

## ARTICLE PRE-PRINT

### **When in doubt: The value of uncertainty for release success among incarcerated women**

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#### **Abstract**

Reentry can be complicated and daunting, yet people leaving prison tend to be overly optimistic about their capability to remain crime-free. This optimism could be good—where a hopeful mindset could be indicative of a prosocial future narrative. Or this optimism could be bad—where a naïve mindset could be indicative of a lack of preparation for the challenges ahead. Our goal is to explore the concept of perceived uncertainty for reentry success with a focus for how it may be useful in better preparing people to rejoin society. Using data from 200 women incarcerated in Arizona, we explore 1) the demographic characteristics that are associated with perceived uncertainty for reentry success and 2) the extent to which perceived uncertainty is associated with the identification of specific obstacles upon their release. Our findings suggest that most women are optimistic about their capability to stay out of prison, but that age, education, and custody level are associated with perceived uncertainty in this capability. Women with uncertainty are more likely to identify employment as a barrier that could bring them back to prison. We suggest that a focus on perceptions of uncertainty is critical for research and programming on prison reentry.

*Keywords:* prisoner reentry; prison programming; perceptions of success; rehabilitation

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People leaving prison have every reason to be uncertain about their capability to stay out of prison. Out of the more than 600,000 people released from prison each year, an estimated 330,000 of them will return to prison within five years (Bronson & Carson, 2019; Durose et al., 2014). People face a number of challenges when they leave prison and rejoin their communities, ranging from obtaining housing and employment to substance abuse treatment to reunifying with families and children (Harding et al., 2019). Despite the realities of life after release, they are generally optimistic about their capability to stay out of prison—even more so than they perceive their peers' capability to stay out of prison (Dhami et al., 2006). Perceived success upon release is important, as it may indicate an optimistic perspective where a self-fulfilling prophecy means perceived reentry success begets actual reentry success.

*Uncertainty* about the future may be as useful as perceived *certainty* of success when it comes to people leaving prison and transitioning back into the community (LeBel et al., 2008). Uncertainty is defined as an affective state where an individual is unable to identify how probable an outcome is (Anderson et al., 2019); it can be directed at one's own capability to reach a goal, where individuals may question their own competence, environment, and/or resources (Duru & Balkis, 2014). This questioning of one's competence has been coined 'self-doubt' and can be a driving factor for behavioral change (Oleson et al., 2000). Among people who are incarcerated, one's level of uncertainty may influence their decision to engage with treatment programs while in prison. People who have a degree of uncertainty about their future may also be better able to identify and respond to risks that can put their success in jeopardy (Souza et al., 2015). Therefore, uncertainty about one's future success may be a healthy and useful response to the daunting task of re-entering and remaining in society after incarceration.

In this study we explore the role that perceived uncertainty of reentry success plays in shaping women's expectations of release from prison. Building upon work by Cobbina and Bender (2016), Visher and O'Connell (2012), and Friestad and Hansen (2006), we explore 1) the demographic characteristics that are associated with perceived uncertainty for reentry success and 2) the extent to which this perceived uncertainty is associated with the women's identification of specific obstacles upon their release. Our data represent standardized, semi-structured interviews of 200 women incarcerated in minimum and medium security prisons in the women's prison complex in Arizona, giving us the opportunity to identify variation in perceived uncertainty in success across a diverse sample with significant levels of involvement in the correctional system. More broadly, we highlight the importance of understanding individual perceptions of success in preparing people to leave prison.

## **Literature Review**

### **Perceptions of reentry success**

Criminological explanations of behavior that are rooted in labeling theories acknowledge the importance of perceptions for individual behaviors and outcome. Maruna (2001) found that attitudes and expectations of life after release are important for one's future outcomes among 65 desisters and 65 persisters in Liverpool. Following these 130 men ten years after their release from prison, those who desisted were often described as having hope and agency regarding their future (Burnett & Maruna, 2004). Even among those who desist from crime, people describe uncertainty and fear of a future that is different from the one they lived before (Fredriksson & Gålnander, in press). People who are currently incarcerated have not had the chance to desist, therefore anticipated—or perceived—desistance is critical for individuals leaving prison (Friestad &

Hansen, 2010). Among a sample of 24 men in the early stages of desistance three months after their release from prison in the Netherlands, those who had a clear expectation for a criminal or crime-free life after release were more likely to fulfil that goal, with more than 75% of them meeting their pre-release expectation at the three month mark (Doekhie et al., 2017). Altogether, criminological theory suggests that, even indirectly, perceptions of risk and success are important for individual outcomes.

People often have inaccurate perceptions about their future and they tend to overestimate their chances of reaching a positive outcome (Klar et al., 1996). This is especially true when making a comparative judgement of one's own risk of experiencing a negative event in relation to the perceived risk of others, which has been termed self-enhancement bias (Krueger, 1998). Further, people often suffer from a "dark side of optimism" where they have unrealistic expectations pertaining to their risk of having negative experiences (Dillard et al., 2009, p. 390). In a study of 323 people with alcohol addiction, those who had unrealistic expectations of risk—defined as the inaccurate belief that one's chances of experiencing an event are lower than those of others—were more likely to have negative experiences like blackouts and contact with law enforcement over a two year period (Dillard et al., 2009). There is an important distinction between the psychological and physical effects of unrealistic optimism, with negative effects showing up in more behavioral (e.g., risky behavior, substance use) than cognitive (e.g., emotional regulation, coping strategies) outcomes. Therefore, unrealistic optimism may be detrimental for tangible outcomes, such as reentry from prison, yet positive for psychological well-being.

