Applying The Broaden-and-Build Theory to offender Counseling

Keosha Meka-Beyanka Branch

College of William and Mary - School of Education, keoco09@gmail.com

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APPLYING THE
BROADEN-AND-BUILD THEORY
TO OFFENDER COUNSELING

A Dissertation
Presented to
The Faculty of the School of Education
The College of William & Mary in Williamsburg, Virginia

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Philosophy

by
Keosha M.-B. Branch
February 2017
APPLYING THE
BROADEN-AND-BUILD THEORY
TO OFFENDER COUNSELING

by

Keosha M.-B. Branch

Approved February 2017 by

______________________________
Charles F. Gressard, Ph. D.
Chairperson of Doctoral Committee

______________________________
Charles McAdams, Ed. D.

______________________________
Thomas J. Ward, Ph. D.
Dedication

“My mission in life is not merely to survive, but to thrive; and to do so with some passion, some compassion, some humor, and some style.”

--Maya Angelou

This dissertation is dedicated to two of the most important people in my life: my husband, Kyle, and my daughter, Kennedy. Your love and support has motivated me to push through the challenges I faced throughout this process. This is as much your accomplishment as much as it is mine. Thank you for always believing in me. ♥ ~143
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ABSTRACT

Incarceration rates in the United States have risen over 500% in the last 30 years. Of the millions of individuals incarcerated in jails and prison across the country, an alarming portion meet criteria for mental health and substance use disorders. Though several models of offender counseling exist, most were developed to treat sex offenders and all focus on recidivism reduction as an outcome measure. However, statistics show that almost half of individuals released from jails and prisons will be reincarcerated within five years of their release. Positive Psychology provides an alternative lens through which to view maladaptive behaviors; however, little research examines the use of Positive Psychology with offender populations. The purpose of this heuristic study was to explore the assumptions of the Broaden-and-Build Theory, a theory from the Positive Psychology literature, as it relates to the offender population. A sample of 109 offenders currently on probation completed a survey measuring key constructs of the Broaden-and-Build Theory including positive affectivity, negative affectivity, and subjective well-being. The survey also measured family life satisfaction and prosocial behavior. Positive relationships between positive affectivity, subjective well-being, and prosocial behavior was found. However, only positive affectivity was found to be a significant predictor of prosocial behavior. Additional key demographic features including education level and having children were also found to be significantly predictive of prosocial behavior. The results of this study provided support for the use of the Broaden-and-Build Theory with offender populations. Furthermore, these findings suggest the potential viability of a new model of offender counseling that may better address the needs of offenders and increase positive post-release outcomes.
Applying the Broaden-and-Build Theory to Offender Counseling
Chapter 1

Introduction

Over the last 30 years, incarceration rates in the United States have risen over 500% (The Sentencing Project, 2014). In 1984, jails and prisons in the United States housed 400,000 inmates. By year end 2013, the number of incarcerated offenders had risen to over 2.2 million (The Sentencing Project, 2014; Cox, Lenz, & James, 2015; James, 2015; Kaeble, Glaze, Tsoutis, & Minton, 2015). The United States incarcerates more offenders for longer periods of time than anywhere else in the world; a sad reality for a country known as “the land of the free.”

An even greater concern for mental health practitioners is the increase in the rate of offenders with mental illness. As individuals with mental illness were moved out of hospitals during the deinstitutionalization movement of the 1960s, the prison system began to see a rapid influx of offenders with mental illness (Cox et al., 2015) and serious mental illness (O’Keefe & Schnell, 2007). Disproportionate prevalence rates of incarcerated offenders with mental illness exist compared to prevalence rates of the general population (Cox et al., 2015; O’Keefe & Schnell, 2007; Reingle Gonzales & Connell, 2014). As many as 15% of incarcerated men and 30% of incarcerated women meet Diagnostic and Statistical Manual 5 criteria for a mental health disorder. Of these individuals, 75% meet criteria for co-occurring substance use disorders (Cox et al., 2015).

Statement of the Problem

Recidivism

Despite the current efforts of prison personnel and administrative staff, recidivism remains a major challenge for offenders. Of the 2.2 million offenders currently incarcerated in jails and prisons in the U.S., well over 95% of these men and women will be released into the
community at some point in time (James, 2015). Unfortunately, the vast majority of these individuals are likely to be rearrested within as little as five years of their release. The Bureau of Justice Statistics found that 76.7% of offenders released from jails and prisons are rearrested within five years. Of those rearrested, 43.4% are rearrested within the first year of release (Durose, Cooper, & Snyder, 2014; James, 2015). Offenders with longer criminal records are more likely to be rearrested than first-time offenders and spend less time in the free world before being rearrested than first time offenders and offenders with shorter criminal records (Durose et al., 2014; James, 2015). These findings have compelling implications for the importance of effective, early intervention and prevention of life-long deviant behaviors of offenders.

Offenders with mental illness have even higher recidivism rates than the general offender population and those prevalence rates increase when offenders receive poor discharge planning and fail to obtain adequate continuity of care upon their release (Cox et al., 2015; James, 2015; O’Keefe & Schnell, 2007; Reingle et al., 2014). Prison personnel such as correctional officers, administrative personnel, medical personnel, and mental health practitioners face far-reaching challenges to provide offenders with mental illness sufficient treatment throughout the duration of incarceration and bridge those services through discharge planning when the offender returns to the community (Cox et al., 2015). O’Keefe and Schnell (2007) conducted a strong exploratory study with a large participant sample to examine the characteristics of offenders with mental illnesses in the Colorado Correctional system. Findings related to recidivism indicated that offenders with mental illness were more likely to be rearrested than offenders with no diagnosis. Furthermore, offenders who did not meet criteria for serious mental illness had higher recidivism rates than offenders with serious mental illness (O’Keefe & Schnell, 2007). A negative correlation exists between recidivism and adequate discharge planning.
Competing research findings exist related to recidivism and discharge planning of offenders with mental illness. Duwe (2015) conducted a study to explore the effectiveness of discharge planning of offenders with mental illness by examining recidivism rates of this population. The author noted that findings might be attributed to the fact that discharge planning is meant to bridge the gap between mental health services and not address criminogenic needs of the offender (Duwe, 2015). However, no national or state standard for discharge services exists (James, 2015). In some states, discharge services include reentry programs aimed towards addressing such criminogenic needs and ensuring a smooth process of assimilation back into the community (Seiter & Kadela, 2003). Despite conflicting findings, both studies highlight the need for comprehensive reentry programs that promote both psychological health and prosocial behaviors within offenders and offenders with mental illness.

**Offender Reentry**

As aforementioned, research indicates that previous incarceration increases the likelihood of recidivism; however, effective discharge planning for offenders with mental illness and reentry programs for all offenders returning to the community serves as protective factors for this vulnerable population (James, 2015). Therefore, any approach to offender rehabilitation must include heavy emphasis on adequately preparing offenders to assimilate back into the community. Offender reentry is a multisystem process that impacts a broad range of social and governmental networks and pathways. Because reentry programs are not typically federally regulated, governing policies of these programs vary across states, communities, and institutions (Seiter & Kadela, 2003). Furthermore, policies and the programs themselves are greatly impacted by the availability of funding to support their implementation and continuation. Therefore, the state in which an offender is incarcerated and the amount of funds allocated to
discharge planning and reentry programming drastically impacts the success of the offender (Seiter, & Kadela, 2003). The need exists for consistency and congruence in reentry programs across multiple states and institutions that take into account the needs of general offenders as well as offenders with mental illness.

Seiter and Kadela (2003) define offender reentry as all activities and programs designed to prepare offenders to return to the community as law abiding citizens. These programs include but are not limited to correctional programs such as prerelease, work release, half-way houses, and specific reentry programs as well as clinical treatment programs such as substance abuse, cognitive behavioral therapy, life skills training, education, and sex offender treatment provided both in prison settings during incarceration and post-release as a measure of continuity of care (Seiter & Kadela, 2003; James, 2015). Reentry programs are multifaceted and provide intervention and treatment in a variety of areas including employment, housing, education, substance abuse treatment, and mental health treatment (Seiter & Kadela, 2003; Petersilia, 2004; James, 2015).

Historically, a lack of rigorously designed research studies existed in the field of offender counseling in general and in offender reentry programs specifically. However, within the last three decades more studies have been conducted in the area which allowed for broad meta-analyses of these studies and the emergence of the “What Works” paradigm. The “What Works” paradigm attempts to establish broad guidelines for effective offender counseling through meta-analysis of current studies and identification of key factors of effectiveness. Following this paradigm, Seiter & Kadela (2003) conducted a meta-analysis of offender reentry programs. Findings indicated that effective reentry programs should: (1) start while the offender is incarcerated and continue after the offender is released into the community, (2) be intensive in
nature and last at least six months or longer, (3) employ the use of cognitive behavioral therapy treatment techniques, and (4) be individualized to adequately match the needs of offenders (Seiter & Kadela, 2003). Findings of a literature review conducted by Petersilia (2004) supported the results of the meta-analysis and similar recommendations for effective reentry programs were purported. These recommendations provide strong evidence supporting the assumption that effective offender counseling include reentry programs that bridge services provided to offenders while they were incarcerated to the community and are individualized to meet the needs of general offenders as well as offenders with mental illness.

Summary

More often than not, offenders have a revolving door relationship with incarceration and offenders with mental illness tend to walk through that door more frequently (Cox et al., 2015; Duwe, 2015; James, 2015; O’Keefe & Schnell, 2007; Reingle et al., 2014. Mental health professionals with proficiency in working with the unique and diverse needs of offender populations are needed in order to promote recovery, health, and wellness of both general offenders and offenders with mental illnesses. Services provided by mental health practitioners should include psychotherapy for offenders and a combination of psychopharmacology and psychotherapy for offenders with mental illness (James, 2015). Psychotherapy provides a safe space where practitioners normalize the experiences of offenders and provide psychoeducation regarding identification of triggers, positive coping skills, and criminal relapse prevention. Medication management for offenders with mental illness decreases and eliminates psychiatric symptoms including delusions, hallucinations, anxiety, and depression (Cox et al. 2015). Additionally, providing psychoeducation to offenders with mental illness about mental health disorders and community resources aimed at assisting offenders in the maintenance of their
recovery serves to reduce recidivism among this subset of the offender population. The “What Works” paradigm identifies key elements that should be included within the structure of the treatment models of offender counseling in order to increase the likelihood of positive outcomes; however, few of the models incorporate these aspects and those that do neglect to incorporate all four of the recommendations.

Current Approaches to Offender Counseling

Several models of offender counseling have emerged in the field and gained empirical support for their efficacy. These models include Cognitive Behavioral Therapy (CBT), Relapse Prevention (RP), Self-Regulation Model (SRM), Risk, Need, Responsivity (RNR), Good Lives Model (GLM) and Good Lives Desistance Model (GLM-D) (D’Orazio, 2013; Looman & Abracen, 2013; Mapham & Heffron, 2012; Yates, 2013). While CBT remains the most widely used model of offender counseling, these newer models demonstrate high effectiveness in treating offenders resulting in reduction of recidivism rates among this population (Looman & Abracen, 2013; Yates, 2013). The main critique of the current models to offender counseling lies on their narrow focus of reducing recidivism. Thus, considering the current recidivism rates of offenders and offenders with mental illness, these models fall short in effectively rehabilitating this population.

Cognitive Behavioral Therapy

CBT aims to challenge maladaptive thought patterns that support negative behaviors and influence emotional, cognitive, and behavioral responses associated with criminal behaviors (Yates, 2013). The efficacy of the use of CBT has been demonstrated with various types of offenders including sexual offenders, offenders with mental illness and serious mental illness, and offenders receiving treatment for substance use disorders (Cox et al., 2015; Yates, 2013).
Research suggests that offenders require a more structured and directive approach to counseling as this type of interpersonal style is consistent with their everyday interaction with correctional officers and others with whom they come into contact (Andrews & Bonta, 2010). Andrews and Bonta (2010) assert that the more self-directed, Humanistic approaches are less effective with offenders than a CBT approach. Offenders benefit and respond best to CBT’s highly structured, concrete, and directive approach (Andrews & Bonta, 2010). Offenders have been trained to follow directives given by those in authority and deviations from those directives typically result in disciplinary action. Therefore, a CBT approach is consistent with the way in which offenders engage with the world around them while they are incarcerated and thus an effective therapeutic approach for this population.

Both individual and group counseling following a manualized format are common treatment modalities utilizing a CBT approach in offender counseling. Central goals of therapy include promotion of positive coping skills and prosocial behaviors while challenging irrational and criminal thinking, ultimately reducing recidivism (Cox et al., 2015). Many similarities exist between the use of CBT in offender counseling and the use of CBT in counseling the general population; however, a few differences are worth mentioning. First, CBT in offender counseling includes a component that focuses on identification of criminal and deviant behaviors. A second component of CBT used particularly in offender counseling is lapse and relapse prevention. Evidence exists supporting the efficacy of CBT in offender counseling (Cox et al., 2015; D’Orazio, 2013; Looman & Abracen, 2013; Yates, 2013).

Much of the research on the CBT model of offender counseling focuses on juveniles, juvenile sex offenders, and adult sex offenders. Few studies explore this model with non-sex offenders and non-sex offenders with mental illness. The intervention study conducted by Cox
et al. (2015) is one of the few in existence that examine the effectiveness of a cognitive behavioral counseling intervention for incarcerated offenders with mental illness. Findings indicated that two of the three participants reported improvement in psychiatric symptoms including anxiety and depression (Cox et al., 2015). While these findings offer meaningful insight into the usefulness of CBT with offenders with mental illness, more studies that offer empirical evidence of the effectiveness of cognitive behavioral therapy for offenders and offenders with mental illness are needed using adult, non-sex offender populations.

**Relapse Prevention**

Developed in the 1980s, the RP model was replicated from various addictions treatment models as a method to treat sex offenders (D’Orazio, 2013). The purpose of the RP models was to help offenders overcome the challenges associated with maintaining abstinence from deviant behaviors, particularly sexually deviant behaviors (D’Orazio, 2013). Psychologists at the Atascadero State Hospital in California adapted the RP model as they were striving to meet the increasing needs of their growing sex offender population. RP has also been applied to other impulse control disorders including gambling, domestic violence, over-spending, and shoplifting (D’Orazio, 2013). Using the principles underlying the Relapse Cycle Theory, RP aims to identify, anticipate, and prevent high risk situations where offenders are likely to commit criminal offenses (D’Orazio, 2013; Yates, 2013). Relapse Cycle Theory assumes that occurrence of relapse is a knowable and foreseeable event rather than an unforeseen and uncontrollable event. Adequate preparation for these triggers increases the likelihood that sex offenders will refrain from committing deviant behaviors. Thus, practitioners must increase client offenders’ awareness of triggering events and teach adequate self-management skills in order to prepare them for success.
RP is the least effective in reducing recidivism of sex offenders (D’Orazio, 2013). Laws (2003) purports that although sex offenders who complete RP therapy are abstinent at the end of treatment, 80% relapse within 12 months. One of the major criticisms of RP highlights the lack of recognition for heterogeneity of sex offenders (Yates, 2013). In fact, RP does not acknowledge individual differences among sex offenders, but applies a one size fits all approach to therapy. Such an approach has led critics of the model to argue that individual differences within sex offenders must be considered in order for lasting changes to be maintained (Laws, 2003). This argument is consistent with the recommendation from the “What Works” paradigm that emphasizes the need for individualized treatment plans for offenders (Seiter & Kadela, 2003).

Furthermore, RP lacks empirical support of its effectiveness in treating all offenders. Although initially developed to treat offenders with substance use disorders and redesigned to treat sex offenders, practitioners employ this model with other types of offenders without taking into account the unique factors influencing those who commit sex offenses as compared to those who commit other types of offenses. In conducting a review of the literature, no empirical study could be found supporting the efficacy of this model with non-substance abuse and sex offender populations. Current existent literature on the RP model exclusively focuses on its use with either sex offenders or offenders with substance use disorders. These studies lack vigorous research designs provide strong internal and external validity. Nonetheless, the model is widely used in sex offender rehabilitation and practitioners also use this approach to treat a broader range of offenses despite the lack of empirical evidence supporting its use.
The Self-Regulation Model

The SRM attempts to address the criticisms of the RP model by providing a more comprehensive approach that attends to the different goals of offenders who engage in deviant behaviors (Yates, 2013). Rather than viewing offense-related behaviors through a single lens, the SRM identifies individualized style of self-regulation to develop specialized treatment plans for offenders (Ward & Hudson, 1998). Using the theory of self-regulation, offense-related goals are assessed and individualized treatment plans are created to address goals in an effort to improve self-regulation of offenders.

Ward & Hudson (1998) use the SRM to define two types of offense-related goals: avoidance goals and approach goals. Goals aimed toward avoidance of aversive, undesired outcomes are known as avoidance goals. Offenders who utilize avoidance goals actively attempt to avoid defiant behaviors likely to lead to criminal acts. Goals aimed toward acquisition of desired outcomes are known as approach goals. Offenders who employ approach goals actually seek out and pursue opportunities to engage in criminal activities. The offender’s self-regulation capacity determines ability to achieve goals. Self-regulation can either be under-regulated/disinhibited, mis-regulated, or successfully regulated (Ward & Hudson, 1998; Yates, 2013). Under-regulation/disinhibition results in a failure to control behavior in appropriate ways. Mis-regulation occurs when an offender unsuccessfullly attempts to control his or her behavior by employing counterproductive or ineffective self-regulation strategies.

The SRM identifies four categories or pathways of self-regulation: the avoidant-passive pathway, the avoidant-active pathway, the approach-automatic pathway, and the approach-explicit pathway (Yates, 2013). An individual who follows the avoidant-passive pathway desires to avoid criminal behavior but lacks the self-regulation capacity to achieve that goal. The
avoidant-passive pathway leads to mis-regulation. These offenders unsuccessfully engage in self-regulating mechanisms which result in deviant and criminal behaviors. An individual who follows the approach-automatic pathway experiences under-regulation. These offenders have no desire to avoid deviant and criminal behaviors. The deviant behaviors of these offenders are reactive to the environmental stimuli which trigger them. Offenders who follow this pathway neglect to make attempts to control their behavior. Lastly, offenders with no intention of refraining from criminal activity follow the approach-explicit pathway. These offenders often have detailed plans of the crimes they intend to commit. Their crimes are proactive and do not result from situational factors. These offenders represent a small percentage of the incarcerated populations and often are diagnosed with mental disorders such as Conduct Disorder in juvenile offenders and Antisocial Personality Disorder in adult offenders.

Proponents of the SRM value it as a comprehensive approach in treating sex offenders and assert that it has much empirical support (D’Orazio, 2013; Yates, 2013). Yates (2013) highlights the efficacy of this model and reports varying recidivism rates based upon the self-regulation pathway of offenders. However, few empirical studies have explored the effects of the SRM. Findings of a grounded theory study conducted by Webster (2005) supported the content validity of the SRM. Such findings add additional support for the importance of individualized treatment plans as outlined by the “What Works” paradigm. Further research using a quantitative methodology and diverse types of offenders including offenders with mental illness would strengthen the empirical evidence supporting the model.

Like the RP model, this model has primarily been used in the treatment of sex offenders. No study to date has explored the use of this model with offenders who have committed other types of crimes. Additionally, no studies have explored effectiveness of this model with
offenders with mental illness or co-occurring disorders. Additional research is needed in order to
determine whether this model is effective for a broader range of offenders including offenders
with mental illness. Based on the literature from the RP model, the SRM may run into similar
challenges related to its implementation with non-sex offenders. SRM is the newest treatment
modality for offender counseling and much is to be learned about this innovative model.

**Risk, Need, Responsivity Model**

The RNR model emerged in the 1980s and became a more formalized model in the
1990s. The RNR model has longed been regarded as the premier model for guiding offender
assessment and treatment (Bonta & Andrews, 2007). The RNR Model of offender rehabilitation
identifies three essential principles of effective correctional intervention and treatment: risk,
needs, and responsivity (Andrews & Bonta, 2010). RNR tailors treatment based on the client
offender’s identified risk of recidivism, criminogenic needs, and responsiveness to treatment
interventions (D’Orazio, 2013; Looman & Abracen, 2013; Yates, 2013). RNR provides a lens
through which practitioners categorize and conceptualize client offenders. Techniques from any
theoretical orientation can be integrated into the RNR model. Thus, practitioners are armed with
a larger arsenal of techniques and are able to select the interventions that will best fit the specific
needs of an individual client offender. Steps in applying this model consist of an assessment of
risks followed by an assessment of needs. Treatment interventions are then applied and the
practitioner tracks the client offender’s level of responsiveness to treatment. Practitioners make
appropriate adjustments to treatment as needed based on the client offender’s responsiveness.

According to the RNR model, risk refers to the likelihood of offender recidivism after
being released from incarceration. Only those offenders assessed to be a high risk for recidivism
should receive treatment interventions (Andrews & Bonta, 2010). Actuarial risk assessment
instruments (ARAI) should be used to assess risk rather than clinical judgment (Looman & Abracen, 2013). ARAI have been supported through the literature as the most accurate measurement of risk while clinical judgment has been demonstrated to be highly inaccurate (D’Orazio, 2013; Looman & Abracen, 2013). ARAI are used to predict potential violent and deviant behaviors in offenders (Hart, Michie, & Cooke, 2007; Silver & Miller, 2002). Thus, ARAI have emerged as the preferred method of offender risk assessment.

An RNR needs assessment focuses on the criminogenic needs that drive an offender to engage in deviant behaviors (Andrews & Bonta, 2010). Researchers identify multiple criminogenic needs including history of antisocial behavior, antisocial personality pattern, antisocial associates, isolation from individuals engaging in prosocial behaviors, problematic circumstances across multiple settings such as home, school, or work, little to no positive or leisure activities, and substance use and abuse. Andrews and Bonta (2010) strongly suggest that treatment focus solely on criminogenic needs. Other need areas such as self-esteem, anxiety, and self-concept issues are intentionally left out of the treatment goals (Andrews & Bonta, 2010; D’Orazio, 2013; Looman & Abracen, 2013). The RNR Model asserts that resolving deficits resulting from the criminogenic needs present in an offender will promote criminal desistance. Criminal desistance remains the optimal outcome of the model; therefore, addressing interpersonal needs are deemed as unnecessary in order to meet the intended goal of the model.

The responsivity principle targets the interaction between the client offender and treatment (Andrews & Bonta, 2010; D’Orazio, 2013; Looman & Abracen, 2013; Yates, 2013). Effective treatment, according to this principle, is based on cognitive, behavioral, and social learning theories; therefore, preference is given to CBT as the underlying theory of the approach (Andrews & Bonta 2010; Looman & Abracen, 2013). The responsivity principle attempts to
take into account individual differences of offenders. Practitioners must consider the individual characteristics of the client offender. Characteristics including language, race, ethnicity, religious beliefs and spirituality, personality characteristics, levels of anxiety, preferred learning styles, and cognitive capabilities all influence the client offender’s level of engagement and should be taken into consideration as practitioners make assessments of responsivity. Practitioners use these characteristics to guide appropriate adaptations to treatment in the event that client offenders lack adequate engagement in treatment.

Despite the wealth of research supporting the RNR model, many oppose the use of the model and have provided adequate evidence supporting the need for adaptations to be made to the model in order to increase the likelihood of a reduction in recidivism (D’Orazio, 2013; Looman & Abracen, 2013). Opponents of RNR claim that ARAI are inaccurate and unreliable measures of offender risk. Silver and Miller (2002) found that while ARAI promoted efficient management of institutional resources, they were not appropriate for use with individuals in the context of social situations. Researchers assert that use of ARAI in this context would be a violation of the construct validity of the instruments (Silver & Miller, 2002). Hart et al. (2007) found that ARAI were ineffective in measuring an individual’s risk for future violence. In this study, ARAI were found to overestimate individual risk (Hart et. al, 2007).

RNR has been criticized for its narrow focus on criminogenic needs (D’Orazio, 2013; Looman & Abracen, 2013). Practitioners using this approach discount the whole person of the offender by narrowly focusing on their criminal and deviant behaviors. While misbehavior by anyone is unacceptable and should be appropriately addressed, mental health practitioners using this model are constrained by focusing solely on criminogenic needs. In many instances, the personal goals of the client offender are never even discussed in therapy. Critics of the RNR
model emphatically oppose this oversight (D’Orazio, 2013; Looman & Abracen, 2013). Furthermore, a narrow focus on criminogenic needs may result in an oversight of mental illness. Offenders with mental illness may not receive the necessary treatment and support needed for successful recovery.

**Good Lives Model/Good Lives-Desistance Model**

The GLM was created in response to the many shortcomings of the RNR and was later revised as the GLM-D (Yates, 2013). The GLM and GLM-D aim to assist offenders in identification of and obtaining personal life goals of the offender (Yates, 2013). The GLM-D added a much-needed emphasis on the general well-being, meaning-making, and feelings of fulfillment of offenders (Mapham & Heffron, 2012). The GLM-D integrates principles of desistence theory with Positive Psychology resulting in the promotion of offender ability enhancement in addition to recidivism reduction. GLM-D balances a focus on criminogenic needs with the core competencies of prosocial activity engagement. These competencies include prosocial relationships, stress-management, adaptability, and flexibility (Looman & Abracen, 2013). The GLM-D differs from the RNR in that it is a more holistic approach to offender counseling by including treatment of both criminogenic needs as well as interpersonal needs. Additionally, GLM-D provides a more collaborative approach to therapy by working with the offender to establish meaningful and appropriate goals for therapy.

GLM-D also aims to establish a more adaptive identity through the facilitation of growth and enhancement of offender’s ability to obtain Primary Human Goods. These Primary Human Goods derive in human nature and endorse evolutionary adaptation geared toward survival, reproduction, and creation of strong social networks. The eleven Primary Human Goods delineated by Willis and Ward (2011) include life, knowledge, excellence in work, excellence in
play, excellence in agency, inner peace, relatedness, community, spirituality, happiness, and creativity. According to Looman and Abracen (2013), problematic behavior results from maladaptive attempts to obtain these Primary Human Goods and not from deficits in them. In addition to recidivism reduction, GLM and GLM-D aim to enhance personal and interpersonal functioning of offenders by exploring the methods used in order to obtain these Primary Human Goods.

Proponents of GLM and GLM-D describe them as more comprehensive models than RNR; however, a lack of evidence in the literature exists to support the notion that the GLM and GLM-D are more effective in treating offenders than RNR (Looman & Abracen 2013; Yates, 2013). A preponderance of studies supports the efficacy of the GLM and GLM-D and an equal amount of studies claim that RNR is an efficacious model in offender counseling; nonetheless, no studies indicate that one model is better than the other (Looman & Abracen 2013; Yates, 2013). Research indicates that both models demonstrate comparable results (Looman & Abracen, 2013). Additionally, no extant literature exists that indicate the GLM and GLM-D reduces recidivism. Mapham and Hefferon (2012) note that many aspects of the GLM and GLM-D are inconsistent with the recommendations of the “What Works” paradigm; however, no attempts have been made to explore the impact on recidivism or to adjust the model to align with the “What Works” paradigm. Finally, like many of the models of offender counseling, no research has explored the use of the model with offenders with mental illness.

**Shortcomings of the Current Models**

While many efficacious models of offender counseling exist, the primary goal of these models is recidivism reduction. These models pathologize offenders and primarily focus on the deficits of the offender that lead to criminal behavior. Although much of the literature on
offender rehabilitation counseling places emphasis on reducing recidivism rates, improving the overall quality of life and subjective well-being of these individuals seems to be conspicuously missing from the literature and from current treatment models of offender counseling. Because of the heavy emphasis placed on recidivism reduction, research has traditionally been on treatment modalities that emphasize focusing on offenders’ criminogenic needs to the exclusion of interpersonal needs such as self-esteem, life satisfaction, and well-being (Looman & Abracen, 2013). Proponents of these models argue that focusing on the interpersonal needs of clients is not as effective in recidivism reduction as focusing on criminogenic needs alone (Andrews & Bonta, 2010; Looman & Abracen, 2013). However, focusing exclusively on criminogenic needs ignores important individual differences in offenders and completely contradicts the recommendations from the “What Works” paradigm. Such a focus also neglects psychosocial needs of offenders. These needs are critical, especially for offenders with mental illness who often require specialized treatment to address their mental health issues in addition to treatment focused on criminogenic needs (Cox et al., 2015; Duwe, 2015).

