

Prisoners' Positive Illusions of Their Post-Release Success

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Abstract Prisoners' forecasts of post-release success may have implications for how they respond to imprisonment, release, and parole decisions. We examined sentenced US and UK prisoners' forecasts of recidivism, and how well UK prisoners believed they would fare compared to the average other prisoner. In both samples, forecasts of recidivism were unrealistically optimistic when compared to official statistics on recidivism. UK prisoners also demonstrated a self-enhancement bias by forecasting that they were less likely to re-offend than other prisoners. Prisoners' forecasts of recidivism were predicted by only a few of the pre-prison, in-prison, and post-prison factors that have been shown to be associated with actual recidivism. We discuss the implications of these findings and propose avenues for future research.

Keywords Unrealistic optimism · Forecasts · Self-enhancement bias · Imprisonment · Prisoner release

Statistics on the world's current prison population and its future trends show that imprisonment is a popular way of dealing with the problem of crime (Walmsley, 2003). The United States has the highest per capita prison population in the world (approximately 701 per 100,000 of the national population) and the United Kingdom has the highest per capita prison population among the

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European Union countries (approximately 141 per 100,000). Prison aims to serve retribution, and incapacitate, deter, and rehabilitate offenders. However, the idea that “prison works” has been much criticized (Mathiesen, 1990). In fact, 41% of US federal prisoners released in 1987 were rearrested or had their parole revoked within 3 years (Harer, 1994), whereas in the United Kingdom, 59% of prisoners released in 1999 were reconvicted within 2 years (Home Office, 2003).

At the beginning of their prison sentence (and at periodic intervals during their sentence), prisoners are assigned a risk classification that, in part, pertains to their risk of recidivism.¹ Considerable research has been conducted into developing tools that forecast prisoners’ chances of recidivism (e.g., Andrews & Bonta, 1995; Bonta, Harman, Hann, & Cormier, 1996) based on a large body of ongoing research aimed at identifying the objective factors that predict recidivism (e.g., Cooke & Michie, 1998; Glover, Nicholson, Hemmati, Bernfeld, & Quinsey, 2002; Harper & Chitty, 2004). To date, however, few criminological studies have examined how prisoners forecast their own chances of recidivism (Burnett, 1992; Visher, La Vigne, & Castro, 2003; Zamble & Quinsey, 1997), and no study has examined the factors that predict these forecasts. Psychological research in other domains has found that people tend to be overly-optimistic and self-serving in their forecasts (for reviews, see Taylor & Armor, 1996; Taylor & Brown, 1988; Weinstein, 1989; Weinstein & Klein, 1996), and that forecasts are often based on invalid factors or misapplication of valid factors (e.g., see Rehm & Gadenne, 1990).

This paper presents a study examining US and UK sentenced prisoners’ forecasts of their post-release success. Our primary goal was to measure the optimism and self-serving nature of their forecasts of recidivism, and to identify factors that predict these forecasts. We used two samples to explore the robustness of the findings. First, however, we review criminological research on recidivism, and psychological research on the tendency for people to provide overly optimistic and self-serving forecasts about their future prospects.

Criminological research on recidivism

Although the prediction of recidivism is problematic, considerable research has been conducted on this topic.² Much of this research has been conducted in North America, but similar findings have been obtained in the United Kingdom (see Harper & Chitty, 2004). Researchers have documented factors associated with recidivism both in general (e.g., Cooke & Michie, 1998; Glover et al., 2002) and specific prison populations (e.g., Hanson & Wallace-Capretta, 2004; Scalora & Garbin, 2003), as well as for certain types of crimes (e.g., Eronen, Hakola, & Tiihonen, 1996; Martinez, 1997). These factors may be divided into three general categories: pre-prison, in-prison, and post-prison experiences.

Pre-prison factors

To date, most research has examined the relation between pre-prison factors and recidivism. The assumption is that prison is a mere “warehouse” or “deep-freeze” that has minimal impact on the offender. Gendreau, Little, and Goggin (1996) conducted a meta-analysis of 131 studies and found eight categories of pre-prison factors that predict recidivism. In order of

¹ Recidivism is defined as the commission of a crime following punishment. It often refers not only to reconviction, but sometimes also to rearrest, reincarceration, and parole violation.

² Recidivism is usually measured in terms of an individual’s reentry into the criminal justice system, and so does not reflect actual reoffending.

predictive validity, these are: (1) criminogenic needs such as antisocial personality and attitudes, offender companions, interpersonal conflict, and substance abuse; (2) criminal history including delinquency and adult criminality, and in-prison misconducts; (3) poor social achievement referring to marital status, education, employment, income, and accommodation; (4) demographic status referring to younger age, male, and ethnic origin; (5) family factors such as family criminality, poor rearing practices, and separation; (6) low intellectual functioning; (7) low socioeconomic class of origin; and (8) personal distress. Studies among specific offender populations or offense types have identified similar pre-prison factors as predictive of recidivism (e.g., see meta-analyses by [Bonta, Law, & Hanson, 1998](#); [Hanson & Bussiere, 1998](#)).

