult learning by highlighting the importance of social context and explicating the processes of modeling and mentoring (Hergenhahn, 1988).

The learning theory or model manifestation of cognitivist psychology is Constructivism. Constructivism, representing an array of related perspectives, posits that human beings construct their own knowledge and view of the world from their experiences and internal cognitive maps (Driver et al., 1994). The cognitive process of meaning-making is emphasized in the Constructivist view as both an individual mental activity and a social interaction. Aspects of constructivism can be found in self-directed learning, transformational learning, experiential learning, situated cognition, and reflective practice (Merriam & Caffarella, 1999). Phillips (1995) identified six major strands of Constructivism, and Steffe and Gale (1995) claimed these strands differ in numerous issues and details, but share the basic assumption that learning is a process of constructing meaning and letting people make sense of their experiences.

The Constructivist model of learning is one in which information and experience have relevance. It also encourages group, activities, interaction among peers, and group and individual learning. The constructivist-learning model prepares learners to think independently, become life-long learners, and become autonomous and self-sufficient (Schuman, 1998). The development of skills that prepare individuals to think for

themselves, make rational and integrity-based decisions, and be self-reliant is a powerful mechanism in human society outside prison walls, but, is in sharp contrast to what inmates learn inside the walls. Upon release from prison, many individuals lack the basic constructivist skills of independent decision-making and self-reliance. The Behaviorist control and structure that has been a prevalent feature of the ex-felons' time in prison is absent upon release in the Constructivist world, and these individuals lack the skills to survive in the general public, thus forcing many of them to return due to fear of culture shock. By not teaching inmates these individuals skills that involve critical thinking and ethical decision making, the rehabilitation process is failing.

Individuals released from prison into the general public of today must be prepared to participate in the fast-paced and industrious society the world has become. Individuals must have the skills to create and shape their own future and destiny. The Constructivist approach to learning encourages such action (Schuman, 1998) and supports the requirements for our current culture. In today's society, productive citizens must possess the ability to function and prosper while at their jobs in the world of employment and in their personal and professional life. It is a required component of our society for our citizens to possess the requisite skills of critical thinking and self-reliance. These skills are inherent in Constructivism (Schuman, 1998), but missing in the Behaviorism that characterizes the prison environment.

Maslow's Hierarchy of Needs

Early in his academic career, Abraham Maslow assisted in research with Rhesus monkeys and observed their behavior dealing with attachment. According to Boeree

(2006), it was during this time that Maslow's interest in behavior began to increase.

Maslow noticed that there were definite needs that took precedence over others, such as water, food, and shelter. It was during this time period that Maslow began to form his signature work, the Hierarchy of Needs.

Maslow's Hierarchy of Needs, Shown in Figure 2, affirms that human beings are motivated by certain needs and that these needs are prioritized by importance (Maslow, 1954, 1968, 1970). According to Boeree (2006), the Hierarchy of Needs model aids understanding of how these needs affect people's everyday lives. Many different versions of Maslow's original model have been developed to serve business and industry as well as personnel management entities. The original model stated that there were five stages of needs that built hierarchically on one another. As lower order needs are met the other needs in the hierarchy can be addressed (Maslow, 1954, 1968, 1970).

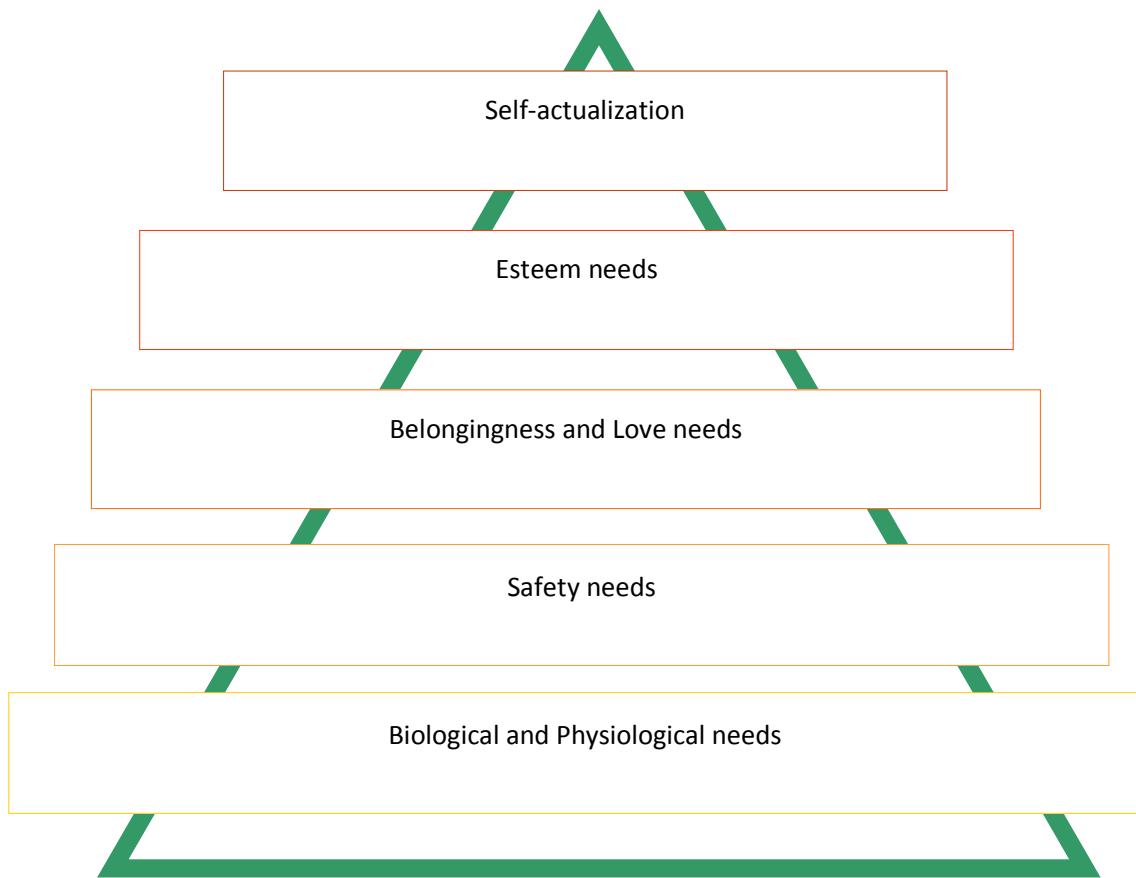


Figure 2. Maslow's Hierarchy of Needs scale. Source: Adapted from Boeree (2006)

As shown in Figure 2, the first set of needs in Maslow's hierarchy is grounded in the physical domain and is labeled Biological and Physiological. This area is concerned with the basic needs of life such as air, water, food, shelter, sleep, warmth, sex, etc. The next level in Maslow's Hierarchy is the Safety needs. They include law, security, order, limits and stability. Belongingness and love are the next needs in the hierarchy and include need for family, affection, relationships, work relationships, and groups. Esteem needs that include achievement, status, responsibility, and reputation are next to last in

the hierarchy of needs, followed at the apex of the hierarchy by self-actualization that includes personal growth and fulfillment, (Boeree, 2006; Maslow, 1954, 1968, 1970).

In Maslow's inventory of human needs, the previous needs must be met before progress to the next level can begin, (Boeree, 2006). At the lower levels of the hierarchy are survival needs: psychological needs and safety needs. These basic survival needs must be attended to before one can deal with the remaining higher levels of belonging and love, self-esteem, and the need for self-actualization. This highest set of needs can be seen in a person's desire to become all that he or she is capable of becoming (Boeree).

Chapman (2004) discussed learning motivation in relationship to Maslow's conceptualization of need. According to Chapman, motivation to learn is an intrinsic human need that emanates from the learner. Self-actualization is the goal of learning, and educators should strive to bring this about. Chapman's view harmonizes with Maslow's (1968, 1970) stance that learning is not only a form of psychology, but also a contributor to psychological health.

Maslow's approach to psychology is more cognitivist than behaviorist, and more humanistic than either. In contrast to Behaviorism, Maslow's emphasis is on human nature, human potential, human emotions, and their effects. Maslow believed that learning involves more than cognitive processes and overt behavior. He believed that human needs build upon one another, as one need is met and attained humans move on to fulfillment of other needs. If needs are not met, actions become dedicated toward accomplishing them. Much of Maslow's theory, especially his ideas surrounding the Hierarchy of Needs, is being advanced in today's training and adult vocational education.

From this view point, the role of the teacher is to arrange the learning environment to enable learners to fulfill their own unique potential through individual discovery and goal attainment (Boeree, 2006).

Oklahoma CareerTech Skills Centers

History, Mission and Operation

In Oklahoma prisons, the CareerTech Skills Centers have provided occupational, employment and life skills training to incarcerated offenders since 1971 (Oklahoma Department of CareerTech, 2011). Technical training programs for prison inmates has had a record of success. Some studies have shown “recidivism rates are as low as 10% for those completing programs and as high as 70% for those that do not” (Bannatyne & Hall, 2000, p. 320). The reported reduction of recidivism rates reinforces the validity of career and technical training for incarcerated offenders, as well as providing argument that additional programs are needed. Bannatyne and Hall (2000) asserted that “By providing inmates with a clear understanding of the careers and opportunities open to them in the technical job market they can make intelligent decisions about their future educational and employment pursuits” (p. 322). The evidence strongly indicates there is value in career and technical education for incarcerated offenders.

Oklahoma began offering vocational training to offenders through the CareerTech Skills Centers (CTSC) in 1971 under the jurisdiction of the Oklahoma Department of Corrections (ODOC) (Goble, 2004). The project began as a “clients-in-training” program that trained offenders for jobs private contractors needed to fill. It also emphasized academic skills as well as life and social skills. Offenders were taught the skills needed to work as part of a team, live on their own, perform basic banking, and establish utilities

and other public services. The CTSC have evolved today into a statewide school system training male, female, and juvenile offenders. As of 2003, CTSC included 18 public prisons, one private prison, and four juvenile facilities (Goble, 2004).

Since 1971, career and technical training programs have been offered through the Oklahoma Department of Career and Technology Education, Skills Centers Division, to those incarcerated individuals who wish to learn an employable trade to help them upon release return to the world of work as qualified technicians. Fields of study can include plumbing, masonry, carpentry, welding, automotive maintenance, electrical wiring, and many others. A review of available programs is presented below. Skills Centers programs are intended to prepare inmates for gainful employment upon release. Trade skill and education experience combined with life and employability skills can aid many of these individuals in avoiding the barriers to successful reintegration. According to third party analysis, survival rate for male adult Skills Centers completers was 78.8% after five years of freedom, compared to 69.6% for a matched sample taken from the general prison population (*SCSS Information Guide*). During the educational experience offered in the Skills Centers, inmate students are taught various skills. Instructors try to identify and remove barriers to successful re-entry and though the focus of instruction is on “career technical education, life skills and employability training” (Meek, 2006, p.2), the skills acquired are not restricted to those contexts.

In addition to being necessary to help offenders gain employment when they are released, education programs inside prisons should also demonstrate fiscal benefits to the states that support them. Haulard (2001) maintained that most people actively involved in corrections would agree about the value and necessity of educating offenders, but

pointed out that it is the taxpayers who need to be convinced that increased expenditures on offenders now will reduce the tax burden later. According to Goble (2004), Oklahoma's taxpayers should be celebrating the success of CTSC. Suitable and sustainable employment is one of the most important and challenging factors for offenders in transitioning and assimilating back into society. Finding employment can prove to be very challenging due to public perception of incarcerated individuals. Goble reported that, fortunately, nearly three-quarters of the offenders graduating from Skills Centers programs in Oklahoma find employment in training-related fields and close to 90% of these graduates will find sustainable employment earning at least \$10 per hour, and only two to three will re-offend to become “tax-eaters instead of tax payers” (Goble, 2004, p. 164). CTSC not only train and prepare offenders, staff also work closely with local agencies and with faith and community-based organizations to help released offenders secure housing and social services (Oklahoma Department CareerTech, 2011). This cooperation, coupled with CTSCs partnership with WorkForce Oklahoma that assists with job placement, ensures that released offenders are given every chance at assimilating back into society as productive tax-paying citizens. Goble (2004) asserted that “In a sense, the projects under the division of the Skills Centers offered especially useful models for what creative schooling could achieve for any student in any circumstances” (p. 150). He also reported that Oklahoma Skills Centers have a national reputation for “returning inmates to society as productive citizens rather than as criminals temporarily between prison terms” (p. 150).

Skills Centers Programs

The Oklahoma CareerTech Skills Centers provide a wide variety of training programs to incarcerated offenders in Oklahoma prisons. Table 2, gives a description of the programs by location, student composition, security level, and gender that were analyzed for this study from the time period of January, 2003, to December, 2008. Because of Oklahoma state budget reductions, some of these programs no longer exist or were terminated due to reductions in force, retirements of personnel and resulting attrition actions taken by the CareerTech Skills Centers Division.

Table 2.