People leaving prison specifically are likely to underestimate their risk for future negative outcomes and be overly optimistic about their future and capability to refrain from crime (Friestad

& Hansen, 2010). This is again true when they are comparing themselves to others leaving prison (Dhami et al., 2006). Non-criminal and conventional aspirations prior to release can only be useful for future outcomes when they are accompanied by successes in these domains after release (Doekhie & Van Ginneken, in press). People who have spent time in prison tend to recognize risk factors for recidivism, but they do not find these factors relevant for their own success (Brooks Holliday et al., 2013). Those who are overly optimistic about their success may believe that they do not need treatment while in prison. An underestimation of services needed upon release can be detrimental to, and leave individuals unprepared for, the realities of reentry (Visher et al., 2003). Service providers in the community have reported that people leaving prison are unrealistic about the difficulties of release, and that those who have experienced reentry before could help fill this gap in knowledge (Visher, 2007). Men and women who perceive difficulties after release may be those who are most likely to encounter them, as a number of risk factors associated with recidivism are also associated with perceptions of success (Dhami et al., 2006). Therefore, a degree of uncertainty could be a good thing for individuals returning to the community from prison.

People who are unrealistically optimistic about their future may also recognize that they may be at risk for negative outcomes. There is a distinction in the literature between having a realistic view of one's future and having a positive mindset (Souza et al., 2015). A positive mindset is important for coping strategies and outcomes such as desistance. On the other hand, realistic views of the future are necessary for recognizing and responding to risk. Souza and colleagues (2015) examined this dual hypothesis of realism versus positivity among a sample of 39 fathers returning to the community from prison. Returning fathers were overly optimistic about their success after release, but those who experienced more problems prior to prison were more likely

to perceive more difficulties upon release. This recognition of potential problems among a high-risk group of individuals points to their perceptions being rooted in realism, influenced by their own personal experiences. Souza and colleagues (2015) conclude that a dual perspective that balances positivity and realism is likely to lead to positive and long-lasting outcomes among people returning from prison. Uncertain perceptions about the future may play a crucial role in reentry outcomes, alongside more hopeful perceptions of life after release.

There have been few examinations of the ways that women specifically perceive their success upon release from prison. Using a mixed-gender sample, Friestad and Hansen (2010) interviewed 260 currently incarcerated men and women about their anticipated desistance from crime after release from prison. Respondents were asked to estimate their chances of avoiding crime after release, and the rating system ranged from 'poor' to 'good.' Eighty percent of individuals believed their chances of staying out of prison after release were rather good or good. The breakdown of optimism about desistance was similar across genders, with 79% of men and 88% of women anticipating desistance after release. The sample of women was small compared to men (n=50 vs. n=210), limiting the authors' ability to make conclusions about how women perceive their chances of success after release. Assuming a recidivism rate where half of the people released from prison will return to prison within five years, the responses present within this sample suggests that these currently incarcerated men and women have overly optimistic perceptions about their future.

Visher and O'Connell (2012) examined the factors that are related to individual perceptions of success after release. Using data from the *Returning Home Study*, the authors interviewed 791 soon-to-be released men and women in the states of Texas and Ohio about their prison experience

and perceptions of life after release. Optimism about life after release was measured as a scale that was comprised of ratings of difficulty meeting 13 different goals upon release, including repairing family relationships, providing for oneself, gaining and keeping employment, and avoiding parole violations. The ratings were on a four-point scale, with higher ratings indicating that respondents were more optimistic. The overall mean rating of the optimism scale was 29.35 with a range of 4 to 52.<sup>1</sup> Individuals with family support, more children, high self-esteem, being in drug treatment, and living in a safe neighborhood increased optimism, while months served, a negative family environment, and pre-prison drug abuse decreased optimism. Subsequent work out of the *Returning Home Study* has found that people are overly optimistic, especially about their ability to avoid crime (Visher, 2007; Visher et al., 2003).

Cobbina and Bender (2012) interviewed 26 women who had returned to prison within 3 years of release about their perceptions of success. The interviewees commonly described their own perceptions of success upon reentry against their perceptions of the success of other women experiencing incarceration, highlighting the regularity of self-enhancement bias. Women who perceived themselves as being successful upon release often described a change in mentality. This involved children, a desire to change their lifestyle, and being released early from community supervision. Women who were uncertain about their success upon release typically described circumstances that would bring them back to prison, such as substance abuse or being victimized in the community. While this study is a critical first step in understanding how perceptions of success may be important for reentry, the small sample size and sample restrictions present

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<sup>1</sup> The wide range indicates that respondents were not required to report difficulty ratings for all 13 goals, as other work out of the study highlights that 75% or more of respondents were optimistic across release goals (see Visher, La Vigne, & Castro, 2003 for example)

challenges for making policy recommendations for the wider population of women in prison. Taken altogether, women leaving prison face significant obstacles, and yet they are likely to overestimate their capability to handle these obstacles.