In-prison factors

Research examining the prediction of recidivism using prison experiences has largely measured the effectiveness of prison-based treatment or intervention programs on reducing reoffending (e.g., [Hartmann, Wolk, Johnston, & Colyer, 1997](#); [Hiller, Knight, & Simpson, 1999](#); [Little, Robinson, & Burnette, 1993](#); [Wexler, de Leon, Thomas, Kressel, & Peters, 1999](#)). The hypothesis is that prisons can rehabilitate offenders. In a review of 18 meta-analyses on the efficacy of correctional treatment, [McGuire \(2002\)](#) reported a reduction of 5% to 10% in recidivism.

A few studies have examined the relationship between other prison experiences and recidivism. It has been reported that participation in regime activities such as education, employment, and religion is associated with reduced recidivism (e.g., [Duguid & Pawson, 1998](#); [Harer, 1994](#); [Johnson, Larson, & Pitts, 1997](#); [Saylor & Gaes, 1995](#); for a review, see [Wilson, Gallagher, & MacKenzie, 2000](#)). Maintaining contact with the outside world via contact with family and friends has been shown to be negatively related to recidivism (see [Hairston, 1988](#)). Finally, prison misconduct has been linked to increased recidivism (e.g., [Harer, 1994](#)).

Post-prison factors

Some studies have examined how post-prison experiences are related to recidivism. As [Travis, Solomon, and Waul \(2001\)](#) state, problems relating to housing, relationships, employment, education, health, and substance abuse may pose obstacles to successful reintegration (see also [Richards & Jones, 1997](#); [Zamble & Quinsey, 1997](#)). In some cases, prisoners enter prison with existing problems that imprisonment improves, whereas in other cases, prison exacerbates or creates such problems.

Factors such as (re)establishing personal relationships (e.g., [Harer, 1994](#); [Nelson, Deess, & Allen, 1999](#)), finding suitable accommodation (e.g., [Baldry, McDonnell, Maplestone, & Peeters, 2003](#)), gaining employment (e.g., [Harer, 1994](#); [Nelson, Deess, & Allen, 1999](#); [Uggen, 2000](#)), and participating in post-release programs such as drug treatment (e.g., [Zanis et al., 2003](#)) and sex-offender management (e.g., [Wilson, Stewart, Stirpe, Barrett, & Cripps, 2000](#)) have been linked to a reduction in recidivism. [Nillson \(2003\)](#) found that an accumulation of problems in post-release adjustment was positively correlated with recidivism.

Prisoners' forecasts of post-release success

There is a dearth of research on the factors that prisoners themselves consider to be predictive of (re)offending. The few criminological studies that have explored prisoners' forecasts of their post-release success suggest that prisoners are optimistic. [Burnett \(1992\)](#) found that shortly before release nearly 70% of her sample of 130 UK prisoners (property offenders) classified as "medium" risk of reoffending estimated a less than 50% likelihood of reoffending (property

offenses only) within 12 months of release. Visher et al. (2003) found that most (i.e., from 65 to 78%) of their sample of 324 US State prisoners who were close to release believed it would be “pretty easy” or “very easy” to renew family relationships, find a place to live, secure employment, and avoid reincarceration and a parole violation after release. Finally, Zamble and Quinsey (1997) reported that their sample of 311 federal Canadian prisoners who had returned to prison recalled that they were on average “fairly confident” they could succeed on the outside before they “got in trouble.”

Psychological research on forecasts

Psychological research indicates that people’s assessments of their future prospects are unrealistically optimistic and self-enhancing (for reviews, see Taylor & Armor, 1996; Taylor & Brown, 1988; Weinstein, 1989; Weinstein & Klein, 1996). People tend to believe that they will do better than warranted by available evidence (i.e., they are unrealistically optimistic), and they tend to think that they will do better than the average or comparable other person (i.e., they are self-enhancing). For instance, people’s estimates of personal risk for health problems are underestimated when compared to population statistics (e.g., Rothman, Klein, & Weinstein, 1996) and to their actual risk e.g., (Kreuter & Strecher, 1995). Furthermore, people rate their chances of experiencing negative life events such as having a heart attack as less than that of others of the same sex, and they believe they are more likely than these others to experience positive life events (Weinstein, 1980).

These “positive illusions” are not simply due to impression management or self-deception. People tend to demonstrate positive illusions under particular conditions, such as when they have personal experience of the event (see Helweg-Larsen & Shepperd, 2001), and these illusions are associated with particular personality traits (see Hoorens, 1996). In addition to research exploring the environmental conditions and personal attributes that may be associated with unrealistic optimism and self-enhancement bias, studies have examined the objective factors that predict people’s forecasts. For instance, in a study of entrepreneurs’ forecasts of their business success, Cooper, Woo, and Dunkelberg (1988) found only very weak relationships between objective predictors of success (e.g., initial capital) and forecasts of success. In fact, several studies have demonstrated that forecasts are often based on invalid factors or misuse of valid factors (e.g., see Rehm & Gadenne, 1990).