Description of Skills Centers programs by location, student composition, security level, and gender

Programs / Facility/Location	Student Composition / Security Level
Commercial Construction Trades William S. Key Correctional Center Ft. Supply, Oklahoma	Male Youthful Offender Minimum Security
Welding Academy Howard McLeod Correctional Center Farris, Oklahoma	Male Youthful Offender Minimum Security
Hospitality Food Service Mabel Bassett Correctional Center, Oklahoma City, Oklahoma	Female Offender Community Security
Horticulture / Landscape Governors Mansion , Oklahoma City, Oklahoma	Female Offender Community Security

Transportation Distribution Logistics Eddie Warrior Correctional Center, Taft, Oklahoma	Female Offender Minimum Security
Business and Information Technology Altus Community Correctional Center, Altus, Oklahoma	Female Offender Community Security
Business & Information Technology Eddie Warrior Correctional Center, Taft Oklahoma	Female Offender Minimum Security
Commercial Building Grounds Eddie Warrior Correctional Center, Taft Oklahoma	Female Offender Minimum Security
Welding Fabrication Oklahoma State Reformatory, Granite, Oklahoma	Male Offender Minimum Security
Precision Machining Howard McLeod Correctional Center, Farris, Oklahoma	Male Offender Minimum Security
Plumbing Technology Jess Dunn Correctional Center, Taft, Oklahoma	Male Offender Minimum Security
Plumbing Academy Jess Dunn Correctional Center, Taft, Oklahoma	Male Offender Minimum Security
Metal Manufacturing Oklahoma State Reformatory, Granite, Oklahoma	Male Offender Minimum Security

Masonry Jim E. Hamilton Correctional Center, Hodgen, Oklahoma	Male Offender Minimum Security
Manufacturing Academy Jess Dunn Correctional Center, Taft, Oklahoma	Male Offender Minimum Security
Industrial Maintenance Academy Jim E. Hamilton Correctional Center, Hodgen, Oklahoma	Male Offender Minimum Security
Industrial Electricity Jim E. Hamilton Correctional Center, Hodgen, Oklahoma	Male Offender Minimum Security
HVAC/ R Academy Jim E. Hamilton Correctional Center, Hodgen, Oklahoma	Male Offender Minimum Security
Heavy Equipment Operator Howard McLeod Correctional Center, Farris, Oklahoma	Male Offender Minimum Security
Auto Services Academy Jim E. Hamilton Correctional Center, Hodgen, Oklahoma	Male Offender Minimum Security
Building Maintenance Technology Jess Dunn Correctional Center, Taft, Oklahoma	Male Offender Minimum Security
Building Trades Academy Jim E. Hamilton Correctional Center, Hodgen, Oklahoma	Male Offender Minimum Security
Cabinet Making Jim E. Hamilton Correctional Center, Hodgen, Oklahoma	Male Offender Minimum Security

Commercial Support Technology James Crabtree Correctional Center, Helena, Oklahoma	Male Offender Minimum Security
Construction Technology Jim E. Hamilton Correctional Center, Hodgen, Oklahoma	Male Offender Minimum Security
Electrical Technician MTD Lexington Correctional Center, Lexington, Oklahoma	Male Offender Medium Security
Electricity Technology Howard McLeod Correctional Center, Farris, Oklahoma	Male Offender Minimum Security
Auto Service Technology Lawton Correctional Center, Lawton, Oklahoma	Male Offender Community Security
Heavy Equipment Mechanic Howard McLeod Correctional Center, Farris, Oklahoma	Male Offender Minimum Security
Equine Management James Crabtree Correctional Center, Helena Oklahoma	Male Offender Minimum Security

Figure 3. shows the location of correctional facilities in Oklahoma.

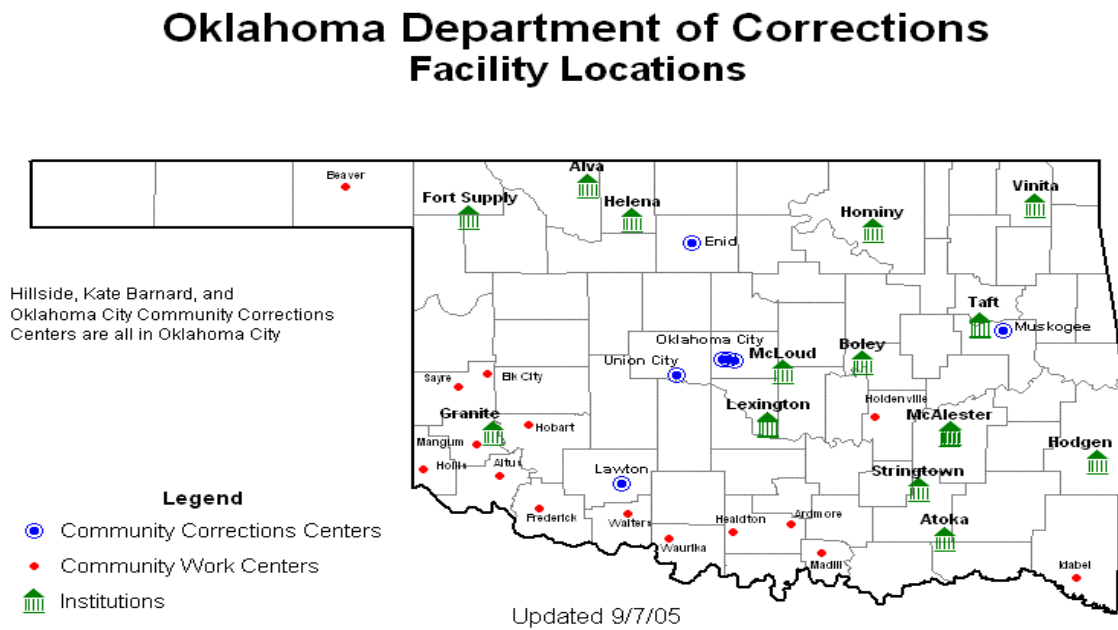


Figure 3: Locations of correctional facilities in Oklahoma

Source: Oklahoma Department of Corrections Website <http://www.doc.state.ok.us> (2012)

Incarceration and Recidivism

Many studies have been conducted regarding the effects of vocational/technical education on the rate of recidivism, defined as “recurrence of crime by an individual known to have previously committed a crime” (Tewksberry, 1997, p. 476). With little

noticeable difference among studies, the recidivism rate is typically reduced dramatically for those inmates who participate and graduate from a vocational/technical training program while incarcerated. The recidivistic reduction is as much as 17.25% for participants versus non-participants (Gordon & Weldon, 2003, p. 200).

In recent years, however, the “get tough on crime” philosophy has trickled into juvenile and youthful offender campaigns, leading to an increased incarceration rate of these offenders as adults (Wilkinson, Bucholtz, & Vasquez, 2006). Despite the long history of juvenile correctional institutions, there is surprisingly little information on the effectiveness of juvenile offender programs (Bohm & Haley, 1997). Some studies have asserted that as high as 51-70% recidivate (Krisberg, DeComo, & Herrera, 1992). Specifically, little is known about what impact, if any, career and technical education may have upon the rate of recidivism for youthful offenders.

Evaluations of rehabilitation programs rooted in a psychopathology model of criminal behavior were experimented with in the 1970s. After these evaluations showed little, if any, treatment effect, American correctional treatment philosophy turned pragmatic. Policy emphasis shifted from a medical model of rehabilitation to strategies for managing safe and humane prisons in which inmates are provided opportunities and encouragement to strengthen their social bonds through programs emphasizing work, education, substance abuse treatment, strengthened family and community ties and wellness” (Harer, 1995, p.5).

Correctional institutions are challenged to engage in a dual role: (1) to rehabilitate those individuals placed in their care, and (2) to remain vigilant in their mission of protecting the general public from violent offenders. Many programs aimed at

rehabilitation are designed to enrich and enhance the lives of inmates while they are enrolled in them. Inmates are offered incentives to participate in prison programs, which will reduce sentence, security level, (i.e. maximum, medium, minimum) and increase monthly inmate pay rate. Many inmates feel that parole boards will look more favorably towards them if they have participated in enrichment programs. Programs are offered for drug offenders, sex offenders, and anger management. Literacy, Life Skills and GED programs are offered to those individuals who did not finish high school and have elementary-school levels of reading writing and math. Prison industries place undereducated and poor incarcerated individuals in work settings where they can learn a trade and aspects of being a quality employee. Bohm & Haley (1977)

Prison and incarceration were once abstract ideas. Most Oklahomans were aware of prisons and appreciated the Department of Correction's (DOC) role in society, but were not intimately affected by offender populations. Times have definitely changed. Today, one in ten Oklahomans have an immediate family member incarcerated or under DOC supervision (Meek, 2011). The number of incarcerated individuals has doubled in the last decade (Hull, Forrester, Brown, Jobe, & McCullen, 2000). One survey suggested that crime is considered one of the most distressing issues facing society today (Hull et al., 2000). Unfortunately, these concerns are not groundless. Crime rates and prison populations are continually on the rise. Society's concern over the pervasiveness of crime and recidivism has led lawmakers and their constituents to embrace a more liberal use of incarceration and increased prison sentences, leading to a current prison population of more than one million offenders at the turn of the 21st century (Hull et al., 2000). In 1994, the United States Bureau of Justice estimated that 91.2 violent crimes were

committed per 1000 citizens over the age of 11, and that over two-thirds of the offenders released would be rearrested for a new crime within three years of their release (Hull et al.). Therefore, not only are more people being incarcerated, but also recidivism rates continue to rise. Currently, the Oklahoma Department of Corrections (ODOC) has under its care 51,121 individuals. Of these, 25,288 are either on supervised probation or parole, leaving 25,233 inmates directly under the supervision of the ODOC in the state prison system. A total of 51.5% of these individuals are serving prison sentences for non-violent crimes. The current recidivism rate reported by the ODOC is 23.3%” (www.doc.state.ok.us, 2011). The high rate of recidivism coupled with increased incarcerations has left ODOC operating close to capacity and facing severe budget shortfalls.

By addressing recidivism rates, and thus reducing the prison population, correctional budgetary decline can be improved and reversed. Several factors have been shown to contribute to incarceration and recidivism. Bannatyne and Hall (2000) reported that “Inmates entering a state prison vary in background and in social and educational level, from functionally illiterate to college graduates” (p. 320). Harer (1995) found that “the greater the educational program participation, the lower the recidivism rate. The greatest decline in recidivism, with educational program participation, is among those who come to prison with a high school degree” (p. 11). Successful reintegration hinges on the released offender’s ability to live and survive in the community. This led Dugid (2000) to assert that “If a man wants to reform himself, then it is up to us, within the resources available, to provide the means by which he can do so” (p. 246). This leads to a belief that social and occupational skills needed to survive and

thrive in free society must be acquired through education and training. There is a natural conflict between the need for inmate education and current costs and short falls in budgets for incarcerations. While the number of incarcerated individuals rises, so does the need for tax dollars to support them. According to ODOC, in 2008, incarcerating a maximum-security offender cost \$70.04 per day, \$56.10 for a medium security offender, \$54.32 for a minimum-security offender, and \$56.13 for a community corrections offender (www.doc.state.ok.us, 2011). With these high costs of incarceration, coupled with budget cuts, most Oklahoma facilities are operating close to capacity with reduced staff. Not only are staff numbers reduced, but also morale is at an all time low due to extended work hours, additional shifts for security personnel, and furloughs for non-essential staff. With the extremely limited funds and resources, education is not considered a top priority. Gehring (2000) asserted, the possibility of a positive attitude toward education in these institutional systems is constantly undermined by the overworked staff (p. 201). This is unfortunate in light of the evidence that education for inmates can reduce recidivism and thus help reduce prison populations and budget tensions.

Inmate Education Programs and Recidivism

The measure generally used to assess the success of inmate education programs is changes in the rate of recidivism. While some experts believe basing educational and training success on recidivism rates is inaccurate and misleading, the current recidivism-based assessment system is still widespread and generally accepted.

According to some experts, recidivism should not be the sole measurement of inmate education success and importance. This argument has been built on several

grounds. McShane and Williams (1996) claimed that “Despite the recognized importance of recidivism for criminal justice policy and practice, it is difficult to measure because there is no uniformly accepted definition for the term ...what has resulted is research literature that contains vastly different conventions, different outcomes, different time periods and different methodologies” (p. 196). Gehring (2000) concurred and cautioned that without having a national standard and recognized system of data collection for recidivism, each facility can interpret and report the data in whatever manner it chooses. The data can be skewed to fit the needs or wants of each facility, thus misleading the citizens and media with biased information. This information can be slanted to lead people to believe that education is the only solution for recidivism or alternatively that training is not worth the time or the tax dollars. Gehring concluded that “until the 'get tough on crime' sentiment evolves into a 'smart on crime' agenda, decision makers should be cautious about recidivism as a measure of correctional education program success” (2000, p. 204).

A second criticism Gehring raised was that recidivism is an “unsophisticated, dichotomous, terminal variable, incapable of measuring incremental progress toward post-release success for inmates” (2000, p. 198). Gehring also warned that the current method of recidivism measurement does not account for individual circumstances such as whether tenth grade completers recidivate more than high school graduates or whether offenders that learn public speaking recidivate more than those who are given training in mathematics. In conclusion, Gehring concluded that without dealing with such incremental questions the ability to use recidivism to enhance and measure inmate education program effectiveness is immature (p. 198).

However, despite the criticisms, many experts agree that recidivism is the most straightforward method of measuring educational success of inmate programs. Haulard (2001) concluded that the education of inmates reduces recidivism, but more importantly, vocational education that leads to a marketable skill reduces recidivism to an even greater extent. He further asserted that in order for rehabilitation to be effective, offenders must be given access to education and with that access, offenders are given the chance to turn antisocial behavior into productive and socially accepted behavior upon reentering society. Gehring (2000) admitted that “The emphasis on recidivism has been in place as long as the prison systems have been operational, more than 200 years” (p. 201) and suggested that once a nationally accepted system of data collection is implemented, recidivism rates and educational success measurements can be used to assign tax dollars and resources more accurately to slow the influx of offenders returning to the prison system.

Issues facing incarcerated offenders and those under DOC supervision are as varied and complex as the offenders themselves. One major issue facing offenders, as well as DOC as a whole, is state and federal budget shortfalls. As discussed previously, the number of incarcerated individuals and the costs to support them are rising. According to Gehring (2000), this situation, coupled with prison staff shortages and work loads, is causing a lowering of the priority of education programs, and even an “anti-educational bias among staff” (p. 201).

Haulard (2001) agreed with Gehring’s (2000) observation, stating that “As society is finding more and more tax dollars to incarcerate more felons and build correctional facilities, the amount of educational dollars earmarked to educate the incarcerated seems

to be less and less” (p. 158). In Oklahoma, in May of 2011, out of a total offender population of 25,390 only 85 completed their GED (www.doc.state.ok.us, 2011). This lack of educational monies and educational opportunities will not only exacerbate the current recidivism problem, but also continue to perpetuate institutionalization and social devolution of offenders. Gehring (2000) asserted that without good education programs, “Prisons not only teach what the system intends, they also teach criminality and alienation from the social system” (p. 198). Similarly, Adney (1999) maintained that many inmates are not learning to become productive citizens with sustainable employment; they are learning to do time.

