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THE EFFECTS OF RELATIONAL VICTIMIZATION ON THE PERCEIVED BARRIERS, CAREER DECISION-MAKING SELF-EFFICACY, AND CAREER ASPIRATIONS OF FEMALE OFFENDERS

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THE EFFECTS OF RELATIONAL VICTIMIZATION ON THE PERCEIVED BARRIERS, CAREER DECISION-MAKING SELF-EFFICACY, AND CAREER ASPIRATIONS OF FEMALE OFFENDERS

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University

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Abstract

THE EFFECTS OF RELATIONAL VICTIMIZATION ON THE PERCEIVED BARRIERS, CAREER DECISION-MAKING SELF-EFFICACY, AND CAREER ASPIRATIONS OF FEMALE OFFENDERS

By: Brooke A. Green, B.S.

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University.

Virginia Commonwealth University, 2013

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We explored the relations among relational victimization and career-related variables in a sample of 174 non-violent female felony offenders residing in a community corrections residential facility. Archival data was used from a larger career-related reentry program that represented a joint effort between investigators at the VCU Department of Psychology and staff from the Virginia Department of Correctional Education. Data analyses focused on the association between (a) recent experiences of relational victimization and (b) career aspiration complexity code, (c) career aspirations towards or away from socially-oriented careers, (d) perceived occupational barriers, and (e) career decision-making self-efficacy. Hypothesized associations among this set of variables were not seen in the data; however, offenders’ aspirations appeared to deviate from established norms. Implications for female offenders reentering the workforce were discussed.
The Effects of Relational Victimization on the Perceived Barriers, Career Decision-Making, Self-Efficacy, and Career Aspirations of Female Offenders

Ex-offender career development is vital because employment generally is considered important for successful reentry and, ultimately, serves as a deterrent from future crime (Uggen, 1999; Railey & Peterson, 2000). However, some researchers assert that offenders need to locate and obtain ‘quality employment’ in order to desist from criminal behavior and to successfully reintegrate (Uggen, 1999) so that these individuals are positioned to obtain meaningful employment and not ‘just a job, any job’ (Shivy et al., 2007). Quality employment seems to imply job prospects that are good matches for offenders’ interests and abilities (cf., Holland, 1985; 1996), vis-à-vis a job taken so as not to be in violation of probation or parole. This project seeks to examine variables associated with offenders’ self-reported career aspirations as they approach the career-related challenges of societal reentry.

In the vocational psychology literature, implementing an occupational choice begins with the process of identifying an appropriate career aspiration (Brown & Ryan-Krane, 2000). Only after individuals identify their career goals, can they focus on exploring potential avenues that allow them to work in their area of interest (Jome & Phillips, 2013). This paper will examine several key variables associated with the occupational aspirations of non-violent female felony offenders readying for career reentry. These variables include perceived occupational barriers, career decision-making self-efficacy and their experience of relational victimization- - a variable that, to date, has received scant attention in the vocational literature.
Relational victimization includes experiences of being the target of another’s attempt to negatively impact one’s social status (Crick & Grotpeter, 1995) and has yet to be examined as a factor in female offenders’ career trajectory. Although there is evidence to suggest that victimization may have a negative impact on career-related variables (e.g., Kenny & Medvide, 2013; Strauser, Lustig, Cogdal, & Uruk, 2006), to date no studies appear to have examined relational victimization specifically. The current project uses archival data from a longitudinal study that investigated the effects of a career intervention for female offenders that was grounded in two empirically supported and widely researched career theories, Social Cognitive Career Theory (SCCT; Lent, Brown, & Hackett, 1994) and Holland’s theory of vocational personalities and work environment (1985; 1996). These theories are used to conceptualize the variables under consideration.

Career aspirations, the focus of this study, are defined as individuals’ desired or intended occupational goals (Gottfredson, 1981; Gray & O’Brien, 2007). Career aspirations differ from career or occupational alternatives because career aspirations are occupational goals identified under ‘ideal circumstances’ (Rojewski, 2004), whereas career alternatives are considered within the context of gender roles, the prestige of the occupation of interest, and the actual conditions of the labor market (Gottfredson, 1981). In lay usage the terms occupational alternatives and career aspirations are often used interchangeably, however this paper will focus solely on career aspirations.

Aspirations typically are operationalized by way of Holland’s theory of vocational personalities and work environments (1985; 1996) which offers a way to categorize both people and occupational environments into six types: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (collectively termed RIIASEC). Thus, career aspirations can
be understood by recoding them into the theoretically-derived RIASEC types. For example, the Holland Code (Holland & Gottfredson, 1996) and hence career aspiration of being a musician would fall under the Artistic category. Additionally, career aspirations can be assigned a complexity code associated with the work of Holland and his colleagues. The complexity code of an occupation reflects the cognitive demands that an occupation places on the incumbent.

In order to pursue a targeted career path after release, and not ‘just a job, any job’ (Shivy, et al., 2007) offenders’ first step is to identify their career aspirations. Offenders then can work on the successive tasks of exploring and specifying particular career choices and, finally, implementing those career choices. Potential factors that can compromise career aspirations are lack of social support, feelings of inadequacy, and perceived barriers such as the lack of resources for education (Rojewski, 2004). Career aspirations are an important concept of offenders’ career-related reentry and employment success.

Perceived occupational barriers (also referred to as perceived career-related barriers) are defined as obstacles to employment as viewed from the perspective of an individual (Albert & Luzzo, 1999). Career decision-making self-efficacy is defined as the belief that one can successfully complete the demands of making an effective decision regarding one’s career (Taylor & Betz, 1983). According to SCCT (1994), self-efficacy is developed and maintained through performance accomplishments, learning vicariously, social interactions, and physiological and emotional states (Bandura, 1977), with accomplishments considered the most influential factor. Both of these constructs receive attention in Lent et al.’s Social Cognitive Career Theory (1994), which posits that people develop and achieve occupational accomplishments via self-efficacy, outcome expectations and goals. Accomplishments are
likely to strengthen self-efficacy and create more positive outcome expectations, and/or fewer perceived barriers. Furthermore, SCCT describes perceived barriers as a type of outcome expectation, albeit a negative outcome, that is influential in the career development process. Both career decision-making self-efficacy and perceived occupational barriers are helpful to examine in offenders because they play a role in what people will avoid and what they will pursue in regards to career.

Female offenders are can be characterized as a vulnerable population, with disadvantaged histories that often include victimization experiences (Chesney-Lind, 1997; Wolff & Shi, 2010). Being victimized is associated with interpersonal conflict and distress (Briere & Rickards, 2007; Riggs & Kaminski, 2010; Bradley & Davino, 2007; Dutton & Hart, 1994, Cloitre, Koenen, Cohen, & Han, 2002; Street, Gibson, & Holohan, 2005) but also may be related to problems in establishing a suitable career path. Emotion-related difficulties in the career decision making process are related to a general tendency towards psychological distress and emotional volatility (Gati et al., 2011) and emotional difficulties have been implicated in problems with career and vocational identity development (e.g., Brown & Ryan-Krane, 2000; Lent et al., 2002; Hazan & Shaver, 1990). Notably, emotional difficulties have been shown to be the consequence of being relationally victimized (Sullivan, Farrell, & Kliwever, 2006).

Furthermore, Kenny & Medvide (2013) suggest that the consequences of interpersonal struggles can further complicate barriers for those experiencing gender, socioeconomic status, and minority status-related discrimination. In addition, social emotional skills, or the lack there-of, and the nature of interpersonal relations may impact career development (Di Fabio & Kenny, 2012). While the detrimental impact of workplace
victimization on career development seems to be supported by research (Aquino & Thau, 2009), the consequence of victimization outside of the workplace on career development is only a more recent focus (e.g., Strauser et al., 2006). Given the interplay between relationships within and outside of the workplace on career development (Richardson, 2012), it is important to examine whether relational victimization in prison is associated with female offenders’ career development trajectory. Given that female offenders experience interpersonal victimization at a disproportionately high rate compared to the general population (Chesney-Lind, 1997; Wolff & Shi, 2010), it seems likely that these negative experiences could impact the development of their career aspirations. This study takes the first step in exploring associations among this key set of career variables.

Female offenders who experience relational victimization during incarceration may internalize negative social interactions and hence proceed on a non-normative career trajectory after release. For example, individuals who are rewarded for participating in social settings will be more likely to seek out Social Occupations (Holland, 1976). Similarly, individuals who have experienced negative events associated with social settings may form career aspirations towards less socially-oriented experiences. The impact of victimization on career development was illustrated by Strauser et al. (2006) in their work with trauma survivors. These individuals exhibited interpersonal problems in the workplace and greater dysfunctional career-related beliefs (Strauser et al.). In addition, Strauser et al. discovered that traumatic experiences influenced victims’ career interests, such that survivors had less differentiated career aspirations and interests. Their work suggests that relational victimization may impact career aspirations and, hence, the career choices that an individual makes. Other researchers (Kelly & Lee, 2002) have found evidence that interpersonal
conflicts can adversely influence career decisions; leading career theorists (Brown & Rector, 2008) to call for a closer examination of interpersonal conflicts in the career development of women and people from disadvantaged backgrounds.

In this study, the relations among female offenders’ career aspirations, their recent experiences with relational victimization while imprisoned, their perception of career-related barriers, and their career decision-making self-efficacy will be explored. It is hypothesized that experience with relational victimization will be negatively associated with socially-oriented career aspirations. Additionally, it is hypothesized that experience with relational victimization will be negatively associated with career aspiration complexity code. Furthermore, it is hypothesized that experience with relational victimization will be related to more perceived occupational barriers. In addition, it is hypothesized that experience with relational victimization will be negatively associated with career decision-making self-efficacy. Lastly, it is hypothesized that the relation between career decision-making self-efficacy and career aspiration complexity code will be mediated by perceived occupational barriers.

**Review of Literature**

**Offender Recidivism and Career-related Reentry**

Offenders’ abilities to attain and maintain stable employment are important protective factors against recidivism (Solomon, Johnson, Travis, & Mcbride, 2004). Female offenders, in particular, face many barriers that may make it difficult for them to take one of the first steps in career development: identifying their career aspirations. While some researchers suggest a direct relationship between employment and recidivism alone (Railey & Peterson, 2000), most researchers argue that only high quality jobs with acceptable pay or satisfying
employment allowing for a viable career decrease recidivism (Uggen, 2000). Helping offenders obtain employment, and more importantly quality employment, begins with understanding offenders’ career-related aspirations, yet research on this topic is limited. This effort examines non-violent female offenders’ occupational aspirations, perceived career-related barriers to employment, and career decision-making self-efficacy specifically, and against a backdrop of their experiences with victimization and violence.

**Career Aspirations**

In the general population, it has been shown that expressed occupational aspirations can be just as useful or more in predicting future occupation when compared to formal career interest inventories results (Schoon & Parsons, 2002). O’Brien, Friedman, Tipton, and Linn (2000) suggest that career aspirations, in concert with career-related self-efficacy, or confidence pursuing career-related tasks, are determining factors in women’s career development. These researchers showed that women with higher career-related self-efficacy scores held higher educational and occupational aspirations, (e.g., leadership positions or post-secondary education). Unfortunately, with societal barriers and disadvantaged histories, female offenders are at risk for having little belief in their own abilities and consequently low career aspirations, and the impact of violence and victimization on their career aspirations may be significant, but has not been explored.

Career aspirations are desired career goals given ideal circumstances (Rojewski, 2004). However, it seems unlikely that female offenders would be in a position to base their goals on ideal circumstances. Furthermore, women are more likely than men to have lower hopes for their careers, to limit themselves to lower status and lower paying jobs, and to lower their career aspirations over time (Betz, 1994). Female offenders may be even more
likely to impose these limitations on themselves. Negative cultural or social perceptions of women, minorities, and people from lower socioeconomic statuses can lower their career aspirations to gender stereotyped careers and poor paying positions (Gottfredson, 1981; Rojewski, 2004).