### **Current Focus**

People leaving prison face a number of obstacles to staying out of prison. Some of these obstacles are self-imposed, such as uncertainty regarding their capability to remain crime-free. Their self-doubt becomes insurmountable when they believe that ‘this is the way that it has always been,’ and their life becomes a condemnation script where a return to prison is almost inevitable (Maruna, 2001). But what if uncertainty in capability to stay out of prison was a good thing? What if feeling unprepared as they leave prison was indicative of a greater awareness of the challenges that lie ahead of them? This acknowledgement of the reality of their future obstacles might mean that they are anticipating facing them and that they are better prepared to do so. Much of the desistance literature focuses on the importance of positive future aspirations and a cognitive transformation that removes crime as a behavioral option. But nearly everyone leaving prison thinks they will not come back. And yet half do.<sup>2</sup> We believe that a more nuanced focus on perceptions of reentry success could provide valuable information with regard to how we approach rehabilitation and reentry.

In the current study we examine these issues through standardized, semi-structured interviews with 200 incarcerated women in minimum and medium custody prisons in the state of Arizona. We build on foundational work by Cobbina and Bender (2012), Visher and O’Connell (2012), and Friestad and Hansen (2010) to better understand the perceptions that the women have

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<sup>2</sup> Women tend to recidivate at a lower rate than men, but recidivism rates among women are still substantial, and a number of experiences within gender create unique pathways to recidivism (Huebner et al., 2010).



regarding their capability to remain in society after their release from prison. In particular, we focus on a larger sample of women with a more varied institutional history who rate their perceived certainty of staying out of prison on a straightforward scale. We also examine the specific barriers that may be associated with this uncertainty, which can begin to unpack the relationship between uncertainty and future reentry success. In doing so, we answer two broad questions. First, what are the characteristics of incarcerated women who express uncertainty in their capability to stay out of prison upon their release? In asking this question we answer whether characteristics like age, race, and number of times previously incarcerated are associated with perceptions of reentry success. Second, is an uncertainty in capability to stay out of prison upon release associated with the identification of specific obstacles the women perceive they will face upon release? In asking this question we explore whether an uncertainty in reentry success could be anticipative of the specific obstacles that the women will face upon reentering society. Our broader purpose is to begin to unpack the dichotomies of certainty and uncertainty, and prepared and unprepared, to demonstrate the value of a more nuanced understanding of what it means to be prepared to stay out of prison upon release.

### **Methods**

We use data from the *ASU Putting Second Chances to Work Project (P2W)*. The goal of the P2W project is to understand the employment, programming, and reentry needs of incarcerated women and to use that information to develop and evaluate an employment-focused program for women in prison. The current study uses data from standardized, semi-structured interviews that were collected in the spring and early summer of 2019. The survey instrument was created by members of Arizona State University's (ASU) Center for Correctional Solutions, in collaboration with state

agencies, ASU entities, and community organizations. The survey contained both close- and open-ended questions.<sup>3</sup>

Data were collected from the only women's correctional complex in Arizona, the Arizona State Prison Complex at Perryville (ASPC-Perryville). ASPC-Perryville houses over 4,000 women at any given time, across minimum, medium, and close custody (Arizona Department of Corrections, Rehabilitation, and Reentry, 2019b). Out of the 7 prisons within the complex, a minimum and a medium security prison were chosen for data collection. Because a majority of individuals in prison serve their time on and are released from low or medium custody prisons (Austin, 2001), these security levels constitute the majority of women in prison in Arizona. These prisons house over 2,000 women collectively. Overall, the participants are fairly representative of the women's prison population in Arizona.<sup>4</sup>

Prior to data collection, flyers were posted in the prisons and participants were asked to volunteer to participate in the study by sending a letter to a designated correctional officer. Each day, a member of the research team would enter the prisons and consent women who had volunteered for participation and were available to participate that day. The ADCRR staff had no influence in selecting prisoners and did not inform women of the project while escorting them to the interview location. Interviews were carried out on a one-on-one basis within visitation or a classroom in the prison. There were no incentives offered to participate in the surveys. A total of

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<sup>3</sup> The study protocols were approved by ASU's Institutional Review Board (STUDY00008660).

<sup>4</sup> The Arizona Department of Corrections, Rehabilitation, and Reentry provides information on the end of fiscal year combined population (Arizona Department of Corrections, Rehabilitation, and Reentry, 2019a). The average age of females in ADCRR in 2019 was 37.2, compared to 37.4 in our sample. The average length of stay in ADCRR for females was 61.2 months, compared to 60.0 months in our sample. Fifty-nine percent of women in ADCRR were serving their first term in an Arizona prison, compared to 65% in our sample. This difference could largely be due to asking about any prison term, rather than Arizona-specific. The level of education is higher in the current study compared to national estimates, with 25% of women in the current study having less than a high school diploma compared to 39.1% nationally (Harlow, 2003)

233 women were approached to participate in the project. Of those, 13 were ineligible due to working outside of the prison or conflicts with programming and 20 declined to participate. This resulted in a cooperation rate of 91% (200/220). Half of the interviews were conducted with women in minimum security and half were conducted in medium security.