“Inmate educational programs not only reduce recidivism rates, but they also facilitate the management of the prisoners. This training gives purpose to the life of an inmate, and it helps to provide him with the necessary skills needed to secure employment when he is released” (Haulard, 2001, p. 158). This opinion has been echoed by numerous experts in incarceration and rehabilitation. Adney (1999) supported prison educational programs. He pointed out that boredom and depression are commonplace in the life of an incarcerated offender. In correctional institutions, “all aspects of the offenders lives, including their basic needs, are controlled and manipulated by the institution and the individuals that are employed there;” this treatment “is often dehumanizing and demoralizing” (Adney, 1999). Everything that offenders once did in their private lives is now under the eyes of other inmates and prison staff; offenders are now identified by a number and are no longer treated as an individual with a name and personality. They are required to relinquish personal identity and forced to conform. Daily activities become monotonous and unchanging with little allowance for personal

expression. The enforced idleness and absence of free will often leads to self-destructive behavior (Adney 1999). One antidote to these problems of the incarcerated is education.

Some researchers have suggested that education programs in prisons must include basic employability skills. Bannatyne and Hall (2000) observed that a common thread in many articles is the lack of marketable skills in general inmate populations (p. 320). In 2008, educational testing revealed that a large percentage of offenders functioned below the sixth-grade level in reading, math, and language (Oklahoma Department of CareerTech, 2011). Hull et al. (2000) found that education programs were an effective way to reduce crime and that the most successful educational programs were ones that focused on the offenders' cognitive functioning because deficits in these areas appear related to their criminality. Hull et al. reported that poor reasoning, poor interpersonal problem solving, and lack of social perspective were the prevalent cognitive functions that most offenders seem to lack, and by providing them with training and education to develop these skills recidivism was greatly reduced. This suggests that career and technical education programs containing these skills have become a necessary component in offender training for good reason.

Despite documented success of CTSC, the current state of rehabilitation of offenders is still in desperate need of modifications and changes. Prison rehabilitation has come a long way. As recently as 1973, the National Advisory Commission on Criminal Justice concluded that "the American prison system was obsolete and could not be reformed, and the false hope of rehabilitation should be abandoned and that prison should not be used for any other purpose than to lock away persons who are deemed too dangerous" to be allowed to live among society (Dugid, 2000, p. 246). In 1977, it was

recommended that prisons discard concerns of the causation of crime and the reasons for recidivism and focus solely on prison management (Dugid, 2000). Fortunately, attitudes about incarceration and rehabilitation have evolved. Offenders are now being given access to education and training that was once not available.

However, while education and training is valuable and extremely important, experts have claimed it cannot be the only means of rehabilitation. Hull et al. stated, “Given the high rate of relapse, it becomes clear that the current epidemic of violence facing our nation will not be seriously reduced until methods are identified that change the behavior of known criminal offenders” (p. 256). In 1976, Martinson notoriously declared that “nothing works” and suggested that there is “a radical flaw in our present rehabilitation strategies – that education at its best...cannot overcome, or even appreciably reduce the powerful tendency for offenders to continue in criminal behavior” (Dugid, 2000, p. 245). Martinson further argued that “our present treatment programs are based on a theory of crime as a disease...as something foreign and abnormal in the individual which can presumably be cured” (Dugid, p. 246). According to Dugid, that theory may “be flawed in that it overlooks both the normality of crime in society and the personal normality of a very large proportion of offenders...who are merely responding to the facts and conditions of our society” (p. 246). Dugid believes that it is “disadvantages and inequalities” in today's society that cause criminal and offender behavior and “it is the labeling of such that perpetuates it” and that the “criminal is viewed as one who cannot help himself and is only fit for treatment, not rational conversation” (p. 246). In order for society to reduce crime and essentially the number of incarcerated criminals, a

balance must be reached between education and treatments that focus on the cause and nature of crime and criminality.

Gehring and Eggleston (2006) claimed that “Although institutions seem isolated from general society, they truly reflect issues of the culture, [this] is one of the things that makes correctional education and prison reform important” (p. ix). Because many people are now personally acquainted with prisons and incarceration, the need for accurate measurements of success and rehabilitation and the need for an overall reduction in crime and recidivism are paramount. As Gehring and Eggleston pointed out, “Correctional educators operate on the principle that attitudes, ideas, and behavior can be corrected, that humans are capable of learning and growing. This is what makes correctional education correctional” (p. xiii). This positive attitude toward rehabilitation and education needs to be adopted by society as a whole in order to combat the problem of growing prison populations. Researchers have asserted that sentencing offenders to longer and harsher prison terms is not the answer to America’s crime epidemic. Gehring reflected the belief of many experts when he asserted that “long term confinement debilitates, rather than rehabilitates” (2000, p. 198). Furthermore, in order for prison rehabilitation to change and advance, it is important for a nationally recognized system of success measurement to be implemented. According to Bannatyne and Hall, currently, there is no assessment process that is routinely conducted on offenders after education program completion to determine if there has been any change or improvement in attitude or academic level (2000, p. 321). Until these changes are made, it will be necessary to rely on agencies such as CTSC and DOC education to provide for the training needs of incarcerated offenders. Overall, the success of these programs is documented and encouraging.

Research indicates that offenders with technical and academic skills are less likely to return to crime, thus lessening the burden on tax-payers and communities (Oklahoma Department of CareerTech, 2011). The fact that 75% of CTSC graduates who have been released have not been re-incarcerated within 5 years is reason enough to support and maintain this type of training in prison facilities (Oklahoma Department of CareerTech, 2011). In Oklahoma, a state with a prison population of over 26,000 with an annual cost of \$15,000 and above per offender, and “with an incarceration rate that guarantees that many of these individuals will return to prison, every taxpayer has every reason to hope for good results” (Goble, 2004, p. 163).

CHAPTER III

METHODOLOGY

The purpose of this study was to describe the effects of career and technical education (CTE) on the recidivism pattern and rates for individuals convicted of crimes and serving prison sentences in Oklahoma correctional facilities between January, 2003 and December, 2008. Specifically, the study examined those offenders who were participating in Oklahoma Department of Career and Technology Education, Skills Centers Division programs. This study analyzed recidivism in selected demographic categories of Skills Centers students as guided by the study's research questions.

General Approach and Research Design

This study was quantitative and used an *ex post facto* explanatory descriptive design based on data mining from large state data bases and public records. Offenders who graduated from an Oklahoma Department of Career and Technology, Skills Centers, career and technical education program while incarcerated were identified in existing Oklahoma data bases. They were then tracked through the data bases for three years following release between January, 2003 and December, 2008. Information was obtained from data bases of the CareerTech Student Records system and the Oklahoma Department of Corrections (ODOC) Statistical Analysis Unit. Records of offenders who recidivated, i.e. returned to ODOC custody, within the selected five-year period were flagged for analysis. Descriptive statistics were calculated on the selected offender

records to answer the research questions. Recorded Oklahoma data were also compared to relevant general population statistics for recidivists and non-recidivists.

Research Questions

The following research questions guided this study:

1. What is the rate of recidivism for offenders who participate in Skills Centers programs while incarcerated in Oklahoma?
2. Is there a difference in recidivism rates among CTE programs offered to offenders while incarcerated?
3. Is there a difference in recidivism rates of offender's age 18 to 29 who participate in CTE programs while incarcerated and offenders age 30 and above?
4. Is there a difference in recidivism rates of offenders who participate in CTE programs who have attained a GED or high school diploma and those offenders who have not?
5. Is there a difference among races in recidivism rates of offenders who participate in CTE programs?
6. Is there a difference between genders in recidivism rates of offenders who participate in CTE programs?
7. Is there a difference in recidivism rates of offenders who participate in CTE programs offered at community and minimum security levels with the Oklahoma Department of Corrections?

8. How do recidivism rates found in this study compare to national rates?

Variables

The *dependent variable* for this research was recidivism rates within the time period selected for the study. The time period was January 1, 2003 to December 31, 2008. Recidivism was operationally defined as *return to Oklahoma Department of Corrections custody after being released*.

The *independent variables* included demographics, CTE program, and security level variables.

Specifically, these variables included:

- CTE program completed while incarcerated
- Age
- High school completion / non completion
- GED completion
- Race
- Gender
- Security level of incarceration

Population and Sample

Frankel and Wallen (2003) stated that “a sample in a research study refers to any group on which information is obtained. The larger group to which one hopes to apply the results is called the population” (p.97).

The population for this study was all offenders housed at Oklahoma Department of Corrections (ODOC) facilities in the State of Oklahoma between January 2003 and December 2008 who completed Skills Centers programs and successfully discharged

from the Oklahoma Department of Corrections during that time period ($N = 2772$). Of this population, 23.48% ($N=651$) recidivated during the time period studied. This time period was selected because it allowed checking all participants for recidivism for three years after release. This study was a census study of all members of the population, thus no sample was required. Descriptive parameters by ethnicity for the study's population and the recidivists are shown in Table 3.

Table 3: Student Population and Recidivism By Race

	Native American	Black	Hispanic	White	Asian	Other	Missing Data
Students ($N=2,772$)	274	641	114	1,721	10	3	9
Recidivists ($N=651$)	60	187	29	368	2	1	4
%Recidivists	21.89%	29.17%	25.43%	21.38%	20.00%	33.33%	44.44%

Tables 4 through 9 present additional descriptive data about the population of students and the sub-set of recidivists. Table 4 shows the gender distribution of the recidivists. This distribution is skewed by the smaller percentage of females in the incarcerated student population. Further discussion on gender and recidivism is presented in Chapter IV.

Table 4: Recidivists By Gender ($N=651$)

Male	614	94%
Female	37	6%

Table 5 shows the distribution of the recidivists by age groups. This distribution is skewed by the smaller percentage of the younger groups in the incarcerated student population. Further discussion on age groups and recidivism is presented in Chapter IV.

Table 5: Recidivists By Age ($N=651$)

Ages 18 to 29 (<i>N</i> =503)	181	36%
Ages 30 and Over(<i>N</i> =2269)	470	20.71%

Table 6 shows the distribution of recidivists based on completion or non-completion of the 12th grade. Further discussion of this distribution is presented in Chapter IV.

Table 6: Recidivists By High School Education (N=651)

Completed 12 th Grade	201	31%
Did Not Completed 12 th Grade	432	66%
No High School Education	18	3%

Table 7 shows the distribution of recidivists based on completion or non-completion of a GED. Further discussion of this distribution is presented in Chapter IV.

Table 7: Recidivists By GED (N=651)

No GED	285	44%
Have GED	353	54%
Missing Data	13	2%

Tables 8 and 9 show recidivists and non-recidivists among the incarcerated student populations at community and minimum security levels. Further discussion of these data are presented in Chapter IV.

Table 8. Incarcerated Students and Recidivists By Community Security Level (N=269)

	Students	Recidivists	Non Recidivists
Community Security Recidivism Rate	269	32 (11.89%)	237 (88.11%)

Table 9. Incarcerated Students and Recidivists By Minimum Security Level (N=2,503)

	Students	Recidivists	Non Recidivists
Minimum Security Recidivism Rate	2,503	619 (24.73%)	1,884 (75.27%)

The population for this study consists of a larger proportion of males than females that is consistent with the current ODOC population of 23,019 males and 2,598 females as verified in *ODOC Facts at a Glance* (p. 3). According to *ODOC Facts at a Glance*, the average age of the offenders incarcerated in Oklahoma is 37.7 years. The population for this study was consistent with that for the entire population in terms of gender and age.

Instrumentation and Data Sources

This study used data from existing large-scale data bases and other publicly available data sources. Therefore data-gathering instrumenting was required. Data mining techniques were the methodological foundation for the study and also replaced instrumentation.

Data sources used in the study included:

1. *Oklahoma Department of Corrections Statistical Analysis Unit*. This source provided data on offender recidivism. This information was stripped of all possible identification sources and yielded a recidivism flag of yes or no to indicate whether a former student had returned to prison for any reason.
2. *Oklahoma Department of Career and Technology Education(ODCTE) Student Records system*. This system provided a listing of all students who participated in ODCTE Career and Technical programs from January 1st 2003 to December 31st 2008. This information was sent to the Oklahoma Department of Corrections Statistical Analysis Unit for determination of

recidivism. The data were then stripped of all identifiers and sent to the researcher for use in this study.

3. *The Federal Bureau of Justice Statistics* publications and web site were used for recidivistic trends in the determination of the national recidivism rate for comparison with those found in this study..
4. *The Oklahoma Department of Corrections Facts At A Glance* site was used for demographic profiles of incarcerated offenders in the state of Oklahoma.

Procedures

The first step in the procedures for this study was to receive permission from the Oklahoma State University Institutional Review Board (IRB) to gather the needed data and conduct this study (Appendix A).

After IRB permission was granted, an email was sent to Dr. Jim Meek, Superintendent, Oklahoma Department of Career and Technology Education Skills Center Division, to determine how to proceed with a request for data from the Oklahoma Department of Career and Technology Education. Dr. Meek suggested submitting an inquiry, in writing, conveying what information would be needed, how it would be utilized, and for what purpose. (Appendix B)

Subsequent written permission was provided by Dr. Phil Berkenbile, State Director, Oklahoma Department of Career and Technology Education, to gather and use Skills Centers data for this study (Appendix C).

Dr. Jim Meek was consulted regarding acquisition and utilization of Skills Centers data. Dr. Behrooz Jahanshahi, Director of Student Services, Oklahoma Department of Career and Technology Education Skills Center Division, provided a

prepared Excel file containing information of all students enrolled in Skills Centers programs from the requested dates of January 1st 2003 to December 31st 2008.

After receiving the data, the researcher sent an unopened emailed Excel file to the Oklahoma Department of Corrections Statistical Analysis Unit with the request for data determining which former Skills Centers students had returned to the Oklahoma Department of Corrections (ODOC) custody.

Once the file was returned to the researcher via email, it was then forwarded, unopened, to Dr. Jim Meek to ensure that the data was stripped of all identifiers except for the specified ones requested to be used in this study and approved by the IRB to qualify this study as non-human subject research . Dr. Meek returned the file stripped of all identifiers except for the requested information that included the following: race, gender, year of birth, whether or not a GED or High School Diploma was attained, Recidivism Flag that was indicated by a yes or no response, security level, minimum or community eligibility, date and length of program enrollment, name of program in which student was enrolled, and date of discharge from ODOC. All dates included year only, as required by the IRB.