However, research demonstrates that treatment focused on criminogenic needs and deviant behaviors risk producing feelings of guilt and shame within client offenders (Jones 2014). Such treatment can inadvertently increase feelings of guilt and shame even if practitioners have the purest of intentions. A study demonstrated that feelings of guilt and shame related to criminal behaviors actually increased negative emotions such as anger and resentment within offenders. This increase in negative emotions subsequently increased the likelihood that offenders maintained deviant and maladaptive behaviors rather than sustaining positive behavioral changes (Jones, 2014). The end result was an increase in the likelihood of recidivism of these individuals. If reducing recidivism is the goal, then the national recidivism rates
indicate that many of these models consistently miss that mark (Durose et al., 2014; James, 2015). Practitioners must utilize a model that minimizes the potential for inducing feelings of guilt and shame by focusing on maximizing the potential within offenders rather than highlighting their deficits.

Another critique of the current models of offender counseling involves their original derivation for treating sex offenders. Sex offenders are a mere fraction of the offender population; however, the majority of the research studies on offender rehabilitation counseling have primarily focused on sexual offenders in particular. Researchers then attempt to justify generalization of treatment to all offenders without considering the implications of doing so. While supporters of RNR, GLM, and RP purport that these models can be used with all types of offenders, the needs and drives of sex offenders are very different than other types of offenders and may require unique treatment modalities unfit for non-sex offenders (Yates, 2013).

Garos, Bleckley, Beggan, & Frizzell (2004) found that sex offenders have greater intrapsychic conflicts than non-sex offenders. Research conducted by Neidigh & Tomiko (1991) found that sex offenders are more likely to have self-denigrating coping strategies and negative emotional states than non-sex offenders. Finally, sex offenders are more likely to experience higher rates of feelings of inadequacy and anger than non-sex offenders (Lussier, Proulx, & McKibben, 2001). These differences between sex offenders and non-sex offenders likely indicate a need for a different approach to treatment. Despite the efficacy shown for these models, they may not be the best approaches to offender counseling on a broad scale.

Effective models of offender counseling should include adequate education and preparation for successful reintegration into the community (Durose et al., 2014; James, 2015; Seiter & Kadela, 2003). Research indicates that in addition to mental health and substance abuse
treatment, services should integrate didactic training related to obtaining employment, housing, and education (Seiter & Kadel, 2003; Petersilia, 2004; James, 2015). Despite the preponderance of empirical evidence pointing towards effective treatment practices, little evidence exists that researchers and practitioners are working together to establish effective treatment and reentry programs (Petersilia, 2004). Although both researchers and practitioners work independently to improve the field of offender counseling, Petersilia (2004) notes that the independent work of each entity does not appear to influence the other. Research findings are not used by practitioners to improve practice nor does practitioner practice seem to influence the type research conducted. For example, the meta-analysis conducted by Seiter and Kadel (2003) resulted in four recommendations for effective treatment programs; however, few of the models of offender counseling reviewed incorporate all four of these recommendations into their treatment programs.

Furthermore, the counseling discourse is practically silent on research related to offender counseling. Very little empirical research within the field of counseling exists on the topics of offender counseling and offender reentry programs specifically. Because of the high prevalence rates of offenders with mental illnesses, counselors must begin to develop best practices in working with this population both while they are incarcerated as well as once they are released into the community (Durose et al., 2014; Seiter & Kadel, 2003). As offenders are released into the community, counselors are likely to provide services to them in community-based agencies and private practices. Counselors must be prepared to meet the unique needs of this very special population. Recidivism reduction, the basic premise of the current models of offender counseling, seems counterintuitive to the aim and purpose of the field of counseling: promotion
of health, wellness, and empowerment. Therefore, counselors need a treatment model congruent with the basic assumptions, tenets, and values of the profession.

**Rationale for a New Approach to Offender Counseling**

Preparing offenders for discharge from prison is a very important endeavor often overlooked by mental health practitioners. Using the theoretical underpinnings of Positive Psychology, a new model of offender counseling for non-sex offenders may offer a more holistic approach that shifts the focus from criminogenic needs of offenders and reduction of recidivism to the inter- and intrapersonal needs of individuals who have been convicted of committing crimes. Ultimately, a new model of offender counseling may more adequately prepare offenders to live successful lives as productive, law-abiding citizens, improve the overall subjective well-being, life satisfaction, and positive affective experiences of offenders, and as a byproduct, reduce recidivism.

While the GLM and GLM-D take into consideration the general well-being and fulfillment of clients to some extent, these models place a heavier emphasis on criminal desistance rather than improvement of the subjective well-being and life satisfaction of offenders. The GLM and GLM-D attempt to combine a wellness approach with a disease model. Practitioners utilizing these models send mixed messages to their clients, unintentionally induce guilt and shame, and negatively impact the therapeutic relationship as clients may question the intentions of the therapist and the goal of therapy (Jones, 2014). Given the rising incarceration rates of offenders with mental illness and the increased likelihood that currently incarcerated offenders will be released back into the community at some point in their lifetime, a more holistic and comprehensive model is needed.
A model aiming to promote a more fulfilling post-incarceration life may inadvertently reduce recidivism as offenders are better able to cope with the day to day challenges of life in the free world. While extremely important, when it comes to psychological treatment, recidivism reduction should be a byproduct of treatment, not the goal. Treatment should focus on educating offenders on how to create meaningful goals, enhancing life skills such as decision-making, positive coping, effective communication, and social skills training in order to develop healthy and meaningful relationships, and addressing mental health concerns (Seiter & Kadela, 2003; Petersilia, 2004; James, 2015). While the GLM and GLM-D attempt to integrate Positive Psychology into the treatment model, the foundation of the model is based in desistance theory. A new model of offender counseling with a foundation in principles of Positive Psychology that adheres to all four recommendations of effective reentry programs may be more effective in meeting the vast needs of offenders and offenders with mental illness.

**Positive Psychology**

Positive Psychology primarily focuses on the principles and circumstances that make life worth living (Seligman & Csikszentmihalyi, 2000). Positive Psychology interventions aim to increase the positive experiences of clients and to ensure that their lives flourish (Seligman & Csikszentmihalyi, 2000). Practitioners emphasize valued experiences such as satisfaction, well-being, hope, and optimism, focus on positive character strengths such as capacity for love, forgiveness, and interpersonal relationships, and address virtues that elevate individuals at the societal level such as altruism and work ethic (Seligman & Csikszentmihalyi, 2000). Positive psychotherapy is the term used to describe counseling approaches that utilize principles of Positive Psychology (Seligman, Rashid, & Parks, 2006). A strengths-based approach, positive psychotherapy strives to empower clients rather than emphasize deficits and promotes
therapeutic change for clients through the utilization of techniques aimed at promoting positive experiences such as positive feelings, behaviors, and cognitions (Rashid, 2009; Sin & Lyubomirsky, 2009). A positive psychotherapeutic model provides a more holistic approach to offender counseling and rehabilitation by recognizing the presence of subjective well-being and de-emphasizing the absence of mental disorders (Keyes, 2003).

Positive psychotherapy assumes mental disorders and behavioral problems can be treated by increasing positive affectivity, character strengths, and meaning while at the same time decreasing negative symptoms (Seligman et al., 2006). A guiding tenet of positive psychotherapy asserts that building positive resources counterbalances the presence of negative symptoms and decreases the likelihood of future reoccurrence of unwanted symptoms and behaviors (Seligman et al., 2006). Research demonstrates the effectiveness of positive psychotherapy for specific clinical conditions such as anxiety, depression, and schizophrenia, in working with clients who deal with loss, grief, and relationship difficulties, and in improving couple relationships (Fredrickson, 2001; Fredrickson & Losada 2005; Rashid, 2009; Seligman et al., 2006; Sin & Lyubomirsky, 2009; Dambrun & Dubuy, 2014).

**The Broaden-and-Build Theory**

Positive psychotherapy interventions teach clients positive coping strategies when faced with negative life-events which in turn increases propensity to experience positive emotions (Sin & Lyubomirsky, 2009). According to the Broaden-and-Build Theory, experience of positive emotions provides an array of physical and psychological benefits (Fredrickson, 1998, 2001). The Broaden-and-Build Theory emerged from the Positive Psychology literature and explores how individuals develop the capacity to experience and seek out positive experiences. According the Broaden-and-Build Theory, feelings of positive affectivity such as joy, gratitude,
interest, contentment, love, and compassion broaden individuals’ attention and thinking enabling them to draw upon social connections and a wider range of ideas when faced with aversive situations in order to effectively problem solve (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008). The more individuals experience positive affectivity, the more likely they are to draw upon appropriate resources when faced with a problem. Engagement in such behavior also increases the likelihood of a positive outcome despite the initial aversive stimuli. Thus, the individual’s interpretation of the event shifts from negative to positive (Fredrickson, 2001). The positive interpretation of a seemingly negative event then increases the individual’s capacity for positive affectivity and the likelihood that the individual will continue to reach out towards those resources in the future, thus creating a positive feedback loop.

The Broaden-and-Build Theory asserts that individuals are able to discover and build consequential personal resources using their broadened perspective. These resources can be cognitive, psychological, social, or physical. Examples include the ability to be present and in the moment, the ability to cope with unpleasant situations, the ability to show and receive empathy, and the ability to protect themselves from disease. Individuals with the aforementioned resources cope with life’s challenges more effectively. Additionally, they recognize and take advantage of opportunities as they arise from moment to moment. As a result, these individuals become more successful, healthier, and happier.

The Broaden-and-Build Theory is not without its opponents. Pérez-Álvarez (2016) criticized the field of Positive Psychology as a whole stating that it is a pseudo-science and that the Broaden-and-Build Theory possesses a pseudoscientific foundation. Pérez-Álvarez (2016) states that happiness cannot be studied in an objective, descriptive, and value-free manner like the natural sciences. Rathunde (2000) argues that the theory inappropriately credits positive
emotions with broadening thought-action repertoires and neglects the positive impact of negative emotions on skill-building. Additionally, the theory is criticized for dichotomizing positive and negative emotions and portraying positive emotions as healthier and as more beneficial than negative emotions (Rathunde, 2000). Pérez-Álvarez (2016) argues that the distinction between positive and negative emotions is not scientific; rather, it is a religious or ethical distinction. Rathunde (2000) highlights that negative emotions such as depression, hardship and stress also play an essential role in building both personal and social resources. Furthermore, happiness and flourishing are Westernized constructs and are not necessarily desirable in all cultures and in all situations (Pérez-Álvarez, 2016). Despite these criticisms of the theory, a preponderance of evidence exists supporting Positive Psychology, positive psychotherapy interventions, and the Broaden-and-Build Theory as a viable approach to counseling.

Applying the Broaden-and-Build Theory to offender counseling places the focus of therapy on enhancing offender subjective well-being and creates a more holistic model that helps practitioners prepare offenders for life post incarceration. By enhancing offenders’ subjective well-being and positive affectivity, offenders are better equipped to create new resources for themselves, become more productive, and have better personal and professional lives. Moreover, this approach empowers offenders to cope more effectively and constructively with adversity and the many obstacles with which they are faced. The Broaden-and-Build Theory guides therapeutic interventions aimed towards increasing traits such as positive affectivity, subjective well-being, and prosocial behavior. The theory shifts the focus of counseling from criminogenic needs and deviant behaviors towards the intra- and interpersonal needs of offenders and reduces the likelihood of inducing guilt and shame within clients. Such an approach focuses on building the client up and adequately preparing client for reentry into the community.
Furthermore, this approach increases the likelihood that when faced with adversity, offenders will reach out toward positive resources rather than maladaptive coping mechanisms, thus reducing the likelihood of engaging in maladaptive behaviors and recidivism.

**Justification for the Study**

The purpose of this heuristic study was to explore the assumptions of the Broaden-and-Build Theory as it relates to the offender population. The following research questions provided the guiding framework for the study: (a) What is the relationship between offenders’ experiences of positive affectivity, negative affectivity, subjective well-being, family life satisfaction, and prosocial behavior? and (b) How do familial relationships impact offenders’ experiences of positive and negative affectivity, subjective well-being, and prosocial behavior?

**Overview of the Study**

To explore these research questions, a sample of offenders currently on probation and representing a diverse array of crimes was obtained. Sex offenders were excluded from the study. Participants completed a demographic questionnaire and four empirically validated measures: (a) the Positive and Negative Affectivity Schedule (PANAS), (b) the Satisfaction with Life Scale (SWLS), (c) the Satisfaction with Family Life Scale (SWFLS) and (d) the Prosocial Tendencies Measure (PTM). Responses were gathered using a paper-and-pencil survey and was analyzed using the SPSS statistical software.

**Definition of Terms**

**Positive and Negative Affectivity.** Positive affectivity is the emotional experience of pleasurable feelings in response to environmental stimuli (Watson, Clark, & Tellegen, 1988). Conversely, negative affectivity is the emotional experience of unpleasant feelings in response to
environmental stimuli (Watson, Clark, & Tellegen, 1988). For the purposes of this study, positive and negative affectivity was measured by the PANAS.

**Subjective Well-being.** Subjective well-being is an individual’s cognitive evaluations of his or her life (Deiner, Lucas, & Oishi, 2002; Ferguson, Conway, Endersby, & MacLeod, 2009). For this study, subjective well-being was defined by an individual’s level of life satisfaction as measured by the SWLS.

**Satisfaction with Family Life.** Subjective well-being is multi-dimensional and is determined by cognitive evaluations of multiple areas of one’s life (Deiner et al., 2002; Zabriskie & McCormick, 2003; Ferguson et al., 2009). One such dimension of subjective well-being is satisfaction with family life (Zabriskie & McCormick, 2003). For the purposes of this study, satisfaction with family life was defined by an individual’s score on the SWFLS.

**Prosocial Behavior.** Prosocial behavior is the voluntary and intentional behaviors committed for the benefit of another individual or group of people (Kosek, 1995). For the purposes of this study, prosocial behavior will be referred to as an individual’s amount of engagement in prosocial behavior as measured by the PTM.

**Limitations**

Several limitations to the proposed study existed including sampling and instrumentation, and operationalization of the variables. Convenience sampling was used to obtain the sample. Use of convenience sampling may have impacted the overall generalizability of the study. Offenders who volunteered to participate in the study may have differed from those who choose not to participate and the overall populations of offenders. Additionally, choosing to participate in the study was a form of prosocial behavior. Thus, those offenders who volunteered to participate in the study may be more inclined to engage in prosocial behavior than those who
chose not to participate. The assessments for the survey was delivered in a paper-and-pencil method and required at least a third-grade reading level. Participants with limited educational and reading abilities may have had difficulty completing the assessments or may have declined to participate in the study altogether. The offender population represents a unique subset of the general population. These individuals experience multiple aversive situations that may negatively impact their experiences of positive and negative affectivity, subjective well-being, and prosocial behavior which may result in ceiling and floor effects in the measurements used.

**Summary**

Chapter one provided a description of the rising incarceration and recidivism rates of offenders and offenders with mental illness in the United States. An overview of current models of offender counseling was presented and their limitations were discussed. Rationale for a new model of offender counseling using the Broaden-and-Build Theory was introduced and a brief description of the proposed study was provided. In the next chapter, a review of the literature provides the foundation for the study.
Chapter Two

Literature Review

In this chapter, the current research on Positive Psychology and the Broaden-and-Build Theory will be discussed in order to provide a foundation for the proposed study. The chapter will begin with an analysis of Positive Psychology and the Broaden-and-Build Theory to establish the context for its utilization with the offender population. Next, a review of the literature on each of the important constructs will be described and applications for offender counseling will be considered. Finally, an overall summary of the findings will address the implications for the present study.

Positive Psychology

Research supports the effectiveness of positive psychotherapy in treating mental disorders and behavioral problems (Seligman et al., 2006). Dambrun and Dubuy (2014) conducted a study to examine the effects of a Positive Psychology intervention on long-term unemployed individuals. The sample consisted of 21 participants (n= 10 men and n= 11 women) who were members of an unemployment assistance program in a medium-sized French city. All participants were offered an opportunity to participate in a Positive Psychology intervention. Random assignment was not used in the study, rather participants self-selected into groups (n= 12 in the treatment group and n= 9 in the comparison group). All participants completed measures of depression, state anxiety, trait anxiety, happiness, life satisfaction, and self-esteem at three time intervals (pre-intervention, post-intervention, and 1-week post-intervention) throughout the study.

Findings indicated that the Positive Psychology intervention significantly decreased depression and anxiety while simultaneously significantly increased life satisfaction, happiness,
and self-esteem. These findings are consistent with previous studies and strengthen support for the effectiveness of Positive Psychology interventions. Because random assignment was not used, the study is vulnerable to issues of internal validity. Differences found between the groups could be accounted for by pre-existing difference between those who chose to participate in the intervention and those who declined. Thus, replication of the study using random assignment will strengthen the findings of the study.

Seligman et al. (2006) conducted two studies to test the effectiveness of positive psychotherapy interventions on symptoms of depression. In the first study, the sample consisted of 40 students from the University of Pennsylvania who scored in the mild-to-moderate range of the Beck Depression Inventory. Participants were randomly assigned to the treatment group (n=19) or no treatment group (n=21). Participants in the treatment group completed a six-week, two-hour positive psychotherapy group. All participants completed the Beck Depression Inventory and the Satisfaction with Life Scale prior to treatment, immediately following treatment, 3 months, 6 months, and 1 year post-treatment. Results indicated that group positive psychotherapy worked better than no treatment. Participants in the treatment group experienced symptom relief from depression and increased well-being lasting through the 1 year post treatment. These findings offer support for the utilization of positive psychotherapy and provides evidence that even a brief intervention provides long-lasting symptom relief. However, the participant sample consisted of college students. Unique characteristics of college students may have impacted the external validity of the results. Findings may not be generalizable to other populations such as offenders. Replication of the study with diverse populations including offenders and offenders with mental illness would add to the body of knowledge and strengthen the findings.
The purpose of the second study was to determine the effectiveness of positive psychotherapy on a clinical sample of depressed clients (Seligman et al., 2006). The sample consisted of 46 participants who met criteria for DSM-IV-TR diagnosis of major depressive disorder and sought treatment at the University of Pennsylvania based counseling center. Participants were randomly assigned to individual positive psychotherapy (n=13) and treatment as usual (n=15). Participants were also compared to a nonrandomized, matched group receiving treatment as usual and antidepressant medication (n=17). Findings indicated that positive psychotherapy reduced symptoms of depression, increased global functioning, happiness, and well-being, and produced higher remission rates than treatment as usual and treatment with medication. These findings provide empirical support for the effectiveness of positive psychotherapy interventions with clinical samples and strengthen the argument for its potential usefulness with offenders with mental illness. However, like the previous study, this sample consisted exclusively of a college population. Replication of the study with a more diverse sample, including offenders and offenders with mental illness, will provide further support for the effectiveness of positive psychotherapy interventions.

Many studies of positive psychotherapy intervention have demonstrated its effectiveness in reducing symptoms of depression and in increasing subjective well-being (Fredrickson, 2001; Rashid, 2009; Seligman et al., 2006; Sin & Lyubomirsky, 2009). Sin and Lyubomirsky (2009) conducted a meta-analysis of these studies to determine whether interventions focused on increasing positive emotions, behaviors, and cognitions alleviate depressive symptoms. The analysis consisted of 51 studies with a combine 4,266 participants. A total of 49 studies examine the effects of positive psychotherapy interventions on subjective well-being and 25 studies explored the effects of positive psychotherapy interventions on symptoms of depression. Results
indicated that positive psychotherapy interventions significantly enhance subjective well-being and significantly decrease symptoms of depression. The study used a comprehensive procedure with clearly defined inclusionary criteria to ensure that all appropriate studies were included in the analysis. The authors obtained the most robust studies by requiring that included studies had to empirically test an intervention, complete pre-test and post-test measurements, and have comparison groups. Such inclusionary criteria provided increased assurance of internal validity of the studies analyzed. Findings of this meta-analysis strengthen the argument for the usefulness of positive psychotherapy interventions in offender counseling.

Of all the models of offender counseling, only the GLM and GLM-D utilize positive psychotherapy interventions in its treatment methods. Mapham and Hefferon (2012) conducted a phenomenology to explore the lived experiences of offenders who had participated in the Silence the Violence (STV) program, a South African treatment program that follows the GLM-D principles. Participants consisted of 14 convicted offenders (n= 11 men and n=3 women) ages 22 to 36 who had been convicted of a variety of crimes and served 2 to 18 years in prison and had participated in the STV program in the last 2 to 5 years. Structured interviews were conducted with participants and the interviews were transcribed and analyzed using thematic analysis. Four themes emerged including relationships, emotional intelligence, new identity, and agency. Desisting offenders were found to develop new, redemptive self-narratives, feel empowered to maintain changes, and expressed desires to engage in more prosocial behaviors. These findings point towards concepts of Positive Psychology that impact offenders as they transition towards desistance. This study provides a strong foundation for future qualitative and quantitative research to explore how such principles of Positive Psychology might influence and even predict desistance and engagement in prosocial behavior.
Summary

Positive interventions have proven to be effective for the treatment of a variety of mental health disorders and offer an extensive range of psychological interventions to subclinical individuals with the desire for more fulfilling and enriched lives. Unlike the pathological view that has little to offer non-diagnosable and high functioning individuals, positive psychotherapy helps these individuals thrive and flourish in different aspects of their lives including work, education, and interpersonal relationships (Rashid, 2009; Seligman & Csikszentmihali, 2000). All offenders, regardless of whether or not they are diagnosed with a mental illness can benefit from such an approach. Positive interventions will support the model’s goals of enhancing positive affectivity, character strengths, and subjective well-being.

Broaden-and-Build Theory

In the seminal article on the Broaden-and-Build Theory, Fredrickson (1998) offers a new model to describe the function of positive emotions. In her review of the literature, Fredrickson (1998) noted that positive emotions had largely been marginalized in research. Much of the literature at that time focused on individual experiences of negative emotions. The theories and hypotheses of human behavior focused on the experience and function of negative emotions; however, the role of positive emotions had largely been ignored in the literature and research (Fredrickson, 1998; Fredrickson, 2001). In this article, Fredrickson (1998) provided the foundation for the Broaden-and-Build Theory using related empirical studies that provided direct and indirect support for the model.

Fredrickson (1998, 2001) asserts that positive emotions such as love, joy, contentment, pride, and interest broaden one’s thought-action repertoire during moments of stress in an effort to support negative emotion regulation and support positive coping mechanisms. These
emotions share the ability to broaden the individual’s momentary responses to specific stimuli and build enduring physical, intellectual, social, and psychological resources (Fredrickson, 2001). The theory postulates that positive emotions broaden one’s scope of attention, cognition, and action enabling an individual to be exposed to a broader range of positive coping capabilities. As a result of these experiences of positive affectivity, psychological, social, physical, and intellectual resources are built and developed within these individuals increasing the likelihood that individuals will reach out for these positive coping mechanisms when faced with future adversity. The theory assumes that positive emotions in effect undo the aftermath of negative affective experiences (Fredrickson, Mancuso, Branigan, & Tugade, 2000), serve as protective factors for health and wellness within individuals (Fredrickson & Losada, 2005; Fredrickson et al., 2008), trigger upwards spirals toward emotional well-being (Fredrickson & Joiner, 2002), enhance positive coping by contributing to resilience and positive emotional granularity (Tugade, Fredrickson, & Feldman Barrett, 2004), and enhance negative emotion regulation (Fredrickson & Levenson, 1998; Fredrickson et al., 2000; Tugade & Fredrickson, 2004). Ultimately, positive emotions improve the overall psychological well-being and life satisfaction of the individuals who frequently experience them (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009).

The Broaden-and-Build Theory postulates that positive emotions are worth cultivating because they both signal and produce flourishing and serve as a means to produce psychological growth and improve well-being over time (Fredrickson, 2001; Fredrickson & Losada, 2005; Cohn et al., 2009). Certain emotions including joy, interest, contentment, pride, and love, while phenomenologically different, share the ability to broaden an individual’s momentary responses to specific stimuli and build enduring physical, intellectual, social, and psychological resources.
The theory purports that positive emotions help people to feel better in the moment, but also improve the overall psychological well-being of individuals in the long run.

Much research has been conducted to support the theories and assumptions of the Broaden-and-Build Theory. The following cluster of studies provides foundational support for the assumptions of the Broaden-and-Build Theory and establishes its overall validity. One of the central assumptions of the Broaden-and-Build Theory is the broaden hypothesis (Fredrickson, 1998; Fredrickson, 2001; Fredrickson & Branigan, 2005). The broaden hypothesis asserts that positive emotions broaden one’s range of attention, cognition and action (Fredrickson, 1998; Fredrickson, 2001). This broadening extends thinking of various actions when problem-solving and facing aversive situations. Alternatively, the narrowing hypothesis asserts that negative emotions shrink one’s access to diverse thoughts and actions (Fredrickson, 1998; Fredrickson, 2001; Fredrickson & Branigan, 2005). The purpose of this study was to test the broaden hypothesis of the Broaden-and-Build Theory (Fredrickson & Branigan, 2005).

To test this hypothesis, the authors conducted two separate experiments to examine the broadening and narrowing of the scope of attention and the broadening and narrowing of thought-action repertoires (Fredrickson & Branigan, 2005). Both experiments consisted of 104 university students (66% women) enrolled in an introduction to Psychology course. Experiment 1 used a global-local visual processing task to explore the broadening and narrowing of the scope of attention. Experiment 2 directly followed the completion of Experiment 1 and used the Twenty Statements Test to explore the broadening and narrowing of thought-action repertoires. Participants were randomly assigned to view one of five film clips designed to induce a positive, negative, or neutral stimulus. Experiment 2 was conjoined with Experiment 1 so that no participants viewed the same videos twice. Results confirmed the broaden hypothesis that
positive emotions broaden the scope of attention and thought-action repertoires relative when
compared to a neutral state. The authors designed a strong study and took appropriate steps to
ensure the internal and external validity of the study. A major limitation of the study is its use of
convenience sampling. However, findings do support the broaden hypothesis and further
validates the Broaden-and-Build Theory. Replication of the study with offender populations will
extend these findings and further validate the underlying assumptions of the theory.

In order to extend upon the findings of Fredrickson and Branigan (2005), Fredrickson et
al. (2008) conducted a study to find empirical evidence to support the build hypothesis. The
build hypothesis asserts that positive emotions impact individuals’ paths towards psychological
growth resulting in development of physical, psychological, social, and intellectual resources
(Fredrickson, 1998; Fredrickson, 2001; Fredrickson et al., 2008). The authors used Loving-
Kindness Meditation to induce positive emotions in order to test the build hypothesis of the
Broaden-and-Build Theory. The study consisted of 202 participants; however, due to attrition,
the final sample consisted of 139 participants. Participants were all working adults employed by
a large business software and computer technology services company in Detroit, Michigan.
Participants were randomly assigned to experimental and comparison groups. The experimental
group engaged in daily loving-kindness meditation while the comparison group was placed on a
waitlist for participation. Findings indicated that participation in daily meditation increased
experiences of positive emotions and personal resources. Increases in personal resources
predicted increase in life satisfaction and decrease in depressive symptoms. Considerations must
be made for 31% attrition rate. Differences between the emotional reactivity of those who
dropped out the study and those who successfully completed the study may have impacted the
internal validity of the study. Nonetheless, the findings do provide support for the build
hypothesis and provides further validation of the theory. Further research is needed to determine if the build hypothesis applies to the offender population.