## Measures

Key dependent variables.

We measure perceived uncertainty for reentry success through a question that asks the women “On a scale of 0% to 100%, how prepared are you to stay out of prison after you’re released?” This variable was recorded as a continuous variable. The variable was highly skewed, with a mean rating of 91.43 (SD=18.59) and 72% of respondents saying they were 100% prepared to stay out of prison after release. The low level of uncertainty present among respondents is in line with prior literature, where only 10% to 25% of respondents report uncertainty about their future chances of staying out of prison (Friestad & Hansen, 2010; Visser et al., 2003). Using this question, we operationalize perceived uncertainty for reentry success as a dichotomous variable of uncertainty.<sup>5</sup>

*Any uncertainty* captures whether a respondent had any uncertainty about their capability to stay out of prison after release with 0 equaling 100% prepared to stay out of prison after release (certainty) and 1 equaling 0-99% prepared to stay out of prison after release (uncertainty).

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<sup>5</sup> We also measured uncertainty as a categorical variable containing three groups, with cut-off points for group inclusion determined by median and standard deviation. The first group, ‘certainty,’ represents respondents who said they were 100% prepared to stay out of prison after release. This is the median response of the original variable and captures 72% of the sample (n=144). The second group, ‘moderate uncertainty,’ represents women who were at the mean or within one standard deviation of the mean. This group represents respondents who said they were between 73% and 99% prepared to stay out of prison after release (15.5% of sample, n=31). The third group, ‘high uncertainty,’ represents women who are within two or more standard deviations below the mean for preparedness for release. This group represents respondents who said they were between 0% and 73% prepared (12.5% of sample, n=25). We estimated separate models with the three-category variable, which did not significantly alter the results presented here. Results are available upon request.

We measure perceived obstacles for reentry success through a question that asks the women “What are one or two obstacles that you foresee to staying out of prison?” We identified qualitative themes through a grounded theory approach. Grounded theory approaches data in an inductive way, which allows the themes to originate from the data. We used a two-cycle thematic coding scheme, where initial concepts were coded during the first cycle and larger, more structural concepts were coded during the second cycle of coding (Saldaña, 2015). Further, we read through all responses individually before the coding process began and codes were double-checked after each cycle of coding by the author responsible for coding. We prioritize the use of second cycle codes where appropriate.

All themes about obstacles to release were translated into dummy variables, where 1 indicates that a theme was present in a response; themes were not mutually exclusive. A total of 11 themes were identified, with responses averaging 1.5 (SD=0.55) themes. The coded themes include substance abuse, employment, no obstacles, housing, mindset, old environment or friends, probation or parole, housing, family, discrimination, idle time, and relationships or domestic violence. Five themes were reported less than 5% of the time by the full sample, so they were excluded from the analysis (mental health, transportation, education or skills, social support, and don’t know).

Key independent variables.

*Demographics.* There are a number of individual-level demographic factors that are included in the analysis, as guided by their inclusion in prior literature on optimistic outlooks among all-male (Dhami et al., 2006) or mixed-gender (Visher & O’Connell, 2012) samples. *Age* was measured in years, ranging from 20 to 72. *Race* was measured as a dichotomous variable with 0 equaling non-

white and 1 equaling white.<sup>6</sup> *Education* was measured as a categorical variable with four groups: less than a high school education, high school diploma or GED, some college, a technical, vocational, or associate's degree, and bachelor's degree or graduate degree. Less than a high school education is the reference group for all analyses. *Substance abuse problem* was measured as a dichotomous variable with 0 equaling no and 1 equaling yes. The survey asks respondents "Do you feel that substance abuse was the main contributing factor to your incarceration?" *Married* was measured as a dichotomous variable with 0 equaling not married and 1 equaling married. *Number of minor children* was measured continuously ranging from 0 to 11. *Number of times to prison* was measured continuously ranging from 1 to 9. *Months in prison* for the current sentence was measured continuously and ranged from 1 to 336. *Months left to serve* for the current sentence was measured continuously and ranged from 0 to 420. We use transformed, natural logged versions of *months in prison* and *months left to serve* for the multivariate analyses to account for non-normality in their distributions.

We control for *number of programs* participating in. This was measured as a continuous variable ranging from 0 to 6. Participants were asked which programs they were participating in at the time of the interview. Programs included substance abuse, education, job training, self-help, peer-led, and other. We also controlled for *security level*. This measured as a dichotomous variable, and individuals were given a 1 if they were housed in medium security at the time of the interview and 0 if they were housed in minimum security.