All graduates from a ODCTE Skills Centers career and technical education (CTE) program between the dates of January 1st 2003 and December 31st 2008 were to be tracked during the three-year period immediately following their release from prison. Once the data were compiled, the information was reviewed and all students who did not fit the criteria of having been out of prison for less than three years from their discharge date were removed. The recidivism statistics that were provided by the Oklahoma Department of Corrections look at all offenders who re-offend and are convicted of a new

crime or parole and probation violation and sentenced to prison. Many ex-offenders return to the custody of the Oklahoma prison system due to various violations and failure of the probation and parole system.

Upon further review of the data, the number of male and female recidivists found in the population of graduated Skills Centers students was determined. To calculate and record accurate percentages, the data were addressed by grouping the population into male and female categories and then further into recidivists in each gender category.

Next was the determination of the number of students age 18 to 29 years and 30 years and above. Once this information was gathered, the data were separated into categories by year of birth. The categories were then further divided into recidivists and non- recidivists. This information was analyzed and the percentages were then calculated and recorded.

The next area of analysis was to determine the number of students within each race. After separating the categories by race, the categories were further divided into recidivists and non recidivists and again this information was analyzed and the percentages were then calculated and recorded.

Security level was the next field examined. The number of students within each security level was determined and separated into minimum and community security levels. Computed percentages in each security level category were then calculated and recorded.

Next the number of students who graduated within each Skills Centers program was determined. After separating the categories by program, the number of recidivists in each program was determined. Percentages were then calculated and recorded.

Finally, the number of students who had attained either a high school diploma or GED was determined. The data were further evaluated to ascertain which students had recidivated who received a GED and which had recidivated who completed High School and received a diploma. This information was analyzed and the percentages were calculated and recorded.

Data Analysis

An explanatory descriptive research design will be used wherein the raw data was collected and subjected to analysis as described above in procedures to address the research questions. The quantitative analysis was based on descriptive statistics using graphs, tables, and charts to display the data. With recidivism as the dependent measure, comparison was made among groups defined by the independent variables. Comparisons were also made of the recidivism rates of inmates completing CTE programs and those of the general prison population in national recidivism rate.

CHAPTER IV

FINDINGS

Overview of Study and Research Questions

The purpose of this study was to describe the effects of career and technical education (CTE) programs offered by the Oklahoma Department of CareerTech, Skills Centers Division, in Oklahoma prisons, and their relationships to recidivism rates. Specifically the study: described recidivism rates of: (a) all CTE students in Skills Centers programs, (b) recidivism rates among individual programs; (c) compared recidivism rates between age groups: 18 to 29 and 30 and over; (d) compared recidivism rates between GED and High School diploma; (e) compared recidivism rates among racial groups; (f) compared recidivism rates between gender; (g) compared recidivism rates between offenders at community and minimum security levels; and (h) compared recidivism rates found in Oklahoma to reported national recidivism rates. For this study, data for inmates released between 2003 and 2008 were included.

All data were collected from information derived from a student database provided by CareerTech and quantified by the Oklahoma Department of Corrections. The quantitative data analysis technique used was descriptive statistics. Findings are reported in this chapter and arranged by order of research questions found in this study.

Research Question 1

What is the rate of recidivism for offenders who participate in Skills Centers programs while incarcerated in Oklahoma?

Research question number one examined the recidivism rate of offenders who participated in Skills Centers CTE programs in Oklahoma between 2003 and 2008. Between January 1, 2003, and December 31, 2008, the total number of offenders who attended Skills Centers short-term CTE programs and then were released from prison was 2,772. According to data collected in the Oklahoma Department of Corrections records database within this population, 651 offenders returned to prison within 3 years of their release while 2,121 did not. The resulting frequencies and percentages are recorded in Figure 4.

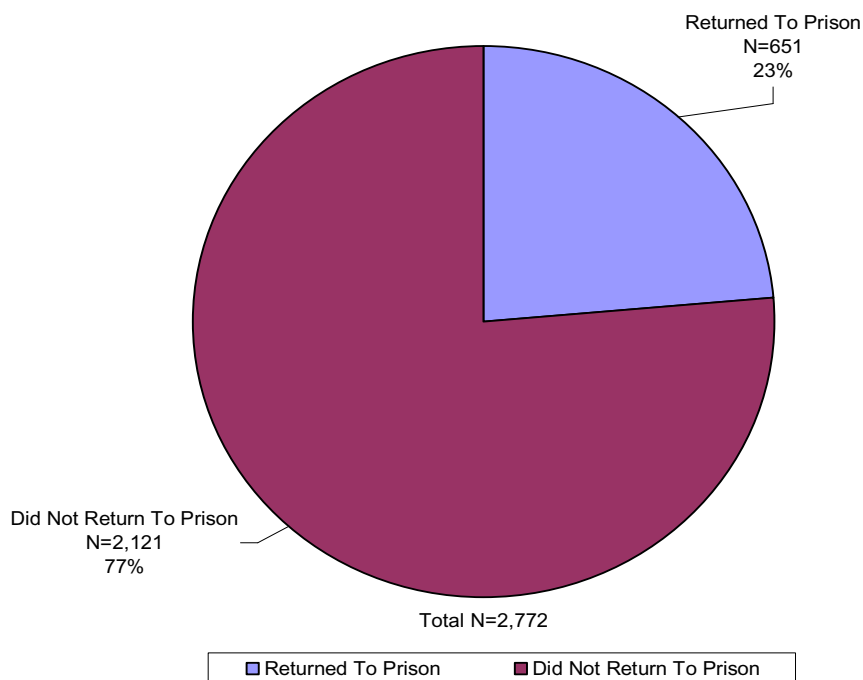


Figure 4: Recidivism Among Offenders Who Participated in Skills Centers Programs (N=2772)

Figure 4. shows the number and percentages of Skills Centers students that returned and did not return to prison. These data indicate that the recidivism rate for Skills Centers was 23%; approximately three-quarters did not return to prison for at least three years after release.

Research Question 2

Is there a difference in recidivism rates among CTE programs offered to offenders while incarcerated?

Research question number two examined the recidivism rates among different Skills Centers programs. Between January 1, 2003, and December 31, 2008, the total number of offenders who attended Skills Centers short-term programs and then returned to prison was 651. During this time period, the Skills Centers offered 30 separate programs to offenders depending on location and security level. Due to budgetary constraints, some programs were closed and others remained open, resulting in variances in numbers of students served. The offenders who participated in these programs and then recidivated and respective recidivism rates are displayed according to the programs in which students were enrolled in Table 10.

Table 10:

Recidivism among Participants by Program

Students ($N=2,772$)

Recidivists ($N=651$)

Program	($N=2,772$)	($N=651$)	Percentages
	Students	Recidivists	% of Recidivists
Welding Fabrication	73	18	24.65%
Welding Academy	167	52	32.11%

Transportation/Distribution	72	10	13.9%
Precision Machining	6	2	30.00%
Plumbing Technology	65	24	27.08%
Plumbing Academy	8	3	37.50%
Metal Manufacturing	189	50	26.45%
Masonry	75	26	34.66%
Manufacturing Academy	72	23	31.94%
Industrial Maintenance Academy	204	36	17.64%
Industrial Electricity	7	1	14.28%
HVAC/R Academy	189	40	21.16%
Hospitality Food Service	67	11	16.41%
Horticulture/Landscape	19	1	5.26%
Heavy Equipment Operator	74	17	22.97%
Auto Services Academy	290	73	25.17%
Building Maintenance Technology	75	22	29.33%
Building Trades Academy	159	31	19.49%
Business & Information Technology-Community Security	19	3	15.78%
Cabinet Making	14	2	14.28%
Commercial Building Grounds	43	4	9.30%
Commercial Construction Trades	341	117	34.31%
Commercial Support Technology	44	9	20.45%
Construction Technology	181	34	18.78%
Electrical Technician (MTD)	5	1	20.00%

Electricity Technology	97	16	16.49%
Auto Service Technology	50	3	6.00%
Heavy Equipment Mechanic	42	8	19.04%
Business & Information Technology-Minimum Security	101	8	7.92%

Table 10. shows the number of students enrolled in Skills Centers programs and the number and percentage of those that returned to prison. Programs with the lowest recidivism rates (<10%) were Horticulture / Landscape, Commercial Building Grounds, Auto Service Technology, and Business Information Technology.

Research Question 3

Is there a difference in recidivism rates of offenders age 18 to 29 who participate in CTE programs while incarcerated and offenders age 30 and above?

Research question number three examined if a differences in recidivism rates between offenders in two separate age categories. Between January 1, 2003, and December 31, 2008, the total number of offenders who attended Skills Centers short-term programs between the ages of 18 and 29 was 503. There were 322 offenders between the ages of 18 and 29 years that did not return to prison. There were 181 students between the ages of 18 and 29 years that did return to prison. The resulting frequencies and percentages are shown in Figure 5.

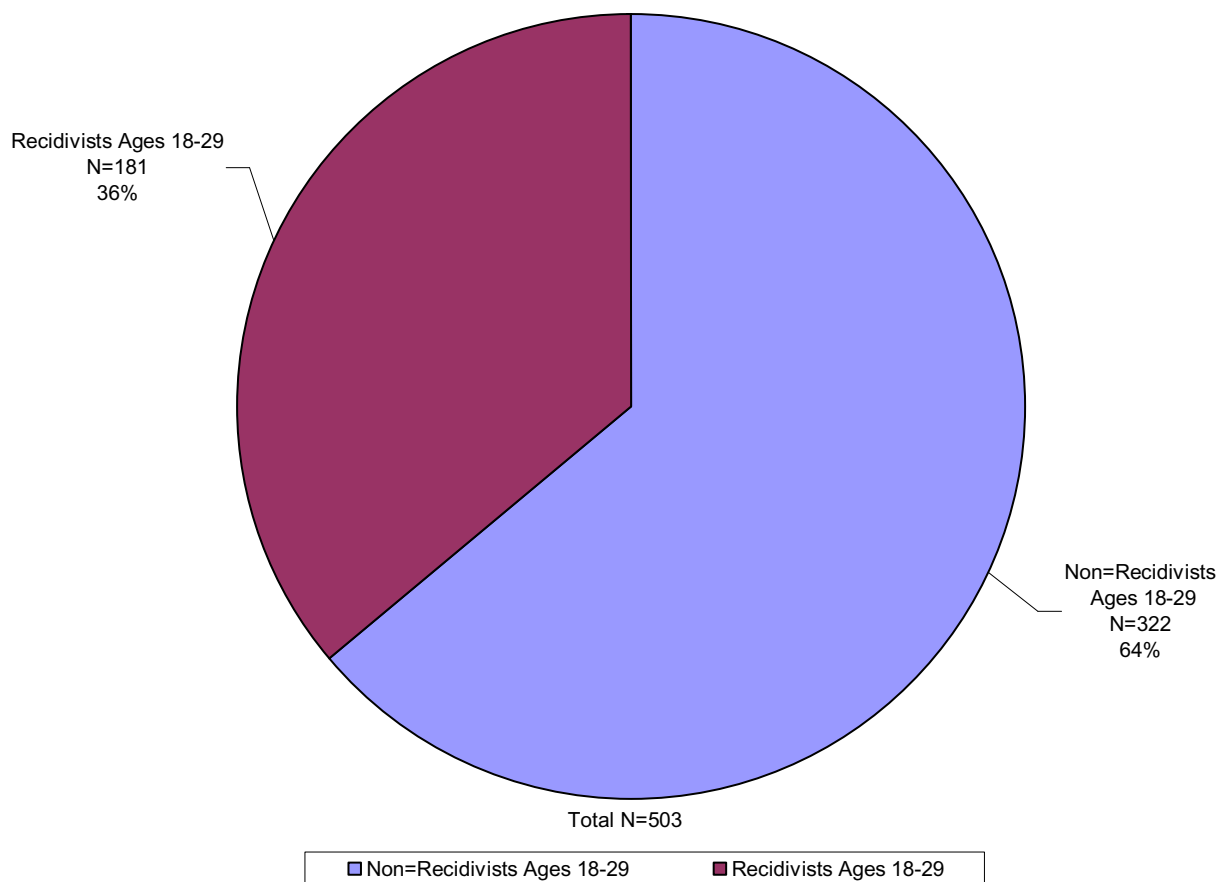


Figure 5: Recidivists/ Non-Recidivists Ages 18-29 (N=503)

Figure 5. shows the number and percentage of Skills Centers students ages 18 to 29 that returned and did not return to prison. The recidivism rate for this age group was 36%

There were 470 offenders ages 30 years and above that returned to prison. There were 1799 offenders that did not return to prison. A total of 2269 population of offenders were 30 years and above. The resulting frequencies and percentages are recorded in Figure 6.

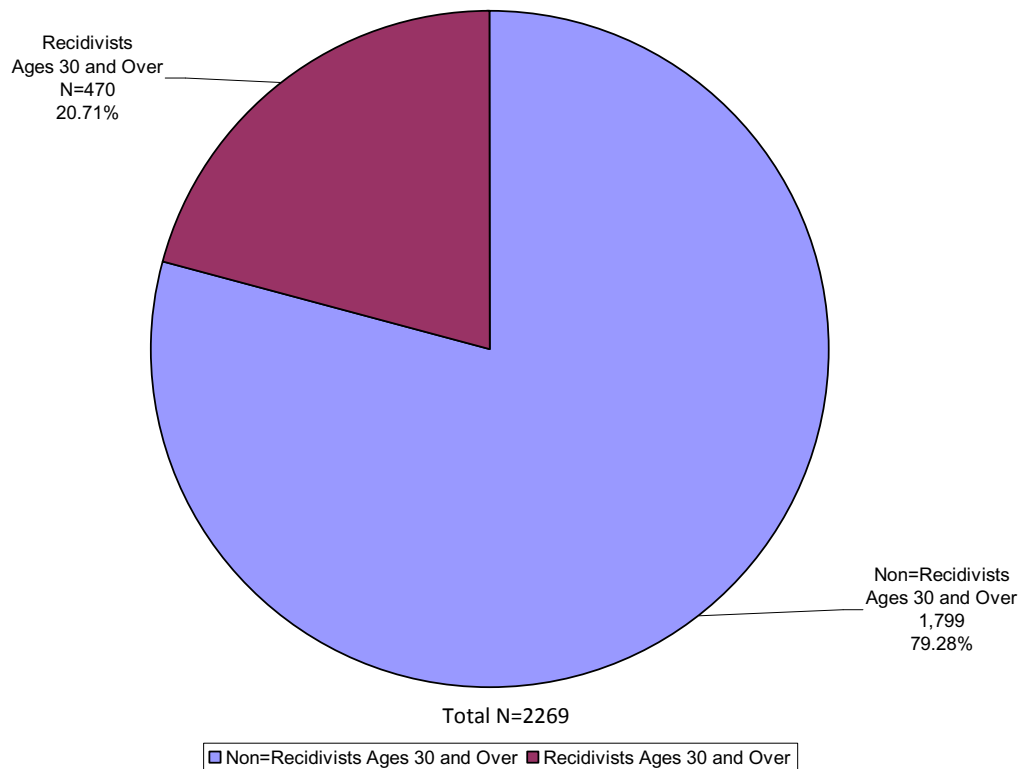


Figure 6: Recidivists and Non-Recidivists Ages 30 and Over (N=2269)

Figure 6. shows the number and percentage of Skills Centers students age 30 and over that returned and did not return to prison. The recidivism rate for this age group was 21% which was smaller than the rate for the younger group (36%).