Cohn et al. (2009) conducted another study of the build hypothesis to gather further empirical support of the Broaden-and-Build Theory. In this study, the authors tested the assumption that positive emotions help people to build lasting resources (Fredrickson, 1998; Fredrickson, 2001; Fredrickson et al., 2008; Cohn et al., 2009). Participants included a sample of 86 college students from a university. Researchers measured emotions daily for one month. Students completed the Ego Resiliency 89 and the Satisfaction with Life Scale at the beginning and end of the study. Researchers found positive emotions to be predictive of increases in resilience and life satisfaction. Additionally, positive emotions mediated the relationship between the baseline resilience and final resilience scores. However, life satisfaction did not demonstrate this relationship. Finally, negative emotions had a weak or null effect on resilience and life satisfaction. This effect did not interfere with the benefits of positive emotions. The study was conducted with a small sample (N= 86) and had a high attrition rate leaving the internal validity in question. Additionally, the analysis relied heavily on the self-report of participants and correlational statistics. However, these findings build upon and provide further support of previous research findings of the Broaden-and-Build Theory (Fredrickson, 1998; Fredrickson, 2001; Fredrickson et al., 2008; Cohn et al., 2009).

In an early study of the Broaden-and-Build Theory, Fredrickson et al. (2000) tested the undoing hypothesis. The undoing hypothesis states that positive emotions function to negate or undo the aftermath of negative emotions (Fredrickson, 1998; Fredrickson et al., 2000; Fredrickson, 2001). That is, positive emotions specifically counter the narrowing of thought action-repertoires caused by the experience of negative emotions. In order to examine the
undone hypothesis, Fredrickson et al. (2000) conducted two studies to explore the relationship between cardiovascular reactivity and positive emotions. The purpose of this study was to replicate and extend the findings of earlier research conducted by Fredrickson and Levenson (1998) in which cardiovascular recovery was measured after participants were exposed to a video clip to induce fear and then exposed to a second video clip meant to induce positive or negative emotions.

The first study tested two samples of university students (n=95 and n=75, respectively). Participants were exposed to a stimulus aimed at producing negative emotions including fear and anxiety. Researchers then measured the length of time it took for cardiovascular recovery after exposure to negative stimuli followed by a randomly assigned video clip designed to induce positive, negative, or neutral emotions. Findings supported the undoing hypothesis in that participants who reported higher experiences of positive emotions had faster cardiovascular recovery times than participants who reported fewer experiences of positive emotions. The study utilized a robust research methodology which included random assignment to groups which strengthened the internal validity of the results. This study provided support for the undoing hypothesis of the Broaden-and-Build Theory. Replication of this study with a population of offenders, including offenders with mental illness, would further validate these findings by extending the results to a new population.

In the second study, the authors tested an alternative explanation for the undoing hypothesis. This explanation purports that rather than undoing the effects of negative emotions, positive emotions simply replace the physiological response of the cardiovascular system with a physiological response of low arousal (Fredrickson et al., 2000). By ruling out the replacement explanation, support for the undoing hypothesis would be strengthened. This study consisted of
185 university students. Cardiovascular responses were measured while participants were exposed to positive, negative, or neutral stimuli. Results indicated that positive and neutral stimuli differed in the subjective responses produced; however, these stimuli did not differ in the cardiovascular responses produced. Positive and neutral stimuli differed in both the subjective responses produced and the cardiovascular responses produced from negative stimuli. These findings disconfirmed the replacement explanation providing further support for the undoing hypothesis. Again, the authors employed a robust research design to ensure both the internal and external validity of the results. The study does provide further validation of the undoing hypothesis and warrants further study using offenders and offenders with mental illness.

The remaining studies reviewed in the section add value to the literature on the Broaden-and-Build Theory by providing empirical support for various assumptions of the theory. These studies point mental health practitioners towards appropriate positive psychotherapy interventions that will increase personality characteristics including positive affectivity, subjective well-being, and prosocial behavior. In a study conducted by Fredrickson & Joiner (2002), the assumption of the Broaden-and-Build Theory that positive emotions improve contentment in the moment as well as create upward spirals towards psychological well-being in the future was examined. The study tested whether positive affect and broad-minded coping were predictive of one another. The participant sample consisted of 138 undergraduate college students enrolled in an introductory course in psychology. Each participant completed measures of positive and negative affectivity and coping. The measures were completed twice, once at the beginning of the study and a second time 5 weeks later.

Results supported the hypothesis that positive emotions trigger upward spirals toward psychological well-being (Fredrickson & Joiner, 2002). Individuals who experienced high
positive emotions had an increased likelihood of experiencing positive emotions in the future. Caution should be taken when interpreting the results of this study. Testing appears to be a major threat to internal and external validity. Because the same measures of positive and negative affectivity and coping were used at Time 1 and Time 2 of measurement, participants may have been sensitized to the measures the second time they completed the assessments. Additionally, respondents may have answered in socially desirable ways. Further testing and replication of this study is needed to confirm the results and strengthen the support of the assumption of the Broaden-and-Build Theory that positive emotions trigger growth toward greater emotional well-being. However, these findings provide promising implications for the potential use of the Broaden-and-Build Theory for offender populations. Further study is needed using samples of offenders and offenders with mental illness to explore how assumptions of this theory impact these populations.

According to the Broaden-and-Build Theory, positive emotions and psychological resilience share a positive relationship. That is, individuals who frequently experience positive emotions also tend to express greater psychological resilience than individuals who less frequently experience positive emotions (Fredrickson, 2001; Tugade & Fredrickson, 2004; Tugade et al., 2004). The purpose of this study was to examine the relationship between psychological resilience and positive emotions. Psychological resilience has been defined as one’s ability to rebound from negative experiences by responding to stressful situations in flexible and adaptable ways (Tugade & Fredrickson, 2004; Tugade et al., 2004). Using the Broaden-and-Build Theory as the theoretical underpinnings, the authors conducted three studies to explore the physiological components of resilience and to explore the role of positive emotions in the coping process (Tugade & Fredrickson, 2004).
Using a psychophysiological method, Study 1 explored the emotional regulatory process known to be associated with psychological resilience (Tugade & Fredrickson, 2004). Study 1 also attempted to provide support for the undoing hypothesis. The study consisted of 57 undergraduate students at the University of Michigan. Participants completed measures of positive and negative affectivity. They were then placed in a simulation aimed at inducting negative emotions. Afterwards, participants completed a report of their emotions and the Ego Resiliency-Scale. Findings supported the positive relationship between resiliency and experience of positive emotions. Highly resilient participants were also experienced high positive emotionality and were able to physiologically rebound from a stressful event at a faster rate than less resilient participants.

Study 2 was conducted to follow-up on the finding from Study 1 that highly resilient participants interpreted the stressful event as less threatening than their less resilient peers. To follow-up on this finding, the purpose of Study 2 was to explore the function of cognitive appraisals in psychological resilience (Tugade & Fredrickson, 2004). Study 2 consisted of a sample of 57 undergraduate students from the University of Michigan. The procedure of Study 2 resembled that of Study 1; however, participants were randomly assigned to a challenge condition and a threat condition. Higher psychological resilience was associated with increases in positive emotions. Participants in the threat condition with higher psychological resilience tended to experience faster emotional regulation. Finally, positive emotions were found to be a mediator between psychological resilience and emotion regulation.

In Study 3, the authors tested the prediction of the Broaden-and-Build Theory that positive emotions increase psychologically resilient individual’s positive meaning making when faced with negative experiences (Tugade & Fredrickson, 2004). Participants consisted of 192
undergraduate students from the University of Michigan. Participants completed measures of psychological resilience, subjective emotion reports, and negative mood reports. The authors asked participants to write short essays on the most significant problem they were facing at the time and to rate the extent to which they experienced various different emotions in relation to the problem identified. Finally, the rated the degree to which they found positive meaning in the identified problem. Psychological resilience was again positively correlated with positive emotion. Individuals higher in psychological resilience reported more positive meaning-making. Further analysis indicated that positive emotions mediated the effect between resilience and positive meaning-making.

Findings of each of the studies indicated that individuals high in psychological resilience tend to have more experiences of positive emotions when faced with stressful situations and thus, according to the Broaden-and-Build Theory have broader access to thought-action repertoires that enable them to effectively regulate negative emotions (Fredrickson, 1998; Fredrickson 2001; Tugade & Fredrickson, 2004; Tugade et al., 2004). Those with higher experiences of positive emotions also experienced faster physiological recovery from stressful situations. Importantly, positive emotions appeared to play a significant role in helping individuals find positive meanings out of negative situations. These findings hold particular significance for the offender population. Offenders face an array of negative situations that impact their personal and social lives as a result of being arrested and convicted of a crime. Mental illness compounds these effects. These findings lend support for increasing positive affectivity and psychological resilience within this population. Although these studies provided support for the Broaden-and-Build Theory, small sample sizes were used (N= 57 for the first two studies and N=192 for the third study) from a single population, college students at the University of Michigan.
Replication of this study with larger sample sizes from a broader and more diverse population would strengthen the results of the study.

The Broaden-and-Build Theory postulates that positive emotions are related to, enhance, and improve psychological resilience and positive emotional granularity (Fredrickson, 1998; Fredrickson, 2001; Tugade et al., 2004). In a study conducted by Tugade et al. (2004), the authors set out to provide empirical evidence to support this assumption. The purpose of this study was to examine individual differences in psychological resilience and positive emotional granularity. Psychological resilience is defined as one’s ability to bounce back from negative events by using positive emotions in self-regulations and coping styles (Fredrickson, 2001; Tugade et al. 2004). Positive emotional granularity is the tendency to use specificity and precision when representing experiences of positive emotions (Fredrickson, 2001; Tugade et al. 2004).

The authors used two separate studies to examine these constructs. In the first study, researchers used psychophysiological evidence to support this assumption. A sample of 57 university students completed measures of positive and negative affectivity and psychological resilience. Participants were then exposed to an anxiety-inducing stimulus followed by a 3-minute rest period at which time the measurements were completed. Findings indicated that trait resilience was positively associated with experiences of positive affectivity but not negative affectivity. Additionally, participants with higher trait resilience experienced faster cardiovascular recovery than participants with lower trait resilience. Experience of positive emotions enabled individuals to physiologically return to baseline after encountering a stressful event. These findings have important implications for the proposed study. If these findings are applicable to offenders, increasing trait resilience and positive affectivity within this population
may insulate them from the negative effects of aversive environmental stimulations. Expanding these findings to offenders with mental illness becomes especially important as these individuals may experience the additional benefit of psychosomatic symptom relief.

The second study employed the use of an experience-sampling method to explore the individual differences positive emotional granularity and positive coping. The study consisted of 130 participants (n=69 females and n=61 males) who reported on their emotional experiences at 10 random times throughout the day for a period of 28 days. Additionally, participants completed self-report measures of coping. Findings indicated that positive emotions were useful in the coping process. Findings also indicated that individuals with higher positive emotional granularity tended to be more attentive to coping options and were less likely to spontaneously respond to adversity. Results should be interpreted with caution as the study relied primarily on self-report measures of coping. Participants may have responded to these measures in socially desirable ways. Replication of the study using behavioral observations of coping may strengthen the results of the study. Nonetheless, these findings to provided further support for the Broaden-and-Build Theory and further strengthen the argument regarding the benefits of positive affectivity.

In a study conducted by Fredrickson & Losada (2005), the authors sought to replicate and extend upon previous research conducted by Losada (1999) which identified a mathematical ratio that differentiated human flourishing from languishing. The purpose of the study was to determine whether positivity ratios that meet or exceed a certain threshold would be predictive of human flourishing. Using the Broaden-and-Build Theory and Losada’s (1999) nonlinear dynamics modeling, the authors predicted that ratios of positive to negative affect above 2.9 would indicate flourishing mental health. To test this hypothesis, the authors collected data from
two separated samples. The first sample consisted of 87 first and second year students from a large Midwestern university (N = 52 women and N= 35 men). Participants in the first sample were screened for depression resulting in the exclusion of about half of the volunteer for the study (Fredrickson & Losada, 2005). The second sample consisted of 101 first year students from the same university (N= 55 women and N = 46 men). Participants completed a measure of flourishing mental health and reported on their experiences of positive emotions for 28 consecutive days using computer-based technology. Results confirmed the hypothesis that flourishing mental health was associated with positivity ratios above 2.9. This study offers further support for applying positive psychotherapy interventions to offenders with mental health. Increasing positive emotions, particularly within this population of offenders, can promote flourishing mental health as well as positive coping strategies and increased engagement in prosocial behavior.

**Summary**

Much of the research on the Broaden-and-Build Theory has focused on providing empirical support for the assumptions and primary tenets of the model. In the current review of the literature, no studies were found that explicitly focused on the application of the theory to clinical practice. Furthermore, the majority of the studies were conducted on a sample of college students. Few studies reviewed utilized adolescent or adult populations. College, specifically for traditional students, is a time of dramatic mental, intellectual, and psychological growth. Findings of studies using this sample may not generalize to a broader population. Further research is needed to validate the Broaden-and-Build theory across the life span. Additionally, research aimed at providing support for the assumptions of the Broaden-and-Build theory as it
relates to offenders is needed in order to guide the field towards a new model of treatment and rehabilitation for this population.

The Broaden-and-Build Theory has special implications for offenders who are likely to experience a wealth of adversity throughout their lifetimes. In addition to positive affective experiences, this model also focuses on development of character strengths such as resilience and self-regulation (McCullough & Snyder, 2000, Part et al., 2004; Seligman, 2004). Park et al. (2004) define character strengths as a group of positive traits found in cognition, emotions, and behaviors reflecting the individual differences of humanity. The Broaden-and-Build Theory aims to create and improve character strengths of offenders. This process requires emphasizing strengths and experiences of positive affectivity (Park et al., 2004). Resilience increases as experience of positive affectivity increases (Lord et al., 2015). As previously mentioned, positive emotions play a critical role in improving individuals’ psychological resilience which is associated with decreased externalizing behaviors in early childhood, increased adjustment capabilities throughout the life span, decreased symptoms of anxiety, and decreased negative affectivity (Cohn et al., 2009).

Positive Affectivity

The notion of positive affectivity is central to the Broaden-and-Build Theory. The theory asserts that through the experience of positive emotions, an individual becomes more susceptible to beneficial outcomes related to physical and mental health and psychological growth. Positive affectivity describes the emotional experiences of pleasurable engagement with the environment including feeling such as joy, contentment, excitement, interest, and enthusiasm (Caprara, Eisenberg, & Alessandri, 2016). Positive affectivity reflects stable individual differences in positive emotional experience (Watson, 2002). Individuals high in positive affectivity
experience frequent and intense episodes of pleasant, pleasurable mood. They are cheerful, enthusiastic, energetic, confident, and alert. Individuals with high positive affectivity may be more responsive to rewarding stimuli. High positive affectivity has been a key indicator in the literature of psychological and subjective well-being (Caprara et al., 2016).

Watson (2002) offers support for the heritability of the trait of positive affectivity; however, positive affectivity can be fostered and developed within individuals for whom the trait is not an innate experience. Increasing positive affect requires an action-oriented approach to therapy: through socializing and exercising. Therapists must get clients to be physically, socially, and mentally active. Clients must actively be involved in striving towards goals rather than attaining goals in order to increase positive affectivity and subjective well-being. An individual’s capacity for positive affectivity is not seriously impacted by his or her objective conditions such as age, wealth, and status (Watson, 2002; Lyubomirsky, King, & Diener, 2005; Caprara et al., 2016). Positive affectivity has been associated with multiple health outcomes due to its impact on social relationships, coping, cognition, and resiliency (Yang, Cheng, Chuang, 2015; Caprara et al., 2016). Much research has been conducted on the construct of positive affectivity and findings indicate further support for the Broaden-and-Build Theory. Positive affectivity has been linked to success (Lyubomirsky et al., 2005), life satisfaction (Ciarrochi & Scott, 2006), perceived meaning in life (Işık & Üzbe, 2015), resilience (Lord, Rumburg, Jaser, 2015), psychological health (Clark, Watson, & Mineka, 1994; Lyubomirsky et al., 2005, Caprara et al., 2016), job satisfaction (Iverson, Olekalns, & Erwin, 1998), choice of conflict frames and conflict management (Yang et al., 2015), and self-directedness and persistence (Garcia, Kerekes, & Archer, 2012).
Lyubomirsky et al. (2005) conducted a meta-analysis in order to develop a conceptual model to account for the link between happiness and success in the literature. The authors suggest that happy people are successful because happiness engenders success. The authors reviewed cross-sectional, longitudinal, and experimental studies and combined the effect sizes meta-analytically. Results indicated that happiness is both associated with and foreshadows multiple successful outcomes and behaviors aligned with success. Positive affectivity signifies that life is going well, goals are being met, and resources are adequate for those who experience them (Lyubomirsky et al., 2005). Additionally, the researchers found that positive affectivity specifically may be the cause of many of the characteristics, resources, and successes correlated with happiness. Many of the studies reviewed in the meta-analysis used correlational and multiple regression analyses. More experimental studies are needed in order to determine causal relationships between positive affectivity and the variables of interest in the studies. However, the findings warrant further study in order to determine whether happiness impacts the offender population in the same way it appears to impact the population examined in this study. Increasing experiences of positive emotions within offenders may serve to increase their subjective well-being as well and propensity towards engaging in prosocial behavior. Establishing a similar relationship between happiness and success within the offender population might lead to experimental studies in order to explore effective methods of increasing happiness within offenders and offenders with mental illness in order to increase engagement in prosocial behaviors and reduce recidivism.

Positive affectivity has frequently been associated with psychological health and well-being. Clark et al. (1994) conducted a review of the literature on temperament, personality, and mood and anxiety disorders. Overall conclusions of this review of the literature indicated that
dimensions of personality do play a role in psychological disorders (Clark et al., 1994). Specifically, state and trait positive affectivity and extraversion seem to be linked to depression. Individuals low in positive affectivity and extraversion are at risk for the development of depression and the lower the levels of positive affectivity and extraversion the worse the prognosis of the progression of the disorder (Clark et al., 1994). Additionally, negative affectivity and neuroticism increases an individual’s risk for anxiety disorders. A similar positive correlation between levels of negative affectivity and neuroticism and prognosis of the disease was noted in the literature (Clark et al., 1994).

Thus, higher levels of positive affectivity and lower levels of negative affectivity appear to serve as protective factors from psychological disorders (Clark et al., 1994). The authors noted that based on the findings of the literature, a shift in treatment focus from the specific symptoms of the disorders themselves to the underlying temperament and personality deficiencies may be warranted. Additional research using longitudinal methodology is needed in order to differentiate causal factors from concomitant, confounding, and residual factors. However, these findings seem to support the tenets of Positive Psychology and may provide additional evidence to support and validate the Broaden-and-Build Theory. Thus, this study provides further support for exploring these constructs within the offender population, specifically for the growing number of offenders with mental illness. Incorporating Positive Psychology interventions within offender counseling may help to reduce the psychiatric symptoms experienced by offenders with mental illness while also increasing their overall physical and psychological health and well-being.

Positive affectivity has been closely associated with subjective well-being and life satisfaction (Ciarrochi & Scott, 2006; Caprara et al., 2016). In order to further explore the nature
of these relationships, Işık and Üzbe (2015) conducted a study to explore the effect of both positive and negative affect and personality traits on meaning in life. Researchers used convenience sampling to obtain a sample size consisting of 190 females and 145 males for a total sample of 335 participants. Participants were divided into three groups based on their ages. Groups consisted of young adults ages 18-34 (n=128), middle-aged adults ages 35-64 (n=145), and older adults ages 65 and older (n=66). Participants completed the Meaning in Life Questionnaire, the Positive and Negative Affect Schedule and the Adjective-Based Personality Scale.

The researchers used a one-way analysis of variance (ANOVA) as well as a Pearson Product Moment Correlation and Hierarchical Multiple Regression to analyze the data. Presence of meaning in life was not found to be significantly different based on age (Işık & Üzbe, 2015). Results indicated that positive affect, extraversion, openness to experiences, agreeableness, and conscientiousness correlated with presence of meaning in life and search for meaning in life (Işık & Üzbe, 2015). Positive affect, openness to experiences, and neuroticism were found to be predictive of presence of meaning in life (Işık & Üzbe, 2015). Thus, positive affect was both positively correlated and predictive of presence of meaning in life. Results should be interpreted with caution as groups were of unequal sizes and the researchers do not indicate whether this was taken into account in their analysis of the data. Additionally, the study relies heavily on self-report and participants may have responded to the assessments in socially desirable ways. However, the study provides support for the relationship between positive affectivity and life satisfaction. Life satisfaction is a component of subjective well-being and an element of happiness (Cohn et al., 2009). Aforementioned research substantiates the positive benefits of increased happiness. Exploring how these constructs impact offenders and offenders with
mental illness will add to the currently body of knowledge and improve the types of services provided to these populations.

Ciarrochi and Scott (2006) conducted another study to extend findings on the relationship between positive affectivity and subjective well-being. The purpose of this study was to explore the relationship between emotional competence and well-being. Emotional competence is defined as the way in which individuals effectively manage emotions and emotionally charged situations (Ciarrochi & Scott, 2006). Emotional competence is comprised of three dimensions: emotional problem orientation, identifying and describing specific emotions, and effective emotion management (Ciarrochi & Scott, 2006). The authors were interested in determining which aspects of emotional competence promoted positive affect and psychological health. The study consisted of 163 first-year university students. The study was conducted over a three-year period in order to obtain a sufficient sample size. Participants completed measures of emotional competence, well-being, and positive and negative affect at the beginning of the study and again a year later. Findings indicated that measures of emotional competence were predictive of well-being a year later (Ciarrochi & Scott, 2006). Individuals with ineffective problem orientation tended to experience increases in anxiety and stress and decreases in positive affectivity. Presence of positive affectivity appeared to serve as protective factors against poor psychological health such as anxiety and depression.

Implications of the findings of this study have important significance for the Broaden-and-Build Theory. Emotional problem orientation relates to the way in which individuals view problems. Research indicates that individuals who view problems as challenges rather than threats tend to be high in positive affectivity and resilience (Tugade & Fredrickson, 2004). Understanding the lens through which offenders view the various problems they face provides
important information for mental health practitioners working with these populations. Having therapeutic goals focused on shifting the view of the problem towards a challenge rather than a threat will help to increase positive affectivity enabling offenders and offenders with mental illness to reap the vast benefits of experiencing positive emotions. Results of this study indicate that positive affectivity served as protective factors for effective emotion management, thus building upon the literature on the Broaden-and-Build Theory. However, this study should be replicated as the participant sample consisted exclusively of college freshmen and sampling methods may have threatened the internal validity of the study as it relates to history and maturation effects.

Caprara et al. (2016) conducted a longitudinal study to explore the relationship between positive affect and positivity over time starting in middle adolescence and ending in early adulthood. The study consisted of 263 participants (n=124 males and n=139 females). Participants completed a survey questionnaire four times over a period of eight years. The survey questionnaire consisted of measurements of positive orientation and positive affectivity. Data on the participant’s family’s socioeconomic status was also obtained at each point of data collection over the eight-year period. Data were analyzed using a principal component analysis using a promax rotation at each point of assessment. Each time, a two-factor model emerged representing the two constructs of interest in the study. Researchers used an integrative autoregressive-latent-trajectory model to further analyze the data. Results indicated that positivity supports the development of positive affectivity through life transitions (Caprara et al., 2016). Despite the results of the model, this longitudinal study does not allow for causal inferences to be made. Additionally, the sample was overly represented by higher educated and higher socioeconomic participants which is not representative of the general population, resulting
in questionable external validity. However, the study provides evidence of additional factors that might influence positive affectivity. Findings of this study build upon the research of Ciarrochi and Scott (2006) by identifying that cognitive as well as emotional aspects of positivity are important for promoting positive affectivity through aversive situations.

Garcia et al., 2012 sought to determine whether self-directedness mediates the relationship between persistence and positive affectivity. In order to explore the research questions, the researcher used two separate studies. The first study consisted of 304 high school students (n=123 girls and n=181 boys) from a high school in west Sweden. Participants completed measures of persistence, self-directedness, and subjective well-being. Findings indicated that positive affectivity was the only measure of subjective well-being found to correlate with persistence and self-directedness (Garcia et al., 2012). Therefore, the relationship between positive affectivity and persistence was the only correlation analyzed for mediation. Self-directedness was found to mediate the relationship between persistence and positive affectivity (Garcia et al., 2012). These findings, although conducted on a sample of high school students, provide evidence of additional factors associated with positive affectivity. Replicating this study with offender populations might provide mental health practitioners with guidance regarding the implementation of treatment interventions aimed at increasing and enhancing positive affectivity.

The second study sought to build upon the first by determining whether self-directedness mediated the relationship between persistence and life-satisfaction (Garcia et al., 2012). Participants consisted of 164 high school students (n=101 girls and n=63 boys) from a high school in south Sweden. The same procedure used in Study 1 was used in Study 2. Participants completed the same measures of persistence, self-directedness, and subjective well-being.
Additionally, participants completed the Satisfaction with Life Scale in order to measure life satisfaction. As with the first study, positive affectivity was the only measure of subjective well-being that was found to correlate with both persistence and self-directedness. Self-directedness was not found to mediate the relationship between persistence and life-satisfaction. To explain this finding, the researchers noted that the study was conducted using an adolescent population. Given the developmental challenges and constant life changes of this particular age group, the day-to-day experiences of positive and negative emotions decrease the impact of persistence on life-satisfaction (Garcia et al., 2012). Further research using adult and offender populations is needed to gather additional support for these findings. Given the physical and psychological health benefits of positive affectivity and life satisfaction, understanding how various factors such as persistence and self-directedness impact and influence these constructs adds vital information for the development and implementation of treatment programs targeting these populations.

As previously stated, positive affectivity has been associated with positive health outcomes (Caprara et al., 2016). Lord et al. (2015) set out to extend findings of previous research by exploring the construct of resiliency in health prognosis. The purpose of this study was to examine the relationship between positive affect, glycemic control, quality of life, and psychological symptoms in adolescents diagnosed with Type I Diabetes. The participant sample consisted of 93 adolescents ages 10-16 years old and their mothers. Participants completed the Response to Stress Questionnaire, Positive and Negative Affect Schedule, Child Behavior Checklist, and the Pediatric Quality of Life measures. Additionally, participants completed a 15-minute video-taped interview in which positive behaviors were observed and coded. Finally, the
researchers obtained the Glycosylated hemoglobin measure from the participants’ medical record.

Results indicated that positive mood was associated with better glycemic control, improved quality of life, and fewer psychological symptoms (Lord et al., 2015). Thus, positive affect contributes to resiliency within adolescents diagnosed with Type I Diabetes. These findings extended and built upon earlier research related to resiliency of adolescents with Type I Diabetes and to findings associating positive affectivity with positive health outcomes. Interpretations of finding are limited by the small sample size. Additionally, the sample may not necessarily be representative of a larger population as the sample had a relatively high socioeconomic status. However, experiencing positive emotions in the face of a life-long physical disease demonstrates a significant amount of resiliency. Similar factors may be at play within offenders who experience positive emotions despite the significant adversity they face on a day-to-day basis. The findings of this study warrant further exploration on how positive affectivity impacts the physical and psychological health of offenders and offenders with mental illness.