[TABLE ONE NEAR HERE]

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<sup>6</sup> Analyses were run using the white/non-white variable and using all racial/ethnic groups. Analyses produced similar results and white was not significantly more likely to be uncertain compared to any of the other racial/ethnic groups. For simplicity in reporting and interpretation, we use the dummy white/non-white variable.

## Plan of Analysis

We estimate bivariate and multivariate models to address each research question. For the first research question, “What are the characteristics of incarcerated women who express uncertainty in their capability to stay out of prison upon their release?” we examine mean differences in the key independent variables and controls across the certainty and uncertainty groups at the bivariate level using independent samples t-tests for continuous variables and chi-square tests for categorical variables. We then estimate logistic regression models predicting perceived uncertainty in capability to stay out of prison including all independent variables and controls. For the second research question, “Is an uncertainty in capability to stay out of prison upon release associated with the identification of specific obstacles the women perceive they will face upon release?” we examine mean differences in the identified obstacles to reentry across the certainty and uncertainty groups at the bivariate level using chi-square tests. We then estimate logistic regression models predicting each of the 5 top identified obstacles to successful reentry including the key variable of perceived uncertainty in ability to stay out of prison alongside all other independent variables and controls.

To test for multicollinearity, we ran diagnostic tests to determine the level of collinearity between the independent variables. No bivariate correlations exceeded the absolute value 0.41<sup>7</sup> and variance inflation factors did not exceed 1.80 for any of the variables. Conditional index values

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<sup>7</sup> The variable for months until release and medium security have a correlation of 0.41. Due to collinearity, supplemental analyses were run using each of the variables separately. These analyses produced two changes. When months to release was dropped from the multivariate analysis for research question one, times to prison was significant (1.323,  $p < 0.044$ ). Further, we observed an improvement in model fit for the multivariate analyses for research question two on the release obstacle of employment. Medium security was dropped in the multivariate employment release obstacle model to improve model fit.

did not exceed 20. All of these values are below conventional criteria for collinearity issues (Kutner et al., 2005). All analyses are run in Stata 14.2.

## Results

The results for the bivariate analyses for research question one are included in Table Two. Compared to women with certainty, women with uncertainty had served more times in prison ( $M_{\text{uncertainty}}= 2.036, M_{\text{certainty}}= 1.563, p<0.007$ ). A larger proportion of women with uncertainty were medium security, compared to women with certainty  $M_{\text{uncertainty}}= 0.661, M_{\text{certainty}}= 0.438; p<0.005$ ). Women with uncertainty had more months left to serve on their sentence compared to women with certainty ( $M_{\text{uncertainty}}= 44.232, M_{\text{certainty}}= 32.629, p<0.077$ ). More women with uncertainty reported substance abuse as the main contributing factor to their incarceration than women with certainty  $M_{\text{uncertainty}}= 0.764, M_{\text{certainty}}= 0.625; p<0.064$ ). The differences between women with uncertainty and women with certainty for months left to serve and substance abuse approached statistical significance.

[TABLE TWO NEAR HERE]

The results for the multivariate analysis for research question one are presented in Table Three. A one-year increase in a women's age resulted in her being 1.05 times less likely to have uncertainty ( $p<0.029$ ). Women who had completed some college, vocational, technical, or associate's degree were four times more likely to report having uncertainty than were women who had less than a high school diploma ( $p<0.002$ ). Women who had completed a bachelor's degree or a graduate degree were four times more likely to report having uncertainty than were women who had less than a high school diploma ( $p<0.043$ ). Women housed in medium security were 2.99 times more likely to report having uncertainty than women in minimum security ( $p<0.011$ ). White

women were twice as likely to report having uncertainty compared to non-white women, although this finding approached significance ( $p < 0.071$ ). Women who believed they had a substance abuse problem were two times more likely to report having uncertainty than women who did not believe they had a substance abuse problem, although this finding approached significance ( $p < 0.073$ ).

[TABLE THREE NEAR HERE]

The results for the bivariate analysis for research question two can be found in Table Four. There were a number of significant relationships between having uncertainty and the proportion of women who reported specific themes of obstacles for staying out of prison. Thirty-three percent of women who had uncertainty cited employment as a release obstacle, compared to 14% of women with certainty ( $\chi^2 = 10.315$ ;  $p < 0.001$ ). Twenty-three percent of women with certainty cited no obstacles to release, compared to 9% of the women with certainty ( $\chi^2 = 4.336$ ;  $p < 0.037$ ). There was a relationship, which approached statistical significance, between having uncertainty and citing housing as an obstacle, with women with uncertainty citing this theme 12% of the time, compared to 5% of those with certainty ( $\chi^2 = 3.614$ ;  $p < 0.057$ ).

[TABLE FOUR NEAR HERE]

The results for the multivariate analysis for research question two are largely presented in text. Only the finding related to employment is presented as a table in Table Five. The certainty group serves as the reference group in all five of these models. Full tables are available upon request. Uncertainty was associated with the likelihood of reporting employment as an obstacle for release. Women with uncertainty were four times more likely to cite employment, compared to women with certainty ( $p < 0.001$ ). Uncertainty was also associated with citing old environment and friends as an obstacle, although this finding approached significance. Women with uncertainty



were three times less likely to cite old environment or friends, compared to women with certainty ( $p < 0.060$ ). With the exception of employment, women who were uncertain about their capability to stay out of prison were no more likely to identify specific obstacles to that success as compared to women who were certain in their capability to stay out of prison.