Experiencing relational victimization may impact the development of aspirations. This may create particular difficulties for female offenders, as many jobs open to women have a heavy interpersonal / social component: that is, they are people-intensive. Many of the lower paying occupations available to female offenders have this strong social component, and revolve around tasks associated with providing a service to others (e.g., drive-thru attendant, nursing home aide).

The messages that individuals receive from the social systems in which they are embedded influence career choice (Brown & Lent, 2005). Thus, negative messages that could be internalized as a result of being relationally victimized may influence the career choices that an individual makes. Traditionally, men are more likely to work in Realistic (non-social / “thing” oriented) occupations and women are more likely to work in Social occupations, regardless of age or ethnicity (Fouad, 2002; Tracey & Robbins, 2005). Thus, this study is interested in whether female offenders who have experienced victimization are less likely to endorse the socially-oriented occupations that researchers (Gottfredson, 1978; Arbona & Novy, 1991) have found to be the more typical choice for females.

**Characterizing Career Aspirations**

**Holland type.** John Holland’s (1985; 1996) typology for persons and work environments is well-researched, widely accepted, and has been shown to be compatible with the Big Five personality factors (Costa, McCrae, & Holland, 1984). Holland’s model
categorizes people and occupational environments into Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (collectively termed RIASEC) types. This occupational-environmental typology describes the interplay between work personality and work environment types. Holland’s theory proposes that people will search for and remain in rewarding and congruent employment environments, whereas they will be dissatisfied and more likely to exit non-congruent employment environments (Gottfredson & Holland, 1996). The personality and work environment types are typified by distinctive characteristics, including career preferences, outlooks, competencies, requirements, values, and self-perceptions.

Holland (1996) has provided accounts of his typology in numerous publications. He describes the Realistic type as preferring to manipulate things, such as tools or machines; valuing tangible rewards; and, avoiding interaction with people. He described the Realistic work environment as one that requires mechanical and technical abilities and rewards practical achievements. The Investigative type prefers to explore and predict natural and social phenomena. In addition, they value the acquisition of knowledge and may avoid activities that include persuasion. The Investigative work environment requires analytical and scientific abilities and rewards the solution of problems. The Artistic type prefers inventive activities, values creative expression, and avoids conformity. The Artistic work environment requires creativity and expression and rewards artistic achievement. The Social type prefers interpersonal interaction, values the welfare of others, and avoids participating in mechanical or technological activities. The Social work environment requires interpersonal skills and rewards empathy. The Enterprising type prefers directing others, values material rewards, and may avoid abstract or scientific activities. The Enterprising work environment requires
persuasion and leadership abilities and rewards material and financial achievement. The
Conventional type prefers maintaining orderly routines, values material accomplishment, and
may avoid unstructured activities. The Conventional work environment requires clerical and
organizational skills and rewards dependability.

Researchers examining the distribution of occupations in relation to the Holland
typology have consistently found an unequal distribution in terms of availability, ethnicity,
gender and requirements (Arbona, 1989; Gottfredson, 1978; Arbona & Novy, 1991). For
example, these researchers have shown that Realistic jobs are the most commonly
encountered occupational alternatives and require the least amount of education, whereas
Investigative and Artistic jobs are relatively scarce and require much more education
(Arbona & Novy, 1991). Women are more likely to aspire for and work in Social and
Conventional jobs (Gottfredson, 1978; Arbona & Novy, 1991) whereas men are more likely
to aspire for and work in Investigative and Realistic jobs (Arbona & Novy, 1991). In a 1975
sample of women attending college 62%-72% of women aspired for Social occupations
(Gottfredson & Holland), and even in a 1994 sample of college women, more than 50%
aspired for Social occupations (Holland, Fritzche, & Powell). In a recent study of 123
women, mean scores for Social occupations were the highest (35.11), followed by
Enterprising (27.10), Conventional (23.51), Artistic (22.68), Investigative (20.77) and finally
Realistic (13.86) (Rees, Luzzo, Gridley & Doyle, 2007) which was comparable to the
standardization sample for Holland’s Self-Directed Search (1994).

The six parallel work environments that match these personality types, and into which
occupations are categorized, are presented in the Dictionary of Holland Occupational Codes
(DHOC: Gottfredson & Holland, 1996) by requirements, values, activities involved, and
sample occupations. For example, the Realistic work environment, like that of a carpenter or crane operator, requires manual skills and mechanical skills, values productivity and practical accomplishments, and involves the use of machines, tools, or materials. The Investigative work environment, like that of a psychiatrist or environmental biologist, requires analytical skills and problem solving, values the development of knowledge through scholarly or investigative activities, and involves participation in intellectual activities. In this manner Gottfredson and Holland (1996) went about “typing” the 12,000-plus occupational titles available in the U.S. Department of Labor’s *Dictionary of Occupational Titles*. Each occupational title has a corresponding interest code that emanates from Holland’s (1996) model, often called the “Holland Code.” Both occupational complexity code and Holland Codes are useful to characterize individuals’ aspirations.

**Complexity code.** According to Johnson (1995), career aspirations mostly are influenced by personal ambitions for rewards, the nature of the tasks the occupation involves, how the job deals with people, and the gender type of the occupation. Consequently, the characteristics of offenders’ career aspirations can be indexed both by the complexity code and interest type of aspiration, which encompass these factors. According to Holland & Gottfredson (1996), the complexity code of an occupation reflects the cognitive demands that occupation places on the incumbent. Holland and Gottfredson developed an aggregate measure of job complexity that they describe in their *Dictionary of Holland Occupational Codes* (DHOC; Gottfredson & Holland, 1996). This index has been used in previous research, and combines information on job prestige, average wage, authority, autonomy, education, and intelligence (Rojewski, 2004) to create a score that ranges from about 35 to 80. By using a general measure of complexity, one can distinguish between occupations that
make significant cognitive demands on employees versus occupations that are easier to learn and less challenging (Gottfredson & Holland, 1996). Knowing the level of complexity of an occupation can assist in understanding what level of training and education it requires. Comparing complexity scores allows for an understanding of the preparation, demands, and quality of offenders’ past occupation and aspired for occupation in order to determine if offenders are aspiring for higher quality careers than they had in the past. In this study, complexity code will be used to measure the hypothesized negative influence of experiencing relational victimization on career aspirations.

**Relational Victimization**

Victimization experiences in prison, such as physical violence (Wolff, Blitz, Shi, Siegelm, & Bachman, 2007), sexual assault (Struckman-Johnson & Struckman-Johnson, 2002), and bullying (Allison & Ireland, 2010), have been widely researched. However, one specific form of victimization that has not been widely researched (in adults) and that may negatively influence female offenders’ career aspirations is relational victimization, or in other words, being the target of relational aggression. Relational victimization occurs when one’s relationship with others is intentionally damaged or one’s feelings of acceptance are damaged (Crick & Grotpeter, 1995). For example, Crick & Grotpeter (1995) describe how this occurs when someone turns others against a target or attempts to negatively impact a target’s social status (e.g., gossip, rumors, social exclusion). In addition, relational victimization also occurs when one is manipulated or controlled by threats from others to withdraw their friendship (Sullivan et al., 2006). Few studies have examined relational victimization in an adult population (e.g., Gros, Gros, & Simms, 2010; Linder, Crick, & Collins, 2002; Loudin, Loukas, & Robinson, 2003; Werner & Crick, 1999; Zwolinski, 2008;
Goldstein, Chesir-Teran, & McFaul, 2008), and even fewer have focused on indirect types of victimization (which includes relational victimization) in the context of imprisonment (e.g., Archer, Ireland, & Power, 2007). Based on their experiences with victimization in general (Chesney-Lind, 1997; Wolff & Shi, 2010), it is plausible that female offenders may have experienced relational victimization, both prior to incarceration and possibly during their incarceration experience. This paper will be the first to address relational victimization as a factor that may negatively impact offenders’ career aspirations.

According to Dempsey and Storch (2008), relational victimization involves direct behaviors, such as excluding or embarrassing a target, and indirect behaviors, such as spreading rumors or exposing personal information regarding the target. For example, a group member may verbally warn a target against communicating with a group outcast less they become group outcasts themselves. In women, experiencing relational victimization has been shown to result in internalizing behaviors, such as depression and anxiety (Goldstein et al., 2008; Gros et al., 2010; Linder et al., 2002). Even more, relational victimization has also been shown to result in externalizing behaviors, such as aggression or anger (Goldstein et al., 2008). The psychological maladjustment and use of negative coping strategies that may result from victimization has the potential to interfere with individuals’, including offenders’, career aspirations. Thus, this paper is the first to examine female offenders’ unique experiences of relational victimization and its impact on career-related variables. Given the influential impact of relational experiences on career development (Kenny & Medvide, 2013), this paper is a much needed addition to the correctional and vocational literature.

Female offenders may experience relational victimization in prisons for several reasons. First, prison environments are thought to produce a culture of aggression (Ireland &
Ireland, 2003) and allow for covert perpetration of aggression (Ireland, 1999). Ireland cites factors such as overcrowding, demand for material goods, and continual population turnover as factors that may develop and maintain cycles of victimization. Ireland and Ireland (2008) report that while 80% of male and female prisoners indicate experiencing victimization in prison and 20% report chronic (frequent) experiences of victimization; it is female prisoners who report being victimized more often (Archer, Ireland, & Power, 2007). Likewise, experiencing relational victimization is a relatively common phenomenon in young adults (Nelson, Springer, Nelson, & Bean, 2008), who comprise a large proportion of the prison population (i.e., 4,795 inmates per 100,000 U.S. residents below the age of 30; BJS, 2010). Furthermore, research has linked past abuse to an increased risk of experiencing relational victimization (Murray-close, Ostrav, Nelson, Crick, & Coccaro, 2010). According to a meta-analysis by Aquino and Thau (2009), negative affect (i.e., depression, anxiety, fear, anger, etc.) serves as the strongest predictor of relational victimization. Given offenders’ disadvantaged backgrounds, likelihood of having experienced abuse before incarceration, and high rates of mental illness (McClellan et al., 1997), they may be at an even greater risk than the general population to experience relational victimization while incarcerated.

In a study on early victimization, drug use, and criminality, McClellan et al. (1997) found that childhood victimization was linked to juvenile delinquency, adulthood criminal activity, and substance dependence for males and females. However, when compared to victimized male offenders, victimized female offenders experienced more severe and frequent victimization, participated in more serious drug and alcohol abuse, experienced more depression, and were more likely to be further victimized as they aged (McClellan et al.). Research has linked histories of abuse to future victimization (Murray-close et al., 2010),
further increasing the likelihood that female offenders may experience this in prison. Furthermore, it is logical to posit that being victimized could result in negative affect. Interestingly, negative affect has been found to be the strongest predictor of relational victimization (Aquino & Thau, 2009). As mentioned previously, being victimized (along with many of other variables) results in a loss of healthy relationships, blocked development of emotional and social competencies, and a lack of feeling connected to the surrounding social community (Cloitre et al., 2006) which have been shown to result in difficulties with career and vocational identity development (e.g., Brown & Ryan-Krane, 2000; Lent et al., 2002; Hazan & Shaver, 1990). With many female offenders experiencing victimization, their difficulties in career and vocational development are likely to adversely impact their occupational aspirations.