Iverson et al. (1998) attempted to address shortcomings in the literature related to dispositional factors and common method variance in causal methods of stress. To address these disparities in the literature, the researchers tested a causal model of burnout using affectivity and absenteeism as predictor variables. Participants consisted of 487 hospital employees (n=360 females and n=127 males) from a large public hospital in a major metropolitan city in Australia. Participants completed a multiple item survey that measured positive and negative affectivity, co-worker, supervisory, and peer support, components of burnout including emotional exhaustion, depersonalization, and personal accomplishment. Measures of absenteeism were
obtained from the employee files of the hospital. The multiple regression analysis provided support for the causal model. Positive affectivity predicted high social support and job satisfaction and low emotional exhaustion and depersonalization (Iverson et al., 1998). Positive affectivity was also associated with higher personal accomplishment and autonomy and lower absenteeism (Iverson et al., 1998). Although the researchers demonstrated significant reliabilities for the multiple item survey used in the study, replication of the results with well-known and widely used measures of the constructs of interest would further strengthen the support of the causal model. However, these findings provide promising support for increasing positive affectivity within the offender population. Upon their release from jail or prison, development of social support and personal achievement become important factors in ensuring offenders remain in the community (James, 2015). Findings of this study provide evidence that positive affectivity increases the likelihood that offenders will establish these factors and lead lives as productive citizens in the community.

Research indicates that positive affectivity increases resiliency and positive coping strategies within individuals (Yang et al., 2015; Caprara et al., 2016). To further explore the relationship between positive affectivity and coping, Yang et al. (2015) conducted a study to examine the function of trait affectivity and momentary moods in conflict management and conflict frames. Conflict frames was defined as the cognitive interpretations made when individuals engage in conflict (Yang et al., 2015). In the study, conflict frames where either a frame of compromise or a frame of win. Conflict management was defined as the actions individuals take when addressing and confronting conflict (Yang et al., 2015). Conflict management was categorized as cooperation or competition.
Participants consisted of 180 undergraduate management students ages 18 to 25. For 12 consecutive days, participants completed measurements of momentary mood and then read a scenario and were asked to imagine themselves as the main character in the scenario. Participants then completed measurements of conflict frame, conflict management strategy, and emotional anger. Hierarchical Linear Modeling was used to analyze the data. Findings indicated that positive trait affect and momentary mood lead to employment of a compromise conflict frame and a cooperative conflict management style (Yang et al., 2015). Limitations of the study include use of a scenario method which increases vulnerability of socially desirable response sets. Socially desirable response sets potentially impact the internal validity of the study. However, findings indicate that experiencing positive emotions influence how individuals approach conflict management. Expanding these research findings to offender populations will provide additional support for the proposed model of offender counseling.

**Summary**

While the studies specifically related to positive affectivity were conducted using adolescents, college students, and adults, no studies to date have explored the Broaden-and-Build Theory or the construct of positive affectivity with the offender population. Empirical evidence suggests that inducing positive affectivity produces a broader visual search range, creative thoughts and behavior, more inclusive social relationships, and more flexible goals and mindsets (Cohn et al., 2009). The literature suggests that experiencing increased positive affectivity improves work productivity and relationships as well as reduces depressive symptoms (Fredrickson, 2009). People who experience positive affectivity tend to engage in the coping process more frequently, actively, and effectively rather than engaging in destructive reactions (Park, Peterson, & Seligman, 2004). Moreover, research shows that expressing and experiencing
positive affectivity can promote psychological growth even following loss and adversity (Fredrickson & Tugade, 2003). Positive affectivity also correlates with many other character strengths such as hope, integrity, kindness, love, and persistence (Park et al., 2004). Promoting positive affectivity in offender counseling provides a first step towards building these character strengths within offenders.

Increasing positive affectivity and character strengths also increases levels of subjective well-being. People with higher levels of subjective well-being tend to engage in more prosocial behaviors than individuals who do not feel happy as frequently (Lyubomirsky et al., 2005). Happy people are more likely to be altruistic, generous, and charitable (Lyubomirsky et al., 2005). Those with higher levels of subjective well-being are inclined to act in a cooperative manner both at personal and professional settings and show greater interest in helping others (Lyubomirsky et al., 2005). The literature suggests that individuals who display happiness more frequently, tend to show empathy toward others, and volunteer in community service activities more frequently than those who experience lower levels of subjective well-being (Lyubomirsky et al., 2005). By increasing subjective well-being, offenders are more likely to portray traits of good citizenship and desist from criminal behavior.

**Subjective Well-Being**

Subjective well-being involves assessments of optimal experience and functioning (Ferguson et al., 2009). Subjective well-being is defined as a person’s cognitive evaluations and affective experiences of his or her life (Deiner, Lucas, & Oishi, 2002; Ferguson et al., 2009). Subjective well-being is a broad concept that includes experiencing pleasant emotions, low levels of negative moods, and high life satisfaction (Deiner et al., 2002; Ferguson et al., 2009). According to Deiner et al. (2002), goal setting and goal attainment play an important role to life
satisfaction and subjective well-being. Evidence suggests that subjective well-being is genetic in nature and exists as a trait characteristic. However, for those low in trait subjective well-being, state subjective well-being can be learned, supported, and developed through training and intervention strategies (Chen, Wu, & Chen, 2015; Tien, Du, & Huebner, 2015).

Economic, social, personality, and cognitive factors have been found to be associated with subjective well-being (Ferguson et al., 2009). Personality traits most connected to subjective well-being include extraversion and neuroticism (Deiner et al., 2002). Although the happy person is more likely to be from a wealthy nation and have enough resources to pursue his or her particular goals, characteristics such as a positive outlook, meaningful goals, close social relationships, and a temperament characterized by low worry are very important to high subjective well-being (Deiner et al., 2002). Thus, evidence supports a close link between subjective well-being and positive affectivity. However, the literature on subjective well-being is ambiguous regarding casual relationships between these factors and well-being. Research aimed at establishing causal relationships would add greatly to the body of literature on the topic.

The literature on subjective well-being and the offender population is scarce; however, few studies are of worth mentioning. The following cluster of studies explored various aspects of subjective well-being as it relates to offenders and provides foundational evidence for the proposed study. Bouman, de Ruiter, & Schene (2008) conducted a study to explore the differences between the perceived quality of life of violent offenders and sex offenders with personality disorders. Participants for the study were recruited from four forensic psychiatric units in the Netherlands. The sample consisted of 135 males ages 18 and older diagnosed with a personality disorder or personality disorder traits. Participants completed measure of quality of life, criminal history, and a demographic background questionnaire. The researchers used t-tests
to compare the differences between violent offenders and sex offenders on the variables of interests, using Bonferroni correction when applicable.

Results indicated no significant differences between the two groups on demographic background including age, educational level, IQ, and income (Bouman et al., 2008). Additionally, researchers reported no significant differences between the two groups on social indicators quality of life; however, sexual offenders were satisfied in more domains than violent offenders on domain-specific measures of quality of life (Bouman et al., 2008). Sexual offenders were more satisfied with their life in general and with their family, safety, and health specifically. This study used a relatively small sample size, specifically a small sample of sex offenders. Additionally, the sample of sex offenders consisted of both child molesters and rapists. Replicating the study with a larger sample of sex offenders and separating child molesters from rapists would strengthen the support for the findings (Bouman et al., 2008). This study offers further support for the need for a model of offender counseling specifically geared towards non-sex offenders. Sex offenders seemed to report unrealistically higher perceived subject well-being given their current life circumstances indicate. Thus, different cognitive processes may be at play with this population.

As previously stated, given the proper conditions, state subjective well-being can be learned and increased within individuals (Chen et al., 2015; Tien et al., 2015). To build upon the findings of Bouman et al. (2008) and others, Ferguson et al. (2009) conducted a study to assess the effectiveness of a new evidenced-based well-being intervention within a forensic population. The intervention emphasized skills known to be related to well-being including goal setting and planning (Deiner et al., 2002). Participants consisted of 14 mentally disordered, male offenders ages 24-60 ($M=40.1$, $SD=10.8$) residing in two different secure regional facilities in the London
Participants completed several standardized questionnaires pre-intervention, post-intervention, and two months post-intervention to assess multiple constructs including well-being, positive and negative affectivity, future-directed thinking, anxiety, depression, hopelessness, and negative symptoms of psychosis (Ferguson et al., 2009). All participants completed a six-week group based goal-setting and planning (GAP) intervention adapted from a GAP intervention found to effectively increase subjective well-being in previous research.

A repeated measures ANOVA was used to analyze treatment effects across three levels: pre-intervention, post-intervention, and two months post-intervention. Findings indicated that well-being increased as a result of the intervention (Ferguson et al., 2009). Higher levels of well-being were reported two months post-intervention than pre-intervention. Participants reported decreases in hopelessness, depression, and negative symptoms of psychosis and increases in positive future thinking. This valuable study provides empirical support for the argument that subjective well-being can be learned and increased in a forensic population. Additionally, such an intervention also decreased presence of psychiatric symptoms in the population. The methodology adds value to the body of literature by including an intervention. Much of the current literature relies on correlational analysis. Replication of the study with a larger sample size would further strengthen support for the findings of the study. The proposed study will build upon the findings of this study by including additional characteristics associated with subjective well-being.

In a study conducted by Wheeler, Clare, & Holland (2013) differences between active offenders with intellectual disabilities and non-offenders with intellectual disabilities on contemporary life experiences were explored. Using a case-comparison design, the researchers compared community groups of offenders and non-offenders with intellectual disabilities were
on measures of life experiences, subjective well-being, and choice. Groups were matched on age, gender, and level of intellectual disability. The sample consisted of 46 adult participants ages 18 and over who received services from the Community Teams for Adults with Learning Disabilities in the eastern region of the UK. The case group consisted of 27 participants referred for active offending behaviors. The comparison group consisted of 19 participants who had been referred to the same agency but were not known for engaging in criminal behaviors.

Participants completed three self-reports measures: the Choice Questionnaire, the Life Experiences Checklist, and the Personal Well-being Index-ID. Results indicated that participants in the Active-Offender group scored significantly lower on measures of life experiences and subjective well-being than the comparison group. Additionally, using multiple regression analysis, the researchers developed a predictive model of offending behavior based on measures of life experiences, subjective well-being, and choice. The model accurately predicted membership in the Active-offender group in 78% of the cases (Wheeler et al., 2013). This study is significant to the proposed study in that the researchers were able to establish a predictive model that accurately predicted offending behavior, lending support for a similar model predicting prosocial behavior is likely to be established. Given the small sample size of the present study, results should be interpreted with caution and replication of the study with a larger sample size would strengthen support for the model.

Previous research had indicated that stress and stressful life events negatively impacted mental health and subjective well-being (Keaveny & Zauszniewski, 1999). Many investigations on the psychological health of female offenders noted prevalence of mental health problems and diagnosis; however, very little research had focused specifically on female offenders’ coping styles. Keaveny and Zauszniewski (1999) conducted a study to further explore the coping styles
of incarcerated females. The purpose of this study was to identify the relationship of life events and coping resources to the psychological well-being of incarcerated women. Participants consisted of 62 women housed in the general population unit of a large maximum-medium security institution.

Participants engaged in face-to-face interviews where they completed measures of life events, coping resources, and psychological well-being. Results indicated that incarcerated women experienced multiple life events characterized by loss in the year preceding their incarceration which impacted their psychological well-being (Keaveny & Zauszniewski, 1999). Correlational statistics indicated a negative relationship between life events and psychological well-being. No significant relationship was found between coping resources and psychological well-being; however, a limited number of coping resources were present and a small sample size was used (Keaveny & Zauszniewski, 1999). These findings may reveal a need to develop resilient coping strategies within this population. Replication of the study with a larger sample, including both men and women, would strengthen the results of the study and provide a more comprehensive understanding of the role of coping mechanisms within a population who faces much hardship and adversity.

James (2015) asserts that housing remains a major obstacle for many offenders and increases the likelihood of recidivism. Many offenders cycle in and out of homelessness and use incarceration as a means to provide a warm, dry living environment and consistent food source. Although not directly studying the offender population, Biswas-Diener and Diener (2006) conducted a study in order to gain insight into how various living conditions impact subjective well-being of the homeless. The study consisted of 186 homeless people from diverse areas in the world including pavement dwellers from Calcutta, India, Fresno, California, and Portland,
Oregon. Participants completed measures of life satisfaction, positive and negative affect, domain satisfaction, and a demographic questionnaire.

Across each of the three groups, participants reported low levels of satisfaction, low levels of positive affect, and high levels of negative affect (Biswas-Diener & Diener, 2006). Participants indicated particularly low levels of satisfaction with material resources including income and housing. Significant correlations were found between housing satisfaction and general life satisfaction. Strength of this study comes in the researcher’s use of a broad range of population from diverse areas in the world. The study has special implications for the offender populations who are often transient homeless and experience unstable living conditions as they transition in and out of incarceration by providing support for the argument that homelessness remains a risk factor for recidivism. Poor living conditions decrease life satisfaction and poor life satisfaction is negatively correlated with engagement in prosocial behavior. Conducting research to increase understanding of the relationship between these factors is needed in order to improve the support and services provided to offenders as they prepare for release into the communities.

The final two studies on subjective well-being introduce the positive emotion of gratitude. Gratitude has been defined as the sense of gratefulness felt towards others when one experiences a positive outcome due to another’s benevolence (Chen et al., 2015). Research has supported the positive relationship between trait gratitude and subjective well-being; however, little attention has been paid to trait gratitude and its relationship with subjective well-being (Chen et al., 2015; Tien et al, 2015). Chen et al. (2015) conducted a study to determine whether state gratitude contributes to higher state life satisfaction. Furthermore, the researchers sought to explore the relationship between state gratitude and state life satisfaction as ambivalence over the
expression of emotion increases. To explore the research questions, 29 elite student athletes (n=18 females and n=11 males) were recruited to participate in the study. Participants completed weekly measures of gratitude, life satisfaction, and ambivalence over emotional expression for a ten-week period.

Hierarchical linear modeling was used to analyze the data. Results indicated support for the hypotheses of the study. Higher gratitude positively predicted life satisfaction, but the prediction was weaker when ambivalence over emotional expression was higher (Chen et al., 2015). Results should be interpreted with caution as the sample size was small and results may not be generalizable to a broad population. This study adds value to the literature by strengthening the support for the relationship between gratitude and subjective well-being. Additionally, the study provides evidence for both state gratitude and state well-being. Evidence of state well-being implies that this characteristic can be developed within individuals, providing support for the present study. Replication of the study with offender population would provide further support for the generalization of the results.

In another study conducted by Tian et al (2015), the relationship between gratitude and subjective well-being was explored using a sample of elementary school students. The purpose of this study was to examine the role of prosocial behavior in mediating the relationship between gratitude and subjective well-being. Participants consisted of 706 Chinese elementary school students (n=375 males and n=331 females) enrolled in fourth through sixth grade. Participants completed a packet of questionnaires to assess gratitude, subjective well-being in school, and prosocial behavior. Results supported previous findings of the positive relationship between gratitude and subjective well-being. Prosocial behavior was found to partially mediate the relationship between gratitude and school satisfaction and positive affect in school. Despite the
participant population being elementary aged children, this study provides an important link between subjective well-being, positive affectivity, and prosocial behavior. Replication of the study with adult populations and adult offender populations will extend these findings to multiple populations and further enable clinicians to provide supportive interventions to these populations that will enhance their life satisfaction and general well-being.

Williams, Childers, and Kemp (2013) aimed to build upon the literature supporting the relationship between subjective well-being and positive emotions by exploring how both impact learning behaviors. The sample consisted of 176 undergraduate business and hospitality majors (n=74 females and n=102 females) ages 19 to 25 from two universities located in the Southwestern and Midwestern United States. Participants completed measures of positive emotions, motivation, achievement outlook, and emotional exhaustion. Structural equation modeling was used to analyze the data. Results indicated that participants’ experiences of positive emotions were related to motivation to engage in behaviors that lead toward academic success (Williams et al., 2013). Replication of the study with well-established and widely used measures of subjective well-being and positive affectivity would further strengthen the results of the study. The findings of the present study provide foundational support for the proposed study. If the experience of positive emotions increase motivation towards positive learning behaviors in students, it is likely that positive emotions will increase motivation towards prosocial behaviors in offenders.

**Summary**

Enhancing offenders’ subjective well-being increases the likelihood of them becoming productive members within their family systems and society as a whole. Furthermore, offenders will be more prepared to address adversity as it comes. People who experience high levels of
well-being are more likely to have strong social connections and relationships; moreover, they
tend to make other people happy (Fowler & Christakis, 2008). Compelling evidence suggests
that individuals with enhanced subjective well-being are more likely to be successful in different
domains of their lives such as marriage, friendship, work, and health. In addition, those people
tend to have healthier mental status and effective coping skills (Lyubomirsky et al., 2005).

People with higher levels of subjective well-being also have higher life satisfaction.
Ultimately, improved positive affectivity, subjective well-being, and life satisfaction results from
the broadening and building of skills and resources needed for living a better life, demonstrating
resilience when faced with adversity, and increasing engagement in prosocial behavior.

Research aimed at providing support for the assumptions of the Broaden-and-Build theory as it
relates to offenders is needed in order to guide the field towards a new model of treatment and
rehabilitation for this population.

**Prosocial Behavior**

According to Andrews and Bonta (2010), offenders tend to engage in impulsive and
antisocial behaviors as well as maladaptive, antisocial cognitions. Offenders tend to experience
high levels of anger, resentment, and defiance; characteristics quite the opposite of those who
engage in prosocial behaviors. To date, treatment has focused explicitly on these antisocial,
criminogenic needs of offenders with the hope that such a focus would reduce the likelihood of
recidivism of these individuals. The Broaden-and-Build Theory offers an alternative treatment
modality for the offender population. Increasing characteristics such as positive affectivity,
subjective well-being, and life satisfaction increases the potential for positive social interactions
of offenders.
Prosocial behavior has been defined as the willful and deliberate behavior that benefits another person despite the motivations and intentions of the actor (Kosek, 1995). Characteristics such as positive affectivity and subjective well-being each seem to increase the likelihood that an individual will engage in prosocial behavior. When people feel better, they reciprocate those positive feeling towards other people and engage in behaviors likely to cause others to feel better (Kosek, 1995). Several studies have been conducted on the role of prosocial behavior in relation to positive affectivity and subjective well-being. However, the majority of these studies explore the development of prosocial behavior within pre-school and school-aged children. Surprisingly, few studies examine prosocial behavior within the offender population. Nonetheless, the following studies offer insight into this construct and its impact on the offender population.

Jones (2014) provided a review of the literature supporting the argument that shame does not reduce offending behavior and may actually be counterintuitive. Jones (2014) notes that shame is often overtly or covertly used in the current models of offender counseling and argues that its use can impede and reverse progress towards the goal of desistance. Despite support for the argument that shame is often accompanied by guilt, evidence suggests that for individuals with a frequent pattern of externalizing blame, shame is precipitated by anger and aggression (Jones, 2014). Because most offenders tend to engage in a pattern of externalizing blame, they are more likely to respond to shame with feelings of anger and aggression. Resulting behavior tends to be maladaptive and increases risk for engagement in criminal activities.

Jones (2014) highlights that much of the research indicates that shame should be excluded from treatment aimed at rehabilititating offender populations. However, Jones (2014) notes that proponents of using shame as an intervention strategy argue that reintegrative shaming can be used in a therapeutic context. Reintegrative shaming is the belief that crime rates will be
reduced when societies appropriately communicate shame towards engagement in criminal behavior. However, the author purports that reintegrative shaming is only effective within the context of a therapeutic treatment setting and that substantial rapport must be had between the therapist and the offender. Even then, a high risk remains that shaming will backfire and serve to decrease the likelihood of engagement in prosocial behavior. This literature provides support for a strengths-based approach to offender counseling.

As previously reviewed, Wheeler et al. (2013) were able to develop a model that successfully predicted engagement in criminal behavior using life experiences, subjective well-being, and choice. In the study, low levels of subjective well-being were associated with engagement in criminal behavior; thus, the converse must be true. Higher levels of subject well-being should be associated with increased prosocial behavior. Research conducted by Tien et al. (2015) offered support for this assumption. Findings indicated a positive correlation between prosocial behavior and subjective well-being as well as prosocial behavior and positive affectivity in elementary school children. Findings of both of these studies support the assumptions of the Broaden-and-Build Theory related to increasing proclivity towards engagement in prosocial behaviors through experiences of positive affectivity and subsequent subjective well-being. Further study is needed to using an offender population to extend the findings of these studies to a new population.

In a study conducted by Warren et al. (2013), the researchers tested assumptions from previous literature that peer affirmations and peer corrections lead to increased prosocial behaviors due to the mechanism of generalized reciprocity by using a sample of inmates housed in therapeutic communities. Archival clinical records were collected for peer affirmations received (N= 282,604), peer/ correction received (N=152,797), and affirmations sent
(N=290,539) at three different community corrections-based residential treatment communities in the Midwestern United States. A multi-level negative binomial regression analysis was conducted to explore the relationship among peer affirmations and corrections received and affirmations sent.

Findings indicated that the system of peer monitoring and feedback within therapeutic communities effectively motivated residents to engage in prosocial and helping behaviors (Warren et al., 2013). Residents who received positive affirmations were more likely to affirm others up to 6 weeks after receiving the affirmation. Residents who received corrections were also more likely to affirm others; however, the increase in affirmations only lasted for about 2 weeks. Thus, the results further support the notion of positive reinforcement and many aspects of the Positive Psychology movement. Affirming positive behaviors seemed to increase the engagement in the prosocial behavior and have longer lasting effects than correcting negative behaviors. Encouraging an individual’s strengths and enhancing characteristics present within individuals rather than focusing of deficiencies is a central tenet of Positive Psychology.

Limitations include overall generalizability of the study. The sample consisted of only three therapeutic communities in a particular section of the United States. The demographics of the sample included a larger number of female inmates and a smaller number of minorities than is reflected in the national offender population. Replication with a larger number of therapeutic communities from diverse sections of the country that more accurately reflects the demographics of the offender population in the United States would strengthen these results.

As previously stated, the majority of offenders currently incarcerated in the United States will be released back into the community (James, 2015). Jackson and Innes (2000) recognize the need for program development aimed at supporting, encouraging, and enhancing increased
prosocial behaviors in this population. The researchers purport a strong need to be able to identify offenders most likely to benefit from such programs and to willingly participate in sessions. To further explore these research questions, Jackson and Innes (2000) conducted a study to examine the effects of various demographic and prison factors that influence inmate participation in self development programs. A representative sample of 291 male inmates ages 18 to 30 housed in medium-security institutional facilities completed the Survey of Federal Inmates which was designed to measure inmates’ views on programming including interests, benefits, and participation.

Results identified multiple characteristics of program participants including inmates with a history of full-time employment prior to incarceration, higher levels of education, and history of basic program experience (Jackson & Innes, 2000). These individuals also had more time served and less time expected to serve. Additional findings included inmates’ desires for personal achievement and ability to set long-term goals. Fostering and supporting these desires lead to increases in prosocial behaviors. The findings of this study have particular ramifications in regards to applying the Broaden-and-Build Theory to offender counseling. Participants in the study reported higher desires for personal achievement and ability to set long-term goals. Previous research has linked experiences of positive emotions with increased motivations to actively engage in and seek out new resources in order to obtain a positive outcome (Tugade et al., 2004; Lyubomirsky et al., 2005; Williams et al., 2013). According to the findings of the present study, characteristics such as these increases the likelihood that offenders will voluntarily participate in treatment, ultimately leading to increased engagement in prosocial behavior.

Little research exists on incarcerated populations, and even less research in conducted on incarcerated females (Goldweber, Cauffman, & Cillessen, 2014). Thus, the researchers aimed to
address the gaps in the literature as it relates to incarcerated, female offenders. In a study conducted by Goldweber et al. (2014), female offenders’ mental health and adjustment related to their peer status was examined. Three dimensions of peer study were identified: likeability, popularity, and social impact. The study consisted of 86 females, ages 15 to 24, incarcerated in a secure juvenile correctional facility for women and girls in Southern California. Sociometric measures were used to determine likeability, popularity, and social impact. The Center for Epidemiological Studies-Depression Inventory was used to assess depression. Anxiety was measured with the Revised Children’s Manifest Anxiety Scale. Substance use was measured using the five-item Self-Report of Substance Use scale. Loneliness was measured with the Revised UCLA Loneliness Scale. The Novaco Anger Scale was used to measure anger.

Findings indicated that popularity was negatively related to depression, physiological anxiety, loneliness, and anger (Goldweber et al., 2014). Social impact was related to more health risks including substance use and institutional offending (Goldweber et al., 2014). Thus, more popularity led to fewer internalizing problems. The findings of this study have important implications for the impact of prosocial behaviors on mental health. Increasing engagement in prosocial behavior may serve as a protective factor against symptoms of mental illness. Because of the large prevalence rates of mental illness within the offender population, finding multiple ways to promote recovery from mental illness should be emphasized in treatment programs. These implications strengthen support for the proposed study.

A study conducted by Healy (2010) examined how the minds and lives of offenders change as they transition from engagement in criminal behavior towards desistance. The sample consisted of 73 male participants on supervised probation in Dublin, Ireland. Each of the participants had a minimum of two previous convictions and was between the ages of 18 and 35.
Participants completed three psychometric instruments and a self-reported offending questionnaire. Results indicated that psychological factors and cognitive processes were more indicative of criminal behavior than social factors (Healy, 2010). The study offers support for the theory of cognitive transformation which asserts that offenders create new identities as non-offenders through an active decision making process (Giordano, Cernkovich, & Rudolph, 2002). Findings provide notable implications for the present study. If offenders must create new identities as non-offenders, understanding the characteristics of those new identities become an important goal of clinicians in order to support and promote their development. The Broaden-and-Build Theory provides a strong foundation for the development of character traits aimed towards prosocial behavior.

The last three articles reviewed in this section do not focus on offender populations. These three studies were conducted using college student populations; however, each of them offer important implications for the offender population and are worth mentioning because they explore overarching factors such as personality, growth, and learning. Kosek (1995) examined the relationship between the five-factor model of personality and prosocial behavior. The author defined prosocial behavior as intentional and voluntary behavior that benefits another person regardless of the motivation for that behavior. Sixty-one college students (N=31 men and N=30 women) ages 17-21 were given the Bipolar Adjective Scale and the Prosocial Behavior Inventory. Pearson correlations were conducted between the two measures and significant correlations were found between Compassion and Openness, Fiscal Responsibility and Openness, Fiscal Responsibility and Agreeableness, the overall Prosocial Behavior Inventory and Agreeableness, and the overall Prosocial Behavior Inventory and Openness.
Koesek (1995) suggests that further research include identification of sources of prosocial behavior. Although findings yielded significant correlations between several personality factors and dimensions of prosocial behavior, these findings are not directional and cannot determine causation. Further study is needed to determine if personality factors increase propensity towards engagement in prosocial behavior. Additionally, personality characteristics tend to be stable and resistant to change. Research is needed to determine if state characteristics of personality traits have similar relationships with prosocial behavior as state characteristics are responsive to treatment and can be increased within individuals. If relationships between state characteristics of personality traits and prosocial behavior mirror the relationship between trait characteristics of personality and prosocial behavior, then the Broaden-and-Build Theory will be a useful model in enhancing these characteristics to increase prosocial behavior.

Brandenberger and Bowman (2015) examined the impact of college experiences on students’ sense of prosocial orientation. Prosocial orientation was defined as voluntary cognitive or behavioral commitment to the welfare of other people. The researchers cited previous research indicating that service learning participation and college volunteering were positively associated with increased prosocial orientation and volunteering after graduation (Brandenberger & Bowman, 2015). The researchers argue that ongoing engagement in prosocial behavior acts as a primary source of development of prosocial orientations. To tests this hypothesis, the researchers used data collected from a larger study conducted by the Higher Education Research Institute. Participants included 14,527 college students from 136 campuses in the U.S. Three prosocial measures were used including charitable involvement, ethic of caring, and compassionate self-concept.
Hierarchical linear modeling was used to analyze the data. Overall, precollege variables were less salient predictors or prosocial orientation. Institutional characteristics and college experiences were more salient predictors of prosocial orientation (Brandenberger & Bowman, 2015). Implications of the results include the idea that promotion of prosocial growth requires educators to be intentional in providing prosocial opportunities and integrating questions of social and personal responsibility into their curriculums. These findings might suggest that administrators of correctional institutions must create a climate conducive to prosocial growth within their residents of the facility by providing residents with opportunities for engagement in prosocial behavior. As previously reported, research conducted on therapeutic communities offers support for this argument (Warren et al., 2013). Such a climate might facilitate long-lasting prosocial orientation post-incarceration.