The present study

The present study examined the optimism and self-serving nature of prisoners’ forecasts of recidivism (and other post-release events), and the factors that predict these forecasts of recidivism. This study thus extends past criminological on prisoners’ forecasts of post-release success and applies the psychological research on forecasts to a new domain.

This study had five objectives: First, we sought to measure prisoners’ forecasts of finding accommodation, gaining employment, reoffending, and reincarceration upon release. Second, we wanted to assess the optimism of prisoners’ forecasts of recidivism relative to official statistics on recidivism rates. Third, we wanted to assess prisoners’ forecasts of their own chances of reoffending relative to their forecasts of other prisoners’ chances of reoffending. Fourth, we sought to determine which pre-prison factors, in-prison adjustment factors, and forecasts of other post-release events that have been shown to be associated with actual recidivism predict prisoners’ forecasts of recidivism. And, finally, we wanted to explore the robustness of the findings by assessing similarities and differences in findings among the US and UK samples.

Consistent with past criminological research, we predicted that prisoners in both our US and UK samples would provide highly-optimistic forecasts of their chances of finding accommodation, gaining employment, reoffending, and reincarceration upon release. Further, consistent with past psychological research, we predicted that forecasts of recidivism would be unrealistically optimistic when compared to official statistics on recidivism. We also predicted that prisoners would be self-enhancing by viewing their own chances of reoffending as being lower than that of the average prisoner. We expected that one significant predictor of prisoners' forecasts of recidivism would be number of previous convictions because it reflects the concept of experience that has been shown to impact optimism (i.e., past experience of recidivism would predict higher forecasts of recidivism or less optimism). In the absence of previous research and theory on these issues, we did not formulate any specific predictions regarding other factors that may predict prisoners' forecasts. However, based on past psychological research, we expected that only a few of the factors that predict actual recidivism would predict forecasts of recidivism. Finally, we explored how our two samples may differ in their forecasts and in the factors that may predict those forecasts.

Method

Sample

We surveyed 241 US federally sentenced, adult, male prisoners from a high-security prison (80% response rate), and 283 UK sentenced, adult, male prisoners from two medium-security prisons (63% response rate).

Twenty-two percent of the US sample and 38.20% of the UK sample was serving their first prison sentence. On average, the US sample had served 56.53% of their sentence at the time of data collection, whereas the UK sample had served 35.28% of their sentence. Table 1 presents further information on both samples. The differences between the samples mostly reflect the differences between the populations.³ The US prisoners in our sample, on average, were older than the UK prisoners, and a greater proportion of the former were of ethnic origin. A relatively similar proportion of US and UK prisoners were currently serving sentences for crimes against the person (i.e., murder, rape, and assault), and a relatively similar proportion of both samples had been previously convicted of crimes against the person. The UK prisoners had committed more offenses in the past, and consequently had served a greater number of past custodial and non-custodial sentences. The US prisoners were serving longer sentences than the UK prisoners.

Survey

Both samples of prisoners completed a survey entitled "Life in Prison and a Future Outside" (a copy can be obtained from the first author). The UK sample completed a slightly longer version of the survey that included self-other comparison items used to measure self-enhancement (this item was accidentally omitted from the US version of the survey). The survey consisted of four parts, and the questions were selected on the basis of a review of the literature on recidivism.

³ The United Kingdom (referring to England and Wales) has one prison system whereas the United States has State and federal systems. We studied the federal system in the United States because prisoners and their experiences in individual States may not be representative of other States. Both the US federal and UK systems have minimum to high security prisons, and over 90% of prisoners are male. Around half of the US prison population is White compared to three-quarters in the UK, US prisoners are older on average (mid-30s) than UK prisoners, around 80% of US prisoners are serving a sentence of over 3 years compared to around 55% in the UK, and around half of US prisoners committed drug offences compared to around 15% in the UK.

Table 1 Characteristics of US high-security prisoners and UK medium-security prisoners

Factors ^a	US prisoners	UK prisoners
Most serious current offense		
Against person	55.74%	50.36%
Against property	2.55%	26.09%
Drug-related	16.17%	17.75%
Other	25.53%	5.80%
Mean sentence length (years)	11.26	5.87
Mean number of past offenses	1.94	2.41
Mean age (years)	37.09	32.54
Ethnicity		
0 = Ethnic origin	72.77%	24.19%
Education level		
0 = Not finish high school	39.24%	47.49%
Past employment		
0 = Unemployed	26.20%	35.77%
Income assistance		
0 = No	86.50%	59.78%
Housing situation		
0 = Shelter/street	5.86%	5.80%
Marital status		
0 = Single	26.58%	25.45%
Mean number of family criminality	0.78	0.98
Friends' criminality		
0 = None	45.34%	46.21%
Mean frequency of alcohol use	4.26	4.28
Mean frequency of drug use	4.47	4.49
Mean number of regime activities	2.51	2.20
Mean number of program activities	1.26	0.84
Mean frequency of outside contact	4.80	5.86
Mean frequency of misconducts	3.05	2.25
Return to family/friends		
0 = No	19.57%	16.79%
Mean accommodation chances	81.64	71.58
Mean employment chances	70.29	60.24
Attend program		
0 = No	50.00%	64.47%
Mean recidivism chances	29.11	28.62

^aA single figure is listed for the negative value of binary variables where the figure for the alternative (positive value) is 1-X.