[TABLE FIVE NEAR HERE]

### **Discussion**

Incarcerated women often express dismay and frustration that they celebrate their fellow women's departure from prison only to see them return a short while later. They believe that 'it won't be me' and they are fully certain this will be the last amount of time that they spend incarcerated. Statistically, it will be some of them, and incarcerated women's perceptions of their reentry success—and why they think that way—is an under-conceptualized and under-studied component to prisoner reentry. In our sample, one woman had been incarcerated nine times in her life. Shelly is 36 years old, set to be released within 1 year, and she was 90% confident that she would not return to prison for a tenth time.<sup>8</sup> She told us that she had changed a lot of her ways this time and that it had not been easy, that her main obstacle to reentry success was bad family members, and that in five years she saw herself owning her own little business. Near 100% confidence is surely promising for a desistance literature that values optimistic future outlooks, but that 10% of uncertainty is where we could turn our scholarly attention to better understand the role that perceptions of reentry success play in achieving that reentry success. Our goal in the current study was to move beyond thinking that absolute certainty in perceived reentry success is a good thing, and to inspire continued critical thought as to why most people leaving prison are overly optimistic

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<sup>8</sup> Pseudonyms are used in this section. Additional demographic information is not provided to protect anonymity.

in their chances to stay out of prison; in effect, some uncertainty regarding the future could be a good thing that prepares people leaving prison for the obstacles that lie ahead.

Our results showed that a nontrivial portion of women in our sample expressed some uncertainty regarding their preparation for staying out of prison. The 26% of women who expressed some uncertainty is higher than that of previous studies (e.g., Friestad & Hansen, 2010), and we even believe this to be a conservative estimate given the potential selection effect of women who volunteered to talk about their programming experiences to us; a more representative sample to include women who were not actively programming may produce even more uncertainty. A number of demographic factors were associated with having uncertainty for reentry success. Women who were younger, more highly educated, and of a higher security level were all associated with having some uncertainty. Age could be indicative of an aging out of crime where younger women have not yet grown tired of a life of addiction, victimization, and criminal behavior—many older women in our sample commented on all the life that they had missed out on because of their incarceration. Younger women might also have less experience in navigating the reentry process, whether that experience be direct or vicarious through the examples of others. More highly educated women may have a more realistic understanding of the challenges that lie ahead, in the same vein of research that finds women with higher levels of education have a greater awareness of health risks (Wardle et al., 2001). Security level may be a proxy of risk, where a more serious criminal past could mean a more serious level of stigma to overcome in society. Whatever the reasons, our results are clear in that a significant percentage of women are concerned that they will return to prison, and that uncertainty for reentry success is not randomly distributed across all incarcerated women.

We believe these findings have significant implications for the theoretical foundations that underlie the reentry experience. Perceptual research has a rich history in criminology, where perceptions of deterrence, strain, peer deviance, and procedural justice have all contributed significantly to our understanding of human behavior (Meyers et al., 2017). The prominence of perception is especially evident in corrections through the emphasis on changing of attitudes in cognitive behavioral therapy (Smith et al., 2009) and in encouraging the vision of an efficacious, desisting future self that can overcome obstacles (Fredriksson & Gålnander, in press). Here we advance the idea that uncertainty in future success could actually be a good thing, where it allows people to proactively anticipate a difficult pathway ahead of them and to fully prepare themselves for those obstacles (Souza et al., 2015). Acknowledgement of a level of uncertainty in reentry success could be a first step in identifying and accepting social support to help navigate the reentry process—whether that support be from family and friends, community members, or agents of the criminal justice system (Wright & Cesar, 2013). Perceptions are prominent in corrections, but nearly every scholar has focused on the majority that views their reentry with optimism. We believe there is much to learn from the people who view their reentry with caution as opposed to the defiant people who “will never come back to prison,” but sometimes do.

Our results showed that having uncertainty in reentry success was associated with securing employment as an obstacle to success. Women who were uncertain about their capability to stay out of prison told us that they were particularly concerned about their ability to find employment due to having low skills, the felony stigma of a criminal record, and unaddressed traumas and addictions. This is a critical finding, and our data were collected prior to the COVID-19 pandemic that has impacted the economy and availability of jobs. Thus, our results allow us to go a step

further in exploring *why* women leaving prison may be uncertain about their capability to stay out of prison—although we acknowledge that uncertainty was predictive of just this obstacle among the top five identified in our sample. Women leaving prison have less personal and social capital to draw from as compared to men when it comes to establishing independence through gainful employment (Holtfreter et al., 2004). Finding reentry success may be about finding a job, and uncertainty in ability to find a job could match up better with uncertainty within the economy.