**Conclusion and Implications for Proposed Study**

Although reducing recidivism is not the central focus of the proposed new model of offender counseling, desistance must be one of the treatment outcomes in order to be a viable treatment option and to ensure public safety as these offenders reenter the community. Therefore, evidence must exist that engagement in prosocial behaviors increases the likelihood and maintenance of desistance. The literature reviewed provided a preponderance of evidence suggesting that engagement within prosocial behaviors is related to positive personality characteristics and increases as positive affectivity, subjective well-being, and life satisfaction increases (Biswas-Diener & Diener, 2006; Williams et al., 2013; Chen et al., 2015; Tien et al., 2015). Additionally, prosocial behavior contributes to increased and prolonged desistence from criminal activities (Healy, 2010). The research findings seem to point towards the viability of the Broaden-and-Build Theory as applied to offender counseling. However, research is needed
to confirm this hypothesis by identifying a predictive model of prosocial behavior using the foundations of the Broaden-and-Build Theory.
Chapter Three

Research Methodology

This chapter describes the research design and methodology of the study. A quantitative, survey research design was used to explore the relationships between positive affectivity, negative affectivity, subjective well-being, and prosocial behavior. The goal of the research study was to develop a predictive model of prosocial behavior using positive affectivity, negative affectivity, subjective well-being, and familial relationships. This chapter includes descriptions of the populations of interest and the sample studied, procedures used for data collection, measurements used, research hypothesis, and methods used for data analysis. An informed critique will also be addressed.

Population and Sample

The target population for this study was incarcerated offenders. Because incarcerated offenders are a protected population, significant challenges existed in the researcher’s attempts to access this population. Though the researcher began the process of obtaining approval through the Human Subjects Research Review Committee of the Virginia Department of Corrections, approval was not obtained due to the lengthy approval process and the time constraints of the study. Therefore, the sample consisted of offenders currently on probation through local probation offices in four jurisdictions in the Hampton Roads and Central Virginia area. Offenders on probation through local probation offices do not hold the same protective status as offenders in the Department of Corrections and only require IRB approval, approval from the director of the probation office, and consent of the participant.

As previously stated, no research to date has explored the application of the Broaden-and-Build Theory with offenders; therefore, the sample consisted of both male and female offenders.
with diverse offenses. Participants ranged from those who had been convicted of crimes but received no jail time for their convictions to those who spent an extended period incarcerated. Sex offenders were excluded from this study. Using both male and female offenders with diverse offenses and experiences with the corrections system allowed for multiple comparisons among the various groups represented in the study.

According to Gall, Gall, and Borg (2007), correlational studies require a minimum of 30 participants; however, obtaining the largest sample possible is recommended for quantitative research. Furthermore, an a-priori sample size calculation for a multiple regression with five potential predictors indicated a minimum requirement of 91 participants. Potential participants were solicited from local probation offices in the Hampton Roads and Central Virginia area and yielded a total of 109 completed datasets.

**Data Collection**

Prior to the start of the data collection process, the researcher obtained approval by the Institutional Review Board at the College of William & Mary. Convenience sampling was used to obtain a volunteer participant sample. All the directors of local probation offices in Hampton Roads and Central Virginia (N = 14) were contacted by the researcher via email and asked to support the study by asking probationers who visited their location to participate in the study. A follow-up phone call to each of the directors who had not responded to the email occurred approximately two weeks after the initial email was sent.

Four agencies representing five jurisdictions, three from Hampton Roads Virginia and two from Central Virginia agreed to allow data to be collected at their agency. Each of the agencies provided a representative to act as a confederate of the study. Confederates acted as points of contact for the researcher to arrange drop off and pick up dates for the surveys and
managed the survey distribution process at their respective sites. Surveys were provided to the confederates who then distributed them to the probation officers at the agency. Probation officers asked their clients to participate in the study. Those who agreed were provided with an informed consent, which explained the purpose and process of the study. Once the informed consent was signed, participants completed the demographic questionnaire and the four assessments. Surveys were returned to the confederates who checked for completion and notified the researcher when surveys were ready for pick up. Confederates at each of the agencies supplied the researcher with overall demographic data of their respective agency so that comparisons could be made between the population at the agency and the sample received from the agency.

Data collection occurred over a five-month period. Degree of participation varied across agencies. Confederates at Agency 2 and 4 reported a high degree of participation and experienced little challenges in gaining support from their fellow probation officers to get probationers to agree to participate in the study. Confederates at Agency 1 and 3 had a more difficult time obtaining participants; however, confederates reported that the challenge was with the probation officers rather than the potential participants. Fewer probation officers at Agency 1 and 3 actively participated in soliciting probationers to participate in the study. Confederates reported that probation officers either elected not to participate or would forget to offer the study to the probationers during their meetings. Data collection at these agencies took longer to complete.
Instrumentation

Informed Consent (Appendix A)

The purpose of the informed consent is to provide a description of the study, explain its purpose, and to inform participants of the benefits and potential risks of participation in the study (Sarantakos, 2005). The informed consent provided to participants included identification of the researcher, sponsoring institution, purpose of the study, benefits of participation, and level and type of participation involved. Additionally, potential risks of participation in the study, a confidentiality statement, and researcher contact information was provided. Finally, participants were informed that the survey would take approximately 20 minutes to complete and that they could discontinue completion of the survey at any point during its administration. To begin, participants acknowledged that they had read the informed consent, understood their rights as participants in the study, and met the criteria for participation.

Demographic questionnaire (Appendix B)

To provide descriptive statistics and make comparisons within the sample, demographic information was collected. The demographic questionnaire asked participants to disclose general information about themselves regarding their age, gender, highest level of education completed, race/ethnicity, employment status, annual household income, marital status, number of children, types of criminal offenses committed, number of incarcerations, and length of time spent incarcerated.

Positive and Negative Affectivity Schedule (Appendix C)

Positive and Negative Affect Schedule (PANAS) is a 20-item self-report measure of temporal experiences of positive and negative affect (Watson, Clark, & Tellegen, 1988). Time periods include over the past week, day, or in the very moment in which the assessment is taken.
Items are rated on a five-point Likert scale ranging from very slightly or not at all to extremely. The PANAS is virtually two scales in one with 10 items measuring positive affect and 10 items measuring negative affect. Scoring requires adding the scores on each of the scales. Scores on each of the scales range from 10 to 50 with higher scores representing higher levels of positive or negative affect. The scales demonstrate high internal consistency and were found to be both reliable and precise independent measures of positive and negative affect (Watson et al., 1988). Internal consistency reliabilities range from .86 to .90 for the positive affect scale and .85 to .87 for the negative affect scale depending on the temporal instructions provided. Concurrent and discriminate validity has also been confirmed for the measure (Watson et al., 1988).

For the present study, the researcher asked participants to complete all 20 items of the measure. This produced a score for positive affectivity and a score for negative affectivity. The temporal indicator utilized was over the past week. The overall scores of each of the constructs were used in the data analysis to determine whether and to what extent a relationship exists among the constructs measured by instrument, subjective well-being as measured by the SWLS and the SWFLS and prosocial behavior as measured by the PTM. Both the constructs measured by this instrument were used as predictors of prosocial behavior.

**Satisfaction with Life Scale (Appendix D)**

The Satisfaction with Life Scale (SWLS), is a short, 5-item instrument designed to measure cognitive judgments of well-being (Diener, Emmons, Larsen, & Griffin, S., 1985). The instrument was designed as a 7-point Likert scale ranging from strongly disagree to strongly agree. Total scores range from 5 to 35, with higher scores indicating higher life satisfaction. The scale has been found to have high test-retest reliability with correlation coefficient of .82 and coefficient alpha of .87. The measure demonstrates strong internal consistency and validity as
well as good convergent validity with other scales of subjective well-being (Pavot & Deiner, 1993; Kobau et al., 2010). Strong correlations exist between the SWLS and other measures of subjective well-being including Fordyce’s (1978) single item measure of happiness (.58), Fordyce’s (1978) percent of time happy question (.58), Cantril’s (1965) Self-Anchororing Ladder (.62), Differential Personality Questionnaire (.68), and Campbell et al. (1976) semantic differential-like scale (.75) among others (Deiner et al, 1985).

For this present study, the researcher requested participants to complete the entire instrument. This yielded a score for subjective well-being. The overall scores were used during the data analysis to determine whether and to what extent a relationship exists among positive affectivity and negative affectivity as measured by the PANAS, subjective well-being as measured by this instrument and the SWFLS, and prosocial behavior as measured by the PTM. The scores were also used as predictors of prosocial behavior.

**Satisfaction with Family Life Scale (Appendix E)**

The Satisfaction with Family Life Scale (SWFLS) is a modified version of the SWLS designed to measure cognitive judgments of relational well-being specific to familial relationships (Zabriskie & McCormick, 2003; Zabriskie & Ward, 2013). The SWFLS utilizes the same five items found in the SWLS but replaces the word “life” with “family life” to assess familial subjective well-being. Items are rated using a 7-point Likert scale ranging from strongly disagree to strongly agree. The instrument is scored by summing the items together resulting in a total score ranging from 5 to 35. The measure has demonstrated strong construct validity, internal consistency (α=.93), and test-retest reliability (r=.89) (Zabriskie & McCormick, 2003; Zabriskie & Ward, 2013).
For this present study, the researcher requested participants to complete each of the 5 items of this instrument. This yielded a second score for subjective well-being. In a study conducted by Mapham and Hefferon (2012), family played an important role in the rehabilitation of the participants of the study. Including this instrument allowed the researcher to explore the impact of family life on engagement of prosocial behavior of the participants in the sample. The overall scores were used during the data analysis to determine whether and to what extent a relationship exists among positive affectivity and negative affectivity as measured by the PANAS, subjective well-being as measured by the SWLS and this instrument, and prosocial behavior as measured by the PTM. The scores were also used as predictors of prosocial behavior.

**Prosocial Tendencies Measure (Appendix F)**

To measure prosocial behavior, the Prosocial Tendencies Measure (PTM) was used. The PTM independently assesses six prosocial tendencies including public, anonymous, compliant, altruism, emotional, and dire (Carlo & Randall, 2002). The PTM is a 23 item self-report measure that uses a 5-point Likert scale ranging from does not describe me at all to describes me greatly. Total scores range from 23 to 115 and composite scores can be obtained by taking the average of the total score. Research indicates that the PTM demonstrates test-retest reliability in each of the subscales ranging from .60-.80 and internal consistency of each of the subscales ranging from 0.41-.074 (Carlo & Randall, 2002). Total composite score yielded a Cronbach’s α of .73. Convergent validity was demonstrated with several measures including time altruism $r(36)=0.58$, $p < 0.001$, time/effort altruism $r(36)=0.44$, $p<0.01$, and helping measures $r(36)=0.45$, $p < 0.005$ (Carlo & Randall, 2002).
For this present study, the researcher requested participants to complete all 23 items of this instrument. This produced an overall score of prosocial behavior. The scores were used during the data analysis to determine whether and to what extent a relationship exists among positive affectivity and negative affectivity as measured by the PANAS, subjective well-being as measured by the SWLS, and prosocial behavior as measured by this instrument. The scores were also used as the target variable of prosocial behavior of which the other constructs were predictors.

**Research Questions and Hypotheses**

This study explored the following research questions: (a) What is the relationship between offenders’ experiences of positive affectivity, negative affectivity, subjective well-being, family life satisfaction, and prosocial behavior? and (b) How do familial relationships impact offenders’ experiences of positive and negative affectivity, subjective well-being, and prosocial behavior? The researcher posed the following hypotheses:

1. Positive affectivity will be positively correlated with subjective well-being, family life satisfaction, and prosocial behavior.
2. Negative affectivity will be negatively correlated with positive affectivity, subjective well-being, family life satisfaction, and prosocial behavior.
3. Offenders who are single or have no children will have significantly lower positive affectivity, subjective well-being, family life satisfaction and prosocial behaviors and significantly higher negative affectivity than offenders who are married or have children.
4. Positive affect, negative affect, subjective well being, and family life satisfaction will be predictive of engagement in prosocial behavior.
Data Analysis

The statistical software program, Statistical Package for the Social Sciences (SPSS), was used to analyze the data. First, descriptive statistics were computed for each of the measures as well as the demographic questionnaire to establish whether the sample produced normal distributions particularly with regards to the demographic data. The researcher reviewed mean, median, mode, standard deviation, variance, range, kurtosis, and skewness of the data to determine sample distribution characteristics. Where appropriate, Chi square tests for goodness of fit and two-tailed, one-sample t-tests were also conducted to make comparisons of the demographic data collected from samples obtained from each of the agencies to the population of each respective agency. Next analyses of univariate, bivariate, and multivariate levels were conducted to determine the relationships between the five constructs measured: positive affectivity, negative affectivity, subjective well-being, family life satisfaction, and prosocial behavior. Pearson-product moment coefficients were computed to determine whether statistically significant relationships existed between positive affectivity, negative affectivity, subjective well-being, family life satisfaction and prosocial behavior. To explore the differences in positive affectivity, negative affectivity, family life satisfaction, subjective well-being, and prosocial behaviors based on marital and parental status multiple regression analysis and t-tests were conducted. Lastly, multiple regression analyses were conducted to develop a predictive model of prosocial behavior using the three variables.

Ethical Considerations

Prior to conducting the study, the researcher obtained approval from the Institutional Review Board of the College of William & Mary’s School of Education. Before participating in the study, participants were provided with informed consent and acknowledged understanding of
their rights, potential risks and benefits of the study, and methods to maintain confidentiality of participation. Participant identifying information was not collected and the researcher did not receive any information that could potentially link the participants to their responses. No known risks for the study existed and there was no penalty for participants who declined to participate or who withdrew their participation prior to completion of the survey.

**Informed Critique**

Several limitations of this study must be considered. First, the target population of the study was incarcerated offenders; however, the sample consisted of offenders on probation. Despite the multiple attempts of the researcher, obtaining approval from Virginia Department of Corrections Human Subjects Research Committee was unsuccessful due to the time constraints of the study. Offenders on probation might significantly differ from incarcerated offenders on measures of positive affectivity, negative affectivity, subjective well-being, family life satisfaction, and prosocial behaviors. This discrepancy in the sample and target population limits generalizability of the results to offenders on probation. Furthermore, prior to the start of the study, the researcher was aware of the significant obstacles that exist when studying incarcerated offenders due to the protections given to them under the regulations of human subjects’ research. However, favorable outcomes of the study might open the possibility of replicating the study with the originally intended population. The current study provides a firm foundation upon which to develop future research and to expand upon the knowledge in this subject area.

Use of convenience sampling offered another limitation to the study which may impact the generalizability of the study. Despite the researcher’s best attempts, only four local probation offices representing five jurisdictions provided participants for the study. Participants represented two jurisdictions in Central Virginia and three jurisdictions in Hampton Roads Area.
Each probation office agreed to provide a minimum of 25 participants for the study. Data collection at each site began at different times throughout the data collection period. Some confederates were more responsive to the researcher and completed the data collection quicker than others. This may have resulted in differences among the participants at the varying agencies. Having a large sample size should account for these differences because larger sample sizes are more representative of the population and limits the influence of outliers. The sample lacked equal representation in all demographic areas including marital status, criminal offence, number of incarcerations, and time spent incarcerated. Additionally, participation was on a voluntary basis. Differences between those who volunteered for the study and those who chose not to participate may exist and impact the external validity of the study. Such volunteerism may have also impact the findings of the study as the act of volunteering itself is a prosocial behavior. Those who volunteered to participate may engage in more prosocial behaviors than those who choose not to participate.

A final limitation of the study is the research methodology. Like much of the current literature on offender counseling, the quantitative survey research design yielded correlational statistics. These results do not indicate causal relationships between the variables of interest. Because this line of research has not yet been explored in the literature, this analysis was warranted and was appropriate to develop a foundation for future experimental and intervention studies. As will be discussed in chapters four and five, findings yielding relationships between these variables provide guidance for future research endeavors. The results of the study provide information for current mental health professional working with clients on probation.
Conclusion

Despite these limitations, the present study added to the current discourse of offender counseling and to the body of knowledge regarding the Broaden-and-Build Theory. As stated in chapter one, few studies have explored elements of the Broaden-and-Build Theory with offenders and no studies have sought to validate the theory as a potential model of offender counseling. Current models of offender counseling focus exclusively on maladaptive behaviors of offenders without addressing the interpersonal needs of the offender. Additionally, with increasing numbers of offenders with mental illness and serious mental illness entering the correctional system, a comprehensive model of offender counseling is needed that can provide a more holistic approach to treatment for general offenders and offenders with mental illness and substance use disorders. The present study was a first step to creating a more comprehensive and holistic approach to offender counseling. The study attempted to fill the gap in the literature by applying the principles of the Broaden-and-Build Theory to offenders. Outcomes of this study have the potential to establish a new model of offender counseling that might better prepare offenders to lead satisfying, productive lives post incarceration as contributing members of society.


Chapter Four

Results

The purpose of this chapter is to describe the results of the study. This chapter will discuss both the descriptive statistics of the demographic information and the instruments used in the study as well as the statistical analysis of each of the hypotheses put forth in chapter three. The chapter provides further information on sample selection, description of the demographic information of the sample, and the statistical analysis of the assessments completed by participants of the sample. Statistical analysis used to determine the outcome of the study included univariate, bivariate, and multivariate correlations, one-tailed independent samples \( t \)-tests, and multiple linear regression. The commonly used alpha level for educational and psychological research \((p = .05)\) was used as the significance level for the analyses (Gall et al., 2007).

Description of the Study

Sampling

The purpose of this study was to explore the assumptions of the Broaden-and-Build Theory as it relates to the offender population. To accomplish this, the researcher examined the relationship of offenders’ positive affectivity, negative affectivity, subjective well-being, familial relationships, and prosocial behavior. The researcher contacted via email all the directors of the local probation offices in Hampton Roads and Central Virginia \((N = 14)\) to request their agency’s participation in the study. A follow-up phone call was placed to each of the directors who did not respond to the email two weeks after the email was sent. This yielded four agencies willing to provide a sample of participants. Each agency provided the researcher with a contact person to act as a confederate of the study. The confederate’s role was to manage the distribution of the
survey at the site. Overall data collection began in July 2016 and lasted approximately five months. Data collection at each site began and ended at different times, based on confederate’s responsiveness to the researcher and their ability to obtain the desired number of participants at their specific site. Agency 1 provided 21 participants and collected data from October 2016 to January 2017. Agency 2 provided 25 participants and collected data from September 2016 to January 2017. Agency 3 provided 29 participants and collected data from August 2016 to January 2017. Agency 4 provided 34 participants and collected data from July 2016 to October 2016. A total of 109 surveys were completed and all were used in the data analysis.

**Instrumentation**

Participants completed an informed consent, demographic questionnaire, and four formal assessments that measured positive affectivity, negative affectivity, subjective well-being, familial relationships, and prosocial behavior. All information was collected via paper-and-pencil. The four formal assessments completed by participants in the study included: (a) the Positive and Negative Affectivity Schedule (PANAS; Watson et al., 1988), (b) the Satisfaction with Life Scale (SWLS; Diener et al., 1985), (c) the Satisfaction if Family Life Scale (SWFLS; Zabriskie & Ward, 2013), and (d) the Prosocial Tendencies Measure (PTM; Carol and Randall, 2002).

**Demographic Information**

The information gathered by the demographic questionnaire completed by the participants was used to make comparisons within the sample. The demographic information collected in the questionnaire included: age, gender, highest level of education, race/ethnicity, employment status, annual household income, marital status, children, types of criminal offences, number of incarcerations, and length of incarceration. The researcher obtained
demographic information for three of the four agencies participating in the study which allowed for comparisons of the sample to the population.

**Age**

Participants were asked to provide their age by simply filling in a blank. For the total sample, ages ranged from 18 to 61 with a mean age of 28.11 (SD = 8.85). Figure 4.1 illustrates the age data for each participating agency as well as the total sample. The distribution for the total sample was positively skewed and leptokurtic. The standard error of kurtosis was 2.837 indicating a non-normal distribution for age. For Agency 1 (n = 21), the ages ranged from 18 to 41 with a mean age of 26.85 (SD = 7.04). Per the demographic data provided by Agency 1, the ages of the population ranged from 18 to 64 with a mean age of 28. A one-sample *t*-test was conducted to compare the mean age of the sample from Agency 1 to the population. With an alpha level of .05, the test indicated that the sample mean was non-significantly lower than the population mean of 28, *t*(20) = -.74, *p* ≥ .05. Thus, the mean age of the sample obtained from Agency 1 was non-significantly different from the population mean. The distribution was positively skewed and platykurtic; however, neither the standard error of skewness nor the standard error of kurtosis was statistically significant indicating an approximately normal distribution.

For Agency 2 (n = 25), the ages ranged from 18 to 61 with a mean age of 31.48 (SD = 10.19). The population at Agency 2 ranged in age from 18 to 70 with a mean age of 33. With an alpha level of .05, a two-tailed one-sample *t*-test indicated that the sample mean was non-significantly lower than the population mean of 33, *t*(24) = -.75, *p* ≥ .05. Therefore, the overall sample from Agency 2 had a non-significantly lower mean age than the population mean. As with the total sample, the distribution for Agency 2 was positively skewed and leptokurtic.
Similarly, to the total sample, the standard error for kurtosis 2.601 indicating a non-normal distribution.

Ages ranged from 19 to 58 with a mean age of 30.48 ($SD = 9.88$) for Agency 3 (n=29). Ages of the population at Agency 3 ranged from 18 to 77 with a mean age of 30. Again, the researcher conducted a two-tailed, one-sample $t$-test to compare the sample obtained from Agency 3 to the population. The statistic indicated that the sample mean was non-significantly higher than the population mean of 30, $t(28) = .794, p \geq .05$. The distribution was positively skewed and leptokurtic. Like Agency 1, the figures for the standard error of skewness (.43) and the standard error of kurtosis (.85) indicated an approximately normal distribution. The sample at Agency 3 was distributed similarly by age as the population.

Finally, Agency 4 (n = 34), ages ranged from 18 to 45 with a mean age of 24.38 ($SD = 6.25$). Per the demographic data provided by Agency 4, the population ranged in ages from 18 to 74 with a mean age of 28. With an alpha level of .05, a two-tailed one-sample $t$-test indicated that the sample mean was significantly lower than the population mean of 28, $t(33) = -3.37, p \leq .05$. Therefore, the overall sample from Agency 4 had a significantly lower mean age than the population mean. The distribution was positively skewed and leptokurtic. Agency 4 age distribution was also non-normal due to a standard error of kurtosis of 2.87.
Figure 4.1. Frequency of Age by Agency and Total

Gender

The researcher gathered information on participant gender by asking them to identify whether they were (a) female, (b) male, (c) transgender, or (d) other, please specify. All participants in the sample identified themselves as either females or males. Thirty participants (27.5%) identified themselves as females and 79 participants (72.5%) identified themselves as males. Figure 4.2 illustrates the gender data. Chi square tests for goodness of fit were conducted to determine whether the gender distribution of the sample matched the expected gender distribution based on the population at each agency. The total population from each agency (N = 1,797) consisted of 594 clients (33.06%) who identified themselves as female and 1,203 clients (66.94%) who identified themselves as male. With an alpha equal to .05, the chi square on these frequencies was statistically non-significant, \( \chi^2(1, N=109) = 1.51, p \geq .05 \). Thus, the gender distribution from the sample was non-significantly different from the gender distribution of the population.
The sample from Agency 1 consisted of nine participants (42.86%) who identified themselves as females and 12 participants (57.14%) who identified themselves as males. The population at Agency 1 (N = 211) consisted of 71 clients (33.65%) who identified themselves as females and 140 clients (66.35%) who identified themselves as male. With an alpha equal to .05, the chi square on these frequencies was statistically non-significant, $\chi^2(1, N=21) = .797$, $p \geq .05$. Thus, the gender distribution from the sample obtained from Agency 1 was non-significantly different from the gender distribution of the population.

The sample from Agency 2 consisted of 6 participants (24%) who identified themselves as females and 19 participants (76%) who identified as males. The population at Agency 2 (N = 362) consisted of 83 clients (22.93%) who identified themselves as females and 279 clients (77.07%) who identified themselves males. With an alpha equal to .05, the chi square on these frequencies was statistically significant ($\chi^2(1, N=25) = .016$, $p \leq .05$. Therefore, the gender distribution from the sample obtained from Agency 2 was significantly different from the gender distribution of the population. The sample had a significantly higher distribution of females than the population.

The sample from Agency 3 consisted of 10 participants (34.48%) who identified themselves as females and 19 participants (65.52%) who identified as males. The population at Agency 3 (N = 846) consisted of 311 clients (36.76%) who identified themselves as females and 535 clients (63.24%) who identified themselves males. With an alpha equal to .05, the chi square on these frequencies was statistically non-significant ($\chi^2(1, N=29) = .065$, $p \geq .05$. Therefore, the gender distribution from the sample obtained from Agency 3 was non-significantly different from the gender distribution of the population.
The sample from Agency 4 consisted of 5 participants (14.71%) who identified themselves as females and 29 participants (85.29%) who identified as males. The population at Agency 4 (N = 378) consisted of 129 clients (34.12%) who identified themselves as females and 249 clients (65.88%) who identified themselves males. With an alpha equal to .05, the chi square on these frequencies was statistically non-significant ($\chi^2(1, N=34) = 5.701, p \geq .05$). Therefore, the gender distribution from the sample obtained from Agency 4 was non-significantly different from the gender distribution of the population.

Figure 4.2 Frequency of Gender by Agency and Total

Education Level, Annual Household Income, and Number of Children

Demographic data was obtained regarding participants’ level of education, annual household income, and number of children. This demographic data was not collected by any of the participating agencies; therefore, no data were available to compare these dimensions with the population at each of the sites. Participants provided their level of education by marking one of the following responses: (a) less than high school, (b) some high school, (c) high school
graduate, (d) some college, (e) trade/technical/vocational school, (f) college graduate, (g) some postgraduate work, or (h) postgraduate degree. The sample consisted of four participants (3.7%) who had less than a high school education. Twenty participants (18.3%) reported having some high school, 33 participants (30.3%) indicated being a high school graduate, 29 participants, (26.6%) indicated having some college, 15 participants (13.8%) reported attending trade/technical/vocational school, and 8 participants (7.3%) indicated being a college graduate. No participants in the study reported completing some postgraduate work or having a postgraduate degree. Most the participants in the sample had graduated from high school (77.9%). Only 24 participants (22%) had not completed high school. Figure 4.3 illustrates the demographic data gathered for level of education.

Figure 4.3 Frequency of Level of Education for the Total Sample

Participants indicated their annual household income by checking whether they made (a) $0-$20,000, (b) $21,000-$40,000, (c) $41,000-$60,000, (d) $61,000-$80,000, (e) $81,000-$100,000, or (f) $100,000+. The sample contained participants in each of the defined categories.
Most of the participants (n = 60, 55%) indicated that they made $0-$20,000 annually. The next largest group (n = 28, 25.7%) reported making $21,000-$40,000 annually. Eleven participants (10.1%) reported making $41,000-$60,000, three participants (2.8%) reported an annual income of $61,000-$80,000, one participant reported making $81,000-$100,000 annually, and six participants (5.5%) reported an annual income of $100,000+. Figure 4.4 illustrates the data for the annual household income of the sample.

