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# *Measuring Risk and Blameworthiness in the Sentencing of Criminal Defendants: an Exploratory Study in Western Australia's Higher Courts*

Christine EW Bond and Samantha Jeffries\*

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## *Abstract*

The focal concern perspective dominates quantitative explorations of judicial sentencing. A critical argument underlying this perspective is the role of judicial assessments of risk and blameworthiness. Prior research has not generally explored how these two concepts fit together. This study provides an empirical test of the focal concerns perspective by examining the latent structure among the measures traditionally used in sentencing research, and investigates the extent to which focal concerns can be applied in a non-US jurisdiction. Using factor analysis (as suggested by prior research), we find evidence of distinct factors of risk and blameworthiness, with separate and independent effects on sentencing outcomes. We also identify the need for further development of the focal concerns perspective, especially around the role of perceptual shorthand.

## **Introduction**

Until recently, there has not been a tradition of quantitative research on judicial discretion of the sentencing process in Australia. Of the studies that exist, most have been concerned with empirically establishing whether sex and/or Indigenous status impacts differentially on sentencing (Snowball and Weatherburn 2006, 2007; Bond and Jeffries 2010; Jeffries and Bond 2009). Outside of Australia, the study of sentencing outcomes has been the subject of decades of extensive investigation. In North America, where the vast majority of these sentencing studies are undertaken, the focal concerns perspective (originating in the work of Steffensmeier, Kramer and Streifel 1993 and Steffensmeier, Ulmer and Kramer 1998) is currently the most popular criminological framework used to guide researchers.<sup>1</sup>

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<sup>1</sup> The focal concerns perspective is only one approach to studying sentencing discretion within legal and criminological traditions, but for researchers interested in modelling sentencing outcomes, this has become the dominant theoretical framework.

The focal concerns approach sits within a tradition of explaining sentencing decision through focusing on the micro-social context of the court (i.e. individual case characteristics). Research shows that judges perceive the process of sentencing as a matter of 'balancing' competing priorities and goals (Mackenzie 2005). From the focal concerns perspective, this 'balancing' process is driven by three key focal concerns, namely: offender blameworthiness; community protection (or risk to the community); and practical constraints (organisational and offender level) and social costs (Steffensmeier et al 1998:766–67; Johnson 2003). These concerns are linked to sentencing goals and priorities, as well as situational factors of cases and their organisational impact. However, judges do not routinely have complete and accurate information about an offender and their case at the time of their decision. Thus, to make these assessments, judges rely on a 'perceptual shorthand' based on stereotypes and perceptions related to offender characteristics such as race, sex and age (Hawkins 1981:280; Steffensmeier et al 1998:767). Through this 'shorthand', disparities can enter the decision-making process: race, sex and age affect the sentencing decision through images or attributions that racial and ethnic minorities, males and young defendants are more dangerous, criminal or at greater risk of reoffending than others (Steffensmeier et al 1998:768).

Yet despite numerous studies, few have explicitly tested the focal concerns perspective. Instead, past researchers have interpreted their empirical findings in light of focal concerns (Hartley et al 2007:59). Moreover, because sentencing scholars have generally used focal concerns as an interpretative tool to explain results rather than deriving testable propositions *per se*, little is known about how the various focal concerns of sentencing judges work together.

Given the dominance of the focal concerns perspective in quantitative studies of sentencing outcomes, this paper focuses on the measurement of the two most relied on focal concerns: risk and blameworthiness. Drawing on the work of Hartley and colleagues (2007), we present an exploratory analysis of whether the concerns of risk and blameworthiness are empirically distinct concepts, using data from Western Australia's higher courts. Thus, this paper has two purposes. First, our primary purpose is to provide a further empirical test of the traditional application of the focal concerns perspective by examining the underlying latent structure of the independent variables. We recognise that some researchers have put forward alternative theoretical conceptualisations of criminal justice discretion (e.g. Albonetti 1991; Schlesinger 2005; Kautt 2009), but in this paper, we focus on the focal concerns perspective as typically found in sentencing outcome studies. Second, we investigate the extent to which focal concerns can be applied in a non-US jurisdiction. As much sentencing research relying on the focal concerns perspective has been conducted in a few US jurisdictions, its applicability in other jurisdictions is an important step in assessing the usefulness of this perspective in our understanding sentencing decision-making and practices. For instance, due to differing political and historical contexts, we might expect that Indigenous defendants trigger different attributions from African-American and Hispanic defendants.