Although victimization can take many forms, and may have occurred at different points in female offenders’ lives, this study focuses on the effects of one kind of victimization – relational victimization – that may have occurred shortly before these offenders’ release dates. Victimization often is used as a broad term referring to sexual, physical, and psychological victimization and has been examined in the prison population (Chesney-Lind, 1997; Wolff & Shi, 2010). However, relational victimization is a form of victimization that is not usually focused on in the correctional literature or even in adult victimization research, except for a few studies focusing on relational aggression in adults between 18-25 years old (e.g., Burton, Hafetz, & Henninger, 2007; Goldstein et al., 2008; Lento-Zwolinski, 2007; Storch et al., 2004; Werner & Crick, 1999). Nonetheless, these aforementioned studies found support for the assertion that relational victimization can result in damaging psychosocial consequences (Murray-Close et al., 2010). Relational victimization
may be experienced as verbal or non-verbal, direct or non-direct, and is distinct from psychological victimization in that it has the exclusive purpose of negatively affecting relationships (Marshall, 1996).

Experiencing relational victimization, or damage to one’s relationships with peers (Sullivan et al., 2006), has been shown to be equally prevalent in adolescent males and females (Nakamoto & Schwartz, 2009). The tendency to place importance on social relationships is not specific to adolescent females alone, and is characteristic of women in a range of developmental trajectories. Even more, women in prison often are isolated (with the exception of contact with other prisoners and correctional officers) and their best option for frequent interpersonal contact may be with their fellow inmates. Given their high rates of victimization in general (Archer, Ireland, & Power, 2007) and their limited options of social contact, they may be even more sensitive to relational victimization from fellow inmates. They may internalize these victimization events, and due to their restricted range of interactions, may lack other social contacts to whom they could turn to instead of their victimizers. Being victimized may adversely impact some of the same socioemotional competencies that are necessary for personal and vocational identity development (e.g., Brown & Ryan-Krane, 2000; Lent et al., 2002; Hazan & Shaver, 1990). Thus, the effects of relational victimization during imprisonment may impact the career aspirations of female offenders.

There are several reasons why experiences with relational victimization may occur frequently in prison. According to Ireland’s Interaction Model of Bullying, the prison environment interacts with individuals predisposed to bullying and reinforces and maintains this behavior (2005). The prison environment has long been described as stressful and
frightening, consequently impairing social skills and relationships (Dodge & Somberg, 1987; Ireland, 2005). Past research has shown that adults who tend to attribute hostility from ambiguous conflict interactions with others are more likely to engage in relational aggression (Murray-Close et al., 2010). Thus, the prison environment may promote conflict and therefore may increase relational aggression. Ireland, who has extensively researched bullying in male and female correctional institutions, points out that the aggression that occurs in prison is a result of individual and social-environmental factors (2002a) similar to the socioenvironmental interaction that is indicated in bullying in schools (Jennifer, Cowie & Ananiadou, 2003) and workplaces (Reis, Trockel & Mulhall, 2007). For example, female inmates may resort to relational aggression as an acceptable response to anger due to the combined effects of gender and institutional norms, as further elaborated on below, that suppress females from using overt, or direct physically aggressive responses (Crothers, Field, & Kolbert, 2005). Therefore, despite their deviance from other social norms, female offenders may still feel compelled to suppress direct, or obvious forms of aggression. Furthermore, relational aggression may serve as a form of indirect aggression by being disguised and used for social manipulation by spreading rumors about the victim or persuading others to ostracize them (Lagerspetz, Bjorkqvitz, & Peltonen, 1988).

Ireland suggests that instrumental aggression, which can include relational aggression, is supported by a confidence that consequences from this type of aggression will be minimal and that it is a socially accepted response (2002b). In fact, Ireland (2000) showed that covert (or verbal/psychological aggression) is used more frequently in prisons than overt (physical) forms of aggression. Interestingly, female prisoners report being victimized more than male prisoners (Archer, Ireland, & Power, 2007). This may be an important tool in
prison as offenders often are relatively powerless in other areas, but still can make attempts to control each other. For example, relationships between prisoners tend to be based on a prison social hierarchy that is determined by dominance and power (Connell & Farrington, 1996: Allison & Ireland, 2010), and relational victimization may be an important tool in maintaining social status. For example, it has been theorized that adolescent females use relational victimization as a tool to enhance status and power (Long & Pelligrini, 2003).

Lastly, forms of indirect aggression, such as relational aggression, are less detectable by correctional officers and are therefore more common than overt, or physical forms of victimization in prisons (Ireland, 1999). Consequently, female offenders are more likely to get away with spreading rumors about another inmate or trying to lower their social status than they are to get away with directly physically or verbally assaulting them.

**Measuring victimization.** Experiencing victimization by one’s peers has obvious effects on one’s future social interactions. Murray-Close et al. (2010) examined adults diagnosed with a psychiatric condition versus healthy adult controls and found that relational aggression is more common in people suffering from a variety of psychological conditions (e.g., depression, mood disorders, anxiety disorders) which have been shown to be higher in the female offender population than the general population (McLellan et al.). Research has shown that youth who have experienced relational victimization tend to exhibit social anxiety and low self-esteem (Prinstein et al., 2001). Other researchers (e.g., Cloitre et al., 2006; Storch, Brassard, & Masia-Warner, 2003) have shown that victims of relational victimization may internalize negative self-evaluations, resulting in distress and avoidance of social situations or a blocked development of emotional and social competencies that could negatively impact their vocational development. Extending this logic, it seems likely that
their career aspirations may be impacted. Offenders who have experienced relational
victimization may opt out of social situations, including careers that require close contact
with others. This is important to examine because women are overrepresented in occupations
categorized by Holland’s Social type (Holland, Fritzsche, & Powell, 1997). Railey and
Peterson (2000) found that the majority of their participants displayed a Holland code of
SCE, or social, conventional, or enterprising in their study on 92 female offenders in various
stages of in the correctional system (first time offenders, repeat offenders, probationers).
They assessed career interests via Holland’s Self-Directed Search (1994) and found that
47.8% of female offenders’ interest aligned with Social occupations and only 9.8% expressed
interest in predominately Realistic occupations.

Despite the recently increased focus on offender reentry, and recognition that reentry
involves interrelationships among workforce participation and other life events and roles
(Travis et al., 2001), research regarding variables related to the career-related reentry of
female offenders is limited. A review of existing research suggests that there may be a
relationship between offenders’ experience of relational victimization and their career
aspirations. This study represents an attempt to examine that relationship. Although
researchers have identified key challenges in offender reentry (Travis et al.), more could be
learned in terms of how these challenges interrelate. With the aforementioned negative
effects of victimization on career development, it is important to have an understanding of
the disadvantages female offenders face when forming career aspirations and putting them
into action after release. Due to the significant influence of others on educational and career
aspirations (Davey & Stoppard, 1993), relational victimization has the potential to be a
pervasive influence on aspirations and should be investigated as a possible target for career-
related-reentry interventions for offenders. Whereas longitudinal studies have shown that there are long-term consequences of lifetime relational victimization (Hanish & Guerra, 2002), previous experiences with relational victimization were not explored during this study. This study focused on relational victimization; but, only as it was experienced during individuals’ time under correctional supervision. This study did not address other forms of victimization, such as physical or sexual victimization. While the sexual victimization does occur in prison (rates range from 4-27%; Hensley, Castle, & Tewksbury, 2003; Struckman-Johnson & Struckman-Johnson, 2002), in addition to physical victimization (28 out of every 1000 inmates; Stephan & Karberg, 2003), research appears to tentatively support the hypothesis that indirect forms of victimization occur more often (e.g., Ireland & Ireland, 2008). Thus, this study could add to the literature by examining the number of baseline occurrences of relational victimization in a female prisoner population.

**Perception of Occupational Barriers**

Experiencing relational victimization has been shown to result in depression and negative affect (Rudolph & Conley, 2005; Hawker & Boulton, 2000; Goldstein et al., 2008), and as Heppner, Cook, Strozier, & Heppner (1991) point out, experiencing depression and negative affect has been linked to an important variables in SCCT, perceived career-related barriers (e.g., stigma of a criminal record, financial difficulties, lack of education and experience, time away from the workforce, childcare related issues, lack of transportation). According to Albert and Luzzo (1999), perceived barriers are career-related barriers that may or may not be founded. Barriers to employment perceived by female college students, such as childcare related issues and ethnic and gender discrimination (Swanson & Tokar, 1991; McWhirter, 1997), are especially salient for female offenders. An individual’s perception of
barriers reflect their expectations about the obstacles involved in the career development process (Lent et al., 2000) and members of marginalized groups (e.g., female offenders) are likely to perceive more barriers (Luzzo & McWhirter, 2001). Perceived barriers are important in that they can be a factor that can compromise career aspirations (Rojewski, 2004), and Greene-Black points out that perceived barriers may decrease an individual’s self-confidence and derail the career planning process (1988). When female offenders contemplate trying to achieve their career aspirations, their perception of barriers may serve to limit them, given the stigma and loss of resources that comes with being incarcerated. In Lent et al.’s (1994) social cognitive career theory (SCCT), it is suggested that perceived career-related barriers may block the translation of interests into aspirations and aspirations into goals. Understanding the role of perceived career barriers has been shown to be especially important for women (Luzzo & McWhirter, 2001), and therefore, this variable seems to be critical when examining the career-related reentry process for female offenders. Female offenders’ perceptions of career-related barriers may be excessive due to their disadvantaged pasts and unfavorable current conditions. They may have too many real and perceived career-related barriers to aspire for higher complexity level careers.

The main goal of career assessment, according to Betz (1992), is to assess individual characteristics (i.e., abilities, interests) and the career choice process (i.e., career decision-making self-efficacy, perception of occupational barriers). Perceived occupational barriers can be conceptualized as internal or external conditions that are detrimental to the career development process (Swanson, Daniels, & Tokar, 1996) and they affect how an individual makes and implements career choices (Swanson & Woitke, 1997). Perceived occupational barriers have been thought to play a role in the gap between women’s abilities and their
actual achievements and hinder career aspirations (Farmer, 1976; Matthews & Tiedeman, 1964). According to Swanson & Tokar, perceived barriers can be broken down into three categories: social/interpersonal, attitudinal, and interactional (1991). The construct of perceived occupational barriers is supported by Lent et al.’s (1994) social cognitive theory of career development (Swanson et al., 1996). According to these researchers, the process of perceived barriers is a self-reflective process that involves reflecting on the work environment and this would be supported by Lent et al.’s claim that cognitive evaluation determines vocational decisions. Furthermore, certain types of barriers overlap with the two main tenants of SCCT according to Lent’s (2004) expansion of the theory, outcome expectations and self-efficacy (Swanson & Woitke, 1997). Perceived occupational barriers can be overcome, but with varying degrees of difficulty based on the nature of the barriers and an individual’s characteristics (Swanson & Woitke).

Outcome expectations are perceptions of what the consequence of a particular behavior will be (e.g., “If I do A, then B will happen”) (Swanson & Woitke, 1997). Thus, perceived career-related barriers are perceptions of unfavorable consequences of career choices or options. SCCT posits that goals can be focused on the type of career an individual has the intention to pursue and the level of achievement an individual wishes to pursue within that career. While not a tenant of SCCT that is examined explicitly in this study, goals are affected by one’s self-efficacy and perceived outcome expectations (e.g., belief in one’s mathematical abilities and belief in the attainable rewards of a career in mathematics would likely influence one’s motivation to take mathematics courses). Research with the POB scale has shown that females perceive more career-related barriers (e.g., negative outcome expectations) than males and are more likely to perceive potential gender and racial
discrimination (Luzzo & McWhirter, 2001; McWhirter, 1997). A study assessing the perceived barriers of school age children supported Luzzo’s (1996) hypothesis that the more barriers one perceives is related to lower levels of career maturity and less knowledge of career-decision making principles (Patton, Creed, & Watson, 2003).