*Figure 4.4 Annual Household Income*

The demographic questionnaire asked participants to fill in a blank with the number of children they had. The number of children of the participants ranged from 0 to 7 with a mean number of children of 1.39 (SD = 1.68). The distribution was positively skewed and leptokurtic. The skewness (1.3) and kurtosis (1.42) statistics were observed and indicated a normal distribution of data. Most of the participants (n=48, 44%) reported having no children. Twenty participants (18.3%) reported have one child, 13 participants (11.9%) reported having two children, 18 participants (16.5%) reported having three children, four participants (3.7%)
reported having four children, and two participants (1.8%) reported having five, six and seven children respectively. Figure 4.5 illustrates the data for number of children.

Figure 4.5 Number of Children

Race/Ethnicity

The researcher used the federal definition when gathering demographic information regarding the race and ethnicity of the participants. This resulted in the researcher asking two questions about race/ethnicity. First, participants responded to a question asking whether they were Hispanic or Latino by indicating (a) no, not Hispanic/Latino or (b) yes, Hispanic/Latino. Then participants identified their race as (a) American Indian/Native American, (b) Asian, (c) Black or African American, (d) Native Hawaiian or other Pacific Islander. The overwhelming majority of the sample (n=99, 90.8%) were not Hispanic or Latino. Ten participants (9.2%) indicated that they were Hispanic or Latino. Fifty-four participants (49.5%) indicated that they were Black or African American, two participants (1.8%) indicated that they were Native Hawaiian or Other Pacific Islander, 46 participants (42.2%) indicated that they were White, and
seven participants (6.4%) indicated that they were of mixed race. No participants in the study identified as American Indian/Native American or Asian. Figure 4.6 illustrates the data for race.

*Figure 4.6 Reported Race/Ethnicity Percentages for the Total Sample*

Chi square tests for goodness of fit were conducted to determine whether the race/ethnicity distribution of the sample matched the expected race/ethnicity distribution based on the population at each agency. The total population from each agency (N = 1,797) consisted of 1,040 clients (57.87%) who identified as Black or African American, 665 clients (37%) who identified as White, 16 clients (.89%) who identified as Asian, 37 clients (2.1%) who identified as Hispanic/Latino, three clients (0.17%) who identified as Native American, and 36 clients (2%) who identified as Mixed Race which was specified as other or unknown on the demographic data sheet obtained from each of the agencies. With an alpha equal to .05, the chi square on the frequencies of those identifying as non-Hispanic/Latino and Hispanic/Latino was statistically non-significant, \( \chi^2(1, N=109) = 27.344, p \geq .05 \). Thus, the ethnicity distribution of the sample was non-significantly different from the ethnicity distribution of the population. With an alpha
equal to .05, the chi square on the frequencies of those identifying as Black or African American, Native Hawaiian or other Pacific Islander, White, and Mixed Race was statistically non-significant, $\chi^2(3, N=109) = 30.171, p \geq .05$. Thus, the race distribution from the sample was non-significantly different from the race distribution of the population.

The sample from Agency 1 consisted of 19 participants (20.5%) who identified not Hispanic/Latino and two participants (0.5%) who identified themselves as Hispanic/Latino. Twelve participants (57.14%) identified as Black or African American, six participants (28.57%) identified as White and three participants (14.29%) identified as Mixed Race. The population at Agency 1 ($N = 211$) consisted of 138 clients (65.4%) who identified themselves as Black or African American, 55 clients (26.06%) who identified themselves as White, two clients (0.95%) who identified themselves as Asian, five clients (2.37%) who identified as Hispanic, one client (0.47%) who identified as Native American, two clients (0.95%) who identified as other, and eight (3.79%) who identified as unknown. With an alpha equal to .05, the chi square on the frequencies of those identifying as non-Hispanic/Latino and Hispanic/Latino was statistically non-significant, $\chi^2(1, N=21) = 4.677, p \geq .05$. Thus, the ethnicity distribution from the sample obtained from Agency 1 was non-significantly different from the ethnicity distribution of the population. With an alpha equal to .05, the chi square on the frequencies of those identifying as Black or African American, White, and Mixed Race was statistically non-significant, $\chi^2(2, N=21) = 1.085, p \geq .05$. Thus, the race distribution from the sample obtained from Agency 1 was non-significantly different from the race distribution of the population.

All the participants from Agency 2 identified as non-Hispanic/Latino. Fifteen participants (60%) identified as Black or African American, ten participants (40%) identified as White. The population at Agency 2 ($N = 362$) consisted of 196 clients (54.14%) who identified
themselves as Black or African American, 154 clients (42.54%) who identified themselves as White, three clients (0.83%) who identified as Hispanic, and nine clients (2.49%) who identified as unknown. The chi square on the frequencies of those identifying as non-Hispanic/Latino and Hispanic/Latino could not be completed because the frequency of the sample was zero. With an alpha equal to .05, the chi square on the frequencies of those identifying as Black or African American and White was statistically non-significant, \( \chi^2(1, N=25) = .346, p \geq .05 \). Thus, the race distribution of Blacks and Whites from the sample obtained from Agency 2 was non-significantly different from the race distribution of the population.

The sample from Agency 3 consisted of 24 participants (82.8%) who identified not Hispanic/Latino and five participants (17.2%) who identified themselves as Hispanic/Latino. Seventeen participants (58.6%) identified as Black or African American, one participant (3.4%) identified as Native Hawaiian or Other Pacific Islander, eight participants (27.6%) identified as White and three participants (10.3%) identified as Mixed Race. The population at Agency 3 (\( N = 846 \)) consisted of 553 clients (65.37%) who identified themselves as Black or African American, 252 clients (29.79%) who identified themselves as White, eight clients (0.95%) who identified themselves as Asian, 22 clients (2.6%) who identified as Hispanic, one client (0.12%) who identified as Native American, and ten clients (1.18%) who identified as other. With an alpha equal to .05, the chi square on the frequencies of those identifying as non-Hispanic/Latino and Hispanic/Latino was statistically non-significant, \( \chi^2(1, N=29) = 24.549, p \geq .05 \). Thus, the ethnicity distribution from the sample obtained from Agency 1 was non-significantly different from the ethnicity distribution of the population. With an alpha equal to .05, the chi square on the frequencies of those identifying as Black or African American, White, Native Hawaiian or Other Pacific Islander, and Mixed Race was statistically non-significant, \( \chi^2(3, N=29) = 46.819, p \)
Thus, the race distribution from the sample obtained from Agency 1 was non-significantly different from the race distribution of the population.

The sample from Agency 4 consisted of 31 participants (91.2%) who identified not Hispanic/Latino and three participants (8.8%) who identified themselves as Hispanic/Latino. Ten participants (29.4%) identified as Black or African American, one participant (2.9%) identified as Native Hawaiian or Other Pacific Islander, 22 participants (64.7%) identified as White and one participant (2.9%) identified as Mixed Race. The population at Agency 4 (N = 378) consisted of 153 clients (40.48%) who identified themselves as Black or African American, 204 clients (53.97%) who identified themselves as White, six clients (1.59%) who identified themselves as Asian, seven clients (1.85%) who identified as Hispanic, one client (0.26%) who identified as Native American, six clients (1.59%) who identified as other, and one (0.26%) who identified as unknown. With an alpha equal to .05, the chi square on the frequencies of those identifying as non-Hispanic/Latino and Hispanic/Latino was statistically non-significant, \( \chi^2(1, N=34) = 9.106, p \geq .05 \). Thus, the ethnicity distribution from the sample obtained from Agency 4 was non-significantly different from the ethnicity distribution of the population. With an alpha equal to .05, the chi square on the frequencies of those identifying as Black or African American, Native Hawaiian or other Pacific Islander, White, and Mixed Race was statistically non-significant, \( \chi^2(3, N=34) = 11.510, p \geq .05 \). Thus, the race distribution from the sample obtained from Agency 4 was non-significantly different from the race distribution of the population.

**Employment Status**

The participants were asked to identify their employment status by responding to one of the following choices: (a) full-time employed, (b) part-time employed, (c) unemployed, or (d) retired. Fifty-five participants (50.5%) reported being full-time employed, 15 participants
(13.8%) reported being part-time employed, 38 participants (34.9%) reported being unemployed, and one participant (0.9%) reported being retired. Figure 4.7 illustrates the data for employment status. Chi square tests for goodness of fit were conducted to determine whether the employment status distribution of the sample matched the employment status distribution of the population at each agency. The total population from each agency (N = 1,797) consisted of 1009 clients (56.14%) who were employed, 774 clients (43.07%) who were unemployed, and 14 clients (.78%) whose employment status was unknown. With an alpha equal to .05, the chi square on the frequencies of employed and unemployed was statistically non-significant, $\chi^2(1, N=109) = 2.583, p \geq .05$. Thus, the employment status distribution of the sample was non-significantly different from the employment status distribution of the population.

The sample from Agency 1 consisted of nine participants (42.9%) who were employed full-time, three participants (14.3%) who were employed part-time, and nine participants (42.9%) who were unemployed. Though each participating agency also collected data on employment status, different categories were used. These categories included employed, unemployed, and unknown. The population at Agency 1 (N=211) consisted of 101 clients (47.87%) who were employed, 105 clients (49.76%) who were unemployed, and five clients (2.37%) who’s employment status was unknown. With an alpha equal to .05, the chi square on the frequencies of employed and unemployed was statistically non-significant, $\chi^2(1, N=21) = .553, p \geq .05$. Thus, the employment status distribution from the sample obtained from Agency 1 was non-significantly different from the employment status distribution of the population.

The sample from Agency 2 consisted of 12 participants (48%) who were employed full-time, three participants (12%) who were employed part-time, and ten participants (40%) who were unemployed. The population at Agency 2 (N=362) consisted of 163 clients (45.03%) who
were employed and 199 clients (54.97%) who were unemployed. With an alpha equal to .05, the chi square on the frequencies of employed and unemployed was statistically non-significant, \( \chi^2(1, N=25) = 2.263, p \geq .05 \). Thus, the employment status distribution from the sample obtained from Agency 2 was non-significantly different from the employment status distribution of the population.

The sample from Agency 3 consisted of 15 participants (51.7%) who were employed full-time, two participants (6.9%) who were employed part-time, 11 participants (37.9%) who were unemployed, and one participant (3.4%) who was retired. The population at Agency 3 (N=846) consisted of 499 clients (58.98%) who were employed and 347 clients (41.02%) who were unemployed. With an alpha equal to .05, the chi square on the frequencies of employed and unemployed was statistically significant, \( \chi^2(1, N=29) = .002, p \leq .05 \). Thus, the employment status distribution from the sample obtained from Agency 3 was significantly different from the employment status distribution of the population. Fewer participants in the sample were employed than what could be expected based on the employment status of the population.

The sample from Agency 4 consisted of 19 participants (55.9%) who were employed full-time, seven participants (20.6%) who were employed part-time, and eight participants (40%) who were unemployed. The population at Agency 4 (N=378) consisted of 246 clients (65.08%) who were employed, 123 clients (32.54%) who were unemployed, and nine clients (2.38%) whose employment status was unknown. With an alpha equal to .05, the chi square on the frequencies of employed and unemployed was statistically non-significant, \( \chi^2(1, N=34) = 1.470, p \geq .05 \). Thus, the employment status distribution from the sample obtained from Agency 4 was non-significantly different from the employment status distribution of the population.
To gather information on participants’ marital status, the researcher asked participants to select whether they were (a) single/never married, (b) married, (c) separated, (d) divorced, or (e) widowed. Most the participants in the sample indicated being single, having never married. Eighty-five participants (78%) selected single/never married, 15 participants (13.8%) selected married, seven participants (6.4%) selected separated, and two participants (1.8%) selected divorced. No participants stated that they were widowed. Figure 4.8 illustrates the data for employment status. Chi square tests for goodness of fit were conducted to determine whether the employment status distribution of the sample matched the expected employment status distribution based on the population at each agency. The total population from each agency (N = 1,797) consisted of 1,298 clients (72.23%) who were never married, 774 clients (12.41%) who were married, 120 clients (6.68%) who were separated, 132 clients (7.35%) who were divorced, 10 clients (.56%) who were widowed, and 14 clients (.78%) who identified their marital status as
other. With an alpha equal to .05, the chi square on the frequencies of single/never married, married, separated, and divorced was statistically non-significant, $\chi^2(3, N=109) = 5.084, p \geq .05$. Thus, the marital status distribution of the sample was non-significantly different from the marital status distribution of the population.

The sample from Agency 1 included 20 participants (95.2%) who were single/never married and one participant (4.8%) who was married. None of the participants from this agency were separated, divorced or widowed. The demographic data collected by the participating agencies included one addition category, other, that was not used in the demographic questionnaire completed by the participants for the study. The population at Agency 1 (N=211) consisted of 176 clients (83.41%) who were never married, 18 clients (8.53%) who were married, six clients (2.84%) who were separated, four clients (1.9%) who were divorced, two clients (0.95%) who were widowed, and five (2.37%) who identified their marital status as other. With an alpha equal to .05, the chi square on the frequencies of single/never married and married was statistically non-significant, $\chi^2(1, N=21) = .509, p \geq .05$. Thus, the marital status distribution from the sample obtained from Agency 1 was non-significantly different from the marital status distribution of the population.

The sample from Agency 2 included 17 participants (68%) who were single/never married, five participants (20%) who were married, and three participants (12%) who were separated. None of the participants from this agency were divorced or widowed. The population at Agency 2 (N=362) consisted of 254 clients (70.16%) who were never married, 46 clients (12.71%) who were married, 20 clients (5.52%) who were separated, 41 clients (11.33%) who were divorced, and one client (0.28%) who was widowed. With an alpha equal to .05, the chi square on the frequencies of single/never married, married, and separated was statistically non-
significant, $\chi^2(2, N=25) = 2.28$, $p \geq .05$. Thus, the marital status distribution from the sample obtained from Agency 2 was non-significantly different from the marital status distribution of the population.

The sample from Agency 3 included 19 participants (65.5%) who were single/never married, five participants (17.2%) who were married, three participants (10.3%) who were separated, and two participants (6.9%) who were divorced. None of the participants from this agency were widowed. The population at Agency 3 ($N=846$) consisted of 589 clients (69.62%) who were never married, 117 clients (13.83%) who were married, 69 clients (8.16%) who were separated, 66 clients (7.8%) who were divorced, and five clients (0.59%) who were widowed. With an alpha equal to .05, the chi square on the frequencies of single/never married, married, separated, and divorced was statistically non-significant, $\chi^2(3, N=29) = 67.264$, $p \geq .05$. Thus, the marital status distribution from the sample obtained from Agency 3 was non-significantly different from the marital status distribution of the population.

The sample from Agency 4 included 29 participants (85.3%) who were single/never married, four participants (11.8%) who were married, and one participant (2.9%) who was separated. None of the participants from this agency were divorced or widowed. The population at Agency 4 ($N=378$) consisted of 279 clients (73.81%) who were never married, 42 clients (11.11%) who were married, 25 clients (6.61%) who were separated, 21 clients (5.56%) who were divorced, two clients (0.53%) who were widowed, and nine participants (2.38%) identified their marital status as other. With an alpha equal to .05, the chi square on the frequencies of single/never married, married, and separated was statistically non-significant, $\chi^2(2, N=34) = .96$, $p \geq .05$. Thus, the marital status distribution from the sample obtained from Agency 4 was non-significantly different from the marital status distribution of the population.
Participants were asked to provide information on their criminal offences by selecting all that applied from the following: (a) felonies only, (b) misdemeanors only, (c) both felonies and misdemeanors, (d) drug related offences: drug smuggling, drug trafficking, drug possession etc., (e) drunk driving offences: DUIs, DWIs, (f) Motor vehicle offences: vehicular manslaughter, hit and run, carjacking, etc. (g) sex offences, (h) domestic offences: spousal abuse, child abuse, domestic violence, etc. (i) property offences, (j) white collar offences, (k) violent and weapons offences, (l) inchoate offences: conspiracy, solicitation, accessory, accomplice etc. The researcher examined the descriptive statistics of criminal offences by first analyzing the broad categories of felonies or misdemeanors then examining the specific types of offences committed. Six participants (5.5%) indicated that they had committed only felony offences, 47 participants (43.1%) indicated that they had committed only misdemeanor offences, 33 participants (30.3%) indicated that they had committed both felony and misdemeanor offences, and 23 participants...
(21.1%) did not respond to the question. Twenty-four participants (22%) indicated that they had committed drug related offences, three participants (2.8%) indicated that they had committed drunk driving offences, 11 participants (10.1%) indicated they had committed domestic offences, one participant (.9%) indicated having committed violent and weapons offences, 14 participants (12.8%) indicated they had committed offences from multiple categories listed, and 56 participants (51.4%) did not respond to the question. Figures 4.9 and 4.10 illustrate the broad category criminal offences and the specific types of criminal offences respectively. Because a considerable number of participants chose not to respond to the questions, comparisons to the population of each participating agency were not made.

*Figure 4.9 Reported Broad Category Criminal Offences Percentages for the Total Sample*
The researcher was also interested in the number of times participants had been incarcerated and the total length of time participants spent incarcerated. Unfortunately, this demographic data was not collected by the participating agencies and the researcher was not able to make comparisons of the sample to the population. Participants were asked to indicate the number of times they had been incarcerated by filling in a blank. Times incarcerated ranged from 0 to 20 with a mean of 2.45 ($SD = 3.75$). The distribution was positively skewed and leptokurtic. The skewness (2.8) and kurtosis (8.96) statistics were observed and indicated a non-normal distribution of data. Most of the participants (n=32, 29.4%) reported having no incarcerations or one incarceration. Participants reporting no incarcerations were arrested and convicted of the crimes they committed, but were never sentenced to serve jail time. Sixteen participants (14.7%) reported two incarcerations, eight participants (7.3%) reported three incarcerations, four participants (3.7%) reported four incarcerations, four participants (3.7%)
reported five incarcerations, two participants (1.8%) reported six incarcerations, one participant (.9%) reported seven incarcerations, two participants (1.8%) reported eight incarcerations, four participants (3.7%) reported ten incarcerations, one participant (.9%) reported 13 incarcerations, one participant (.9%) reported fifteen incarcerations, and two participants (1.8%) reported 20 incarcerations. Figure 4.11 illustrates the data for number of incarcerations.

*Figure 4.11 Frequency of Times Incarcerated for the Total Sample*

Participants indicated the total length of time they spent incarcerated by filling in a blank. Length of time incarcerated ranged from 0 to 10 years with a mean of 1.54 (SD = 2.2). The distribution was positively skewed and leptokurtic. The skewness (2.38) and kurtosis (5.18) statistics were observed and indicated a non-normal distribution of data. Thirty-one participants (28.4%) reported spending no time incarcerated, 55 participants (50.5%) spent one year incarcerated, eight participants (7.3%) spent two years incarcerated, one participant (.9%) spent three years incarcerated, two participants (1.8%) spent four years incarcerated, five participants (3.7%) spent five years incarcerated, two participants (1.8%) spent seven years incarcerated, four
participants (3.7%) spent eight years incarcerated, and two participants (1.8%) spent ten years incarcerated. The researcher noted that 32 participants reported not having been incarcerated but only 31 participants reported spending no time incarcerated. One participant reported not having been incarcerated but also provided a length of time being incarcerated. Despite the illogical nature of this report, the researcher reported the information as it was listed on the demographic questionnaire. Figure 4.12 illustrates the length of incarceration data.

Figure 4.12 Length of incarceration

Instrument Descriptive Statistics

Positive and Negative Affectivity Schedule (PANAS)

Created by Watson et al. (1988), the PANAS is a 20-item self-report instrument that measures the temporal experiences of positive affectivity and negative affectivity. Thus, the measure consists of two subscales: positive affectivity and negative affectivity. The measure of time used in this study was over the past week. Items are rated on a five-point Likert scale ranging from 1 (very slightly or not at all) to 5 (extremely). Scores on each of the subscales
range from 10 to 50. The range of scores for this sample (n=109) for the positive affectivity was 10 to 50 with a mean of 36.24 ($SD = 8.47$). The distribution was negatively skewed and leptokurtic. The skewness (-.58) and kurtosis (.18) figures indicated an approximately normal distribution of scores. For the negative affectivity subscale, scores ranged from 10 to 44 with a mean of 18.83 ($SD = 7.97$). The distribution was positively skewed and leptokurtic. Skewness (1.07) and kurtosis (.33) figures indicated an approximately normal distribution of scores. Thus, scores on both subscales followed a normal distribution pattern in this sample.

**Satisfaction with Life Scale (SWLS)**

The SWLS, constructed by Diener et al. (1985) is a short, 5-item self-report measure of subjective well-being. Through factor analysis, the measure was found to be a single scale instrument (Diener et al., 1985). Responses are rated on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Scores range from 5 to 35. In the present study, scores ranged from 5 to 32 with a mean of 18.37 ($SD = 6.95$). The distribution was negatively skewed and platykurtic. The skewness (-.2) and kurtosis (-.86) figures indicated an approximately normal distribution of scores.

**Satisfaction with Family Life Scale (SWFLS)**

Modified from the SWLS, the SWFLS is designed to measure family relational well-being, a dimension of subjective well-being (Zabriskie & McCormick, 2003; Zabriskie & Ward, 2013). Like the SWLS, The SWFLS uses the same five items; however, the phrase “family life” is used in the place of the word “life”. The same 7-point Likert scale is used and scores on each of the items range from 1 *strongly disagree* to 7 *strongly agree*. Total scores range from 5 to 35. In the present study, scores ranged from 5 to 35 with a mean of 18.37 ($SD = 6.95$). The
distribution was negatively skewed and platykur tic. The skewness (-.23) and kurtosis (-.78) figures indicated an approximately normal distribution of scores.

**Prosocial Tendencies Measure (PTM)**

The PTM was created by Carlo and Randall (2002) and independently assesses six prosocial tendencies: public, anonymous, compliant, altruism, emotional, and dire. The six subscales can be used alone or all six can be combined to provide an overall measure of prosocial behavior. For the purposes of this study, the instrument was used to obtain an overall measure of prosocial behavior. The PTM is a self-report measure that contains 23 items. Responses are rated on a 5-point Likert scale ranging from 1 *does not describe me at all* to 5 *describes me greatly*. Total scores range from 23 to 115. The range of scores for this sample was 43 to 101 with a mean of 71.23 ($SD = 12.32$). The distribution was positively skewed and platykur tic. The skewness (-.12) and kurtosis (-.46) figures indicated an approximately normal distribution of scores. Table 4.1 illustrates the descriptive statistics for the PANAS, SWLS, SWFLS, and PTM.

Table 4.1

<table>
<thead>
<tr>
<th></th>
<th>$M$</th>
<th>$SD$</th>
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<tr>
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<td>Negative Affectivity Subscale</td>
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<td>7.97</td>
</tr>
<tr>
<td>Satisfaction with Life Scale</td>
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<td>6.95</td>
</tr>
<tr>
<td>Satisfaction with Family Life Scale</td>
<td>20.72</td>
<td>7.76</td>
</tr>
<tr>
<td>Prosocial Tendencies Measure</td>
<td>71.23</td>
<td>12.32</td>
</tr>
</tbody>
</table>
Statistical Analysis of Research Questions and Hypotheses

The purpose of this heuristic study was to explore the following research questions: (a) What is the relationship between offenders’ experiences of positive affectivity, negative affectivity, subjective well-being, family life satisfaction, and prosocial behavior? and (b) How do familial relationships impact offenders’ experiences of positive and negative affectivity, subjective well-being, and prosocial behavior? The researcher posed the following hypotheses:

1. Positive affectivity will be positively correlated with subjective well-being, family life satisfaction, and prosocial behavior.
2. Negative affectivity will be negatively correlated with positive affectivity, subjective well-being, family life satisfaction and prosocial behavior.
3. Offenders who are single or have no children will have significantly lower positive affectivity, subjective well-being, family life satisfaction and prosocial behaviors and significantly higher negative affectivity than offenders who are married or have children.
4. Positive affect, negative affect, subjective well being, and family life satisfaction will be predictive of engagement in prosocial behavior.

Hypothesis One

The first hypothesis asserted that offenders’ scores on the PANAS positive affectivity scale would be positively correlated with their scores of subjective well-being on the SWLS, family life satisfaction on the SWFLS, and prosocial behavior on the PTM. One-tailed Pearson product moment correlations were computed in SPSS to examine this hypothesis. Using a Bonferroni per comparison α (.05/3 = .017), two of the three correlations were statistically significant. Positive affectivity was positively correlated with subjective well-being \( (r(107) = .36, p < .01, r^2 = .13) \) and prosocial behavior \( (r(107) = .39, p < .01, r^2 = .15) \). The correlation
between positive affectivity and family life satisfaction was statistically non-significant ($r(107) = .16, p > .01$). Thus, the hypothesis was partially supported by the data. Table 4.2 illustrates all the correlations for positive affectivity, negative affective, subjective well-being, family life satisfaction, and prosocial behavior.

Table 4.2

<table>
<thead>
<tr>
<th></th>
<th>PANAS-PA</th>
<th>PANAS-NA</th>
<th>SWLS</th>
<th>SWFLS</th>
<th>PTM</th>
</tr>
</thead>
<tbody>
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<td>-.306**</td>
<td>.363**</td>
<td>.164*</td>
<td>.394**</td>
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<tr>
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<td>-.306**</td>
<td>1</td>
<td>-.223**</td>
<td>-.135</td>
<td>.002</td>
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<tr>
<td>SWLS</td>
<td>.363**</td>
<td>-.223**</td>
<td>1</td>
<td>.395**</td>
<td>.273**</td>
</tr>
<tr>
<td>SWFLS</td>
<td>.164*</td>
<td>-.135</td>
<td>.395**</td>
<td>1</td>
<td>.236**</td>
</tr>
<tr>
<td>PTM</td>
<td>.394**</td>
<td>.002</td>
<td>.273**</td>
<td>.236**</td>
<td>1</td>
</tr>
</tbody>
</table>

**$p < .01$; *$p < .05$

**Hypothesis Two**

The second hypothesis conjectured that offenders’ scores on the PANAS negative affectivity scale would be negatively correlated with their scores of positive affectivity on the PANAS, subjective well-being on the SWLS, family life satisfaction on the SWFLS, and prosocial behavior on the PTM. One-tailed Pearson product moment correlations were computed in SPSS to examine this hypothesis. Using a Bonferroni per comparison $\alpha (.05/4 = .0125)$, two correlations yielded statistically significant results. Negative affectivity was negatively correlated with positive affectivity ($r(107) = -.31, p < .01, r^2 = .1$) and subjective well-being ($r(107) = -.22, p < .01, r^2 = .05$). Negative affectivity was not correlated with family life satisfaction as measured by the SWFLS ($r(107) = -.14, p < .01, r^2 = .02$) or prosocial behavior as measured by the PTM ($r(107) = .002, p < .01, r^2 = .00$). Thus, the hypothesis was partially supported by the data.
**Hypothesis Three**

The third hypothesis speculated that offenders who were single or had no children would have significantly lower positive affectivity, subjective well-being, family life satisfaction and prosocial behaviors and significantly higher negative affectivity than participants who were married or had children. Because of the small sample size of participants who were married (n = 15), multiple regression analyses using the enter method was used to determine if the indicator variables married, has children, and the interaction of the two were predictive of the four outcome measures. The hypothesis was not supported by the results of the regression analysis. None of the regression analyses conducted yielded a significant predictive model. Tests to check for collinearity and outliers were completed and no issues were detected. Furthermore, an analysis of the coefficients of the predictor variables indicated that having children was a significant predictor for both positive affectivity ($t(105) = 1.97$, $p < .05$) and negative affectivity ($t(105) = -2.16$, $p < .05$). No other significant predictors of the outcome measures of interest were indicated. Table 4.3 illustrates the results of the models generated.