Part 1 entitled “Your Life in this Prison” included items that measured in-prison factors. Prisoners were asked whether (no vs. yes) they participated in regime activities (i.e., education, employment, gym, religion), and how many of a list of seven common prison programs such as “anger management” and “quitting drugs” they had participated in (we also included an “other” category). Next, prisoners were asked how often they have contact with friends (family from the outside (i.e., via telephones, letters, visits) measured on 9-point scales with 2-point intervals marked from *never*, *rarely*, *sometimes*, *often*, to *constantly*). Then, prisoners were asked to rate how often they were charged with misconducts in prison on a 7-point scale marked from *never* through a midpoint of *sometimes* to *often*.

Part 2 of the survey was entitled “Your Offense and Sentences” and requested details of prisoners’ current offense type (for analysis, categories were reduced to other offense vs. offense against person), sentence length, and amount of sentence served. Prisoners were also asked to report their number of past offenses, type of past offenses, and number of past custodial and non-custodial sentences.

Part 3 entitled “Your Future Life Outside Prison” collected information on prisoners’ forecasts of post-release success. Prisoners were asked whether they would return to family and friends upon release (no vs. yes). They were asked to rate their chances of finding accommodation and employment each on a 0–100% scale marked with 10% intervals. Next, prisoners were asked whether they planned to attend any programs. Prisoners were asked to forecast their chances of reoffending and reincarceration upon release, each on a 0–100% scale marked with 10% intervals. Additionally, self-enhancement was measured in the UK sample using the recommended indirect method where other and self-judgments are made on separate scales (Covey & Davies, 2004), and with estimates for others made before estimates for self (Klar & Giladi, 1999). Thus, prisoners were asked to rate the likelihood of other prisoners reoffending after release on a 7-point scale marked from *very unlikely* to *very likely*, followed by their own likelihood of reoffending.

Finally, Part 4 entitled “Your Past Life Outside Prison” obtained information on pre-prison factors.⁴ These were prisoners’ age, ethnicity (for analysis, categories were reduced to White vs. ethnic), level of education (reduced to did not finish high school vs. did), past employment (reduced to unemployed vs. employed), income level measured as whether on income assistance (no vs. yes), housing situation (reduced to shelter(street vs. house/apartment/other), and marital status (reduced to single vs. partner). Prisoners were also asked to rate their frequency of alcohol and drug use both on 7-point scales marked from *never* through a midpoint of *sometimes* to *often*. Finally, prisoners were asked if their family (i.e., father, mother, brother/sister, spouse/partner, other relatives) and close friends had ever been “in trouble with the law” (no vs. yes for each; and for analysis, the criminality of family was aggregated).

Procedure

The survey data was collected by the first author in the United States and by trained research assistants in the United Kingdom. Prisoners were randomly selected from the prison roll. They were introduced to the survey aims and invited to participate. Confidentiality and anonymity of responses was assured. Prisoners were instructed that they would not face any negative consequences for choosing not to participate, and only those who volunteered to participate did so. They did not receive any compensation. The survey was self-administered in groups of approximately 20 prisoners in the education or chapel areas of prisons, and in the absence of guards. Finally, interpreters were provided for Hispanic-speaking prisoners in the United States, and the researchers administered the survey individually to illiterate prisoners in both countries. The survey took approximately 30–45 min to complete.

⁴ We excluded three pre-prison factors (i.e., intellectual functioning measured via standardized instruments, socio-economic class of origin, and personal distress variously measured) because Gendreau et al. (1996) found these to be least predictive of recidivism. Our measures of the remaining five categories of factors examined by Gendreau et al. referred only to individual factors that had the highest individual predictive validity within a category (although we retained a measure of substance abuse), and required few items to measure them (this latter criterion meant that measures of antisocial personality and attitudes, and rearing practices were excluded). While Gendreau et al. placed prison misconduct within their category of criminal history we moved it to our set of ‘in-prison’ factors.

Results

Prisoners' forecasts of post-release success

As predicted, prisoners provided highly optimistic forecasts of post-release events. US prisoners, on average, forecasted that their chances of finding a place to live were 81.64% ($SD = 27.46$) and 70.28% ($SD = 30.97$) for gaining employment upon release. By contrast, they forecasted that their chances of reoffending were 30.51% ($SD = 32.36$) and 26.23% ($SD = 31.21$) for being reincarcerated. UK prisoners, on average, forecasted that their chances were 71.58% ($SD = 32.64$) of finding a place to live, 60.24% ($SD = 33.33$) of gaining employment, 29.27% ($SD = 31.55$) of reoffending, and 27.90% ($SD = 31.17$) of being reincarcerated. Independent samples t -tests revealed that the US sample forecasted significantly greater chances of finding accommodation and employment upon release than the UK sample, $t(511) = 3.79, p < .001$ and $t(505) = 3.50, p = .001$, respectively. However, there were no significant differences between the two samples in their forecasts of reoffending and of being reincarcerated ($p = .667$ and $p = .550$, respectively).