Relational victimization can be seen as a type of barrier, (i.e., an event that can make career progress difficult; Swanson and Woitke, 1997), therefore negatively influencing self-efficacy beliefs and outcome expectations which can interrupt the path of interests to goals and goals to actions (Lent et al., 2000). One way that relational victimization may influence offenders’ perception of barriers is that it can result in limited opportunities to develop positive and supportive relationships with peers (Crick et al., 2001) and isolation (Rudolph, Troop-Gordon, & Flynn, 2009). If an offender has the support of family and friends, then they may perceive fewer barriers. A lack of social support, resulting from experiences with relational victimization and ostracization from their peer group, could theoretically increase an individual’s perception of barriers. With a lack of social support, their perceived occupational barriers may be more grounded in reality than not, as they may lack the financial and emotional resources that friends or family could provide. In addition, the process of obtaining a job is intrinsically social (e.g., interviewing, meeting potential employers) and this may also pose a problem for female offenders.

Experiencing peer victimization has been shown to play a role in the development of anxiety (Hawker & Boulton, 2000). Even into adulthood, people who experienced relational victimization as adolescents had increased symptoms of anxiety (Dempsey & Storch, 2008). If offenders are experiencing high levels of anxiety, they may perceive more career-related barriers than if they were in a more relaxed state. Anxiety may cause offenders to have a
fearful view of the work force and cause them to expect many obstacles. Research has shown that peer victimization, which encompasses relational victimization, can result in cognitive distortions, such as a negative worldview (Troop-Gordon & Ladd, 2005) and negative peer beliefs (Rudolph, Troop-Gordon, & Flynn, 2009). For example, women who experienced sexual abuse as children tend to attribute positive events to an external locus of control and negative events to internal locus of control (Paunovic, 1998). It could be that female offenders who view the world, as well as their peers, in a negative light may believe that it is harder to succeed in the work force than it actually is.

How female offenders are affected by their circumstances when they attempt to gain employment may depend on the manner in which they perceive their obstacles, based on the SCCT theory by Lent et al. (1994). In fact, research has shown perceived career-related barriers to be associated with career aspirations (Kenny, Blustein, Chaves, Grossman, & Gallagher, 2003). Despite any positive or negative reinforcement they receive from society during their reentry into the workforce, they may be most heavily influenced by their own perceptions of their obstacles to employment. How an individual perceives occupational barriers is more important than whether actual barriers exist (Swanson & Woitke, 1997). Thus, negative outcome expectations can be considered career barriers in themselves (McWhirter, Torres, & Rasheed, 1998), and it is reasonable to assume that they could result from experiencing relational victimization.

Career Decision-Making Self-Efficacy

Another important career development variable, linked to SCCT (Lent, 1994), and potentially influenced by relational victimization is career decision-making self-efficacy. In other words, career decision-making self-efficacy encompasses one’s belief that he or she is
capable of choosing a reasonable career and completing necessary tasks such as researching relevant occupational information and completing the education or training necessary for that career (Taylor & Betz, 1983). Interestingly, it appears that no research to date has examined these two variables of relational victimization and career decision-making self-efficacy together. Whereas self-efficacy is domain specific, the lack of research requires one to draw inferences about career decision-making self-efficacy based on the research associated with self-efficacy in general. Again, researchers have shown that relational victimization may result in depression (Crick & Bigbee, 1998; Crick & Grotpeter, 1996; Prinstein, Boergers, Vernberg, 2001; Goldstein et al., 2008) which has also been empirically linked to lowered self-efficacy (Smith & Betz, 2002). Research has shown that victimization undermines self-efficacy (Macmillan & Hagan, 2004) and that this can deter participation in future-oriented occupational activities. Furthermore, trauma has been shown to facilitate a decrease in perceived self-efficacy (Saigh et al., 1995) as has being a member of a marginalized group (Luzzo & McWhirter, 2001), such as a female offender.

Following this logic, it is reasonable to expect that female offenders could struggle with trusting in their own abilities to maneuver through the career development process (i.e., suffer from low career decision-making self-efficacy); given the high rates of trauma in the prison population (Neller, Denney, Pietz, & Thomlinson, 2006). Thus, the concepts of social persuasion and accomplishments in relation to career decision-making self-efficacy could come into play when female offenders are relationally victimized. Their experience of failure (or a lack of accomplishment) in a social domain could serve as a vehicle for lowering career decision-making self-efficacy in general, and more specifically, for Social careers. Furthermore, given the strength that social persuasion should have on career decision-making
self-efficacy (theoretically), being relationally victimized by one’s peers is a negative social event in which one one’s social group uses persuasion (e.g., spreading rumors, manipulating via interpersonal threats) as a weapon which could lower one’s career decision-making self-efficacy.

Lent’s description of Social Cognitive Career Theory (SCCT; 1994) states that self-efficacy and outcome expectations, which Swanson, Daniels and Tokar (1996) have tied to perceived barriers, play a central role in the process of choosing a career through interests, goals, action and performance (2000). Career decision-making self-efficacy is a person’s belief that they possess the ability and skills necessary to successfully engage in the career decision-making process (Taylor & Betz, 1983). Career decision-making self-efficacy has the potential to affect the development of career aspirations (Ali, McWhirter, & Chronister, 2005). As mentioned previously, career decision-making self-efficacy is strongly related to generalized self-efficacy and self-esteem overall (Betz & Klein, 1996) and a lack of career decision-making self-efficacy is linked with career decision-making difficulties, such as career indecision (Creed, Patton, & Bartrum, 2004). In fact, research has shown that career decision-making self-efficacy is one of the most prominent predictors of career exploration in college students (Taylor & Popma, 1990). Research has linked career decision-making self-efficacy to several other career-related variables such as career indecision (Betz & Klein, 1996) and commitment to the career choice process (Ellis, Wang, & Chen, 1999). Self-efficacy encourages exploratory behavior (Wolfe & Betz, 2004), which is important when one is examining their career aspirations. Likewise, self-efficacy and goals play an important role in successful career development activities (Brown et al., 2005). According to Paulsen & Betz (2004), career decision-making self-efficacy is most often measured by examining an
individual’s self-appraisal, goal selection, planning, problem solving, and skill at gathering information about their desired occupation.

As mentioned previously, relational victimization could potentially have a negative influence on career decision-making self-efficacy. For example, Macmillan and Hagan (2004) have shown that victimization results in lowered educational self-efficacy and subsequent occupational attainment. Researchers have found that experiencing relational victimization lowers self-esteem (Dukes et al., 2010), a concept linked to career decision making self-efficacy (Betz & Klien, 1996). Similarly, social encouragement plays a role in the development of career decision making self-efficacy (Lent et al., 1994). The type of verbal assaults (e.g., spreading embarrassing or hurtful rumors) commonly incorporated into relational victimization may decrease a female offender’s self-efficacy, and in turn her career decision-making self-efficacy. If a female offender’s feelings of self-worth are invalidated, she may feel she is not capable of making good decisions regarding her future career.

Similarly, research from Wolfe and Betz has shown that career decision-making self-efficacy is positively associated with strong peer attachment bonds (2004). It could be expected that experiencing relational victimization has the potential to damage female offenders’ bonds with their peers and subsequently their career decision-making self-efficacy could suffer. However, the relationship between relational victimization and career decision-making self-efficacy specifically has never been studied. Female offenders may struggle to develop and maintain career decision-making self-efficacy for several reasons.

Researchers have linked abuse (a common experience in female offenders’ histories; McLellan et al.) with negative-self evaluations (Bagley & Mallick, 2000; Higgins & McCabe, 2000), which play a role in career decision-making self-efficacy. For example,
research with sexually abused children with symptoms of Post-Traumatic Stress Disorder (PTSD) has shown lower self-efficacy than the general population (Diehl & Prout, 2002). Furthermore, the limited opportunities to develop supportive relationships with peers that may result from relational victimization (Crick et al., 2001) can also influence the development of career decision making self-efficacy in female offenders. As mentioned previously, women who have experienced relational victimization tend to be more avoidant of negative social feedback than the general population (Zwolinski, 2008). This may hinder career decision-making self-efficacy, because as Lent et al. (1994) point out, one must experience success to develop career decision-making self-efficacy. If there are limited opportunities to develop successful peer relations in the prison setting, female offenders may not develop the self-efficacy that they could have otherwise. In addition, females may avoid the only opportunities they have for interaction out of a fear of criticism from peers, because as mentioned previously, women with relational victimization histories tend to be avoidant of negative social feedback (Zwolinski, 2008; Dempsey & Storch, 2008). Likewise, Frydenberg and Lewis (1991) maintained that females are likely to avoid a situation in which they may be relationally victimized. This may cause negative feedback loop where the victim experiences relational victimization, avoids others and therefore is unable to develop positive relationships, and is then further distressed from their victimization experiences and isolation (Storch et al., 2004). It has been hypothesized that relational victimization may contribute to the initial emergence, and continuous perpetration of, a cycle of peer difficulties (Rudolph et al., 2009). This failure in the social domain may be detrimental to females because of the importance they place on relationships with others (Sullivan et al., 2006). As mentioned earlier, this may be amplified in female offenders who are isolated and forced to socialize
with a limited number of other female offenders; as research has shown that isolation can exacerbate the negative effects of relational victimization (Newman et al., 2005).

The Interplay between Perceived Barriers and Career Decision-Making Self-Efficacy

Researchers have shown that while career decision-making self-efficacy and perceived occupational barriers are related, they are constructs that should be examined separately (Swanson et al., 1996). These researchers found only moderate associations between perceived occupational barriers and career-related self-efficacy, and the associations were complex with different patterns for men and women. For example, Lent et al. (1994) hypothesized that the relation between self-efficacy and career expectations and interests is mediated by perceived occupational barriers. According to Lent and Brown (1994; 2000), people may perceive few occupational barriers for a career move (e.g., “I will not have a difficult time getting hired as an offender”) but have low self-efficacy (e.g., “I am not smart enough to have that career”). Or, they may perceive many occupational barriers for a career move (e.g., “I do not have a chance of being hired for that occupation as an offender”) even if they have high self-efficacy (e.g., “I am smart enough for that occupation”). Swanson et al. (1996) claim that both variables are important to address as perceived occupational barriers that are commonly seen as internal constructs (e.g., self-esteem) may be affected by an individual’s career-related self-efficacy. In contrast, they point out that perceived occupational barriers that are commonly seen as external constructs (e.g., ageism) may not be affected by an individual’s career-related self-efficacy. Instead, career-related self-efficacy may affect individuals later on in the career-decision making process by influencing their opinion on whether or not the barrier will serve as a hindrance to employment. In other words, the authors suggest that career-related self-efficacy may influence whether or not
barriers are confronted, and when this process will occur (Swanson & Woitke, 1997). Thus, researchers are divided on the direction and influence of perceived occupational barriers on career decision-making self-efficacy and vice versa. For offenders, the relationship between career decision-making self-efficacy and lowered career aspiration complexity level could be most influenced by their perceived occupational barriers as their situation is unique in its numerous barriers and can be dominating in terms of their self-identity.

**Hypotheses**

**Hypothesis 1.** Experiences with relational victimization will be negatively associated with socially-oriented career aspirations. Females, in general, tend to be employed in socially-oriented occupations (Metz, Fouad, & Ihle-Helley, 2009), however it is hypothesized that victimized offenders may deviate from the norm. Offenders who have experienced relational victimization may avoid occupations that require close contact with others and could be drawn to occupations that allow them to socially isolate.

**Hypothesis 2.** Experiences with relational victimization will be negatively associated with career aspiration complexity code.

**Hypothesis 3.** Experiences with relational victimization will be positively associated with perceived occupational barriers.

**Hypothesis 4.** Experiences with relational victimization will be negatively associated with career decision-making self-efficacy.

**Hypothesis 5.** Career decision-making self-efficacy will impact career aspiration complexity code, which in turn will be mediated by perceived occupational barriers (based on Social Cognitive Career Theory; Lent et al., 1994).
Figure 1. Perceived occupational barrier as the mediator between career decision-making self-efficacy and career aspiration.