Research Question 4

Is there a difference in recidivism rates of offenders who participate in CTE programs who have attained a GED or high school diploma and those who have not?

Research question number four examined the relationship between recidivism rates and attainment of a high school diploma or a GED. Between January 1, 2003, and December 31, 2008, the total number of offenders who attended Skills Centers short-term programs and then returned to prison was 651. Of the 651 students who returned to

prison, 201 possessed a high school diploma, and 432 did not possess a high school diploma. There were 18 students who did not report information related to their education level. The resulting frequencies and percentages are recorded in Figure 7.

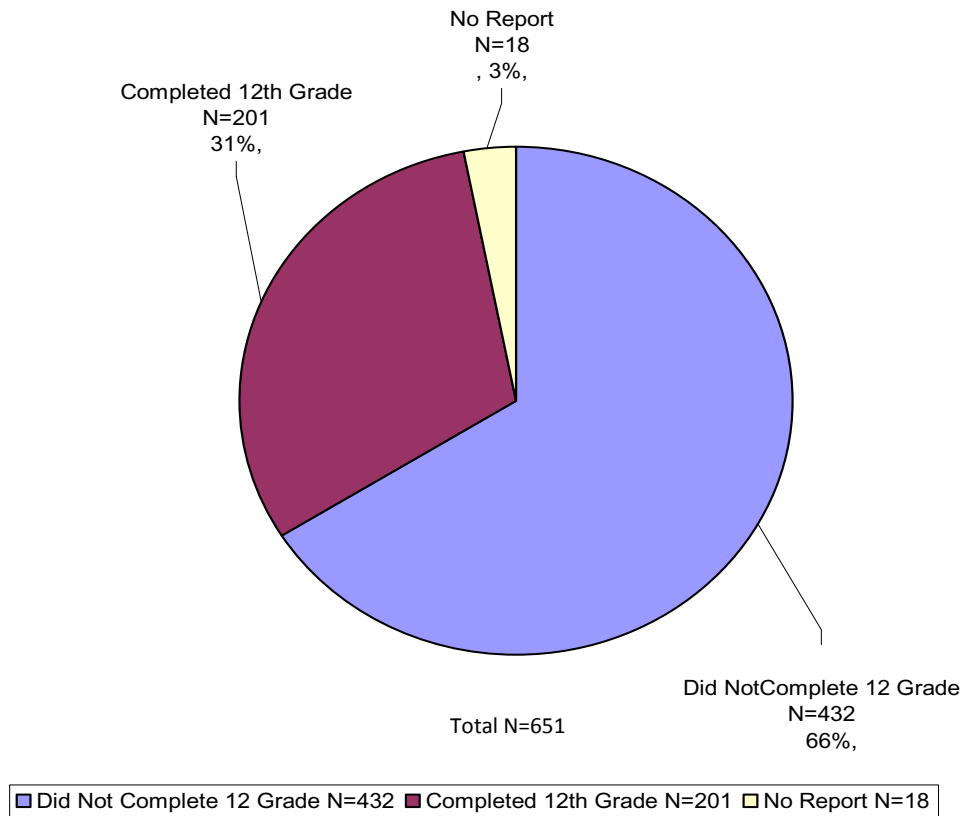


Figure 7: Recidivism by Completion of High School (N=651)

Figure 7 shows the number of Skills Centers program students that had completed the 12th grade or had not completed the 12th grade at time of enrollment in a Skills Centers program.

There were 285 offenders that did not possess a GED at the time of program participation. There were 353 offenders that did possess a GED at the time of

participation. There were 13 offenders did not report educational information relating to GED. The resulting frequencies and percentages are recorded in Figures 8, 9.

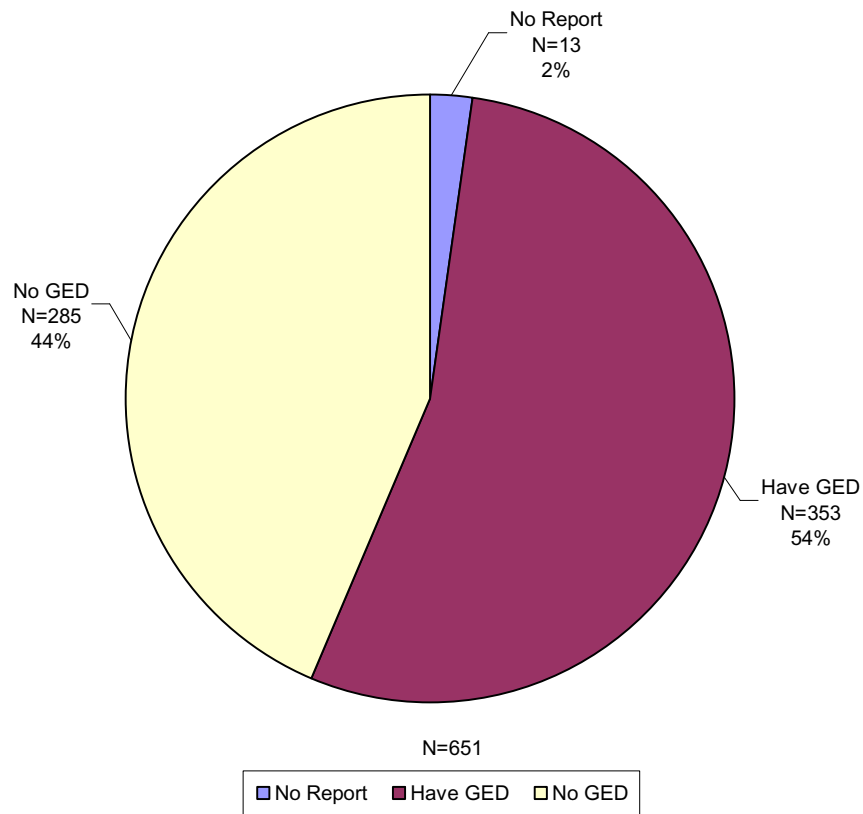


Figure 8 Recidivism by Completion of GED (N=651)

Figure 8 shows the number of Skills Centers program students that had attained a GED or had not attained a GED at time of enrollment in a Skills Centers program.

Further analysis examined recidivism rates for both forms of secondary education attainment (High School completion and GED) and for recidivists with neither form of secondary completion. The results are shown in Figure 9.

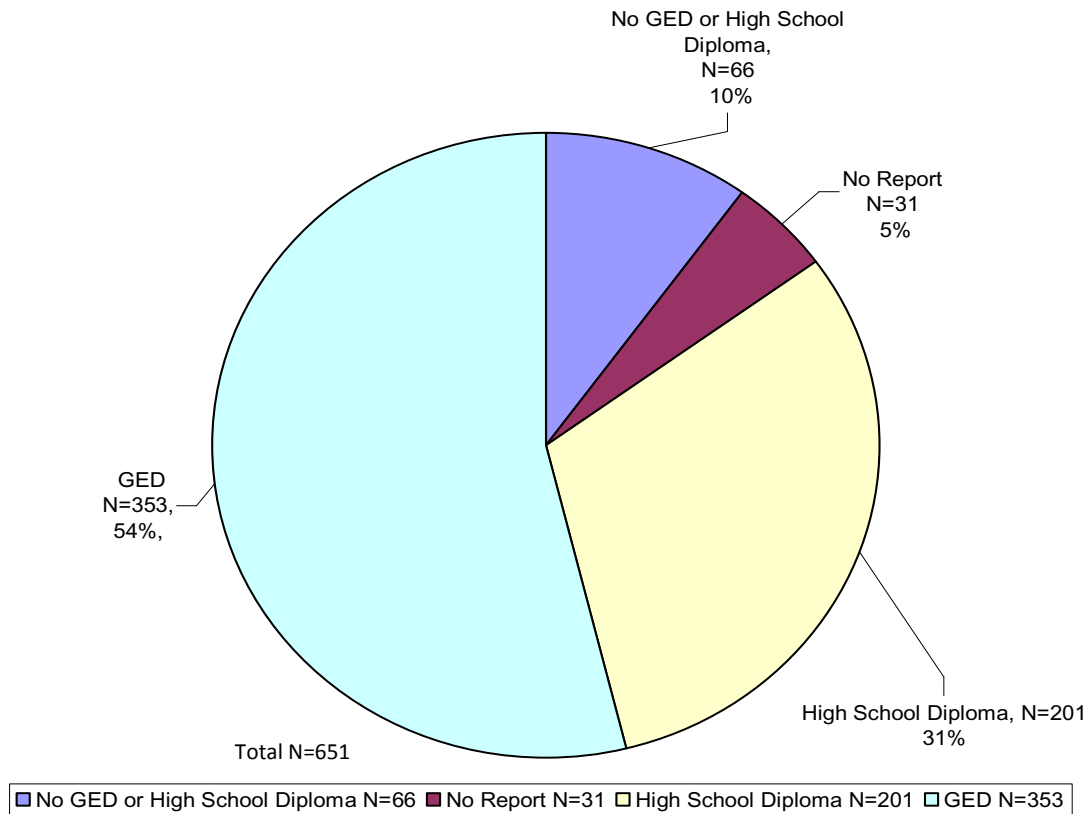


Figure 9: Recidivism by GED, High School Diploma and No Secondary Completion (N=651)

Figure 9 shows the number of recidivists that had attained either a GED or High School Diploma at time of enrollment in a Skills Centers program. These data show that 85% of the recidivists had completed either a high school diploma or a GED. The recidivism rate was smaller for high school completers than for GED holders.

Research Question 5

Is there a difference in recidivism rates of offenders who participate in CTE programs among races?

Research question number five analyzed the rate of recidivism among different racial groups of offenders enrolled in Skills Centers programs. Between January 1, 2003, and

December 31, 2008, the total number of offenders who attended Skills Centers short-term programs and then returned to prison was 651. They were 60 Native Americans, 187 Blacks, 29 Hispanics, 368 Whites, 2 Asians, 1 Other, and 4 offenders whom did not report information on race. The resulting frequencies and percentages are recorded in Table 11

Between January 1, 2003 and December 31, 2008, the total population of offenders who attended Skills Centers short-term programs and were released was 2,772. The racial composition of program enrollment was: 274 Native Americans, 641 Blacks, 114 Hispanics, 1,721 Whites, 10 Asians, 3 Other and 9 that did not report racial information. The resulting frequencies and percentages are recorded in Table 11.

Table 11: Enrolled Students and Recidivism by Race (N=2,772)

	Native American	Black	Hispanic	White	Asian	Other	Missing Data
Students (N=2,772)	274	641	114	1,721	10	3	9
Recidivists (N=651)	60	187	29	368	2	1	4
%Recidivists	21.89%	29.17%	25.43%	21.38%	20.00%	33.33%	44.44%

Table 11. shows the racial demographics of the Skills Centers Students at time of enrollment. The data indicate that the recidivism rates were similar across racial groups.

Research Question 6

Is there a difference in recidivism rates of offenders who participate in CTE programs between genders?

Research question number six analyzed the rates of recidivism for male and female offenders enrolled in Skills Centers programs. Between January 1, 2003, and December 31, 2008, the total number of offenders who attended Skills Centers short-term programs and were release from prison was 2,772, of which 651 offenders returned to prison. The 651 offenders that returned to prison were composed of 614 males and 37 females. The resulting frequencies and percentages are recorded in Figures 10, 11, 12, and 13.

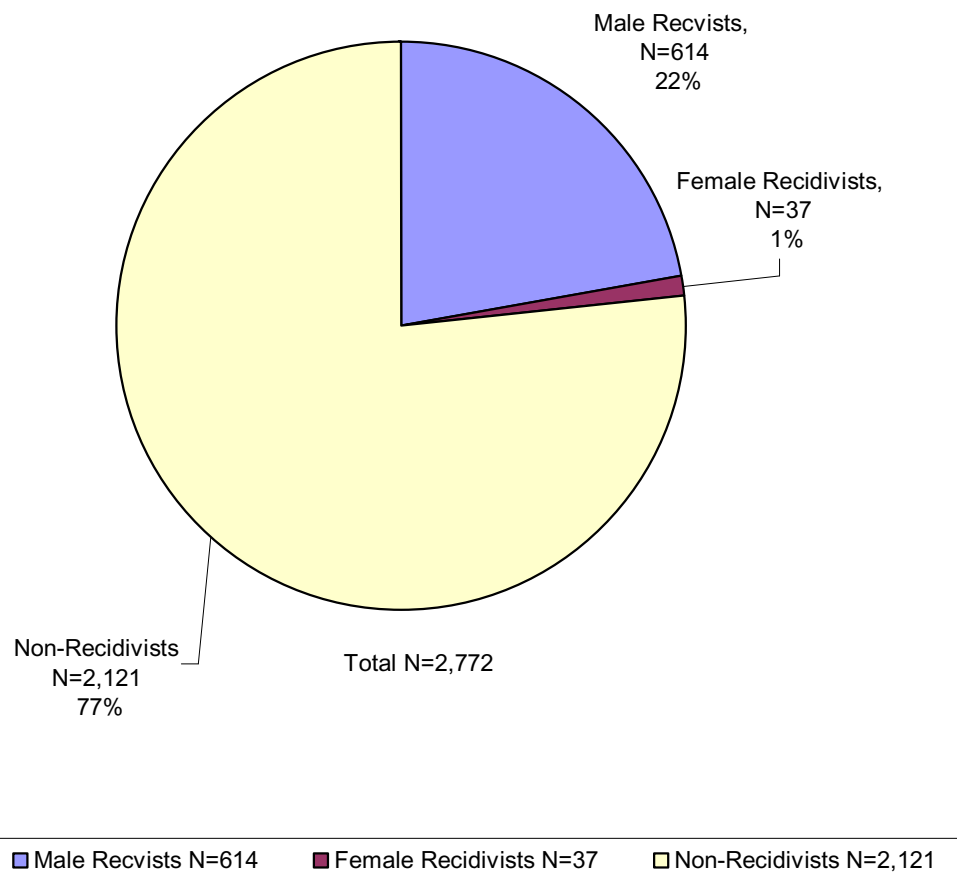


Figure 10: Female Recidivists, Male Recidivists, and Non Recidivists (N=2,772)

Figure 10 shows the percentages of male recidivists, female recidivists and non-recidivists of Skills Centers students.