Unrealistic optimism

Both US and UK prisoners' forecasts of reoffending and reincarceration were highly inter-correlated (i.e., $r_s = .67$ and $.90, p_s < .001$, respectively). Therefore, the two forecasts were averaged for further analysis and labeled "recidivism." Mean forecasts of recidivism were 28.21% ($SD = 29.11$) for US prisoners and 28.62% ($SD = 30.56$) for UK prisoners. We tested our prediction that forecasts of recidivism would be unrealistically optimistic compared to the statistics on actual recidivism by computing one-sample t -tests with the official national statistic on recidivism as the test value (the use of such population statistics is advocated in the optimism literature; e.g., Rothman, Klein, & Weinstein, 1996). The most recent statistics on the recidivism of US federal prisoners show that 41% of males released in 1987 recidivated within 3 years (Harer, 1994). In the United Kingdom, 55% of adult male prisoners released in 1999 were reconvicted within 2 years (Home Office, 2003). Note that these are conservative figures because not all reoffenders will be caught or prosecuted. As predicted, we found that both US and UK prisoners' forecasts of recidivism were unrealistically optimistic, $t(232) = 6.69, p < .001$ for the US and $t(277) = 14.39, p < .001$ for the UK.

Table 2 shows the recidivism rates and forecasts of recidivism by the available breakdown of prisoner characteristics. Significance tests of differences were computed for subgroups where $N \geq 30$. We used one-sample t -tests with the population percentage as the test value, and Bonferroni adjustments were applied. These analyses revealed that many subgroups were unrealistically optimistic: US Black and Hispanic prisoners, US robbery offenders, UK White and Black prisoners, UK prisoners who had committed drug offenses, offenses against the person, and violent offenses, UK offenders serving 12 months to 4 years, and UK offenders with 0, 1–2 and 3–6 previous convictions. However, there were also some subgroups that were well calibrated: White US prisoners, US drug offenders, UK robbery and sex offenders, and UK offenders serving 4–10 years.

Self-enhancement

We next tested our prediction that prisoners would self-servingly view their own chances of recidivism as less than that of the average other prisoner. UK prisoners' forecasted that they

Table 2 Recidivism rates and forecasts of recidivism by prisoner characteristics

Subgroup	US federal prisoners (%)		UK prisoners (%)	
	Recidivism rate	<i>M</i> forecasted recidivism	Recidivism rate	<i>M</i> forecasted recidivism
Ethnicity				
White	34	36	60	30
Black	59	22	53	24
Hispanic	45	31		
American Indian ^a	53	23		
South Asian ^b			42	8
Offense type				
Drugs	34	29	38	23
Firearms ^a	49	34		
Fraud/forgery ^{a,b}	21	54	34	26
Immigration ^a	53	40		
Murder/manslaughter ^a	43	33		
Motoring ^b			55	21
Against person ^a	65	17		
Property, burglary ^a	61	38	74	52
Robbery	64	23	47	36
Sexual ^a	50	37	14	13
Violence incl.			45	16
Murder/manslaughter				
Sentence length				
≤ 12 month ^b			59	18
12 month–4 year			50	34
4–10 year			30	27
10 year ^{a,b}			26	10
Life			6	16
Number of previous convictions				
0			18	8
1–2			40	22
3–6			58	46
7–10 ^b			68	66
11 + ^b			78	100

Note. The US recidivism rates were taken from Harer (Harer, 1994) p. 12, and the UK recidivism rates were taken from Home Office (Home Office 2003) pp. 162, 170, 172, 173. The US rates referred to both males and females and we could not find a breakdown by gender. The UK rates pertained to adult male prisoners except for “ethnicity” which also included females and 17–20-year-old males, and “number of previous convictions” which also included 17–20-year-old males.

^a*N* < 30 for US.

^b*N* < 30 for UK.

(*M* = 2.87, *SD* = 2.18) were significantly less likely to commit a crime after release than other prisoners (*M* = 5.01, *SD* = 2.00), $t(274) = 16.30, p < .001$. When rating negative outcomes, the self-assessment is subtracted from the other assessment, and self-enhancement bias is indicated by a positive difference score. The mean difference score was 2.13 (*SD* = 2.17).

Predicting prisoners' forecasts of recidivism

We conducted analyses of the factors that predict prisoners' forecasts of recidivism and tested the hypothesis that experience (i.e., previous offenses) would be positively related to forecasts of recidivism. The predictors were grouped into three categories: pre-prison factors, in-prison factors, and post-prison factors. Hierarchical multiple linear regression analyses were used to compute the direction and strength of the relation between these factors and prisoners' forecasts of recidivism separately for the US and UK samples.⁵ For each model, pre-prison factors (i.e., current offense type, sentence length, number of past offenses, age, ethnicity, education level, employment, income assistance, marital status, housing situation, criminality of family, criminality of friends, frequency of drinking alcohol, and taking drugs) were entered in the first step. In-prison factors (i.e., participation in regime activities, number of programs participated in, frequency of contact with friends/family from outside, and frequency of misconducts in prison) were entered in the second step. Post-prison factors (i.e., forecasted return to family/friends, finding accommodation, gaining employment, and attending programs) were entered in the final step.