Method

Participants

The data used for this study are archival, and were taken from a larger de-identified database associated with a completed, multi-year career-related reentry intervention (i.e., the INTUIT program) for female offenders. The INTUIT program was a 13-week, career-related, psychoeducational intervention that maintained a general grounding in SCCT, via the constructs of self-efficacy beliefs and recognition of barriers to offender's career-related reentry. This intervention largely was developed in light of important meta-analytic research on career decision-making interventions conducted by Brown and Ryan-Krane (2000). In particular, Brown and Ryan-Krane's work (2000) suggested that five intervention components seem to be predictive of positive effects with the general population. Hence, these features: (a) allowing individuals to clarify their career goals and plans by way of
reflective exercises; (b) providing individualized interpretations of career-related assessments; (c) affording accurate and up-to-date information regarding the world of work; (d) offering opportunities for individuals to interact with successful models – that is, individuals who have used effective strategies to reach their goals; and (e) helping individuals to assess their existing social network, to strengthen it, or to develop a new and healthy social network, explicitly were incorporated into the INTUIT intervention. All data used in this study were from individuals who were assigned to participate in the intervention, but who had not yet begun the intervention. Before undergoing the intervention, participants completed a survey containing several career-related scales beyond the scales used in the study.

Participants include 174 female offenders who were convicted of non-violent felony offenses and who resided in a residential community corrections facility in the state of Virginia. These facilities provide 5 to 7 months of programming with a heavy emphasis on career re-entry related concerns and allow for closer supervision than probation or parole (Virginia Department of Corrections; VADOC, 2010). For example, while working in the community under supervision from the program, residents receive group-based substance abuse treatment, a life skills program, a parenting class, and Graduate Equivalency Degree (GED) classes. Offenders with larceny, fraud, and drug-related convictions make up over a third of the population in Virginia detention/diversion centers and the majority of them (57%) have served less than 1 year in jail (VADOC, 2010). University and Department of Correctional Education (DCE) Institutional Review Board approvals were current for both the intervention, and for analysis of the data.

**Design**

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The present study design was cross-sectional and incorporated self-report questionnaires.

Measures

**Demographics.** Participants completed questionnaires that requested demographic information, as well as data regarding their educational achievement, last job held before conviction, and educational and career aspirations. Specific variables of interest in this study included participants’ age, number of children, marital status, highest educational level achieved, frequency of relational victimization, job held prior to conviction, and current career aspiration. Job held prior to conviction was assessed by asking participants (in an open-ended format) to specify their last job held before conviction. Educational aspiration was assessed by asking participants to select either graduate high school/GED, graduate technical/professional school, graduate college, or they were given the option to specify some other education goal. Career aspiration was assessed by asking participants to specify (in an open-ended format) their current career/job-related goal.

**Career aspirations.** The last job held by offenders before their convictions, and their current career or job-related aspirations were gathered via the demographics section of the questionnaire previously described. In order to assess the Holland Code type and complexity of offenders’ previous work and offenders’ future career aspirations, John Holland’s theory (1985; 1996), and the *DHOC* by Gottfredson and Holland (1996) was used. In particular, the *DHOC* (Gottfredson & Holland, 1996) was consulted to apply three-letter Holland Codes to each occupational title, and to specify the complexity level of each occupation.

Holland Codes characterize the nature of the work tasks associated with each occupation (Gottfredson & Holland, 1996). Three-letter codes generally are deemed
sufficient to characterize, completely, a particular occupational alternative (Spokane, Luchetta, & Richwine, 2002). The first letter code generally reflects the dominant characteristic of the occupation. The DHOC indexes over 12,000 occupational titles and applies a Holland Code to each occupational title listed. Similarly, the DHOC was used to apply a general measure of occupational complexity to each job title. Gottfredson & Holland’s (1996) complexity measure distinguishes between occupations on the basis of the cognitive demands made upon workers. The level of occupational complexity, which generally ranges from about 30 to 80, also indicates the degree of educational preparation and training necessary to enter occupations. Raters used the DHOC, independently, to look up the complexity levels associated with occupational titles. A third rater examined cases in which there were discrepancies in complexity level. Although career complexity is not a proxy for the socioeconomic status associated with occupations, these constructs are highly correlated (Rojewski, 2004). Two trained Graduate Student raters used the DHOC to categorize offenders’ career aspirations, both for Holland Code and for complexity level. An Associate Professor with a specialization in vocational psychology examined cases in which there were discrepancies in categorizations. The agreement rate for the three-letter Holland Codes was 71%. For the primary analysis of this study, examining differences in relational victimization among participants with socially- versus non-socially-oriented occupations, only the first letter Holland Code, “S” or “R” was used. The percent agreement for first letter Holland Codes was 88%. For complexity levels, the arithmetic average of the two raters’ assigned complexity codes was used.

**Relational victimization.** To better understand female offenders’ experiences with relational victimization, a revised version of the *Problem Behavior Frequency Scale* (PBFS;
Farrell et al., 2000) was used. At the time of the initial development of this study, there were no psychometrically supported instruments available to assess adult relational victimization. Measures of relational victimization typically address experiences like being left out of a group, or being the victim of lies that negatively affect one’s social status or relationships. The five items from the PBFS representing relational aggression were modeled after Crick and Grotpeter’s (1995) measure on relational aggression (Farrell, Kung, & White, & Valois, 2000). Crick and Grotpeter’s results showed the validity of relational aggression in that relational aggression is distinct from overt forms of aggression. The revised version of the Problem Behavior Frequency Scale (PBFS; Farrell et al., 2000) was used to examine participants’ experiences with relational victimization using 6 items. Participants were asked to indicate how often they experienced 18 scenarios within the last 2 weeks on a 5-point anchored scale (0 = never, 1 = 1-2 times, 2 = 3-5 times, 3 = 6-9 times, 4 = 10-19 times, 5 = 20 times or more). Representative relational victimization items from this scale included “Had someone spread a false rumor about you” and “Had a person tell lies about you to make others not like you anymore.” The original PBFS consisted of 26 items used to assess the frequency of problem behaviors, such as drug use, delinquency, physical aggression, and non-physical aggression in urban adolescents, including (n = 1,037) boys and (n = 1,200) girls. The items used to measure relational victimization in this study were similar to the non-physical aggression scale in the PBFS and Crick and Grotpeter’s (1995) measure of relational aggression (e.g., “tells friend they will stop liking them unless friend does what they say”) but were slightly reworded to accommodate adults. Crick and Grotpeter (1995) used a 19 item peer nomination instrument to assess relational aggression in third through sixth grade children (n = 256) boys and (n = 235) girls. The measure included four subscales assessing
relational and overt aggression, prosocial behavior, and ostracism. In their study, the relational aggression scaled demonstrated good reliability in this sample ($\alpha = .83$) and factor loadings for the relational aggression items ranged from ($\alpha = .72$) to ($\alpha = .83$). In the present study, the observed Cronbach coefficient alpha was .93.

**Perception of barriers.** Selected items from the revised version of Luzzo & McWhirter’s (2001) *Perception of Barriers* (POB) scale was used as a formal measure of perceived occupational barriers in this study. This scale addresses anticipated ethnic and gender discrimination, educational, resource, and career-related barriers. To date, these items have not been used in an offender or ex-offender population. When a participant is presented with an item on the barrier scale, they are instructed to respond to each statement according to that they think (or guess) to be true for them. Items addressing anticipated gender, ethnic, and offender status-related discrimination were of interest in this study (e.g., “In my future career, I will probably… experience discrimination because of my gender” and “be treated differently because of my ethnic/racial background”). Additional items regarding childcare responsibilities also are included (e.g., “In my future career, I will probably… have difficulty getting time off when my children are sick”). Response options for the 10 items include a 5-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). Cronbach’s alpha for the revised POB scale was reported as .78 (Luzzo & McWhirter, 2001), in a sample of undergraduate college students. In the present study, the observed Cronbach coefficient alpha was .62 for the ten items. The original POB scale (McWhirter, 2000) has been used in research with battered women (Chronister & McWhirter, 2006), who may bear some psychological resemblance to female offenders.
Career decision-making self-efficacy. Betz, Klein, and Taylor’s (1996) short form of the Career Decision-Making Self-Efficacy Scale (CDMSE-SF), which measures the constructs of occupational information-seeking, career goal selection, career planning, career problem-solving, and career self-appraisal was used as a measure of career decision-making self-efficacy expectations. This scale measures the extent to which a person believes that he or she is capable of making good career decisions and successfully executing career-related behaviors. This 25-item measure consists of a 5-point scale ranging from 1 = No confidence at all to 5 = Complete confidence. Participants were presented with items (e.g., “Make a plan of my goals for the next five years” and “Change occupations if I am not satisfied with the one I enter”) and asked to circle the number that indicates that they have that they could complete the task.

Both the CDMSE scale and its short form have been used extensively by researchers (Betz & Luzzo, 1996). The short form was used in this study as it is more desirable for research purposes due to its length (Betz et al., 1996). Researchers have found moderate correlations between the CDMSE scale and other measures of self-efficacy (Betz & Sterling, 1993; Osipow, Temple & Rooney, 1993). The CDMSE-SF has been shown to be psychometrically adequate, with internal reliability ranging from .73 to .83 and validity correlations that exceed those seen in use of the long form (Betz et al., 1996). Research with the CDMSE-SF has shown increased career decision-making self-efficacy for females who participated in a career intervention compared to a control group (Kraus & Hughey, 1999). Past research has found support for construct validity (e.g., correlations with vocational identity and career decision; Betz et al., 1996; Taylor & Betz, 2001) and estimated temporal
reliability ranging from .94 to .95 (Betz et al., 1996). In the present study, the observed Cronbach coefficient alpha was .93 for the 25 items.

**Procedure**

All data were archival and were collected from female offenders who had not yet begun a career intervention implemented in a detention and diversion center. Participants gave verbal consent to an on-site instructor at the Department of Correctional Education and interested participants signed informed consent forms when they were presented with pre-test surveys. Participants filled out the surveys with a group of other participants. Participants were not screened in terms of how long they had been residing in the community corrections facility before being given the questionnaire; but most of the participants were within 6 months of release.

**Planned Analyses**

Participants’ demographics were provided including age range, mean age, ethnicity, level of education, number of children and work history. Work history was determined by asking participants to specify their last job held before conviction and their current career/job-related goal (in an open-ended format). Prior to conducting any statistical tests, assumptions of normality were tested for all variables and a Bonferroni correction was used to address probability pyramiding. The IBM Statistical Package for the Social Sciences (SPSS) Version 20.0 was used to perform data analyses. Scores on the aforementioned self-report measures were used to examine history of relational victimization, perceived occupational barriers, and career decision-making self-efficacy. In addition, the *DHOC* (Gottfredson & Holland, 1996) was consulted to apply three-letter Holland Codes to each
occupational title, and to specify the complexity level of each occupation that the participant lists for most recent job before arrest and job they aspired for after release.

**Hypothesis 1.** First, groups were formed on the basis of first-letter Holland codes. A standard logistic regression analysis was used to assess whether experience with relational victimization would predict whether a participant aspires for socially-oriented (in particular, Holland’s Social) aspirations or non-social (and, in particular, Holland’s Realistic) type aspirations. These groups are most distinct with regard to socially-oriented career interests, or a lack thereof. Realistic aspirations were dummy coded as 1 and Social aspirations were dummy coded as 0. This hypothesis would be supported if scores on the relational victimization items from the *Problem Behavior Frequency Scale* (PBFS; Farrell et al., 2000) were more closely associated with Realistic aspirations.