We believe this finding has important implications for programming and policy within the reentry experience. Support for a relationship between employment and recidivism is mixed (see, for example, Valentine & Redcross, 2015), in part because there are many complexities between work and crime such as the stigma of a felony record, the distinction between ‘any work’ versus stable and well-paying work, and types of work that do not show up in administrative datasets. These issues aside, the ability to obtain work is on the forefront of the minds of women returning from prison. Programs and policies that train women on the inside and connect them to work on the outside seem to be a particularly promising way to alleviate these concerns. For example, in Arizona, the marketing company Televerde trains and employs incarcerated women to work in their call centers during incarceration and links them up with employment within the company upon release (Rogers et al., 2017). What is important is that policies and programs on the inside be grounded in an understanding that incarcerated women have backgrounds marked by poverty, addiction, trauma, victimization, and dependency—not every woman leaving prison is prepared to launch their own business, for example. Prison and educational programming that increases the employability of women, and that connects them to jobs on the outside upon their release, is a good approach to alleviating the uncertainty surrounding ability to find work after prison.

Our study is exploratory in determining variation within perceptions of uncertainty, what factors are associated with that variation in uncertainty, and what that variation in uncertainty means for identifying specific obstacles for reentry success among currently incarcerated women. Perceptions are critical to the corrections and desistance literatures, but we acknowledge the importance of determining whether perceptions predict behavior in the form of recidivism. Although we share the concerns of others who believe that an exclusive focus on recidivism reduction limits scientific progress (Wright et al., in press), we know the degree to which perceptions of uncertainty catches on in the scholarly literature is contingent on the degree to which it is associated with actual behavior. Scholars building on our results here could also examine additional correlates of perceived uncertainty, where we were only able to explain roughly 15% of its variation. Not everyone feels fully prepared to successfully return to society from prison, and we have much to learn about why that is the case. These additional correlates could include risk assessments, indicators of program participation and success, social support and resource access in the community, and indicators of prior justice system involvement. Lastly, it is likely that perceptions of uncertainty for reentry success are best captured through true qualitative interviews, and longitudinal interviews could uncover the uncanny nature of the fears and anxieties that characterize preparation for reentry into the community (Fredriksson & Gålnander, in press). We identified some correlates of perceived uncertainty, but we are less able to say *why* these are correlates. Qualitative research, and especially longitudinal qualitative research, can help explain why factors like security level, for example, are associated with perceived uncertainty in reentry success.

We started this section introducing a woman who was incarcerated for the ninth time in her life. Here are three women who were incarcerated for their first time. Tina is 44 years old, set to be released in 6 months, and was the only person in the entire sample to say that they were 0% prepared to stay out of prison. She told us that she was not prepared whatsoever and did not know what was in store for her, that she did not know what her main obstacle to success was because she did not know what the options were, and that in five years she saw herself hopefully with her own place, car, and job—and ‘not here’ (prison). Gwen is 33 years old, set to be released in 2 months, and was 50% prepared to stay out of prison. She told us that she needed more time to prepare and to stay on top of things in prison and that she wanted to know that she has all of her stuff together, that her main obstacle was going back to where she came from, and that in five years she saw herself with her own business. Shawna is 33 years old, set to be released in 3 years, and was 100% prepared to stay out of prison. She told us that she was ashamed to be in prison, that her main obstacle was her anger, and that in five years she saw herself working at PetSmart. Who among these women could be predicted to return to prison and why? There were 130 women in our sample who were incarcerated for the first time in their lives. Of those 130 women, 99 of them were 100% confident that it would be the last time that they would ever be incarcerated. We believe there is much to learn from people’s level of uncertainty for their future when thinking about crime, incarceration, and successful reintegration back into society.

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Table 1. Demographics Among a Sample of Incarcerated Women (N=200).

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>
<b>Study Variables</b>				
Any uncertainty (1=0-99.99% prepared)	0.28		0	1
<b>Themes: Obstacles for staying out</b>				
<i>Discrimination</i>	0.06			
<i>Employment</i>	0.20			
<i>Family</i>	0.08			
<i>Housing</i>	0.07			
<i>Idle time</i>	0.05			
<i>Mindset</i>	0.17			
<i>Old environment or friends</i>	0.15			
<i>Parole or probation</i>	0.10			
<i>Relationships or domestic violence</i>	0.05			
<i>Substance abuse</i>	0.26			
<i>No obstacles</i>	0.18			
<b>Demographics &amp; Controls</b>				
Age	39.38	11.45	20	72
Race (1=white)	0.53		0	1
<b>Education</b>				
<i>Less than high school diploma</i>	0.28			
<i>High school diploma or GED</i>	0.21			
<i>Some college, vocational, technical, or associate's degree</i>	0.41			
<i>Bachelor's or graduate degree</i>	0.10			
Substance abuse (1=yes)	0.66		0	1
Married (1=yes)	0.17		0	1
Number of minor children	1.46	1.82	0	11
Times incarcerated	1.70	1.24	1	9
Months in prison for current sentence	41.18	59.97	1	336
Months left in sentence	35.89	51.66	0	420
Number of programs participating in	1.72	1.57	0	6
Security level (1=medium security)	0.50		0	1

Table 2. Differences in Demographics and Prison Experiences by Having Uncertainty (N=200)