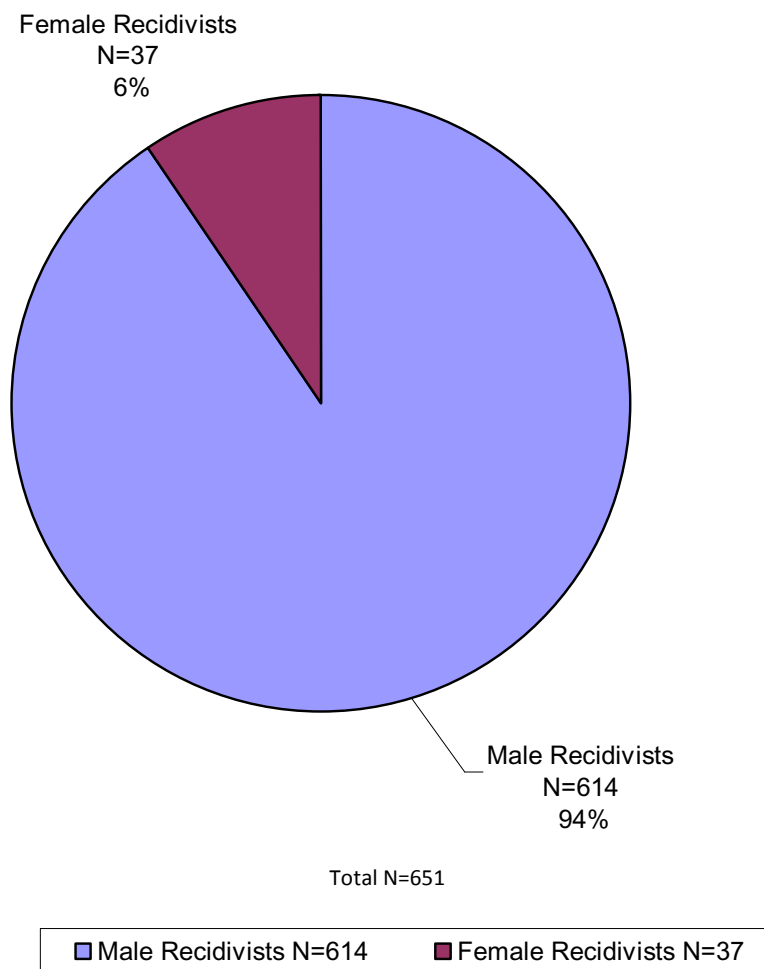


Figure 11: Female and Male Recidivists (N=651)

Figure 11 shows the percentages of males and females in the recidivists sub-population

A total of 278 of the 2,772 offenders released from prison were females, of these 37 returned to prison. The resulting frequencies and percentages are recorded in Figure 12.

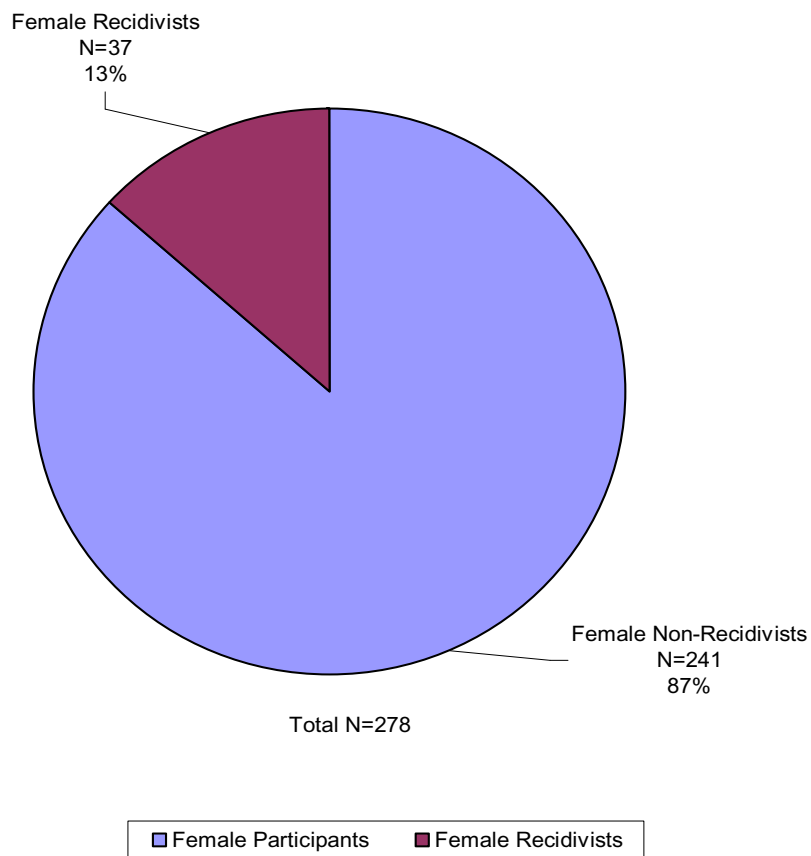


Figure 12: Recidivists and Non- Recidivists by Female Gender (N=278)

Figure 12. shows the percentages of female offenders that returned and did not return to prison

A total of 2,494 of the 2,772 offenders released from prison were males, of these 614 returned to prison. The resulting frequencies and percentages are recorded in Figure 13.

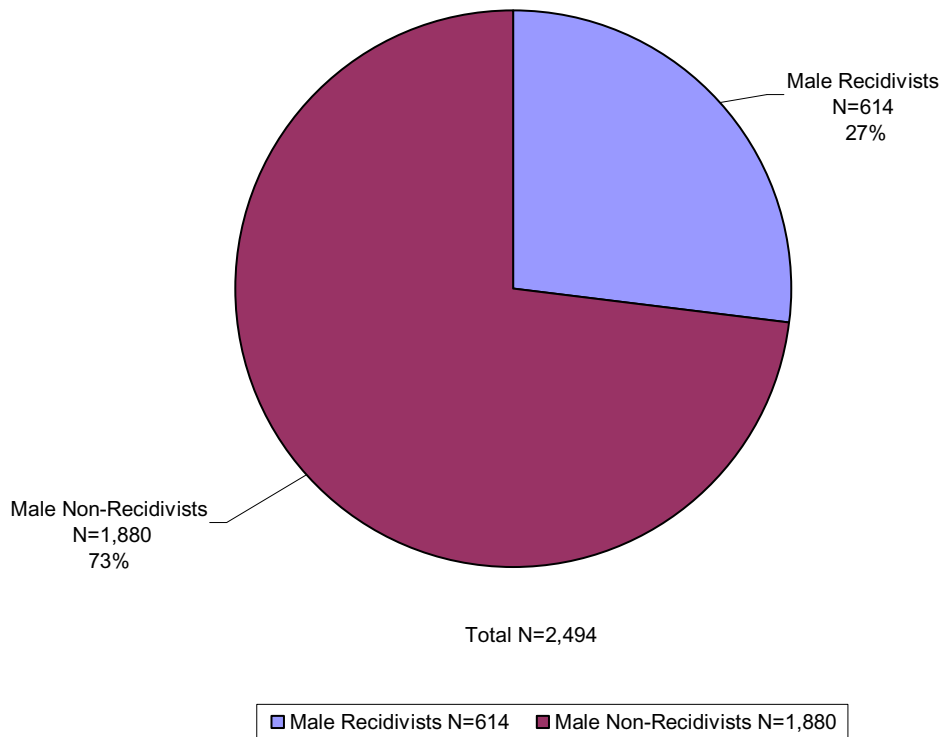


Figure 13: Recidivists and Non- Recidivists by Male Gender (N=2494)

Figure 13 shows the percentages of male offenders that returned and did not return to prison.

Figures 10 through 13 indicate that males were more likely than females to recidivate after participating in Skills Centers CTE programs.

Research Question 7

Is there a difference in recidivism rates of offenders who participate in CTE programs offered at community and minimum security levels with the Oklahoma Department of Corrections?

Research question number seven determined if there was a difference in recidivism rates between those Skills Centers students that graduate from Community Security programs and Minimum Security programs. Between January 1, 2003, and December 31, 2008, the total number of offenders participating in Skills Centers short-term programs was 2,772. The total number of offenders who attended Skills Centers short-term programs and then returned to prison was 651. A total of 269 students were in Community Security of which 32 offenders returned to prison. The resulting frequencies and percentages are recorded in Table 12

Table 12:

<i>Recidivists and Non-Recidivists by Community Security Level (N=269)</i>			
	Students	Recidivists	Non Recidivists
Community Security Recidivism Rate	269	32 (11.89%)	237 (88.11%)

A total of 2,503 students were held in Minimum Security. Of these, 619 offenders returned to prison. The resulting frequencies and percentages are recorded in Table 13.

Table 13.

<i>Recidivist and Non-Recidivists by Minimum Security Level (N=2,503)</i>			
	Students	Recidivists	Non Recidivists
Minimum Security Recidivism Rate	2,503	619 (24.73%)	1,884 (75.27%)

Tables 12 and 13 shows that the recidivism rate for offenders at minimum security was more than twice the rate for those at community security level.

RESEARCH QUESTION 8

How do recidivism rates found in this study compare to national rates?

Research question number eight examined the relationship between the recidivism rate of offenders who participate in Skills Centers programs in Oklahoma and the national recidivism rate as cited by the United States Department of Justice. The national recidivism rate as reported by the United States Department of Justice is 67% (United States Department of Justice 2011). The recidivism rate as reported by this study is 23%. This information is presented in Figure 14.

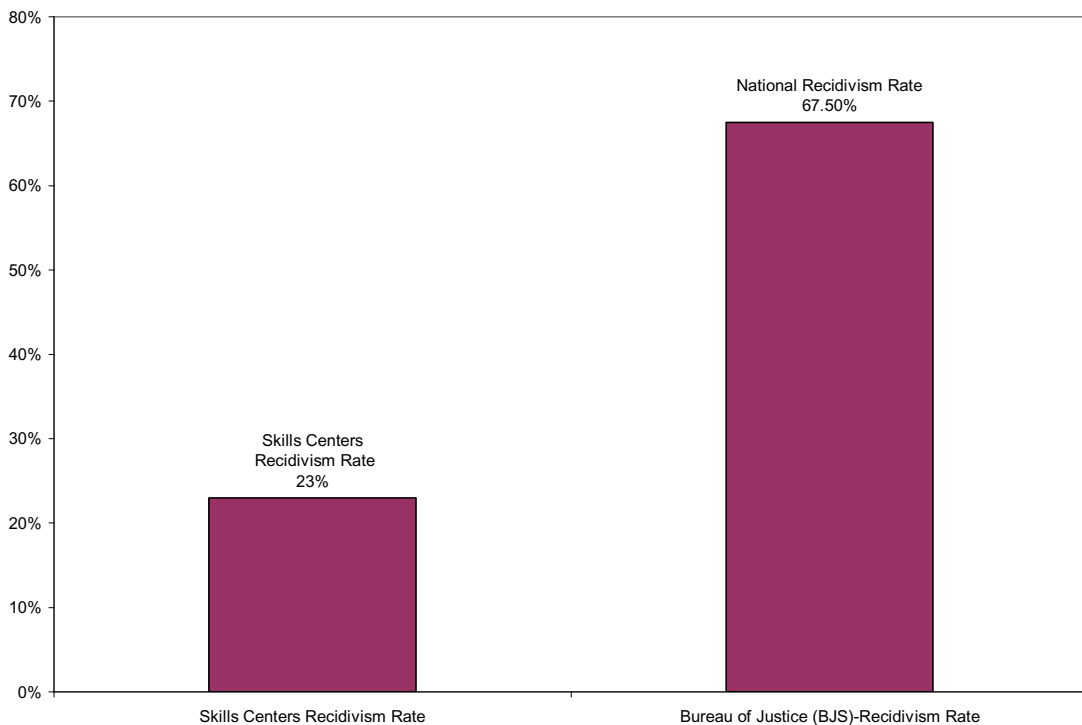


Figure 14: Recidivism Rates for Oklahoma Skills Centers and National Data

Figure 14 shows the reported national rate of recidivism and the rate of recidivism as determined by this study for inmates who participated in Oklahoma Skills Centers CTE programs from 2003 through 2008. Recidivism was defined as criminal acts that resulted in the re-arrest, reconviction, or return to prison with or without a new conviction during a three-year period following the offender's release. The data in Table 14 indicates the recidivism rate report nationally was nearly three times the rate for Skills Centers students.

CHAPTER V
CONCLUSIONS, DISCUSSIONS, AND RECOMMENDATIONS

Overview

The purpose of this study was to determine if the career and technical education (CTE) programs provided by the Oklahoma Department of Career and Technology Education, Skills Centers Division, to offenders in the State of Oklahoma has an effect on recidivism rates. In 2012 the national recidivism rate of offenders was 67.50% (Bureau of Justice). This rate of return of offenders in the correctional systems of this nation has created economic issues that have resulted in reduced services and personnel once assigned to the reintegration of offenders to society. The economic downturn nationally and in the State of Oklahoma has only amplified this problem, resulting in reductions in force and services provided by the Skills Centers Division.