**Hypothesis 2.** The second major hypothesis for this study was that experiences with relational victimization will be negatively associated with career aspiration complexity code. A Pearson’s correlation was conducted to examine this hypothesis on the relational victimization items from the *Problem Behavior Frequency Scale* (PBFS; Farrell et al., 2000) and the occupational complexity level of participants’ reported career aspirations according to the *DHOC* (Gottfredson & Holland, 1996). This hypothesis would be supported if the Pearson’s correlation coefficient for the association between scores on the relational victimization items from the PBFS and the occupational complexity level of participants’ reported career aspirations is significant and if scores on the relational victimization items from the PBFS were negatively related to career aspiration complexity level.

**Hypothesis 3.** The third major hypothesis for this study was that experiences with relational victimization would be positively associated with perceived occupational barriers.
A Pearson’s correlation was conducted to examine this hypothesis on the relational victimization items from the Problem Behavior Frequency Scale (PBFS; Farrell et al., 2000) and selected items from the revised version of Luzzo & McWhirter’s (2001) Perception of Barriers (POB) scale. This hypothesis would be supported if the Pearson’s correlation coefficient for the association between scores on the relational victimization items from the PBFS and scores on the selected items from the POB scale was significant and if scores on the relational victimization items from the PBFS were positively related to scores on the selected items from the POB scale.

**Hypothesis 4.** Fourth, it was hypothesized that experiences with relational victimization would be negatively associated with career decision-making self-efficacy. A Pearson’s correlation was conducted to examine this hypothesis on the relational victimization items from the Problem Behavior Frequency Scale (PBFS; Farrell et al., 2000) and scores from Betz et al.’s (1996) short form of the Career Decision-Making Self-Efficacy Scale (CDMSE-SF). This hypothesis would be supported if the Pearson’s correlation coefficient for the association between scores on the relational victimization items from the PBFS and scores on the CDMSE-SF is significant and if scores on the relational victimization items from the PBFS were negatively related to scores on the CDMSE-SF.

**Hypothesis 5.** Lastly, it was hypothesized that career decision-making self-efficacy would be negatively associated with career aspiration complexity code which, in turn, would be mediated by perceived occupational barriers. Scores from select items from the revised version of Luzzo & McWhirter’s (2001) Perception of Barriers (POB) scale would mediate the relation between Betz et al.’s (1996) short form of the Career Decision-Making Self-Efficacy Scale (CDMSE-SF) and the occupational complexity code of participants’ reported
career aspirations. Multiple regression methods were used to test these hypotheses (Baron & Kenny, 1986). First, the relation between career decision-making self-efficacy and perceived occupational barriers was examined. Second, the relation between career decision-making self-efficacy and career aspiration complexity code was examined. These two regressions would yield significant results if perceived occupational barriers act as a mediator in this relationship among variables. Finally, career decision-making self-efficacy and perceived occupational barriers were used as independent variables in a regression equation in which career aspiration complexity code served as the outcome variable. Following Baron and Kenny’s (1986) recommendation, this was a simultaneous entry regression, so that the effect of perceived occupational barriers on career aspiration complexity code was examined after career decision-making self-efficacy was controlled, and the effect of career decision-making self-efficacy on career aspiration complexity level was examined after perceived occupational barriers were controlled. If career decision-making self-efficacy were less highly associated with career aspiration complexity code in the third regression than the second regression, then perceived occupational barriers would be accepted as a mediator.

**Results**

This study was conducted in order to examine associations among female offenders’ recent experiences with relational victimization and their (a) aspirations toward socially-versus non-socially-oriented occupations, (b) the complexity level of their career aspirations, (c) their perceived occupational barriers, and (d) their career-decision making self-efficacy. Finally, for exploratory purposes, the observed distribution of female offenders’ Holland codes was compared to the distribution of a published normative group. The following section details the proposed hypotheses and the analyses performed.
Demographics

The mean age of participants was 31.20 years ($SD = 7.78$), and ranged from 19 to 57 years old. Six participants did not list their age. Individuals in the sample were predominantly Caucasian and African American. When asked about their ethnicity, 103 (59.5% of participants) identified as Caucasian and 63 (or 36.4%) identified as African-American. One participant identified as Asian American and one participant identified as Middle Eastern. Two participants identified as Hispanic/Latina and two participants identified as “Other.” One participant did not report their ethnicity.

With regard to educational attainment, participants responded to one of the following levels: “some high school (29.8%),” “high school/GED (38.7%),” “some college (16.2%),” and “college graduate (4.6%).” Unfortunately, and because of the wording of this question, it is unknown how many participants might have earned their GED during their incarceration experience. Percentages do not tally to 100% because 15 (8.7%) of the participants reported “other” as their educational attainment. Five participants did not report their educational attainment.

The majority of the female offenders in the sample (89 participants, 51.4%) reported that they were married or partnered. There were 29 (16.8%) participants who reported being single, or never married or partnered. Twenty-five (14.5%) participants reported that they were divorced and 22 (12.7%) participants reported that they had been married or partnered but separated. Lastly, only three (1.7%) participants reported that they were widowed. Five participants did not report their marital status.
Each female offender was asked to report the number of children she had. The number of children participants reported ranged from 0 to 10. Almost 62% of the sample, or 107 participants, reported that they had 1, 2, or 3 children.

**Preliminary Analyses**

Before testing the hypotheses proposed in this study, preliminary analyses were run to examine the relations among important demographic variables and the variables of interest in this study: relational victimization, career aspiration, perceived occupational barriers, and career decision-making self-efficacy.

In order to reduce family-wise error, the error rate for each analysis was adjusted to alpha = .01. The 99% confidence interval, instead of 95%, therefore, is used unless otherwise noted.

**Effects of demographic variables.** The effects of the demographic variables of age and ethnicity were examined.

**Age.** Bivariate correlational analyses were run to examine the effects of age on relational victimization, career aspiration complexity level, perceived occupational barriers, and career decision-making self-efficacy. None of the Pearson correlation coefficients were significant. Thus age was not included in further analyses.

**Ethnicity.** An ANOVA was run to examine the effects of ethnicity on relational victimization, career aspiration complexity level, perceived occupational barriers, and career decision-making self-efficacy. The resulting $F$ values were not significant.

**Intercorrelation matrix and descriptive statistics.** Bivariate correlational analyses were run for all primary variables of interest. Pearson correlation coefficients are displayed in Table 1. The results of these analyses will be discussed further when reviewing results of
hypothesis testing. Table 2 provides the means and standard deviations for the primary variables.

Table 1

*Intercorrelation Matrix with the Primary Variables*

<table>
<thead>
<tr>
<th></th>
<th>CDMSE</th>
<th>BARR</th>
<th>RELVIC</th>
<th>CX_1</th>
<th>CX_2</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDMSE</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BARR</td>
<td>.61*</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RELVIC</td>
<td>.16</td>
<td>-.16</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CX_1</td>
<td>.02</td>
<td>-.02</td>
<td>-.09</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>CX_2</td>
<td>.09</td>
<td>-.19</td>
<td>-.03</td>
<td>.29*</td>
<td>1.0</td>
</tr>
</tbody>
</table>

* = $p < .001$. Relational Victimization (REL VIC), Career Decision-Making Self-Efficacy (CDMSE), Perceived Occupational Barriers (BARR), Complexity of occupation before incarceration (CX_1), Complexity of career aspiration (CX_2)
Table 2

*Descriptive Statistics*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL VIC</td>
<td>13.36</td>
<td>6.45</td>
<td>6 - 30</td>
</tr>
<tr>
<td>BARR</td>
<td>32.86</td>
<td>7.91</td>
<td>16 – 49</td>
</tr>
<tr>
<td>CDMSE</td>
<td>93.45</td>
<td>18.82</td>
<td>45 – 125</td>
</tr>
<tr>
<td>CX_BEFORE</td>
<td>50.30</td>
<td>6.90</td>
<td>37-67</td>
</tr>
<tr>
<td>CX_AFTER</td>
<td>59.70</td>
<td>8.80</td>
<td>40-77</td>
</tr>
<tr>
<td>CX_DIFF</td>
<td>8.89</td>
<td>9.44</td>
<td>-18-31</td>
</tr>
</tbody>
</table>

Relational Victimization (REL VIC), Career Decision-Making Self-Efficacy (CDMSE), Perceived Occupational Barriers (BARR), Complexity of occupation before incarceration (CX_1), Complexity of career aspiration (CX_2)

**Coding career aspirations.** One hundred participants, or 57.2% of the sample, reported their career aspirations. Almost half (41.4%) of the 99 female offenders who did report their career aspirations aspired for Holland Social-type occupations. Twenty-four (24.2%) participants aspired for Holland Enterprising-type occupations, 13 (13.1%) participants aspired for Holland R-type occupations, 11 (11.1%) participants aspired for Holland Conventional-type occupations, 6 (6.1%) participants aspired for Holland Investigative-type occupations, and four (4.0%) participants aspired for Holland Artistic-type occupations. The complexity codes of occupations to which offenders aspired ranged from 40 to 77 with an average complexity level of 59.7 (SD = 8.80). Over half of the 99 participants who reported their aspirations (55 %) aspired for occupations with complexity codes of 60 to 77.
Relational victimization. Scores for 173 participants on the relational victimization measure ranged from 6 (never experienced this form of relational victimization in the past two weeks) to 30 (experienced this form of relational victimization 10 or more times in the past two weeks). The mean for experiencing relational victimization was 13.34 ($SD = 6.36$). Twenty-four participants reported never experiencing any of the six forms of relational victimization and only two participants reported experiencing all six forms of relational victimization ten or more times. The number of times experiencing relational victimization in the past two weeks ranged from seven to 29 for 147 participants with the average participant experiencing relational victimization between one to four times.

Hypothesis Testing

Hypothesis 1. The first major hypothesis for this study was that experiencing relational victimization would be negatively associated with socially-oriented career aspirations. A logistic regression analysis was conducted to examine whether relational victimization experiences would be associated with Holland S-type aspirations versus Holland R-type aspirations. These groups are most distinct with regard to their interests in socially-oriented careers, versus careers with limited significant interpersonal interactions. Thus, data from participants with a first letter Holland code of I, A, E, or C were excluded for this hypothesis. The average score on the relational victimization measure for the forty-one participants that had Holland Social-type aspirations was 14.41 ($SD = 6.41$). The mean relational victimization score for the thirteen participants that had Holland Realistic-type aspirations was 15.12 ($SD = 7.35$). For this hypothesis, the assumption of expected frequencies was violated due to the small number of realistic aspirations. Thus, the proposed analysis was not run due to conditions being unmet.
Hypothesis 2. The second major hypothesis for this study was that experiencing relational victimization would be negatively associated career aspiration complexity code. A Pearson’s correlation was conducted to examine this hypothesis on the relational victimization items from the Problem Behavior Frequency Scale (PBFS; Farrell et al., 2000) and the occupational complexity code of participants’ reported career aspirations. The correlation revealed a negative linear correlation \( r = -0.043, p = 0.672 \) which was not statistically significant. The hypothesis that relational victimization would be negatively associated with career aspiration complexity code was not supported.

Hypothesis 3. The third major hypothesis for this study was that experiencing relational victimization would be positively associated with more perceived occupational barriers. A Pearson’s correlation was conducted to examine this hypothesis on the relational victimization items from the Problem Behavior Frequency Scale (PBFS; Farrell et al., 2000) and selected items from the revised version of Luzzo and McWhirter’s (2001) Perception of Barriers (POB) scale. The correlation revealed a negative linear correlation \( r = -0.051, p = 0.504 \) which was not statistically significant. The hypothesis that relational victimization would be positively associated with more perceived occupational barriers, therefore, was not supported.