As shown in Tables 3 and 4, the models predicting US and UK prisoners' forecasts of recidivism explained 34% and 51% of the total variance, respectively, and were statistically significant. In both models, much of the explained variance was accounted for by pre-prison factors, and as we expected only a subset of the factors that predict actual recidivism were predictive of forecasted recidivism. Further, as we predicted, past offenses significantly predicted forecasted recidivism such that a greater number of past offenses was predictive of higher forecasts of recidivism.

Other significant predictors of US prisoners' forecasts of recidivism were current offense type, frequency of misconduct charges in prison, and forecasted return to family/friends upon release. Specifically, an offense against the person and forecasted return to family/friends upon release were predictive of lower forecasts of recidivism, and more frequent charges of misconduct in prison were predictive of higher forecasts of recidivism.

Similarly, within the UK sample, past offenses was a significant positive predictor of forecasted recidivism. Other significant predictors were frequency of past drug use, number of regime activities participated in, frequency of misconduct charges in prison, and forecasted chances of gaining employment upon release. A higher frequency of past drug use and a higher frequency of charges of misconduct in prison were predictive of higher forecasts of recidivism, whereas participation in a greater number of regime activities and more optimistic forecasts of gaining employment upon release were predictive of lower forecasts of recidivism.

We explored how the two samples differ in their forecasts by statistically comparing the predictors of US and UK prisoners' forecasts of recidivism using the *Z* test for equality of coefficients (see Clogg, Petkova, & Haritou, 1995). There was a significant difference in the effect of three factors on forecasts of recidivism between the US and UK samples. Current offense type and forecasts of returning to family/friends upon release had a greater effect on US prisoners' forecasts of recidivism than on UK prisoners' forecasts ($Z = 1.86, p < .05$ and $Z = 2.14, p < .05$, respectively). Conversely, number of regime activities participated in had a greater effect on UK than US prisoners' forecasts ($Z = -2.24, p < .05$).

⁵ The zero-order correlations among the factors were computed separately for the US and UK samples. The mean absolute magnitude of the inter-correlations was small in both samples, mean $|r| = .10$ ($SD = .09$) and $.12$ ($SD = .11$), respectively. None of the US inter-correlations and only one of the UK inter-correlations was statistically significant after Bonferroni adjustments were applied (using two-tailed tests).

Table 3 Hierarchical regression analysis predicting US prisoners’ forecasts of recidivism

Step variable	Forecasted recidivism				
	End β	R^2	ΔR^2	ΔF	df
1. Current offense type	-.20**	.20	.20	2.99	14, 167***
Sentence length	.02				
Number of past offenses	.22**				
Age	-.10				
Ethnicity	.13				
Education level	.13				
Past employment	-.12				
Income assistance	-.02				
Marital status	-.04				
Housing situation	.08				
Family criminality	-.06				
Friends’ criminality	-.06				
Frequency of alcohol use	.09				
Frequency of drug use	.07				
2. Number of regime activities	.08	.25	.05	2.50	4, 163*
Number of program activities	-.04				
Frequency of outside contact	-.02				
Frequency of misconducts	.17*				
3. Return to family/friends	-.30***	.34	.09	5.46	4, 159***
Accommodation chances	.01				
Employment chances	-.08				
Attend program	-.11				

Note. Final model $F(22, 181) = 3.68, p = .001$. Offense was recoded into 0 = *other offense* versus 1 = *against person*.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Finally, we further examined the effect of previous offenses on forecasts of recidivism by conducting independent samples *t*-tests comparing the forecasts of recidivism between prisoners who reported previous offenses and those who did not. In both the US and UK samples, prisoners who were first-time offenders gave significantly lower forecasts of recidivism ($M_s = 9.58$ and 19.84% and $SD_s = 18.24$ and 22.22 , respectively) than prisoners who reported previous offenses, ($M = 40.11\%$, $SD = 30.08$, $t(101) = 2.51, p < .014$ for the US, and $M = 29.75\%$, $SD = 30.18$, $t(264) = 10.30, p = <.001$ for the UK).