Table 4.3

<table>
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<tr>
<th>Dependent Variable</th>
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<th>$R$ Square</th>
<th>$F$</th>
<th>$P$</th>
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<td>Positive Affectivity</td>
<td>.254</td>
<td>.064</td>
<td>2.41</td>
<td>&gt;.05</td>
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<tr>
<td>Negative Affectivity</td>
<td>.218</td>
<td>.048</td>
<td>1.75</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>Subjective Well-being</td>
<td>.101</td>
<td>.010</td>
<td>.358</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>Family Life Satisfaction</td>
<td>.103</td>
<td>.011</td>
<td>.378</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>Prosocial Behaviors</td>
<td>.130</td>
<td>.017</td>
<td>.606</td>
<td>&gt;.05</td>
</tr>
</tbody>
</table>

*Note.* Enter method regression analysis, Predictors: Marital Status, Has Children, Marital Status * Has Children
To follow-up on the finding that having children was a significant predictor of positive affectivity and negative affectivity, two one-tailed independent samples \(t\)-tests were conducted. This resulted in 48 participants that had no children and 61 participants that had children. The mean positive affectivity scores for those that had no children was 34.02 (\(SD = 7.93\)) and for those that had children was 37.98 (\(SD = 8.55\)). The mean negative affectivity scores for those that had no children was 20.54 (\(SD = 8.8\)) and for those that had children was 17.48 (\(SD = 7.02\)). Table 4.4 illustrates the means and standard deviations for positive affectivity and negative affectivity as it relates to having children.

Table 4.4

<table>
<thead>
<tr>
<th>Dependent Variable</th>
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<th>(N)</th>
<th>(M)</th>
<th>(SD)</th>
</tr>
</thead>
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<td>34.02</td>
<td>7.93</td>
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<tr>
<td></td>
<td>Children</td>
<td>61</td>
<td>37.98</td>
<td>8.55</td>
</tr>
<tr>
<td>Negative Affectivity</td>
<td>No children</td>
<td>48</td>
<td>20.54</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>Children</td>
<td>61</td>
<td>17.48</td>
<td>7.02</td>
</tr>
</tbody>
</table>

The Levene’s Test for Equality of Variance was non-significant for the positive affectivity scale of the PANAS and therefore equal variances was assumed. However, the Levene’s Test for Equality of Variance was significant for the negative affectivity scale of the PANAS and therefore equal variances was not assumed when analyzing that variable. Using a Bonferroni per comparison \(\alpha (.05/2 = .025)\), both one-tailed independent samples \(t\)-tests yielded statistically significant results. The mean positive affectivity score of participants in the no children group was significantly lower than the mean positive affectivity score of the participants in the children group. The mean negative affectivity score of the participants in the no children group was significantly higher than the mean negative affectivity score of the participants in the
children group. Therefore, participants with children had more positive affectivity and less negative affectivity than those without children. Table 4.5 illustrates the results of the two t-tests. Thus, the hypothesis was partially supported.

Table 4.5

<table>
<thead>
<tr>
<th>Variables</th>
<th>$t$</th>
<th>$df$</th>
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<td>.008**</td>
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<tr>
<td>Negative Affectivity*</td>
<td>1.97</td>
<td>88.46</td>
<td>.023***</td>
</tr>
</tbody>
</table>

*Note, Equal Variance was not assumed; **$p < .01$; ***$p < .05$

**Hypothesis Four**

The fourth hypothesis surmised that positive affectivity, negative affectivity, subjective well-being, and family life satisfaction would be predictive of engagement in prosocial behavior. To test this hypothesis, a regression analysis using the enter method was used to determine which, if any of the predictors were statistically significant. Predictors found to be non-significant were removed from the model, and the regression analysis using the enter method was repeated to determine a model for predicting prosocial behavior scores. The hypothesis was partially supported by the results of both models as positive affectivity functioned as a significant predictive variable, but negative affectivity, subjective well-being, and family life satisfaction did not.

The first regression model computed using the enter method yielded a significant model, $F(4, 104) = 7.16, p < .001$ with an $R^2 = .216$. Thus, indicating that the model accounted for about 22% of the variance in prosocial behavior. Nonetheless, an analysis of the coefficients of the predictor variables indicated that the only significant predictor was positive affectivity ($t(104) = 3.93, p < .001$). Tests to check for collinearity and outliers were completed and no
issues were detected. Therefore, the non-significant predictors, negative affectivity, subjective well-being, and family life satisfaction were removed from the model and the regression analysis was repeated. This regression analysis yield a significant model $F(1, 107) = 19.66, p < .001$ with an $R^2 = .16$. Therefore, the model accounts for 16% of the variance indicating that there are other predictor variables yet to be discovered. Again, checks were made for any issues with collinearity and outliers, but none of the diagnostics indicated problems. Furthermore, Model 1 accounts for more of the variance in prosocial behavior because it contains non-significant predictors. Thus, the hypothesis was partially supported. Tables 4.6, 4.7, and 4.8 display the results of both models generated.

Table 4.6

*Regression Analysis: Predictors for Prosocial Behaviors*

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>$F$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.465$^a$</td>
<td>.216</td>
<td>7.16</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>2</td>
<td>.394$^b$</td>
<td>.155</td>
<td>19.66</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

*Note. Enter method regression analysis, $^a$Predictors: Positive Affectivity, Negative Affectivity, Subjective Well-being, Family Life Satisfaction; $^b$Predictors: Positive Affectivity*

Table 4.7

*Coefficients of Model 1*

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>$t$-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>PANAS-PA</td>
<td>.550</td>
<td>.378</td>
<td>3.933*</td>
</tr>
<tr>
<td>PANAS-NA</td>
<td>.252</td>
<td>.163</td>
<td>1.770</td>
</tr>
<tr>
<td>SWLS</td>
<td>.198</td>
<td>.112</td>
<td>1.112</td>
</tr>
<tr>
<td>SWFLS</td>
<td>.242</td>
<td>.152</td>
<td>1.608</td>
</tr>
</tbody>
</table>

*p < .01

Table 4.8

*Coefficients of Model 2*

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>$t$-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>PANAS-PA</td>
<td>.573</td>
<td>.394</td>
<td>4.434*</td>
</tr>
</tbody>
</table>

*p < .01
Additional testing was completed to further explore the predictive model that resulted from the regression analysis completed to test the fourth hypothesis. The predictive model indicated that positive affectivity accounted for about 22% of the variance in predicting prosocial behavior. The researcher was interested in finding out if any of the demographic data collected might account for any additional variance. Again, a regression analysis using the enter method was used to determine which, if any of the demographic variables served as statistically significant predictors of prosocial behavior. Predictors found to be non-significant were removed from the model, and the regression analysis using the enter method was repeated to determine a model for predicting prosocial behavior scores. The final regression analysis yielded a predictive model that accounted for 26% of the variance where positive affectivity, level of education, having children, and number of children served as predictors of prosocial behavior.

The first regression model computed using the enter method yielded a significant model, \( F(18, 90) = 2.6, p < .01 \) with an \( R^2 = .342 \). Thus, indicating that the model accounted for about 34% of the variance. An analysis of the coefficients of the predictor variables indicated four significant predictors: positive affectivity \( (t(90) = 4.15, p < .05) \), education \( (t(90) = 2.44, p < .05) \), number of children \( (t(90) = -2.13, p < .05) \), and having children \( (t(90) = 2.35, p < .05) \). Tests to check for collinearity and outliers were completed and no issues were detected. Therefore, the non-significant predictors were removed from the model and the regression analysis was repeated. The second regression analysis yield a significant model \( F(4, 104) = 8.98, p < .001 \) with an \( R^2 = .26 \). Therefore, the model accounts for 26%. Again, checks were made for any issues with collinearity and outliers, but not of the diagnostics indicated problems. Tables 4.9, 4.10, and 411 display the results of both models generated.
Table 4.9

Regression Analysis: Predictors for Prosocial Behaviors

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>$F$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.585$^a$</td>
<td>.342</td>
<td>2.6</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>2</td>
<td>.507$^b$</td>
<td>.257</td>
<td>8.98</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

*Note.* Enter method regression analysis, $^a$Predictors: Age, Gender, Education, Race/Ethnicity, Employment Status, Household Income, Marital Status, Number of children, Having children, Broad Criminal Offences, Specific Criminal Offences, Times incarcerated, Length incarcerated, Positive Affectivity, Negative Affectivity, Subjective Well-being, Family Life Satisfaction; $^b$Predictors: Positive Affectivity, Education Level, Number of Children, Having Children

Table 4.10

Coefficients of Model 1

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>$t$-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.204</td>
<td>-.146</td>
<td>-1.260</td>
</tr>
<tr>
<td>Gender</td>
<td>-1.005</td>
<td>-.037</td>
<td>-3.58</td>
</tr>
<tr>
<td>Education</td>
<td>2.212</td>
<td>.225</td>
<td>2.375*</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1.671</td>
<td>.039</td>
<td>.437</td>
</tr>
<tr>
<td>Race</td>
<td>.352</td>
<td>.031</td>
<td>.288</td>
</tr>
<tr>
<td>Employment Status</td>
<td>-.032</td>
<td>-.002</td>
<td>-.025</td>
</tr>
<tr>
<td>Household Income</td>
<td>.098</td>
<td>.010</td>
<td>.108</td>
</tr>
<tr>
<td>Marital Status</td>
<td>1.616</td>
<td>.089</td>
<td>.825</td>
</tr>
<tr>
<td>Number of Children</td>
<td>-2.145</td>
<td>-.293</td>
<td>-2.118*</td>
</tr>
<tr>
<td>Having Children</td>
<td>7.159</td>
<td>.290</td>
<td>2.054*</td>
</tr>
<tr>
<td>Broad Criminal</td>
<td>-.598</td>
<td>-.042</td>
<td>-.459</td>
</tr>
<tr>
<td>Offences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Criminal</td>
<td>-.318</td>
<td>-.109</td>
<td>-1.160</td>
</tr>
<tr>
<td>Offences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Incarcerated</td>
<td>.151</td>
<td>.046</td>
<td>.425</td>
</tr>
<tr>
<td>Length of</td>
<td>.599</td>
<td>.107</td>
<td>.944</td>
</tr>
<tr>
<td>Incarceration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PANAS-PA</td>
<td>.631</td>
<td>.434</td>
<td>4.028*</td>
</tr>
<tr>
<td>PANAS-NA</td>
<td>.280</td>
<td>.181</td>
<td>1.732</td>
</tr>
<tr>
<td>SWLS</td>
<td>.282</td>
<td>.159</td>
<td>1.486</td>
</tr>
<tr>
<td>SWFLS</td>
<td>.180</td>
<td>.113</td>
<td>1.121</td>
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</table>

*p < .05
Table 4.11

Coefficients of Model 2

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>PANAS-PA</td>
<td>.588</td>
<td>.404</td>
<td>4.589**</td>
</tr>
<tr>
<td>Education</td>
<td>2.453</td>
<td>.249</td>
<td>2.896**</td>
</tr>
<tr>
<td>Number of Children</td>
<td>-2.521</td>
<td>-.344</td>
<td>-2.7**</td>
</tr>
<tr>
<td>Having Children</td>
<td>7.472</td>
<td>.302</td>
<td>2.371*</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01

Summary

This study examined the relationships between offender positive affectivity, negative affectivity, subjective well-being, family life satisfaction, and prosocial behavior to validate the Broaden-and-Build Theory using an offender population. The sample consisted of offenders currently on probation and being supervised at four local probation offices representing five jurisdictions in the Hampton Roads and Central Virginia area. Diagnostic statistics indicated that the sample was relatively representative of the population at each of the agencies from where they were obtained specifically as it relates to age, gender, race/ethnicity, employment status, and marital status; however, some differences existed. The mean scores on the PANAS subscales for participants of the study were: 36.24 (SD = 8.47) for positive affectivity and 18.83 (SD = 7.97) for negative affectivity. The mean score on the SWLS was 18.37 (SD = 6.95), the mean score on the SWFLS was 20.72 (SD = 7.76), and the mean score on the PTM was 71.23 (SD = 12.32).

The data from the study yielded statistical analyses that partially supported each of the hypotheses of the study. The statistical analyses of the first hypothesis indicated statistically significant positive correlations between positive affectivity and subjective well-being and positive affectivity and prosocial behavior. Thus, offenders who experience high positive affectivity also experience high subjective well-being and are more likely to engage in prosocial
behaviors. Hypothesis two purported that negative affectivity would be negatively correlated with positive affectivity, subjective well-being, family life satisfaction, and prosocial behavior. Again, statistical analysis of the data partially supported the hypothesis in that negative affectivity was negatively correlated with positive affectivity and subjective well-being but was not correlated with family life satisfaction or prosocial behavior. Thus, offenders’ experiences of negative affectivity did not appear to be related to their engagement in prosocial behavior or their family life satisfaction. Hypothesis three suspected that the familial relationships of being married and having children would result in higher positive affectivity, subjective well-being, family life satisfaction and prosocial behaviors, and lower negative affectivity. This hypothesis was partially supported as well. Having children did serve as a predictor of positive affectivity and subjective well-being. Two one-tailed, independent samples t-test yielded statistically significant results indicating that offenders who had children had significantly higher positive affectivity and significantly lower negative affectivity than offenders who did not have children. Lastly, hypothesis four proposed that positive affectivity, negative affectivity, subjective well-being, and family life satisfaction would be predictive of prosocial behavior; however, a regression analysis indicated that only positive affectivity was a significant predictor. Additional testing using the demographic data collected as well as the outcome measures assessed yielded a predictive model of prosocial behavior that included positive affectivity, level of education, having children, and number of children.

This study aimed to explore the Broaden-and-Build Theory with the offender population by examining the relationships between key constructs of the theory: positive affectivity, negative affectivity, and subjective well-being. The results of this study provide support for the potential use of the Broaden-and-Build Theory with offenders. Offenders with high positive
affectivity also have high subjective well-being and low negative affectivity. Furthermore, positive affectivity, education level, and the familial relationship of having children serve as significant predictors of prosocial behavior. Family life satisfaction, a dimension of subjective well-being does not seem to share a similar relationship with positive affectivity and prosocial behavior as subjective well-being. Finally, high positive affectivity and low negative affectivity seem to be the most influential factors of engagement in prosocial behaviors. The results of this study have addressed a gap in discourse of the Broaden-and-Build Theory and offender counseling that may serve to further explore how integrating principals of Positive Psychology might be beneficial in the treatment outcomes of offenders.
Chapter Five

Discussion and Conclusion

The purpose of chapter five is to discuss the results of the study and to make connections between these current results and relevant discourse in the literature. This chapter presents a summary of the study, including a review of the definition of the problem and literature as well as a discussion of the research questions, hypotheses, and statistical analyses utilized to determine the outcomes of the study. Lastly, implications for integrating principals of Positive Psychology into offender counseling are considered.

Overview of the Study

Rates of incarceration in the United States have risen over 500% over the last 30 years (The Sentencing Project, 2014). Additionally, increases in offenders diagnosed with mental illness, serious mental illnesses, and substance use disorders have steadily increased since the deinstitutionalization movement of the 1960s (Cox et al., 2015; O’Keefe & Schnell, 2007). Research indicates that rates have reached as high as 15% of incarcerated men and 30% of incarcerated women who meet criteria for a mental health disorder as defined by the Diagnostic and Statistical Manual 5. Furthermore, as many as 75% meet criteria for co-occurring substance use disorders (Cox et al., 2015). Recidivism also remains problematic for the correctional system as over 75% of those who are released from jails or prisons are reincarcerated within five years of their release (Durose et al., 2014; James, 2015). Of those victims of recidivism, offenders with mental illness and offenders with serious mental illness experience recidivism at higher rates than those without mental illness (Cox et al., 2015; James, 2015; O’Keefe & Schnell, 2007; Reingle et al., 2014). Current models of offender counseling are pathologizing; focusing solely on the maladaptive behavior of the offender without regard for the interpersonal
needs and drives of the individual. However, with the rise of offenders with substance use disorders and mental health concerns, a shift in treatment strategies that emphasize the interpersonal needs of the individual as well as the maladaptive behaviors of the offender could produce more positive outcomes for these offenders, including a reduction in recidivism. The field of Positive Psychology provided approaches to counseling that do just that. Using the Broaden-and-Build Theory from Positive Psychology, this study sought to validate the principals of the theory with the offender population to provide support for integrating Positive Psychology into offender counseling.

Chapter one presented the argument that the field of offender counseling needs to begin applying a more integrated and holistic approach to treatment strategies. Information was provided about rising incarceration and recidivism rates. Disparities in the incarceration of racial and ethnic minorities and the economically disadvantaged and how this impacts those with mental illness, serious mental illness, and substance use disorders were noted. The challenges faced by offender reentry programs were described and current models of offender counseling were outlined. These models included Cognitive Behavioral Therapy, Relapse Prevention, the Self-Regulation Model, the Risk, Need, Responsivity Model, and the Good Lives Model/Good Lives Desistance-Model. Though much research has validated the efficacy of these models, the pathologizing nature of these models have the potential to produce feelings of guilt and shame within offenders and further drive them towards criminal behavior (Jones, 2014). Thus, chapter one ended by presenting a rational for a model of offender counseling utilizing Positive Psychology, specifically the Broaden-and-Build Theory, that emphasizes increasing characteristics such as positive affectivity and subjective well-being to better prepare offenders to lead productive lives post-incarceration.
Chapter two reviewed the relevant literature regarding Positive Psychology, the Broaden-and-Build Theory, and the key constructs of the theory: positive affectivity, subjective well-being, and prosocial behavior. Evidence of the efficacy of Positive Psychology in treating mental illnesses was demonstrated and the importance of promoting strengths and flourishing in an effort to help individuals lead meaningful, fulfilling, and enriched lives. Studies reviewed provided evidence of the positive relationship between positive affectivity, subjective well-being, and prosocial behavior. Finally, the importance of utilizing these constructs in the promotion of prosocial behavior was explained.

The research methodology of the study was delineated in chapter three. The chapter described the research questions and hypotheses that would be examined, the method and steps to the research process, and the statistical analysis used to interpret the data. Chapter four depicted the statistical results of the study. First, the chapter provided a review of the methodology, research questions, and hypotheses. Then, the chapter identified the study’s findings by providing a description of the sample and the results of the various statistical tests that were ran to answer the hypotheses put forth by the researcher. The following section proffers a further discussion of the research findings as it pertains to each hypothesis.

**Discussion of Major Research Findings**

The purpose of this study was to validate the Broaden-and-Build Theory with the offender population. Thus, this study examined the key constructs of the theory, positive affectivity, negative affectivity, and subjective well-being and the relationship that may exist between these characteristics and prosocial behavior. Additionally, due to the research findings presented in the literature review that highlighted the importance of family life satisfaction to engagement in prosocial behavior (Mapham & Hefferon, 2012), this construct was also explored.
A sample of 109 offenders currently on probation at four local probation offices representing five jurisdictions in Hampton Roads and Central Virginia completed a paper-and-pencil survey. The survey included a demographic questionnaire and four formal assessments: (a) the Positive and Negative Affectivity Schedule (PANAS), (b) the Satisfaction with Life Scale (SWLS), (c) the Satisfaction with Family Life Scale (SWFLS), and (d) the Prosocial Tendencies Measure (PTM). The PANAS consisted of two subscales that measured positive affectivity and negative affectivity. The SWLS measured subjective well-being. The SWFLS measured family life satisfaction and the PTM measured engagement in prosocial behavior. Statistical analyses were conducted using the Statistical Package for the Social Sciences (SPSS). Tests included univariate, bivariate, and multivariate levels of comparison to examine the relationships between the constructs measured, t-tests to make group comparisons, and multiple regression.

Sample

The participants of the sample provided demographic information related to their age, gender, level of education, race/ethnicity, employment status, annual household income, marital status, having children and number of children they had, types of criminal offences committed, number of incarcerations, and total length of incarcerations. The researcher obtained comparable demographic data of each of the populations of the participating agencies to make comparisons of the sample to the population. These data included age, gender, race, employment status, and marital status. Some of the demographic information collected, including level of education, annual household income, having children/number of children, number of incarcerations and total length of incarceration, was not information that was tracked by the participating agencies and thus, comparisons to the population were not made. Finally, a considerable number of participants chose not to respond to the question about types of criminal offences committed,
therefore, comparisons to the population were not made. Figures 4.1 through 4.12 illustrate the demographic data obtained from the sample.

For the most part, the participant sample of the study reflected the characteristics of the populations from which they came. For example, the mean age of the sample was similar to the mean age of the population except for Agency 4 where the mean age of the sample was significantly lower than the mean age of the population. The gender distribution of the sample was also similar to the gender distribution of the population. The sample consisted of predominantly male participants which was reflective of the population except for at Agency 2 where the sample contained a higher distribution of female participants. The race/ethnicity distribution of the sample was disproportionately represented by minorities. Half of the participant sample (49.5%) was Black or African American. Thus, the sample was consistent with research findings indicating a disproportionate representation of racial and ethnic minorities in the corrections system (The Sentencing Project, 2014).

The majority participants were employed (64.22%) either full-time or part-time. Again, the sample was relatively representative of the population; however, the sample obtained from Agency 3 had statistically significant fewer participants who were employed than the population. Though the employment rate of the sample was high, the annual income was low. Fifty-five percent of the sample had annual incomes of $20,000 or less. Again, these descriptive statistics of the sample mirrored statistics collected across the country reflecting a heavy presence of the economically disadvantaged being involved in the legal system (The Sentencing Project, 2014). The marital status distribution of the sample was also representative of the population. In fact, all samples obtained from the participating agencies were non-significantly different from the population at each of those agencies. Although the present study is representative of the
population from which the sample was obtained in several demographic categories, generalization to offenders should be made with caution. Considering the sample size and sampling method utilized in the study, generalizations to the entire offender population cannot be made. Though convicted of the crimes committed, about a third of the participants of the sample had no incarceration history. Therefore, the results may not be generalizable to incarcerated offenders. Replication of the study using a participant sample of incarcerated offenders can increase the generalizability of the results.

**Dependent Variables.**

**Positive and Negative Affectivity.** Positive affectivity represents the affective response to pleasurable engagement with the environment (Caprara et al., 2016). Pleasant emotions such as joy, contentment, excitement, interest, and enthusiasm encompass positive affectivity (Caprara et al., 2016). Negative affectivity represents a dimension of unpleasant experiences and subjective distress. Emotional experiences such as anger, contempt, disgust, guilt, fear, and nervousness serve as negative affectivity. In the present study, the Positive and Negative Affectivity Schedule (PANAS) was used to measure positive and negative affectivity. The PANAS, was created by Watson et al. (1988) to measure the temporal experiences of positive and negative affect. Temporal experiences that can be assessed by the PANAS include at this moment, today, past few days, past week, year, and in general. For the purpose of this study, participants were asked to rate their positive and negative affective experiences over the past week. Scores range from 10 to 50 with higher scores representing higher levels of positive or negative affect.

In the present study, scores ranged from 10 to 50 on the positive affectivity subscale with a mean of 36.24 ($SD = 8.47$) and scores ranged from 10 to 44 on the negative affectivity subscale
with a mean of 18.83 ($SD = 7.97$). In a study conducted by Watson et al. (1988), the mean of the positive affectivity subscale was 32 ($SD = 7$) and the mean of the negative affectivity subscale was 19.5 ($SD = 7$) in a sample of college students. The results on the positive affectivity subscale of the present study were significantly different from the validation study ($t(693) = 5.6$, $p < .001$). The results on the negative affectivity subscale of the present study were non-significantly different from the validation study ($t(693) = -.89$, $p > .05$). Offenders had significantly higher positive affectivity than the sample from the Watson et al. (1988) study.

**Subjective Well-Being.** According to the Broaden-and-Build Theory, high positive affectivity increases an individual’s assessment of subjective well-being (Lyubomirsky et al., 2005). Subjective well-being is an individual’s assessment of happiness or optimal experience and functions (Ferguson et al., 2009). Individuals high in subjective well-being in turn are more likely to display empathy toward others and have higher volunteerism and community engagement. In other words, these individuals are more likely to engage in prosocial behaviors. The Satisfaction with Life Scale (SWLS) was used to measure subjective well-being in this study. The SWLS is a commonly used metric of subjective well-being because of its brevity and simplicity (Pavot & Diener, 1993). Scores range from 5 to 35.

In the present study scores ranged from 5 to 32 with a mean of 18.37 ($SD = 6.95$). Participants in this sample scored higher in subjective well-being than a sample of male prison inmates ($M = 12.3$, $SD = 7$) (Joy, 1990) but lower than a sample of abused women ($M = 20.7$, $SD = 7.4$) (Pavot & Diener, 1993). Thus, the scores in this sample were consistent with findings in the previous literature (Pavot & Diener, 1993). Though the sample consisted of individuals who have faced the extremely aversive situation of being arrested and convicted of a crime, they managed to reported levels of subjective well-being consistent with the general population.
including college student samples (Balatsky & Diener, 1993), a sample of divorced, separated, and widowed individuals (Arrindell, Meeuwesen, & Huyse 1991) and a clinical sample of clients in a private practice (Pavot & Diener, 1993).

**Family Life Satisfaction.** Though not an original construct of the Broaden-and-Build theory, the literature has provided conflictual evidence regarding the importance of familial connection in offenders’ rehabilitation. Ward (2002) asserts that desisting offenders act in ways to increase their primary goods such as psychological well-being, goals of personal strivings, material well-being, health, productivity, intimacy, safety, community, and emotional well-being. Those whose primary goods are related to social life tend to emphasis strong family connections (Ward, 2002). Therefore, family life satisfaction becomes a strong motivation for increased engagement in prosocial behaviors. This assumption was supported by a study conducted by Mapham and Hefferon (2012) where the participants identified familial relationships as motivating factors for desisting maladaptive behaviors and engaging in more prosocial behaviors. Consistent with these findings, Slaght (1999) found that emphasizing family relationships before and after release increased positive outcomes for offenders with substance use disorders. However, Heidemann, Cederbaum, and Martinez (2014) found that support from others but not friends or family was positively correlated with life satisfaction because friends and family tend to be sources of stress for offenders. Thus, research indicates that family life satisfaction can be, but not always, predictive of engagement in prosocial behavior.

Thus, the researcher sought to explore the relationship between family life satisfaction and positive affectivity, negative affectivity, subjective well-being, and prosocial behavior. A dimension of subjective well-being, family life satisfaction addresses the quality of familial
relationships and interactions (Zabriskie & McCormick, 2003; Zabriskie & Ward, 2013). In an effort to maintain consistency in the survey, the researcher chose to use the Satisfaction with Family Life Scale (SWFLS) as a measure of family life satisfaction. SWFLS was modified from the SWLS and includes the same five questions but adds the term “family life”. Scores range from 5 to 35. In the present study, total scores ranged from 5 to 35 with a mean of 18.37 ($SD = 6.95$). Scores of the present sample were consistent with several studies utilizing the SWFLS including samples of participants with a female adolescent in mental health treatment (Zabriskie & Freeman, 2004) and participants with an adolescent in mental health treatment (Townsend & Zabriskie, 2010). However, the present sample mean score was visibly lower than a national sample of general families (Agate, Zabriskie, Agate, & Poff, 2009).

**Prosocial Behavior.** When it comes to offender treatment, increasing engagement in prosocial behavior becomes an important therapeutic treatment goal. The more likely an offender is to engage in prosocial behaviors, the less like that offender is to experience recidivism (Healy 2010; Tien et al., 2015). Prosocial behavior is defined as willful, deliberate behavior that benefits others regardless of the motivations and intentions of the actor (Kosek, 1995). As reviewed in chapter two, the literature suggests that by increasing positive affectivity and subjective well-being individuals are more likely to engage in prosocial behaviors (Lyubomirsky et al., 2005). However, no studies that support this link have been conducted with samples of offenders. Thus, the present study sought to create a predictive model of prosocial behavior using a sample of offenders.