Hypothesis 4. Fourth, it was hypothesized that experiencing relational victimization would be negatively associated with career decision-making self-efficacy. A Pearson’s correlation was conducted to examine this hypothesis on the relational victimization items from the Problem Behavior Frequency Scale (PBFS; Farrell et al., 2000) and scores from Betz et al.’s (1996) short form of the Career Decision-Making Self-Efficacy Scale (CDMSE-SF). The correlation revealed a positive linear correlation \( r = 0.095, p = 0.226 \) which was not
statistically significant. The hypothesis that relational victimization would be negatively associated with career decision-making self-efficacy, then, was not supported.

**Hypothesis 5.** Lastly, it was hypothesized that career decision-making self-efficacy would be negatively associated with career aspiration complexity level which, in turn, would be mediated by perceived occupational barriers. Scores from select items from the revised version of Luzzo and McWhirter’s (2001) *Perception of Barriers (POB)* scale are predicted to mediate the relation between Betz et al.’s (1996) short form of the *Career Decision-Making Self-Efficacy Scale (CDMSE-SF)* and the occupational complexity code of participants’ reported career aspirations.

As previously described in the method section, the four-step approach for mediated regression models was used to test these hypotheses (Baron & Kenny, 1986). The Pearson correlations noted above did not support the first condition for the relationship between career decision making self-efficacy and career aspiration complexity level. Because this condition of the proposed model was not supported, no further analyses were run. Thus, the hypothesis that career decision-making self-efficacy would be negatively associated with career aspiration complexity level, which in turn would be mediated by perceived occupational barriers, was not supported.

**Ancillary analyses.** Of the 145 participants who reported about their last job held before conviction, 29% indicated that they worked in a Holland Social-type occupation, 25.5% worked in a Holland Realistic-type occupation, 22.8% worked in a Holland Enterprising-type occupation, and 22.1% worked in a Holland Conventional-type occupation. Only one participant reported that she had worked in a Holland Artistic-type occupation. When the distribution of the female offenders’ Holland codes were compared to the
distribution of a published normative group there were observed differences in the Holland high-point codes. Table 3 presents these distributions for readers’ inspection.

The complexity levels of offenders’ last jobs before incarceration (as distinct from their career aspirations) also were coded. Complexity levels for last job held ranged from 37 to 67, with an average complexity level of 50.2 (SD = 6.937). Forty-seven participants had worked in low complexity level food service occupations. Of the 99 offenders that reported their last job and their career aspiration, there was an average complexity level increase of 8.894 points (SD = 9.4357) from their last job complexity level to their career aspiration complexity level. There was a range of a 48 point difference with a minimum of -17.5 and a maximum of 30.5. The large standard deviation may be skewed due to the 11 participants who displayed negative scores, indicating a decrease in the complexity level from their last job to their career aspiration, and the 17 participants who displayed a complexity level increase from last job to career aspiration of over 20 points. While these results are interesting, such analyses have not been seen in existing career literature so an interpretation of these changes in scores mean is not possible.

**Discussion**

The purpose of this study was to explore the associations among relational victimization and female offenders’ career aspirations, their perceived occupational barriers, and their career-decision making self-efficacy. Recent research suggests that female offenders experience higher rates of victimization and trauma than do members of the general population (Bradley & Davino, 2007; Wolff & Shi, 2010). Additional studies have shown that experiences of victimization are associated with negative affect and lowered self-esteem (Aquino & Thau, 2009) which, in turn, could influence offenders’ occupational
success. The vocational literature is just beginning to recognize the role that relational victimization might play in career development. For example, Kenny and Medvide (2013) recently observed the “limited body of research (that) has examined the role of peer relationships on career development” (p. 337). These are some of the few vocational researchers who consider the impact of relational violence and victimization in career development.

Most career-related programming for inmates does not take a vocational psychological approach. Traditional career-related programming tends to focuses on basic job attainment skills and training for low-wage occupations, paying limited attention to offenders’ career interests and career-related values (Railey & Peterson, 2000). Furthermore, some career-related programming tends to neglect the potential impact that maltreatment and abuse, both common features of female offenders’ histories (Bloom, Owen, & Covington, 2003; Harlow, 1999), could have on their career trajectory after release. This study sought to find support for a relationship between past experiences of relational victimization and the career-related factors of career aspiration, perceived occupational barriers, and career decision-making self-efficacy among female offenders. The section that follows will focus on findings from this study, implications for practice, limitations of this study, and implications for research.

**Relational Victimization and its Relation to the Other Primary Variables**

Given the importance of social context and interpersonal interactions in the development of career aspirations (Lent et al., 1994; Gottfredson, 1981), the influence of relational victimization on several career development variables was examined. For the first hypothesis, a logistic regression was conducted to examine the relationship between scores
on the relational victimization items from the PBFS and Holland code type of career aspirations (i.e., Realistic vs. Social). No significant difference was found for offenders’ experience of relational victimization and their career aspiration Holland code types. This finding is similar to Gros et al.’s. (2002) study in which no association was found between relational victimization and social anxiety. Gros et al. suggested that perhaps experiencing relational victimization in adolescence is more damaging for social development as compared to experiencing it in adulthood. Furthermore, this hypothesis may not have been supported due to the small number of Realistic-type occupational aspirations as compared to Social-type occupational aspirations in this study.

For the second, third, and fourth hypothesis, a Pearson’s correlation was conducted to examine the relations among scores on the relational victimization items from the PBFS and career aspiration complexity code, scores on the POB scale, and scores on the CDMSE-SF scale. In short, no significant associations existed among offenders’ experiences of relational victimization and their career aspiration complexity codes, career decision-making self-efficacy, and perceived occupational barriers. These results are not in line with other research (Strauser et al., 2006) that found a relationship between career decision-making difficulties and trauma.

**Career Decision-Making Self-Efficacy, Perceived Barriers, and Career Aspirations**

For the fifth hypothesis, multiple regression methods were used to examine whether career decision-making self-efficacy would be negatively associated with career aspiration complexity code, and whether this relationship would be mediated by perceived occupational barriers. The association between career decision making self-efficacy and career aspiration complexity code was not significant, thus suspending efforts in this study to explore a
proposed mediating effect of perceived occupational barriers on the relationship between career-decision making self-efficacy and career aspiration complexity code. Interestingly, perceived career-related barriers were not significantly associated with career-decision making self-efficacy; which conflicts with the significant association found between career decision-making self-efficacy and perceived occupational barriers in the work of Chronister and McWhirter (2006) with battered women. Nonetheless, other researchers (Swanson et al., 1996) have also found mixed results with these two variables, finding only moderate associations. Still, the findings of this study contrast with Luzzo’s (1996) work, which found that college students who perceived more career-related barriers exhibited lower career-decision making self-efficacy. Lastly, perceived career-related barriers were also not significantly related to career aspirations. Lent et al. (2000) also found mixed results when examining the relationship between perceived career-related barriers and career aspirations and he attributed this to inadequacies with the POB scale.

**Implications for Practice**

Despite limited results, the aforementioned statistical analyses provided some informational data on female offenders’ career aspirations. Understanding female offenders’ career aspirations is critical, because according to Litzky (2010) career aspirations make up an individual’s intention and desire that motivates them to pursue their goal. The Holland code types of female offenders diverge from those seen in a sample of female undergraduate students (e.g., Arbona & Novy’s (1991) study of female college students (N = 457). For example, female offenders aspired for approximately 27% more Holland Social-type occupations, 11% more Holland Realistic-type occupations, and 7% more Holland-Conventional type occupations than the college sample. Many of the occupations that make
up these categories, like factory worker or day-care worker, are similar to offenders’ previous low-wage jobs before incarceration and may have lower complexity levels. Conversely, female offenders aspired for approximately 26% fewer Holland-Investigative type occupations and 10% fewer Holland-Artistic type occupations and Holland Enterprising-type occupations than the college sample. Many of the occupations that make up the categories, such as biologist or business owner, have higher complexity codes. Despite the average increase in complexity code from last job before incarceration and career aspiration found in this study, offenders still appear to be aspiring for lower complexity level occupations than women in the general population.

As mentioned previously, the average complexity code for offenders in this study was 59.7. Social jobs (the most aspired for of the Holland code categories) that are considered to have a complexity code of 59 include camp counselor and telephone operator (DHOIC; Gottfredson & Holland, 1996). The results of this study are similar to the results of Railey and Peterson’s (2000) study that revealed a dominant Holland Code of SCE for female offenders. These researchers point out that most SC jobs requiring a high school education at best and are low-paying occupations, such as health service aid or domestic assistant. They also point out that SC occupations with significant pay scales usually require higher levels of education and, hence, are out of reach for most offenders.

It is important to note that the non-normative career aspirations of female offenders in this study could have been influences by several variables. The employment available in many prisons would typically be associated with Holland’s Realistic code and thus may have influenced female offenders’ aspirations for more Realistic type jobs. Whereas offense-related information was not collected, most women in this study were likely serving time for
a second or even third offense, given their placement in a residential facility. Type and number of convictions could have potentially influenced the results of this study as more offenses and severity of offense further restricts the jobs available to offenders after release. Regardless of relational victimization experiences, incarceration in itself generally has the potential to affect career aspirations and employment trajectories for female offenders. Vocational programs in prison should take into account the different distribution of female offenders’ career aspirations as compared to the normative distribution. Career aspirations should be taken into consideration when preparing offenders for reentering the workforce because, as Litzky (2010) suggests, having clear and attainable career aspirations should result in successful career decisions.

Another contribution of this study is that it provides baseline data for relational victimization rates of female offenders. There are no known previous studies that solely examine relational victimization rates in female adult offenders. In contrast, approximately one-third of adolescents in grades six through ten are involved in some way in peer victimization experiences (Nansel et al., 2001) and relational victimization accounts for approximately half of these experiences for adolescents in high school (Prinstein et al., 2001). As mentioned previously, 82.2% of women endorsed experiencing some type of bullying in a study examining 118 prisoners (Ireland & Ireland, 2008). Given the nature of the prison environment, it is likely that the majority of these bullying situations were covert in nature. In this current study, 86% of female offenders had experienced some form of relational victimization within the last two weeks and the majority of participants experienced relational victimization between one and four times during the two-week period.
With the base rate for physical victimization of inmates at 21% (or ten times higher than community victimization rates) and sexual victimization rates at 3.5%, or roughly double the community sexual victimization rate (Wolff et al., 2007), it is clear that female offenders are victimized more frequently than their non-offending peers. Thus, it was expected that the relational victimization rates found for the female offenders in this study would be higher than that of the general population. As expected, offenders’ relational victimization scores were high in this study, and it is likely that offenders’ rates may be even higher if this study was replicated due to several limitations of this current study.

In this study, the Holland Codes that characterized offenders’ last jobs held before incarceration and the Holland Codes that characterize the general population differ. The Holland code distribution of the general population is clarified using Holland’s (1994) Self-Directed Search upon which the Holland Code typology is based. While offenders’ rates were similar to the general population in regards to Holland Enterprising-type occupations and Holland Conventional-type occupations, female offenders were approximately 23% more likely to have worked in Holland Realistic-type occupations. They were 15% less likely to have worked in Holland Social-type occupations, and only one had worked in a Holland-Artistic type occupation. None of the participants had worked in Holland-Investigative type occupations. These non-normative results may be related to factors discussed earlier, such as less education and a work history consisting of lower complexity level occupations.

Therefore, popular career assessment tools (i.e., the Strong Interest Inventory) based on this typology may not be acceptable for use with offenders because they may not fit the normal occupational patterns upon which these assessments are based.