Discussion

We conducted a cross-national examination of US and UK sentenced prisoners’ forecasts of their post-release success. No previous criminological research had compared prisoners’ quantitative forecasts of recidivism with an objective quantitative measure of recidivism. [Visher et al. \(2003\)](#) elicited qualitative forecasts of recidivism from prisoners but did not compare them to any objective measure of recidivism. [Burnett \(1992\)](#) examined forecasted recidivism in prisoners classified as a medium risk. However, without knowing the likelihood of recidivism for this risk group, it is impossible to measure their degree of unrealistic optimism. Finally, [Zamble and Quinsey \(1997\)](#) asked prisoners who had recidivated to recall their qualitative forecasts of recidivism. These “forecasts” are difficult to interpret because they were collected after the

Table 4 Hierarchical regression analysis predicting UK prisoners' forecasts of recidivism

Step variable	Forecasted recidivism				
	End β	R^2	ΔR^2	ΔF	df
1. Current offense type	-.03	.43	.43	10.62	14, 195***
Sentence length	-.06				
Number of past offenses	.33***				
Age	-.03				
Ethnicity	.05				
Education level	.01				
Past employment	-.06				
Income assistance	-.05				
Marital status	.03				
Housing situation	-.03				
Family criminality	.03				
Friends' criminality	-.04				
Frequency of alcohol use	.01				
Frequency of drug use	.23**				
2. Number of regime activities	-.14*	.48	.05	4.13	4, 191**
Number of program activities	.02				
Frequency of outside contact	-.03				
Frequency of misconducts	.13*				
3. Return to family/friends	-.06	.51	.03	3.10	4, 187*
Accommodation chances	.07				
Employment chances	-.19**				
Attend program	-.10				

Note. Final model $F(22, 209) = 8.85, p = .001$. Offense was recoded into 0 = *other offense* versus 1 = *against person*.

* $p < .05$. ** $p < .01$. *** $p < .001$.

fact and because they do not easily map onto a quantitative likelihood. By contrast, we asked prisoners to forecast their quantitative likelihood of recidivism (and other post-release events) and compared their forecasted recidivism to official statistics for the relevant population and subgroups. Moreover, we compared prisoners' self-forecasts to their forecasts for the average other prisoner in order to assess whether their forecasts were also self-enhancing.

We found that, on average, adult, male, sentenced US high-security and UK medium-security prisoners were highly optimistic of their chances of finding accommodation and gaining employment upon release, and avoiding recidivism. Moreover, compared to the statistics on recidivism (which represent a conservative measure) prisoners in both samples were unrealistically optimistic about their forecasted chances of recidivism, although a few subgroups were well calibrated. Additionally, UK prisoners provided self-enhancing forecasts in which they indicated that they were less likely to reoffend upon release than other prisoners. In addition to extending the previous criminological research on prisoners' forecasts of post-release success (Burnett, 1992; Visher, La Vigne, & Castro, 2003; Zamble & Quinsey, 1997), these findings also show that past psychological research on unrealistic optimism and self-enhancement bias is generalizable to a new domain (for reviews, see Taylor & Armor, 1996; Taylor & Brown, 1988; Weinstein, 1989; Weinstein & Klein, 1996).

The present study also extends past criminological research on prisoners' forecasts of post-release success by examining the factors that predict forecasts of recidivism. Three key findings emerged. First, as we expected, only a small subset of factors that have been shown to predict

actual recidivism predicted forecasted recidivism. In fact, much of the explained variance was accounted for by pre-prison factors, which are likely to be salient because they contributed to the original offense. Second, the significant predictors were related to forecasted recidivism in a direction consistent with past research on actual recidivism. Indeed, studies show that violent offenders are less likely to recidivate, whereas previous convictions and past drug use are each predictive of increased recidivism (Gendreau, Little, & Goggins, 1996). Participation in regime activities is negatively related to recidivism (Wilson, Gallagher, & MacKenzie, 2000), and prison misconduct is positively related to recidivism (e.g., Harer, 1994). Similarly, returning to family/friends upon release and gaining employment are each associated with reduced recidivism (e.g., Hairston, 1988; Uggen, 2000). Third, as predicted, we found that previous offenses were positively related to forecasted recidivism, and repeat offenders were significantly less optimistic than first-time offenders. These findings are consistent with past psychological research demonstrating that prior experience of the event being forecasted reduces the optimism of people's forecasts (see Helweg-Larsen & Shepperd, 2001).

Because our measure of unrealistic optimism was prisoners' forecasts minus a constant (i.e., recidivism rate), the above factors are also predictive of unrealistic optimism (with the direction of effects reversed). Future research could examine other factors within the pre-, in-, and post-prison categories that may also predict prisoners' forecasts of recidivism or their unrealistic optimism. For instance, to what extent are prisoners' forecasts predicted by their attitudes and behavioral intentions toward crime, and their subjective likelihood of being caught, convicted, and sentenced to imprisonment?

Our comparison between the US and UK samples revealed more similarities than differences in the above findings, thus underscoring their robustness. Indeed, the overall consistency of our cross-national comparison is striking in light of the many differences between our samples. The two samples differed in demographic characteristics such as sentence length. They also differed in prison security level such that the US sample was drawn from a high-security prison, whereas the UK sample was drawn from two medium-security prisons. The wider cultures represented by the two samples also differ in potentially important respects such as the prevalence of drugs, gangs, and guns. Finally, the US and UK criminal justice systems differ in laws that may affect the definition of crime (and consequently recidivism), and policies that may influence the reintegration of ex-prisoners.