This study also identified which Skills Centers CTE programs and what demographic sectors are of the most benefit to the taxpayers of Oklahoma. The theoretical foundation of this study postulates that the curriculum, trade skills, and prison environmental change provided by the Skills Centers programs give Oklahoma offenders experiences that affect the rate at which offenders return to prison. The Behaviorist, Constructivist, and human needs theories that form the underpinning for this study come together in a concept scenario that leads to a working hypothesis for the study. This hypothesis posits that convicted felons leave the Constructivist environment of a free society and enter the rigidly controlled Behaviorist world of prison. While incarcerated,

inmates may experience only the enforced Behaviorism and behavior modification of the prison and experience only the pseudo-change of conformity to meet the needs imposed by prison culture. Alternatively, inmates may participate in an intervention in the form of education programs – particularly CareerTech CTE programs that encourage and facilitate Constructivist personal and occupational skills that lead to permanent changes. Upon release, if ex-offenders who have received training in CTE programs employ their skills in business and industry, those ex-offenders can provide for and meet basic needs of free society as identified by Maslow’s needs hierarchy theory (1954, 1968, 1970) for themselves and their families. This may decrease the likelihood of their return to prison. Incarcerated individuals who do not experience the intervention of CTE programs may be more likely to experience post-release failure that results in their return to the prison system, thus causing recidivism (the dependent variable for this study) to rise. The acquisition of employment skills and the subsequent jobs acquired once released from prison enhances the opportunity for success in the workplace and community in which the ex-offender participates. By the examination of diverse CTE programs and demographic categories of Skills Centers students, a more comprehensive and data-driven approach can be used to create more opportunities for successful program outcomes.

Findings and Conclusions

Within the demographic categories surveyed in this study, some recidivism rates varied and yielded noticeable differences, while others were inconclusive. In the Skills Centers program-to-program comparison, some programs had low numbers of participants, which made comparisons difficult and inconclusive.

Skills Centers and National Recidivism Rates

A key finding of this study was that 77% of offenders who participated in Skills Centers CTE programs did not return to prison upon release, yielding a recidivism rate of 23%. This result supported the Florida Department of Corrections study (2012) which indicated that almost 75% of vocational program completers were successful after release. This recidivism rate was only approximately one-third of the national rate reported by the Bureau of Justice (i.e., 67.5%) in 2012.

This study did not disqualify offenders from the population who failed at supervised probation or parole as a condition of release and were subsequently returned to prison as many previous studies have used as exclusionary criteria. If an offender returns to prison, it costs the State of Oklahoma the same regardless of the type of criminal offense that causes the return. This is the method by which the United States Department of Justice determines offender returns, which make the comparisons to the national recidivism rate of 67% (United States Department of Justice, 2011) legitimate and fair; if an offender is back in prison, he or she is back in prison regardless of the reason. The findings of this study and their comparison with Department of Justice national recidivism rates support a conclusion that participation in CTE programs while incarcerated is associated with a lower rate of recidivism. This conclusion agrees with the literature which generally supports the benefit of CTE programs on recidivism rates.

Recidivism Rates for CTE Programs

The Skills Centers program in which an offender was enrolled had observable effects on the recidivism rates in this study. According to some supporting literature, these variances could be attributed to demographic factors of offenders such as age at

time of incarceration, race, and gender. According to supporting literature on younger offenders, some studies have asserted that as high as 51-70% recidivate (Krisberg, DeComo, & Herrera, 1992). Dramatic differences in program recidivism rates may also be attributed to the number of programs offered in particular trade areas, and program abandonment during the five-year period from 2003 to 2008. Some direct program-to-program comparisons could not be reliably made because sufficient numbers of students were not enrolled in programs. Nevertheless observed recidivism rates across programs varied considerable. Several programs had rates of less than 10%; others were greater than 30%. This supports a conclusion that CTE programs for offenders may have different recidivism rates and some may be better value than others.

Offender Age and Recidivism Rates

The age of the offender upon release from prison provided differing rates of recidivism for ages 18 to 29 and ages 30 and over. It was found in this study that offenders age 18 to 29 had a recidivism rate of 36% while those age 30 and over had a recidivism rate of 21%. This supports a conclusion that more mature age is associated with lower rates in recidivism. The higher rate of recidivism may reflect that the younger participants have radically different life styles than those of the more mature 30 and over age group. Increasing evidence indicates that this disparity possibly occurs as the younger participants struggle to adjust from the regimented, generated influences of prison life, to the chaotic, often-disorderly life to which they are returned outside the prison walls. The age of the offender upon release from prison, and research on Skills Centers programs, suggests that the younger participants struggle to adjust from the regimented, Behaviorist influences of prison life and encounter a more difficult

adjustment to Constructivist life outside of the correctional environment where self discipline, conformity, and lawful actions are societal expectations.

Education Level and Recidivism

With regard to the education level of an offender at the time of incarceration, the data from this study suggests that those offenders who attained a high school diploma prior to incarceration had lower recidivism rates than those who attained a GED. Of the 651 recidivists in this study, 31% had attained a high school diploma, while 54% of those offenders who returned had attained a GED, and 10% had no qualification. Bannatyne and Hall (2000) reported that “Inmates entering a state prison vary in background and in social and educational level, from functionally illiterate to college graduates.” However, 85% of the recidivists in this study did have some form of secondary education completion. These findings support a conclusion that while completion of a High School Diploma may be more associated with low recidivism than a GED, other factors may have stronger relationships to recidivism than secondary education.

Race and Recidivism

The racial make-up of Skills Centers program participants in this study was generally consistent with the ODOC racial characteristics. In the present study, there were only relatively small difference in minority and non-minority recidivism rates. The minimum recidivism rate was 21.38% for whites with the maximum being 29.17% for blacks. Participation and recidivism rates for all major races of Skills Centers offenders are consistently represented as 23%. Of note in the supporting literature was the point that “incarcerated persons are disproportionately male, black, young, single, undereducated, and poor (Bohm & Haley p. 348)” While Blacks had slightly higher

recidivism rates that other racial groups in this study, this difference was not great. This suggests a conclusion that factors other than race may be the stronger influences on recidivism after participation in CTE programs while incarcerated .

Gender and Recidivism

The gender differences of the offenders are disproportionate between male and female participants. Of the total population of 2,772 participants, there were only 278 female participants, or 10% of the total population. Of the 278 female participants, 37 recidivated for a recidivism rate of 13.30%. According to ODOC, the State of Oklahoma ranks number one in the incarceration of women in the United States. This study produced a female recidivism rate of 13.30%. According to this rate of recidivism, a disproportionate number of women are incarcerated in Oklahoma but a low number of them return once released. Of the total population of 2,772 there were 2,494 male participants, or 89.97% of the total population. Of the 2,494 male participants, 614 recidivated for a recidivism rate of 27%. Clearly, these findings support a conclusion that gender is related to recidivism, with males more likely than females to return to prison after being released..

Offender Security Level and Recidivism

With regard to the recidivism rate by security level of an offender during time of incarceration, both numbers of program participants and recidivism rates were disproportionate between offenders in community and minimum security levels. The total participants of Minimum Security Skills Centers programs were 2,503 of which 619, or 24.73% recidivated. The total Minimum Security non-recidivists were 1,884, or 75.27%. . The total participants of Community Security Skills Centers programs were 269, of

which 32, or 11.89% recidivated. The total of Community Security non-recidivists was 237, or 88.11%. Clearly, there was a difference in recidivism rates between Community and Minimum Security Skills Centers participants. Also clear, however, is the fact that Community Security participants are provided links to the outside world with gainful employment opportunities within local communities that help ease their transition back into society. Community Security participants enjoy a philosophy that is more rehabilitative than the punitive settings of Minimum security prison settings. They enjoy more freedom from the uniqueness of the prison culture: peer pressure, lock-downs, frequent head counts, prison codes, security and control that discourage attendance or achievement. Such incentives are important motivators in building their self-esteem, and in addressing the hopelessness and powerlessness that may be both the cause and effect of recidivism. In correctional settings, minimum security could be viewed as a Behaviorist system and community security as a Constructivist system within the theoretical and conceptual framework of this study. This study's findings and framework support a conclusion that Community Security facilitates successful return to free society.

Implications and Recommendations

Practical and Research Implications and Recommendations

An examination of the results of this research provide this researcher with evidence that would suggest that the recidivism rates of those offenders at community security levels, age 30 years and above, and female have the greatest opportunity of a successful reintegration and reduced risk of recidivism. As the state of Oklahoma is reported to have the highest incarceration rate of females in the United States it is of particular interest that females had the lowest rate of recidivism in this study. This could

be due in part to the abundance of prison and education programs provided to females while incarcerated geared to their re-entry success. This suggests that if more programs were provided to male offenders, especially targeting those offenders ages 18 -29 that recidivism in that population might also decrease. Programs such as those offered by the Oklahoma Department of Career and Technology Education are recommended for support and expansion. They serve to provide to the youthful offender the opportunity to learn of variety of occupational and educational skills which may have eluded them or not been available during their high school academic years. A program of research on the effects of program targeting and expansion is also recommended.

Empirical / Knowledge Base Implications

This study supports, reinforces and validates previous studies that have demonstrated the value of CTE programs for offenders. Many studies (e.g. Gordon & Weldon, 2003, Contardo & Erisman, 2005, Przybylski, 2008, Recidivism Rates of Women Offenders and Participation of Education Programs in Prison, 2008, and Florida Department of Corrections 2012) have documented the positive effects of inmate education programs on recidivism. This study adds to this empirical base. Further, the study adds to the research base new information about the relationships of other variables with recidivism. Finally, the study provides to the State of Oklahoma and its Careertech system empirical support for future decision-making and practice.

Offender Motivation

For correctional research to provide a comprehensive and longitudinal picture of the incarceration process from inception during the initial reception phase through incarceration to post-release and then release, studies of individual motivation factors

would be of great benefit. A complete case analysis of individual offenders utilizing the *Rotters Locus of Control* instrument as an indicator of personal internal and external motivation factors could provide and offer a rehabilitative plan for the offender to be successful at his or her attempts to reconcile a life, which is otherwise in decline. Unless specified by self-reporting by the individual offender or court ordered by a judge, prison education programs are not mandatory for offenders. They receive credits or days-off sentence for participation in these programs, and many offenders manipulate the available programs simply for the credits given.

Expansion of Program Offerings

Program availability at maximum and high medium security levels for releasing offenders currently exists at limited or non-existent levels. Offenders are released from multiple security level due to severity of type of crime and type of behavior displayed while incarcerated. If offenders are violent to staff or other offenders, or have previously escaped from confinement, they are moved up in security level, sometimes all the way to Maximum security level which is located in McAlester, Oklahoma. Offenders are released to the street from medium and maximum-security levels with very few programmatic opportunities due to bad behavior and lack of program offerings. Offenders cannot be held longer than the sentence imposed on them by the court system. These individuals pose a threat to society and are certain to return to prison, the rationale being if they could not correctly participate in a controlled society while in prison, they certainly lack the skills to cope in a free society. Expansion of CTE programs and their availability to inmates is recommended to address these problems. Research on the effects of program expansion is also recommended.

Self Esteem vs. Self Efficacy

Those offenders who return to prison and the underlying reasons why they are doing so should be one of the many responsibilities of the American Departments of Corrections. One of the reasons why offenders return to prison was low self-esteem. The positive effects of Career and Technical education serve to improve the self-esteem of the individual, but does it improve self-efficacy of the individual when the task of reintegration is addressed as a whole? Future research is needed in the two areas of individual and situational worth. Both must be in positive working order and work in conjunction with each other for the ex-offender to be successful in the free world. By studying individual self-esteem and self-efficacy of offenders, corrections officials may better predict the possibility of recidivism.

Theoretical Implications

This study proposed a new conceptual model based on Behaviorist and Constructivist theory to explain why participation in education programs while incarcerated may result in lowered tendency to recidivate. This study supported the efficacy of this new explanatory theoretical model. It is recommended that further research focus on the model, validating it through further descriptive research and then ultimately through experimental studies.

Final Thoughts

In a day in which tax-payer investments must guarantee results directly in the outcomes of ROI studies, it is the intangibles of prison programs that must be weighed. It has been demonstrated by this and numerous other studies that alarming numbers of offenders return to prison once released for a myriad of reasons. Investments in prison

programs such as the ODCTE Careertech Skills Centers programs not only directly reduce recidivism but also indirectly reduce the cycle of incarceration that propagates in many families today. Cost associated with generational crime and imprisonment as well as lost family earning potential cannot be measured only monetarily but must also include the psychological and emotional costs associated with children of the incarcerated. Only through generational intervention can the cycle of incarceration be broken.

In creation of new programs as future economic forecasts improve, taxpayer monies can be spent on ventures with proven success rates. Future decisions to reduce or abandon services can also benefit from programmatic data to determine what services and curriculum perform better than others, thus allowing more informed decisions to be made by prison program administrators. The seven research questions posed and answered by this study lead to the conclusion that ODCTE Skills Centers programs are indeed of real significance to the reduction of recidivism of offenders in the State of Oklahoma. They map the interaction of variables that have been shown to influence a Skills Centers participant's decision not to recidivate and open new doorways to improved practice and further research on the critical topic.

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APPENDICES

APPENDIX A

Oklahoma State University Institutional Review Board
Request for Determination of Non-Human Subject or Non-Research

Federal regulations and OSU policy require IRB review of all research involving human subjects. Some categories of research are difficult to discern as to whether they qualify as human subject research. Therefore, the IRB has established policies and procedures to assist in this determination.