The study utilized overall scores on the Prosocial Tendencies Measure (PTM) to assess engagement in prosocial behavior. This 23-item scale addresses the numerous prosocial behaviors in which an individual might engage. Total scores on the metric range from 23 to 115.
In the present study, scores ranged from 43 to 101 with a mean of 71.23 ($SD = 12.32$). Mean scores of the sample were moderately lower than a sample of college students whose mean was 76.59 ($SD = 12.19$) (Carlo & Randall, 2002). However, lower scores on a measure of prosocial behavior can be expected from a sample consisting of individuals who have historically demonstrated maladaptive behaviors which led to criminal convictions. Nevertheless, the dispersion of scores of the current sample displayed a normal distribution pattern and not the floor effects anticipated by the researcher. Thus, offenders in the sample did demonstrate the propensity to engage in prosocial behaviors.

**Research Questions and Hypotheses**

The present study explored the following research questions: (a) What is the relationship between offenders’ experiences of positive affectivity, negative affectivity, subjective well-being, family life satisfaction and prosocial behavior? and (b) How do familial relationships impact offenders’ experiences of positive and negative affectivity, subjective well-being, and prosocial behavior? The following hypotheses were investigated:

1. Positive affectivity will be positively correlated with subjective well-being, family life satisfaction, and prosocial behavior.
2. Negative affectivity will be negatively correlated with positive affectivity, subjective well-being, family life satisfaction and prosocial behavior.
3. Offenders who are single or have no children will have significantly lower positive affectivity, subjective well-being, family life satisfaction and prosocial behaviors and significantly higher negative affectivity than offenders who are married or have children.
4. Positive affect, negative affect, subjective well being, and family life satisfaction will be predictive of engagement in prosocial behavior.
Below is a discussion regarding the findings of these hypotheses.

**Hypothesis One**

The first hypothesis investigated whether offenders’ scores on the PANAS positive affectivity scale would be positively correlated with their scores of subjective well-being as measured by the SWLS, family life satisfaction as measured by the SWFLS, and engagement in prosocial behavior as measured by the PTM. To test this hypothesis, one-tailed Pearson product moment correlations were computed. These correlations resulted in statistically significant correlations between positive affectivity and subjective well-being ($r(107) = .36, p < .01, r^2 = .13$) and between positive affectivity and prosocial behavior ($r(107) = .39, p < .01, r^2 = .15$). However, the correlation between positive affectivity and family life satisfaction was statistically non-significant ($r(107) = .16, p > .01$). Though the results were statistically significant, the correlation coefficients were modest at best. Nonetheless, the hypothesis was partially supported in that as positive affectivity increases so does subjective well-being and prosocial behavior. On the other hand, this relationship does not exist between positive affectivity and family life satisfaction.

Positive affectivity was found to be positively related to subjective well-being and prosocial behavior. In a study conducted by Fredrickson and Joiner (2002), support for the assumption of the Broaden-and-Build theory that positive emotions trigger upward spirals towards emotional well-being was found. As subjective well-being and prosocial behavior encompass aspects of emotional well-being, the results of the present study added further support for this assumption of the Broaden-and-Build Theory. Fredrickson and Losada (2005) found that experience of positive emotions was related to human flourishing and Cohn et al. (2009) found that positive emotions increase life satisfaction. Williams et al. (2013) found that positive
emotions increased motivation to engage in behaviors that lead toward academic success. The results of the present study added further support for the findings of Williams et al. (2013) by extending the link between positive emotions and behaviors that lead toward academic success to a broader range of prosocial behaviors.

Because family life satisfaction is not an original construct of the Broaden-and-Build Theory, the results of the present study indicated that family life satisfaction may not play a critical role in the theory. Such results added to the debate in the discourse regarding the relationship of family life satisfaction with positive affectivity, subjective well-being, and prosocial behavior. Similar to the results of this study, Heidemann et al. (2014), found that familial relationships were not correlated with life satisfaction. Other researchers have found positive correlations between positive familial relationships and subjective well-being (Mapham & Hefferon, 2012; Slaght, 1999, Ward, 2002). In these studies, family life satisfaction was found to be important to those who valued family and positive familial relationships. Perhaps the sample of the present study did not have enough individuals who valued family and positive familial relationships for differences to be observed. Nonetheless, the results of the study partially validated the premises of the Broaden-and-Build theory.

**Hypothesis Two**

The second hypothesis asserted that offenders’ scores on the PANAS negative affectivity scale would be negatively correlated with their scores of subjective well-being as measured by the SWLS, family life satisfaction as measured by the SWFLS, and engagement in prosocial behavior as measured by the PTM. Like hypothesis one, one-tailed Pearson product moment correlations were computed to test this hypothesis. These correlations resulted in statistically significant correlations between negative affectivity and positive affectivity ($r(107) = -.31, p <$
.01, $r^2 = .1$) and negative affectivity and subjective well-being ($r(107) = -.22, p < .01, r^2 = .05$).

However, the correlations between negative affectivity and family life and negative affectivity and prosocial behavior were not significant. Thought the results of two of the correlations were statistically significant, the correlation coefficients were modest at best. As indicated by the coefficients of determination, very little of the reliable variance between the two variables was shared.

The results of hypothesis two provided further support for the applicability of the Broaden-and-Build Theory to offender populations. Though the relationships were weak, the findings were consistent with previous studies that used samples of college students and working adults. Fredrickson et al. (2000) validated the undoing hypothesis that positive emotions negate the aftermath of negative emotions. Thus, as positive emotions increase, negative emotions decrease. The findings of the present study supported this relationship. Işık and Üzbe (2015) also found a negative relationship between negative affectivity and positive affectivity and negative affectivity and subjective well-being.

The results of hypothesis two provided further support for the idea that family life satisfaction is not a crucial construct of the Broaden-and-Build Theory. An extremely weak and non-significant relationship was found between negative affectivity and family life satisfaction. This relationship is also supported by previous literature (Mapham & Hefferon, 2012; Slaght, 1999, Ward, 2002). In a critique of the Broaden-and-Build Theory, Rathunde (2000) argued that negative emotions played an essential role in building personal and social resources that comprise aspects of subjective well-being. The results of the present study would suggest that there is no relationship between negative affectivity and subjective well-being.
Hypothesis Three

The third hypothesis proposed that offenders who were single or had no children would have significantly lower positive affectivity, subjective well-being, family life satisfaction, and prosocial behaviors and significantly higher negative affectivity than participants who were married or had children. Because of the small number of married participants obtained in the sample (n = 15), multiple regression analysis was used to determine if being married, having children, and the interaction of the two were predictive of the four outcome measures of interest. Hypothesis three was not supported by the regression analysis. No significant predictive model could be found. However, having children was a significant predictor of positive affectivity and negative affectivity. Follow up t-tests confirmed that participants who had children had higher mean positive affectivity scores and lower mean negative affectivity scores than participants who didn’t have children.

The findings of hypothesis three lend support for the importance of familial relationships in an individual’s affective experience. The results offer an explanation as to the conflicting findings in the literature. Perhaps familial relationships in general are not related to the constructs of interests in the study; rather, specific familial relationships such as parent-child relationships do positively impact desistence. Results of the present study found that participants who had children had higher positive affectivity than participants who did not have children, and positive affectivity was positively correlated with self-reported propensity towards prosocial behavior. Research indicates that offenders identified their role as parents as important factors in desisting behavior (Mapham & Hefferon, 2012). Additionally, offenders who found familial relationships as increased sources of stress referred to relationships with their parents, siblings,
and significant others as most stressful (Heidemann et al., 2014). Thus it would seem that
having children, serve as motivating factors for offenders to engage in change behaviors.

Giordan et al. (2002) proffered the theory of cognitive transformation which asserts that
offenders who are successful at desisting from criminal activities must create new identities as
non-offenders through an active and intentional decision-making process. Findings of a study
conducted by Healy (2010) provided support for the theory of cognitive transformation. The
results of hypothesis three extend these findings by identifying having children as a key factor in
offenders’ experience of positive and negative affectivity. Experiencing positive affectivity is a
crucial component of the Broaden-and-Build Theory. Fredrickson (1998) assert that positive
emotions broaden one’s scope of attention and build the propensity for an individual to access
resources in order to support them through aversive situations. Lyubomirsky et al. (2005) assert
that positive affectivity is positively correlated to subjective well-being and that by increasing
subjective well-being potential for engagement in prosocial behavior is also increased.
Additional research is needed to further explore the role having children plays in the relationship
of positive affectivity, subjective well-being, and prosocial behavior.

Hypothesis Four

The fourth hypothesis proposed that positive affectivity, negative affectivity, subjective
well-being, and family life satisfaction would be predictive of engagement in prosocial behavior.
This hypothesis, like hypothesis one and hypothesis two, was partially supported. The multiple
regression identified that positive affectivity was the only significant predictor of prosocial
behavior \( F(1, 107) = 19.66, p < .001 \). These findings provide new insight on the factors that
promote engagement in prosocial behavior in offenders. Warren et al., (2013) found that peer
affirmations and peer corrections effectively motivated offenders to engage in prosocial
behavior. Thus, the findings of hypothesis four provide a possible explanation for this connection. Peer affirmations and peer corrections were found to increase positive affectivity which, according to the findings of this study, serve as a significant predictor of prosocial behavior. In a longitudinal study, Caprara et al. (2016) found that high positive affectivity was related to increased positivity, which included engagement in prosocial behavior from middle adolescence to early adulthood.

The predictive model produced by the regression analysis indicated that positive affectivity only accounted for 22% of the variance in predicting prosocial behavior. Thus, other factors must account for additional variance. Using the demographic data collected in the survey, the researcher sought to examine which, if any, of these factors accounted for any additional variance. The regression analysis yielded a significant model with three new significant predictors. In addition to positive affectivity, level of education, number of children, and having children were also found to be significant predictors in the model. Together, the four predictors accounted for 26% of the variance. Representing only a 3% increase in variance, these variables add minimal explanatory power to the model. Thus, other variables, yet to be discovered, offer stronger explanatory power for the model. Further research is needed to uncover these variables.

Nonetheless, these findings are reflective of previous literature as well as findings in the present study. In a study conducted by Jackson & Innes (2000) higher levels of education as well as full-time employment prior to incarceration were predictive of prosocial behavior. The findings in hypothesis three of this study also supported that having children was predictive of positive affectivity which has been linked to prosocial behavior. Furthermore, the number of children seemed to impact this relationship. Nonetheless, the new model with four predictor
variables only account for 26% of the variance. Further research is needed to identify the other variables that account for the variance in this predictive model.

**Implications**

Offenders, upon their release from incarceration, face many aversive circumstances as they attempt to reintegrate into society. Research demonstrates that the majority of these individuals are unsuccessful at reintegration and find themselves reincarcerated within five years of their release (Durose et al., 2014, James, 2015). Though many effective models of offender counseling exist, these models are pathologizing in nature as they focus specifically on the maladaptive behaviors of the offender and their criminogenic needs. Such a focus on the offender’s misbehavior has the potential to produce guilt and shame, pushing the offender toward more criminal behaviors rather motivating them toward positive change (Jones, 2014).

Furthermore, most of the current models of offender counseling were specifically created for treating sex offenders. Research demonstrates several key differences between the criminal drives of sex offenders and non-sex offenders (Bouman et al., 2008; Garos et al., 2004; Lussier et al., 2001; Neidigh & Tomiko, 1991). Finally, the corrections system has been flooded with offenders with mental illness, serious mental illness, and substance use disorders who require specialized treatment in order to meet their interpersonal and mental health needs (Cox et al., 2015; O’Keefe & Schnell, 2007; Reingle et al., 2014). Thus, a new model of offender counseling, holistic and comprehensive in nature, is needed that will prepare offenders to live their best lives post-incarceration.

This study attempted to validate the Broaden-and-Build Theory with the offender population. The Broaden-and-Build Theory asserts that positive emotions such as joy, gratitude, interest, contentment, love, and compassion have the capacity to broaden an individual’s
attention and thinking, and in turn build an individual’s capacity to seek out appropriate resources when faced with a problem (Fredrickson 1998, 2001; Fredrickson et al., 2008). Such behavior increases the likelihood of a positive outcome despite the presence of an aversive stimulus and consequently increases the individual’s propensity to experience positive emotions in the future (Fredrickson, 2001). Much research has been conducted to validate with Broaden-and-Build Theory; however, no research to date has applied the Broaden-and-Build Theory to offender populations. The findings of the current study provide important implications for the field of offender counseling.

The findings of the study partially validated that Broaden-and-Build Theory with offender populations. Consistent with previous literature, the study found that positive affectivity was positively correlated with subjective well-being and prosocial behavior. Increased positive affectivity also serves to undo the harmful effects of negative emotion (Fredrickson et al. 2000). Known as the undoing hypothesis, this assumption was also validated in the present study as positive affectivity was found to be negatively correlated with negative affectivity. Increasing offender’s positive affectivity is likely to increase their perceived subjective well-being and prosocial behavior, decrease negative affectivity, and undo the harmful effects of negative emotional experiences.

As offenders face many aversive situations, having the tools that will support them in achieving positive outcomes becomes crucial in ensuring that these individuals can lead lives as productive citizens when they are released from the correctional system. As the only significant predictor of prosocial behavior, positive affectivity emerged as the most essential component of the Broaden-and-Build Theory for offenders. Such a finding indicates that offender counseling should focus on increasing offenders’ propensity to experience positive emotions, no matter their
circumstances. Not only will their perceived subjective well-being increase, but their negative affectivity will decrease. Ultimately, they will engage in more prosocial behaviors and perhaps, be less likely to reengage in the maladaptive behaviors that led them toward criminal activity. Current treatment models of offender counseling emphasize focusing exclusively on offenders’ criminogenic needs; however, the findings of this study suggest the potential effectiveness of a Positive Psychology approach.

The current discourse on the role of familial relationships in desistence behavior of offenders is divided; with some research findings indicate that familial relationships support and encourage desistance in offenders (Mapham & Hefferon, 2012; Slaght, 1999; Ward, 2002) while other research findings indicate that familial relationships complicate and challenge desistance (Heidemann et al., 2014). Despite a relatively modest relationship, the findings of this study suggest that familial relationships, particularly having children, play a role in offenders’ experiences of positive affectivity. The finding suggests that offenders who had children experienced more positive affectivity and less negative affectivity than offenders who did not have children. Currently, incarceration results in the separation of offenders from their friends and family. In some facilities, visitation consists of only seeing loved ones on a television monitor with no physical contact whatsoever. Such a practice may be more detrimental for offenders and for their family members. More research is needed to better understand the nature of familial relationships and how maintaining significant, engaging relationships with children and other family members might drive offenders toward prosocial growth.

The results of one of the multiple regression analyses identified educational level as one of the significant predictors of prosocial behavior. This finding has also been supported in previous literature (Jackson & Innes, 2000). However, Harlow (2003) found that 41% of
offenders housed in U. S. prisons and local jails and 31% of offenders on probation had not completed high school or its equivalent compared to 18% of the general population. Additional, education has been identified as a key intervention dimension of reentry programs designed to effectively prepare offenders for reintegration (Seiter & Kadela, 2003; Petersilia, 2004; James, 2015). Though education is not a direct service provided by counselors, mental health professionals working in corrections must advocate for educational programs to be integrated into the rehabilitation process of offenders housed in correctional facilities. Because research indicates that higher education plays a significant role in offender engagement in prosocial behaviors; ensuring that offenders have access to quality education while incarcerated may increase positive outcomes post-release.

**Future Research**

The present study explored the characteristics that may relate to and potentially predict prosocial behavior in offenders. Though the findings of the study provided support for the use of the Broaden-and-Build Theory with offender population, more research is needed to better understand the constructs of the theory as they apply to offenders. Specifically, the study should be replicated in order to strengthen the support of the findings. The present study utilized a sample of offenders currently on probation. Though all participants had criminal convictions on their records, many of them had experienced no jail time. Replicating the study with offenders on parole, incarcerated offenders, and offenders with mental illness, serious mental illness, and substance use disorders will expand the understanding of the relationship between positive affectivity, negative affectivity, subjective well-being, family life satisfaction, and prosocial behavior.
As previously discussed, more research is needed to explore the impact of familial relationships on offender desistence and prosocial growth. Research findings indicating negative impacts of familial relationships specifically identified strained, conflictual relationships as negatively impacted outcomes of offenders’ attempts at desistence (Heidemann et al., 2014). However, the study makes no mention of positive familial interaction. Additionally, the findings of the present study indicated that children play a significant role in offender positive affectivity and prosocial behavior. Further research is needed to provide additional support for this finding as well as advance the understanding of how children impact prosocial growth of offenders. Ultimately, further exploration of how positive familial relationships impact offender prosocial growth will guide mental health professionals working in corrections as well as correctional administrators in creating policies that encourage maintenance of positive familial interactions during incarceration periods.

The results of the study partially validated the Broaden-and-Build Theory with offender populations. Appropriate next steps include creating a new treatment model of offender counseling utilizing the underpinnings of the Broaden-and-Build Theory. Research on integration positive psychotherapy intervention with offender populations is needed in order to identify effective treatment strategies. Experimental studies are needed to create empirical evidence of the effectiveness of this new model. Exploration of the model’s ability to reduce psychiatric symptoms in offenders as well as reduce recidivism will add to the body of knowledge of the field of offender counseling. Research should focus on populations of offenders on community supervision (probation and parole), incarcerated offenders, and offenders with psychiatric conditions including mental illness, serious mental illness, and substance use disorders. Differences between these populations of offenders may exist and
research is needed to identify what these differences are and how best to address treatment with each of these subgroups of offenders.

**Informed Critique and Limitations**

As with any study using human subjects, limitations were expected. Steps were taken to limit the threats to internal and external validity; however, generalizations of the results of the study must be made with caution. Limitations and an informed critique of the study are considered below.

**Research Design**

This study was heuristic in nature and was designed to explore the relationships, if any, between key constructs of the Broaden-and-Build Theory. Of the four hypotheses proffered, three were partially supported. Hypothesis one yielded statistically significant correlations between positive affectivity, subjective well-being, and prosocial behavior and hypothesis two yielded statistically significant correlations between negative affectivity, positive affectivity, and subjective well-being. Correlations only indicate presence and direction of a relationship, not causation. Thus, further experimental research is needed in order to understand causal factors underpinning the relationship between these factors.

**Sampling**

The study’s target population was incarcerated offenders. Unfortunately, the researcher was unable to access incarcerated population because of the time constraints of the study and the protected status of the offender population. However, the researcher gained access to offenders by contacting local probation offices in the Hampton Roads and Central Virginia area. Additionally, many of the participants reported spending no time incarcerated. Thus, the sample may not clearly be representative of incarcerated offenders. Additionally, the sample was
collected from a small region in the state of Virginia and therefore, may not be representative of a national demographic of offenders. Thus, replication of the study with additional and differing samples of offenders is imperative to strengthening the support of the findings.

Convenience sampling may also impact the generalizability of the results. First, the study attempted to identify a predictive model of prosocial behavior. Volunteering to participate in the study is an act of prosocial behavior. Thus, the study may have attracted offenders who engage in more prosocial behaviors. Differences in offenders who chose not to participate and those who chose to participate may exist. Further the sample yielded unequal representative of various demographic groups. For instance, only 15 participants in the study were married. This limited the researcher’s ability to make comparisons between groups and may have impacted the internal validity of the study. Furthermore, many of the participants chose not provide demographic information regarding the types of convictions currently on their record. The researcher was unable to explore how different types of offences impact the outcome measures of the study.

**Instrumentation**

One final limitation of this study is instrumentation. Each of the measures used in the study were self-report instruments. Thus, participants may have given inaccurate answers in order to appear more socially desirable. Such reporting methods could impact the internal validity of the study. Given that the sample consisted of offenders who have a history of criminal behaviors, participants may have been more inclined to answer questions in ways that made them appear more favorable and less deviant. Replications of the study using observational data and corroborating reports from friends, family, probation officers, and/or correctional officers would strengthen the findings of the present study.
Conclusion

The present study sought to validate the Broaden-and-Build Theory from Positive Psychology with the offender population. Much research has explored and validated the theory with populations of college students and working adults (Cohn et al., 2009; Fredrickson, 1998, 2001; Fredrickson & Branigan, 2005; Fredrickson & Joiner, 2002; Fredrickson & Losada, 2005; Fredrickson et al., 2000; Fredrickson et al., 2008; Tugade et al., 2004; Tugade & Fredrickson, 2004). However, to date, no research has attempted to apply the Broaden-and-Build Theory to the offender population. The results of the study indicated that the Broaden-and-Build Theory is relevant to the offender population. Thus, the field of offender counseling may benefit from applying a more strengths-based approach to its treatment strategies.

The growing offender population attracted the attention of former President Barack Obama and his Administration (Garunay, 2016). Former President Barack Obama and his Administration provided federal funds for researchers to begin studying how implementing strong reentry programs for offenders in turn create stronger communities (Garunay, 2016). Furthermore, research on reentry programs found that strong reentry programs start during incarceration and continue post release, are intensive in nature and last at least six months, use cognitive behavioral therapy techniques, and create individualized treatment plans (Seiter & Kadela, 2003). Current models of offender counseling neglect to incorporate these recommendations. Recidivism rates in the United State indicate that, overall, many of these programs fail to adequately prepare offenders for successful reintegration into society. The findings of the present study introduce the viability of a new model of offender counseling using the theoretical underpinnings of the Broaden-and-Build Theory that may better address the needs of offenders and increase positive post-release outcomes.
References


Appendix A

Informed Consent

The purpose of this heuristic study is to explore the assumptions of the Broaden-and-Build Theory as it relates to the offender population. Information obtained from this study will be used to help create a strengths-based model of offender counseling. Participants in this project will be asked to complete a demographic questionnaire and three measures related to the Broaden-and-Build Theory. Your participation will require about 15-20 minutes. Answers will be available only to the researchers, retained in their files, and will be given a code in place of names. Your participation is voluntary and you may withdraw at any time without prejudice. No risk to the subject is anticipated, but some questions may result in mild stress or psychic discomfort. The researcher will be available via email to discuss the project’s objectives or procedures during or after completion of the questionnaire and can be contacted at kmjenkins@email.wm.edu.

If you agree to participate in the study, please read and sign the statement below:

I am willing to participate in a study of the applications of the Broaden-and-Build Theory to offender populations. I understand that this study is being conducted by Keosha M.-B. Branch, a doctoral candidate in Counselor Education and Supervision at the College of William & Mary. I also understand that the study is being conducted under the supervision of Dr. Charles Gressard, Chair of the Dissertation Committee.

As a participant in this study, I am aware that I will be asked to complete a demographic questionnaire and three measures related to the Broaden-and-Build Theory. These instruments have been made available in paper-and-pencil will take approximately 15-20 minutes to complete.

I am aware that my participation in this study is voluntary, and that I may refuse to participate or terminate my participation at any time without penalty. By participating in this study, I understand that there are no known risks to my physical or mental health.

Confidentiality Statement

As a participant in this study, I am aware that all responses to the assessments and the demographic questionnaire will be confidential. My name will not be associated with any reports of the study’s results.

I am also confirming that I am over the age of 18 and am currently enrolled in community supervision through the Virginia Department of Corrections.

I fully understand the above statements, and do hereby consent to participate in this study.

________________________________________________ __ _________________
Participant’s Signature      Date

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3966) ON 2016-07-18 AND EXPIRES ON 2017-07-18.
Appendix B

Demographic Questionnaire

1. What is your age?

___________

2. What is your gender?

(a) Female
(b) Male
(c) Transgender
(d) Other (please specify ________________)

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

(a) No high school
(b) Some high school
(c) High school graduate
(d) Some college
(e) Trade/technical/vocational school
(f) College graduate
(g) Some postgraduate work
(h) Postgraduate degree

4. Are you Hispanic/Latino (choose only one)?

(a) No, not Hispanic/Latino
(b) Yes, Hispanic/Latino

5. What is your race (choose one or more)?

(a) American Indian/Native American
(b) Asian
(c) Black or African American
(d) Native Hawaiian or Other Pacific Islander
(e) White

6. What is your employment status?

(a) Full-time employed
(b) Part-time employed
(c) Unemployed
(d) Retired
7. What is your current annual household income?

(a) $0-$20,000
(b) $21,000-$40,000
(c) $41,000-$60,000
(d) $61,000-$80,000
(e) $81,000-$100,000
(f) $100,000 +

8. What is your marital status?

(a) Single/never married
(b) Married
(c) Separated
(d) Divorced
(e) Widowed

9. How many children do you have?

_______________________________________

10. What types of criminal offences have you been convicted of? (Circle all that apply)

(a) Felonies only
(b) Misdemeanors only
(c) Both felonies and misdemeanors
(d) Drug related offences: drug smuggling, drug trafficking, drug possession etc.
(e) Drunk driving offences: DUls, DWIs
(f) Motor vehicle offences: vehicular manslaughter, hit and run, carjacking, etc.
(g) Sex offences
(h) Domestic offences: spousal abuse, child abuse, domestic violence, etc.
(i) Property offences
(j) White Collar offences
(k) Violent and Weapons offences
(l) Inchoate offences: conspiracy, solicitation, accessory, accomplice etc.

11. How many times have you been incarcerated?

_______________________________________

12. What is the total length of time (in years) you’ve spent incarcerated?

_______________________________________
Appendix C

Positive and Negative Affectivity Schedule

This scale consists of a number of words that describe different feelings and emotions. Read each item and then list the number from the scale below next to each word. Indicate to what extent you have felt this way over the past week.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Slightly or Not at All</td>
<td>A Little</td>
<td>Moderately</td>
<td>Quite a Bit</td>
<td>Extremely</td>
</tr>
</tbody>
</table>


Appendix D

Satisfaction with Life Scale

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

1. ____ In most ways my life is close to my ideal.

2. ____ The conditions of my life are excellent.

3. ____ I am satisfied with my life.

4. ____ So far I have gotten the important things I want in my life.

5. ____ If I could live my life over, I would change almost nothing.

Appendix E

**Satisfaction with Family Life Scale**

Below are five statements with which you may agree or disagree. Using the 1–7 scale below, indicate your agreement with each item by circling the appropriate number on the line following that item. Please be open and honest in responding.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Slightly Disagree</td>
<td>Neither Agree nor Disagree</td>
<td>Slightly Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

1. ____ In most ways my *family* life is close to my ideal.

2. ____ The conditions of my *family* life are excellent.

3. ____ I am satisfied with my *family* life.

4. ____ So far I have gotten the important things I want in my *family* life.

5. ____ If I could live my *family* life over, I would change almost nothing.

Appendix F

Prosocial Tendencies Measure

Below are a number of statements which may or may not describe you. Please indicate HOW MUCH EACH STATEMENT DESCRIBES YOU by using the scale below.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does Not Describe</td>
<td>Me at All</td>
<td>Describes Me</td>
<td>Somewhat</td>
<td>Describes Me</td>
<td>Describes Me</td>
</tr>
</tbody>
</table>

___ 1. I can help others best when people are watching me.
___ 2. It is most fulfilling to me when I can comfort someone who is very distressed.
___ 3. When other people are around, it is easier for me to help needy others.
___ 4. I think that one of the best things about helping others is that it makes me look good.
___ 5. I get the most out of helping others when it is done in front of others.
___ 6. I tend to help people who are in a real crisis or need.
___ 7. When people ask me to help them, I don't hesitate.
___ 8. I prefer to donate money anonymously.
___ 9. I tend to help people who hurt themselves badly.
___ 10. I believe that donating goods or money works best when it is tax-deductible.
___ 11. I tend to help needy others most when they do not know who helped them.
___ 12. I tend to help others particularly when they are emotionally distressed.
___ 13. Helping others when I am in the spotlight is when I work best.
___ 14. It is easy for me to help others when they are in a dire situation.
___ 15. Most of the time, I help others when they do not know who helped them.
___ 16. I think there should be more recognition for the time and energy people spend on charity work.
___ 17. I respond to helping others best when the situation is highly emotional.
___ 18. I never hesitate to help others when they ask for it.
___ 19. I think that helping others without them knowing is the best type of situation.
___ 20. One of the best things about doing charity work is that it looks good on my resume.
___ 21. Emotional situations make me want to help needy others.
___ 22. I often make anonymous donations because they make me feel good.
___ 23. I feel that if I help someone, they should help me in the future.