Variable	Certainty Group (n=144)	Uncertainty Group (n=56)
Age	40.02 (12.10)	37.73 (9.49)
Race (1=white)	49.31%	60.71%
Education +		
<i>Less than high school diploma</i>	31.94%	17.86%
<i>High school diploma or GED</i>	21.53%	17.86%
<i>Some college, vocational, technical, or associate's degree</i>	36.11%	55.36%
<i>Bachelor's or graduate degree</i>	10.42%	8.93%
Substance abuse (1=yes) +	62.50%	76.36%
Married (1=yes)	19.44%	10.71%
Number of minor children	1.48 (1.76)	1.39 (1.97)
Times incarcerated**	1.56 (1.00)	2.04 (1.66)
Months in prison for current sentence	38.72 (59.68)	47.50 (60.79)
Months left in sentence +	32.63 (48.11)	44.32 (59.42)
Number of programs participating in	1.78 (1.61)	1.57 (1.46)
Security level (1=medium security) **	43.75%	66.07%
<i>Notes:</i> Mean (SD) or percentages within groups reported		
Chi-squares were used for all categorical variables. Independent samples t-tests were used for all continuous variables.		
+ = p<0.10    * = p<0.05    ** = p<0.01    *** = p<0.001		

Table 3. Logistic Regression of Demographics on Uncertainty about Release Success Among Incarcerated Women (n=197)

DV: Any Uncertainty	Odds Ratio	Std. Error
Age *	0.954	0.020
Race (1=white) +	2.030	0.797
Education		
<i>High school diploma or GED</i>	1.923	1.091
<i>Some college, vocational, technical, or associate's degree**</i>	4.655	2.341
<i>Bachelor's or graduate degree *</i>	4.578	3.440
Substance abuse (1=yes) +	2.203	0.970
Married (1=yes)	0.617	0.327
Number of minor children	0.981	0.102
Times incarcerated	1.270	0.190
Months in prison for current sentence (ln)	1.003	0.157
Months left in sentence (ln)	1.108	0.179
Number of programs participating in	0.948	0.113
Security level (1=medium security) *	2.990	1.285
<p><i>Notes:</i> Less than a high school education serves as the reference group for <i>Education</i>. N=3 cases deleted via listwise deletion. Missing cases on age (n=1), substance abuse (n=1), and months left in sentence (n=1).            Log likelihood = -98.534352 LR <math>\chi^2</math> (14) = 36.25 Prob &gt; <math>\chi^2</math> = 0.0005 Pseudo R2 = 0.1554            + = p&lt;0.10 * = p&lt;0.05 ** = p&lt;0.01 *** = p&lt;0.001</p>		

Table 4. Bivariate Differences in the Obstacles Women Foresee that Could Bring Them Back to Prison by Uncertainty (N=200).

Variable	Certainty Group (n=144)	Uncertainty Group (n=56)	$\chi^2$
Discrimination	6.25%	3.57%	0.557
Employment ***	13.89%	33.93%	10.315
Family	7.64%	8.93%	0.091
Housing +	4.86%	12.50%	3.614
Idle Time	6.25%	1.79%	1.692
Mindset	18.06%	12.50%	0.903
Old Environment or Friends	17.36%	8.93%	2.249
Parole or Probation	10.42%	8.93%	0.0992
Relationships or Domestic Violence	5.56%	3.57%	0.334
Substance Abuse	22.92%	33.93%	2.541
No Obstacles *	21.53%	8.93%	4.336

*Notes:* All chi-square tests had 2 degrees of freedom.  
 + = p<0.10   \* = p<0.05   \*\* = p<0.01   \*\*\* = p<0.001

Table 5. Logistic Regression of Uncertainty on Employment as Release Obstacle (n=197)

DV: Employment Release Obstacle	Odds Ratio	Std. Error
Any Uncertainty **	4.107	1.883
Age	0.981	0.023
Race (1=white)	0.654	0.285
Education		
<i>High school diploma or GED</i>	0.721	0.430
<i>Some college, vocational, technical, or associate's degree</i>	0.730	0.380
<i>Bachelor's or graduate degree</i>	0.808	0.713
Substance abuse (1=yes) *	0.391	0.178
Married (1=yes)	0.589	0.336
Number of minor children	0.979	0.130
Times incarcerated	0.942	0.157
Months in prison for current sentence (ln)	1.316	0.229
Months left in sentence (ln) *	0.692	0.125
Number of programs participating in	1.116	0.141
<p><i>Notes:</i> n=39 (19.50%) of women reported employment as a release obstacle  Less than a high school education serves as the reference group for <i>Education</i>.  N=3 cases deleted via listwise deletion. Missing cases on age (n=1), substance abuse (n=1), and months left in sentence (n=1).  Log likelihood = -85.333836 LR <math>\chi^2</math> (13) = 22.55 Prob &gt; <math>\chi^2</math> = 0.0475 Pseudo R2 = 0.1167  + = p&lt;0.10 * = p&lt;0.05 ** = p&lt;0.01 *** = p&lt;0.001</p>		