REC'D URC
 SEP 19 2011

1. Principal Investigator Information

First Name: Joseph	Middle Initial: W	Last Name: Ely
Department/Division: STCL/OCED		College: Education
Campus Address:		Zip+4:
Campus Phone:	Fax:	Email: jely@okcareertech.org
Complete if PI does not have campus address:		
Address: 2305 CR 1222		City: Blanchard
State: OK	Zip: 73010	Phone: 918-429-2796

2. Faculty Advisor (complete if PI is a student, resident, or fellow) NA

Faculty Advisor's name: Dr. Lynna J. Ausburn	Title: Associate Prof, OCED
Department/Division: STCL/OCED	College: Education
Campus Address: 257 Willard Hall	Zip+4: 74078-4042
Campus Phone: 477-8322	Fax: 744-6290
Email: lynna.ausburn@okstate.edu	

3. Study Information:

A. Title

EFFECTS OF OCCUPATIONAL EDUCATION PROGRAMS OFFERED BY THE OKLAHOMA DEPARTMENT OF CAREER AND TECHNOLOGY EDUCATION, SKILLS CENTERS DIVISION, ON THE RECIDIVISM RATE OF SELECTED GROUPS OF RELEASED OFFENDERS IN OKLAHOMA

B. Give a brief summary of the project. (See instructions for guidance)

PURPOSE and RESEARCH QUESTIONS

This study will be undertaken on behalf of the Oklahoma Department of Career and Technology Education (ODCTE), specifically the Skills Centers Division, which is tasked with delivering Career and Technical Education (CTE) programs inside the Oklahoma prison system.

The following research questions will be addressed in the study:

1. Is there a difference in recidivism rates for offenders who participate in Career and Technical Education (CTE) programs while incarcerated in Oklahoma and those who do not receive training?
2. Is there a difference in recidivism rates among CTE programs offered to offenders while incarcerated?

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3. Is there a difference in recidivism rates of offenders age 18 to 29 who participate in CTE programs while incarcerated and offenders age 30 and above?
4. Is there a difference in recidivism rates of offenders who participate in CTE programs who have attained a GED or high school diploma and those offenders who have not?
5. Is there a difference in recidivism rates of offenders who participate in CTE programs among races?
6. Is there a difference in recidivism rates of offenders who participate in CTE programs between genders?
7. Is there a difference in recidivism rates of offenders who participate in CTE programs offered at community, minimum, and medium security levels with the Oklahoma Department of Corrections?
8. How do recidivism rates found in this study compare to national rates?

Methodology

General Approach

This study will be quantitative using an *ex post facto* explanatory descriptive design based on data mining and descriptive statistical analysis from existing large databases. The research questions will be addressed by obtaining and analyzing graduate information from the ODCTE Student Records system, the Oklahoma Department of Corrections (ODOC) public records, and the Federal Bureau of Prisons public domain records. ODCTE data received by the PI from that agency will be compared with the national recidivism rate as provided by the Federal Bureau of Prisons and ODOC (public domain data) to describe the effects of CTE programs on the rate of recidivism for the selected demographic sample in Oklahoma.

Offenders who graduated from an ODCTE Skills Centers CTE program in the State of Oklahoma will be tracked in the relevant data bases for three years following release between 2003 and 2008. Information will be collected from the ODCTE Skills Centers Student Records system, the ODOC Offender Lookup public domain data, and the Federal Bureau of Prisons public domain data. Offenders who recidivate within that three-year period will be selected and studied. Descriptive data will be calculated to answer the research question. Recorded data will also be compared to the general population numbers of recidivists and non-recidivists who have not participated or completed a Skills Center CTE program (public domain data) during the same time period.

The study will be undertaken with the permission of the State Director of the ODCTE and the Superintendent of the ODCTE Skills Centers – **COPIES OF PERMISSIONS ARE ATTACHED**. Data will be selected and provided to the PI by the **ODCTE Skills Centers Superintendent Dr. Jim Meek in a “de-identified” Excel database format that contains no personal participant identifiers**, ie Name, Department of Corrections Identification Number, ODCTE Identification Numbers, Addresses, Phone Numbers, Photos, Certificate Numbers, Social Security Numbers, ODOC ID numbers, Medical Information, etc. None of

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the 18 identifiers stipulated by the IRB will be included for any subject in the data file received by the PI. **Date of Birth provided for subjects will be YEAR ONLY.**

C. Describe the subject population/type of data/specimens to be studied. (See instructions for guidance)

This will be a census study, so no sample is required. The population will include all adult offenders housed at Oklahoma Department of Corrections (ODOC) facilities in the State of Oklahoma between 2003 and 2008, and successfully discharged from the ODOC. This population will be described with a profile developed with descriptive statistics. The approximate population size will be 3000 – 3600; all subjects will be 18 years of age or older.

Data obtained by the PI and analyzed for this study will be in a “de-identified” Excel spreadsheet. Data will consist solely of basic descriptive information about the subjects (NONE of the 18 identifiers listed by IRB will be included) and whether or not they participated in a CTE program in the Skills Centers programs while incarcerated. All data will come from the ODCTE student records (provided to the PI by the Skills Center Superintendent) and the ODOC and Federal Bureau of Prisons public domain records.

4. Determination of “Research”.

45 CFR 46.102(d): *Research* means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy whether or not they are conducted or supported under a program which is considered research for other purposes.

One of the following must be “no” to qualify as “non-research”:

A. Will the data/specimen(s) be obtained in a systematic manner?

No Yes

B. Will the intent of the data/specimen collection be for the purpose of contributing to generalizable knowledge (the results (or conclusions) of the activity are intended to be extended beyond a single individual or an internal program, e.g., publications or presentations)?

No Yes

NOTE: While doctoral dissertations are, according to the OSU IRB, “... usually considered generalizable...” this study is different. The study will be undertaken with the permission and control of the ODCTE for the agency’s internal use only. Data will be used solely for internal use by the ODCTE and its Skills Centers Division for program analysis and decision-making.

5. Determination of “Human Subject”.

45 CFR 46.102(f): *Human subject* means a living individual about whom an investigator (whether professional or student) conducting research obtains: (1) data through intervention or interaction with the individual or (2) identifiable private information. Intervention includes both physical procedures by which data are gathered (for example venipuncture) and manipulations of the subject or the subject’s environment that are performed for research purposes. Interaction includes communication or interpersonal contact between investigator and subject. Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

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- A. Does the research involve obtaining information about living individuals?
 No Yes
If no, then research does not involve human subjects, no other information is required.
If yes, proceed to the following questions.

All of the following must be "no" to qualify as "non-human subject":

- B. Does the study involve intervention or interaction with a "human subject"?
 No Yes
- C. Does the study involve access to identifiable private information?
 No Yes
The PI will have NO access to such data.
- D. Are data/specimens received by the Investigator with identifiable private information?
 No Yes
- E. Are the data/specimen(s) coded such that a link exists that could allow the data/specimen(s) to be re-identified?
 No Yes
If "Yes," is there a written agreement that prohibits the PI and his/her staff access to the link?
 No Yes

6. Signatures

Signature of PI Joe P. [Signature] Date 9-15-11

Signature of Faculty Advisor [Signature] Date 9-15-11
(If PI is a student)

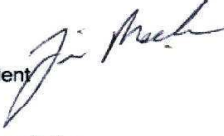
- Based on the information provided, the OSU-Stillwater IRB has determined that this project **does not** qualify as human subject research as defined in 45 CFR 46.102(d) and (f) and **is not subject to oversight by the OSU IRB.**
- Based on the information provided, the OSU-Stillwater IRB has determined that this research **does** qualify as human subject research and **submission of an application for review by the IRB is required.**

Sheila M. Kennison
Dr. Sheila Kennison, IRB Chair

9-19-11
Date

APPENDIX B

Memo

To: Whom it may concern
From: Dr. Jim Meek, Skills Centers Superintendent 
Date: 9/7/2011
Re: Use of Skills Centers Data for Joe Ely Dissertation

Joe Ely has my permission to use the Oklahoma Department of Career and Technology Education, Skills Centers Division data collected on Skills Centers students from 2003 thru 2008 for his research dissertation.

The Skills Centers will provide the requested data to Joe Ely containing no identifiable first, middle or last names, and no Oklahoma Department of Corrections inmate numbers

Before Mr. Ely is allowed to view any Skills Centers data all information will be de-identified as to protect the identity of inmates / students.

Mr. Ely will be provided the following student information from 2003 thru 2008:

- Date of Birth
- Educational Attainment: GED or High School Diploma
- Race
- Skills Center Program Completed

APPENDIX C

To: Dr. Phil Berkenbile

From: Joe Ely

CC: Jim Meek, Dom Garrison, Glen Hammonds

Date: 08/14/2011

Re: Use of Skill Center data for recidivism study

Dr. Berkenbile: *PHB
OK*

I would like to conduct a recidivism study using Skills Center graduate data. This study will be used to fulfill the dissertation requirements of the Ph.D. Occupational Education program in which I am currently enrolled at Oklahoma State University.

The identity and Oklahoma Department of Corrections registry numbers of all research subjects will be kept confidential and not reported in any format; only the number of Skill Center graduates returning to DOC custody will be reported in the research.

I would like to use the Skill Center graduates for 2003 through 2008 and compare them to DOC offender lookup to determine if in fact they did return to DOC custody for commission of subsequent felony offenses.

I would like to use the Skill Center information to identify the following research questions.

1. Is there a difference in recidivism rates for offenders who participate in Career and Technical Education (CTE) programs while incarcerated in Oklahoma and those who do not receive training?
2. Is there a difference in recidivism rates among CTE programs offered to offenders while incarcerated?
3. Is there a difference in recidivism rates of offenders age 18 to 29 who participate in CTE programs while incarcerated and offenders age 30 and above?
4. Is there a difference in recidivism rates of offenders who participate in CTE programs who have attained a GED or high school diploma and those offenders who have not?
5. Is there a difference in recidivism rates of offenders who participate in CTE programs among races?
6. Is there a difference in recidivism rates of offenders who participate in CTE programs between genders?

Skills Centers Division
1500 West Seventh Avenue
Stillwater, OK 74074-4364
www.okcareertech.org/ctss
(405) 377-2000 • Fax: (405) 743-6808

7. Is there a difference in recidivism rates of offenders who participate in CTE programs offered at community, minimum and medium security levels with the Oklahoma Department of Corrections?
8. How do recidivism rates found in this study compare to national rates?

These questions will be researched by obtaining data and mining graduate information from the CareerTech Student Records system and the ODOC public records. This study will be quantitative and *ex post facto* using descriptive statistics. Data retrieved will be compared with the national recidivism rate as provided by the Federal Bureau of Prisons and Oklahoma Department of Corrections to describe the effects of CTE programs upon the rate of recidivism for the demographic sample in Oklahoma.

If allowed to perform this study I will secure all SCSS data from Dr. Jahanshahi and a copy of all data received will be given to the Superintendent and maintained on file in his office, no exceptions. A completed copy of the study will be made available to you, the Associate State Director and Superintendent for their review at the conclusion of the study.

Thank you for your consideration of this matter,

Joe Ely

Skill Centers Instructional Leader

POB 550

Lexington, OK 73051

PH 405-527-2191

Cell 405-564-4648

jely@okcareertech.org

Joseph William Ely

Candidate for the Degree of

Doctor of Philosophy

Dissertation:

EFFECTS OF OCCUPATIONAL EDUCATION PROGRAMS OFFERED BY THE OKLAHOMA DEPARTMENT OF CAREER AND TECHNOLOGY EDUCATION, SKILLS CENTERS DIVISION, ON THE RECIDIVISM RATE OF SELECTED GROUPS OF RELEASED OFFENDERS IN OKLAHOMA

Major Field: Occupational Education

Biographical:

Personal Data: Born February 29, 1972 in McAlester, Oklahoma

Education:

Completed requirements for Doctor of Philosophy in Occupational Education at Oklahoma State University, Stillwater, Oklahoma, July, 2012.

Master of Science in Human Resource Management at East Central University, Ada, Oklahoma, May, 2002.

Bachelor of Science in Education at The University of Oklahoma, Norman, Oklahoma, May, 1995.

Experience:

I have worked with alternative education, adjudicated juvenile and adult students in correctional education / career and technical education environments since 1996 as a program instructor and personnel supervisor. My current position is, Instructional Leader, Oklahoma Department of Career and Technology Education, Skills Centers division

Professional Memberships:

Correctional Educators Association, Association of Career and Technology Education, Oklahoma Association of Career and Technology Education
Omicron Tau Theta

Name: Joseph William Ely
Institution: Oklahoma State University

Date of Degree: July, 2012
Location: Stillwater, Oklahoma

Name: Joseph W. Ely

Date of Degree: July, 2012

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: EFFECTS OF OCCUPATIONAL EDUCATION PROGRAMS OFFERED BY THE OKLAHOMA DEPARTMENT OF CAREER AND TECHNOLOGY EDUCATION, SKILLS CENTER DIVISIION, ON THE RECIDISISM RATE OF SELECTED GROUPS OF RELEASED OFFENDERS IN OKLAHOMA

Pages in Study: 116

Candidate for the Degree of Doctor of Philosophy

Major Field: Education

Scope and Method of Study:

The purpose of this *ex post facto* quantitative descriptive study was to describe the effects of career and technical education (CTE) on recidivism for offenders enrolled in the Oklahoma Department of Corrections CareerTech Skills Center School Systems (SCSS) programs. Specifically, the study mined existing state CareerTech and ODOC data to: (a) compare recidivism rates of inmates who did and did not participate in CTE programs while incarcerated; (b) compare recidivism rates for various CTE programs; and (c) compare recidivism rates for selected demographic groups. Offenders who graduated from Skills Centers programs while incarcerated were identified in existing Oklahoma data bases and were tracked through the data bases for 3 years following release between January, 2003 and December, 2008.

Findings and Conclusions:

A key finding was that 77% of offenders who participated in Oklahoma Skills Centers CTE programs did not return to prison, yielding a recidivism rate of 23%. This result supported a 2012 Florida DOC study which indicated that almost 75% of vocational program completers were successful after release. These recidivism rates for CTE program completers were approximately one-third of the national rate reported by the Bureau of Justice (67.5%) in 2012. Comparison of this study's recidivism findings with those reported as national rates supported a conclusion that participation in CTE programs while incarcerated is associated with a lower recidivism rate. The age of offenders upon release from prison revealed greater recidivism for ages 18-29 (36%) than for ages 30 and over (21%). Male offenders returned to prison more frequently (27%) than females (13.3%). These findings support conclusions that more mature age and female gender are associated with lower recidivism rates and less likelihood of returning to prison after release.

ADVISER'S APPROVAL: Lynna J. Ausburn