In spite of the overall consistency of the findings between the two samples, some differences emerged. First, US prisoners were more optimistic than UK prisoners about finding post-release employment and accommodation. Second, there were differences in the effects of three factors on prisoners' forecasts of recidivism between the two samples (i.e., current offense type, forecasts of returning to family/friends upon release, and number of regime activities participated in). Finally, US drug offenders' forecasts of recidivism were calibrated, whereas their UK counterparts were unrealistically optimistic, and, UK robbery offenders were calibrated, whereas their US counterparts were unrealistically optimistic. Clearly, these differences warrant further investigation. However, given the exploratory nature of these cross-national analyses, we would first cautiously recommend that these differences be replicated before research effort is made to explain them. Finally, the fact that the regression models were better able to predict UK than US prisoners' forecasts of recidivism, suggests that it may be necessary to examine the role of other predictor variables in future research.

Potential limitations

Although we have interpreted our findings in terms of an optimistic bias, critics might propose that prisoners were merely motivated to report optimistic forecasts of recidivism as impression

management to improve their chances of parole or as self-deception to cope with their sentence.⁶ There are a number of reasons to doubt this interpretation. First, prisoners were informed that data collection was anonymous, and that participation would have no bearing on their sentence. Second, US prisoners were not eligible for parole, and we found no significant difference in the degree of optimism of those UK prisoners who were eligible for parole and those who were not ($t[275] = 1.05, p > .05$). Finally, we found no significant correlation between prisoners' forecasts of recidivism and length of sentence left to serve ($r = -.07$ for US and $r = -.05$ for UK, $ps > .05$, respectively).

Although we used techniques to measure unrealistic optimism and self-enhancement that were compatible with past research, these techniques are limited in some respects. First, it has been shown that the tendency to self-enhance is weaker when the other person is a specific, familiar other rather than an average, non-specific other (Klar, Medding, & Sarel, 1996). Future research could, therefore, measure prisoners' self-enhancement by asking them to explicitly compare themselves to their cellmate or neighbor. Second, we did not ask prisoners to provide forecasts with reference to a timeframe (i.e., 2 years). It is therefore, unclear whether their forecasts may have been better calibrated than the present study indicates. Future research could use the same timeframe to collect data on forecasts of post-release events as used to measure the occurrence of these events in national statistics. Finally, the optimism of forecasts should ideally be compared with actual risk for a particular individual rather than base-rates. Several instruments have been developed and validated that predict the risk of recidivism (e.g., the Statistical Information on Recidivism; Bonta et al., 1996; and Level of Service Inventory-Revised; Andrews & Bonta, 1995), and future research could examine individual prisoners' forecasts with their risk of recidivism as measured by such instruments. Longitudinal research could also examine the relationship between forecasts and post-release success.

Potential implications

Prisoners' forecasts of post-release success may have potential implications for how they respond to imprisonment and behave upon release, and how they react to parole decisions. Prisoners who are overly optimistic about their chances of abstaining from reoffending upon release may fail to take appropriate actions to moderate their risks of recidivism, even if they are motivated to do so. For instance, prisoners may choose not to participate in treatment programs that can potentially combat root causes of their offending behaviors, and upon release they may choose to return to situations that contributed to their initial offending. Future research could examine the emotional, psychological, behavioral, and social implications of prisoners' positive illusions of post-release success. Such work could also help resolve questions about the functional value of unrealistic optimism and self-enhancement (see Colvin & Block, 1994; Taylor & Brown, 1988).

Parole officers make predictions regarding a prisoner's chances of successful reintegration using both subjective and objective assessments that include interviews with prisoners. Prisoners who are unrealistically optimistic and whose forecasts contradict those based on assessment instruments will likely be refused parole. However, this may fuel prisoners' negative emotions and perceptions of injustice. For example, Dhimi, Mandel, and Souza (2005) found that prisoners' attributions of the fairness of their trial and sentence predicted their current level of anger. In turn, prisoners who reported thinking about how their trial and sentence could have turned out

⁶ We did not have access to prisoners' records to assess their self-reports. In fact, our discussions with administrative prison staff who manage these records led us to believe that records are themselves sometimes incomplete and unreliable.

better judged the outcomes of these judicial stages as less fair than those who did not report such thoughts.

Finally, forecasts that are not based on factors predictive of actual recidivism will not accurately reflect prisoners' chances of post-release success, and may indicate that prisoners are uninformed of the factors that could exacerbate or attenuate their risks of recidivism. To the extent that forecasts are unrealistically optimistic or self-enhancing because prisoners do not have access to objective, valid information, we recommend that more emphasis be placed on informing them of the literature documenting the risk and protective factors for recidivism. These could be both generally relevant factors (e.g., using base-rates) and factors relevant to a specific prisoner (e.g., using assessment instruments; Andrews & Bonta, 1995; Bonta et al., 1996). This could be coupled with strategies designed to help prisoners overcome their risks for recidivism.

In conclusion, we believe that a body of research examining the nature of prisoners' forecasts of their post-release success could have important implications for developments in the prison, probation, and parole literatures. Such work could also facilitate practical advances that help prisoners adjust to imprisonment, prepare them for release, and facilitate their success in the outside world after release.

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