Limitations
The sample size of this study was small ($N=174$) which may have made it difficult to achieve statistical significance for the analyses. Similar to female offenders nationally, most offenders in this study had at least one child (Glaze, 2011); however the majority of participants in this study were white while black females are three times more likely to be incarcerated nationally. Furthermore, only 145 participants listed their last job before incarceration and only a little over half of the sample listed their career aspiration. While the second hypothesis did correlate in the expected direction, it was not significant, perhaps in part because 42 participants aspired for Social type occupations but only 13 participants aspired for Realistic type occupations. In addition, descriptive data such as prior victimization experiences were not collected and therefore could not be statistically controlled for. Another limitation of this study was that physical victimization was not controlled for when assessing for the effects of relational victimization. Nonetheless, other studies of inmates have found significant effects of indirect victimization (which includes relational victimization) even after controlling for physical victimization (Archer et al., 2007).

In addition to a small sample size, the average number of relational victimization experiences endorsed by the female offenders may be even further deflated due to the limited range of time indicated for the PBFS. Participants were only asked to indicate their relational victimization experiences in the past two weeks; however most relational victimization questionnaires allow for a longer time frame, ranging from the past 30 days to lifetime relational victimization rates. In addition, at the time of the survey the participants were residing in a community corrections facility. This could have resulted in lower relational victimization scores than if they were currently residing in a state or national prison facility.
which would be more likely to have higher stress environments. In addition, not controlling for lifetime relational victimization experiences is a major limitation of this study as past relational victimization experiences could influence the effects of recent relational victimization experiences.

Furthermore, it is important to note that the assumption of expected frequencies was violated for the logistic regression used to test the hypothesis that relational victimization would be associated with less socially-oriented career aspirations. Similarly, there was not a significant effect of ethnicity on perceived barriers in this study. This finding conflicts with a well-established vocational literature that supports the idea that perceived occupational barriers are higher for minorities (e.g., Cook et al., 1996; Constantine et al., 2005).

Lastly, the scales used in this study, although validated with multiple populations, typically have not been used with the female offender population. For example, the PBFS has been used most frequently with adolescents and is not commonly used with an adult population, and Holland’s typology has not been validated with the inmate population. Therefore, while they are useful for establishing base-line data in the offender population, the measures used for this study have yet to be deemed appropriate for this population. Similarly, the alpha coefficient (.62) associated with the POB scale suggests the potential for measurement-related problems.

**Implications for Future Research**

The results of this study leave many questions to be answered by future research. Future studies should incorporate a larger sample size to increase the likelihood of significant results. Furthermore, future studies should examine these constructs longitudinally and control for other types of victimization (e.g., physical, sexual, lifetime, etc.). This population
is often neglected by society at large and even in the psychology literature. Offenders in general, and especially female offenders, should be given more attention as a consequence of their vulnerability and the stigma that they face. Beyond the stigma of incarceration, offenders may struggle with the hassles of obtaining transportation, receiving social services, and figuring out how to obtain the appropriate documents, such as identification, needed to obtain employment. The importance of the career-related findings of this study can be illustrated by statistics that show 61% of males obtain work after release while only 37% of females do (Glaze, 2011).

As noted by previous researchers (Albert & Luzzo, 1999; Swanson & Tokar, 1991), the relations among career related variables (e.g., career decision-making self-efficacy, perceived occupational barriers, and career aspirations) should be further explored. While no relationship was found to exist among these variables in this study, other studies have found evidence pointing to their association (Patton et al., 2003; Luzzo, 1996). Also, some of the studies (Patton et al., 2003; Rivera, Chen, Flores, Blumberg, & Ponterotto; 2007) that found significant results have used other scales to measure perceived barriers (e.g., Perceived Barriers Scale, Howell, Frese, & Sollie, 1984; Career Barriers Inventory-Revised, Swanson et al., 1996) Perhaps future research could attempt to measure perceived occupational barriers with these more promising scales.

Accurately understanding how offenders’ victimization experiences, including their relational victimization experiences, impact their vocational development should be an aim of future studies. It is recommended that the relational victimization items from the PBFS be re-worded to be more age-appropriate for offenders and to take into account their environment. In addition, the length of time (i.e., the past two weeks) in question for the
relational victimization items could be improved upon. Asking offenders about their relational victimization experiences in the last thirty days or even from the entire length of their prison sentence would be more in line with other victimization measures used in prison (e.g., DIPC-R; Ireland, 2005). Also, this study did not differentiate between the experiences of being relationally victimized by other offenders versus being relationally victimized by corrections staff. Both of these experiences could have a distinct impact on the career-related outcomes of female offenders and should be examined separately in future research.

Future research should examine the potential indirect effects of relational victimization in addition to the possible direct effects. Perhaps relational victimization serves as a mediator or a moderator to influence negative emotions, which in turn could adversely impact career-related outcomes. Also, there may be a differential association between relational victimization in a social context of peer networks, relational victimization experienced while working in a job in the prison setting, or relational victimization experienced in a regular work setting. Future studies may benefit from examining the effects of relational victimization by using a path model and examining it in different contexts.

The normative Holland code type distribution of the female offender population should be further examined. Using current vocational assessments with this population may not be useful if they score significantly different on these assessments as compared to the general population. The success or failure of a career aspiration is related to whether an individual’s achievement is appropriate in light of their career aspiration (Litzky, 2010), so career aspirations should be examined with respect to the current state of the job market (Metz et al., 2009). Therefore, future studies should aim to better educate facilitators of
prison vocational programs about the importance of steering offenders towards careers that are interesting to them while still being realistic.
List of References
List of References


Appendix A

Revised Version of the Problem Behavior Frequency Scale

These are some problems that can come up between people. Please indicate how often these things happened to you in the last 2 weeks. Use the following scale:

1-------2-------3-------4-------5
Never   1-2   3-4   5-9   10 or more
Times   Times Times Times Times

1. Had a person say they won’t like you unless you do what he/she wanted you to do ..............................................1-----2-----3-----4-----5

2. Had someone spread a false rumor about you ....................................................1-----2-----3-----4-----5

3. Been left out on purpose by other people when it was time to do an activity ....................................................1-----2-----3-----4-----5

4. Had a person try to keep others from liking you by saying mean things about you ....................................................1-----2-----3-----4-----5

5. Had a person tell lies about you to make others not like you anymore ....................................................1-----2-----3-----4-----5

6. Had a person who is mad at you try to get back at you by not letting you be in the....................................................1-----2-----3-----4-----5

7. Didn’t let someone be in your group anymore because you were mad at him / her ....................................................1-----2-----3-----4-----5

8. Started a fight between other people ....................................................1-----2-----3-----4-----5

9. Told another person you wouldn’t like them unless they did what you wanted them to do ....................................................1-----2-----3-----4-----5

10. Insulted someone’s family ....................................................1-----2-----3-----4-----5
11. Teased someone to make them angry ........................................1----2----3----4----5

12. Tried to keep others from liking another person by saying mean things about him / her ..................................1----2----3----4----5

13. Put someone down to their face ........................................1----2----3----4----5

14. Gave mean looks to another person ........................................1----2----3----4----5

15. Spread a false rumor about someone ..........................................1----2----3----4----5

16. Picked on someone ..................................................1----2----3----4----5

17. Left another person out on purpose when it was time to do an activity ..................................................1----2----3----4----5

18. Said nasty things about another person to make others laugh ..................................................1----2----3----4----5
Appendix B

Perception of Barriers Scale

Please respond to each statement according to what you think (or guess) will be true for you. Use the following scale:


1. In my future career, I will probably be treated differently because of my sex.

2. In my future career, I will probably be treated differently because of my ethnic/racial background.

3. In my future career, I will probably be treated differently because I’ve served time in prison.

4. In my future career, I will probably experience negative comments about my sex (such as insults or rude jokes).

5. In my future career, I will probably experience negative comments about my racial/ethnic background (such as insults or rude jokes).

6. In my future career, I will probably experience negative comments about my having served time in prison (such as insults or rude jokes).

7. In my future career, I will probably have a harder time getting hired than people of the opposite sex.

8. In my future career, I will probably have a harder
time getting hired than people of other racial or ethnic backgrounds .................................................................①----②----③----④----⑤

9. In my future career, I will probably have a harder time getting hired than people who haven’t served time in prison .................................................................①----②----③----④----⑤

10. In my future career, I will probably experience discrimination because of my sex .................................................................①----②----③----④----⑤

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Not Sure</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>①--------------②------------------③-------------------④-------------------⑤</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. In my future career, I will probably experience discrimination because of my racial/ethnic background ..........①----②----③----④----⑤

12. In my future career, I will probably experience discrimination because I’ve served time in prison ..........①----②----③----④----⑤

13. In my future career, I will probably have difficulty finding quality daycare for my children .........................①----②----③----④----⑤

14. In my future career, I will probably have difficulty getting time off when my children are sick .........................①----②----③----④----⑤

15. In my future career, I will probably have difficulty finding work that allows me to spend time with my family ..........①----②----③----④----⑤
Appendix C

Career Decision-Making Self-Efficacy Scale

Please respond to each statement according to what you think (or guess) will be true for you. Use the following scale:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Confidence</td>
<td>Very Little Confidence</td>
<td>Some Confidence</td>
<td>Much Confidence</td>
<td>Complete Confidence</td>
</tr>
</tbody>
</table>

1. Make a plan of my goals for the next five years.

2. Prepare a good resume

3. Change occupations if I am not satisfied with the one I enter

4. Accurately assess my abilities

5. Determine the steps to take if I am having academic/school trouble

6. Choose a career in which most workers are members of the opposite sex

7. Identify some career alternatives if I am unable to get my first choice
8. Determine what my ideal job would be
.................................................................................................................................................................1-2-3-4-5

9. Describe the job duties of the career / occupation I would like to pursue
........................................................................................................................................................................1-2-3-4-5

10. Successfully manage the job interview process
........................................................................................................................................................................1-2-3-4-5

11. Select one educational goal from a list of goals I am considering
........................................................................................................................................................................1-2-3-4-5

12. Find information in the library about occupations I am interested in
........................................................................................................................................................................1-2-3-4-5

13. Find out about current employment trends for an occupation
........................................................................................................................................................................1-2-3-4-5

14. List several college majors that I am interested in.
........................................................................................................................................................................1-2-3-4-5

15. Move to another city to get the kind of job I would really like
........................................................................................................................................................................1-2-3-4-5

16. Persistently work at my educational or career goal even when you get frustrated or discouraged.
........................................................................................................................................................................1-2-3-4-5

17. Choose a career that will fit my preferred lifestyle
........................................................................................................................................................................1-2-3-4-5

18. Identify employers, firms, institutions relevant to my career possibilities
........................................................................................................................................................................1-2-3-4-5
19. Determine the steps I need to take to successfully obtain career training.

20. List several occupations that I am interested in

21. Choose a college major or career that will suit my abilities.

22. Find information about colleges, professional, or trade schools.

23. Define the type of lifestyle I would like to live

24. Choose a career that will fit my interests.

25. Talk to a teacher in a school's department in which I am considering enrolling
Appendix D

Demographics/Career aspirations

Some Information About You

Your Age (in years): __________

Marital Status.......................  □  single, never married / partnered
  □  divorced
  □  married / partnered
  □  married / partnered, but currently separated
  □  widowed

Race / Ethnicity....................
  □  African American / Black
  □  Asian American / Pacific Islander
  □  Caucasian / White
  □  Hispanic / Latina
  □  Middle Eastern
  □  Other (Please Specify): _______________________

Gender...............................  □  Female
  □  Male

Do You Have Children..........  □  No
  □  Yes (How Many): _______________________

School History.....................
  □  Some High School
  □  High School Graduate / GED
  □  Some College
  □  College Graduate
  □  Other (Please Specify): _______________________

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Current Educational Goal:
- Graduate High School / GED
- Graduate Technical / Professional School
- Graduate College
- Other (Please Specify):
  ____________________________________________

Last Job Held Before Conviction (Please Specify):
  ____________________________________________

Current Career / Job-Related Goal (Please Specify):
  ____________________________________________
Vita

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