## Focal Concerns and Past Empirical Evidence

Research on criminal justice discretion has provided substantial evidence in support of the focal concerns perspective, especially in the explanation of racial and ethnic disparities in outcomes (Kautt and Spohn 2007). Although this perspective has been applied to different

decision stages, such as pre-trial decisions (e.g. Schlesinger 2005), we focus here on the sentencing of adult criminal defendants. The empirical findings of US studies of adult sentencing show that racial/ethnic minorities are sentenced more harshly than others (e.g. Spohn and Delone 2000), with Hispanic and African-American criminal defendants receiving harsher outcomes than other racial/ethnic groups (Steffensmeier and Demuth 2000, 2001). Younger adult defendants, compared to older adult offenders, receive harsher outcomes (Steffensmeier et al 1995); male defendants are more likely to be treated harshly in the sentencing process than female defendants (Spohn and Beichner 2000; Steffensmeier et al 1993); and those unemployed are more likely to be disadvantaged in sentencing outcomes than employed defendants (Chiricos and Bales 1991). These studies are consistent with a focal concerns interpretation of sentencing decision-making.

In contrast to North American findings for African-American and Hispanic defendants, recent Australian research has found only a very small increase (Snowball and Weatherburn 2007) or a reduction (Jeffries and Bond 2009) in the odds of imprisonment for Indigenous offenders, compared to non-Indigenous offenders. These findings are still consistent with the focal concerns model: unlike race/ethnicity in the US, Indigenous status may reduce judicial assessments of offender culpability and/or risk, due to judicial perceptions of the critical importance of community in the lives of Indigenous offenders and the impact of colonisation on their lived experiences (Jeffries and Bond 2010).

However, these statistical studies (and others in this tradition) suffer from a number of shortcomings. In particular, there has been little exploration of the underlying structure among the independent variables suggested by the focal concerns perspective (Hartley et al 2007). Although focal concerns scholars argue that there are distinct concepts (e.g. blameworthiness and risk) that drive judicial decision-making, these unobserved concepts are not directly tested or measured by these studies. Rather, variables are used as indicative of a focal concern, and at times, more than one focal concern. For example, Steffensmeier and colleagues (1998) found that offenders exhibiting more extensive and serious forms of criminality tend to receive harsher sentences, leading them to conclude that these variables are used by judges to make assessments about offender blameworthiness and risk of re-offending. Kramer and Ulmer (2002) have similarly linked offence seriousness and criminal history to court actors' conceptions of both blameworthiness and dangerousness (risk). Kautt and Mueller-Johnson (2009) also argue that offence seriousness and prior record reflect blameworthiness and risk, although other indicators of perceived risk include number of conviction counts, and defendant race and age. Others have argued that perceptual shorthand variables may include offence seriousness and criminal history, as well as the more traditional offender demographics (Hartley et al 2007).

Thus, even though the focal concerns of blameworthiness and risk are presented as theoretically distinct, operationally they are measured the same way (Hartley et al 2007). There is little explanation about how each variable measures the concepts of blameworthiness and risk. Researchers simply argue that there is a 'complex interplay' between the unobserved focal concerns and the observed variables (Hartley et al 2007:63).

## Distinctiveness of the Concepts of Blameworthiness and Risk<sup>2</sup>

So, according to the focal concerns approach, how do the concepts of blameworthiness and risk (community protection) differ? Blameworthiness is argued to be associated with offender culpability and the degree of harm caused by the crime committed. Philosophically speaking, this focal concern is driven by the sentencing aim of retribution, or the more modern 'just desserts'. It is punishment focused, requiring that the seriousness of an offence be balanced by the imposition of a punishment proportional to the criminal harm caused (Steffensmeier et al 1998:766–67). The sentence (or punishment) should reflect the degree to which offenders can be blamed for the harm caused by their acts (von Hirsh and Jareborg 1991). Thus, this focal concern is focused on the current behaviour of an offender: the offence, its circumstances, motivations and seriousness.

In contrast, the focal concern of risk, or community protection, is driven by the sentencing philosophies of incapacitation and deterrence (Steffensmeier et al 1998:766–67; Johnson 2006). The ultimate aim of both incapacitation and deterrence is community protection in the short and long term. Judges' sentencing decisions reflect a desire to protect the community by incapacitating offenders deemed at high risk of re-offending or deterring other potential offenders in the community. This focal concern of risk involves judicial assessments of the predicted future dangerousness of an offender, so it is concerned with an offender's future behaviour. As a result, offender and case information linked to perceptions of the causes of recidivism are likely indicators of this concept. In many ways, the focal concern of risk is subject to higher degrees of uncertainty than the other focal concerns (see Steffensmeier et al 1998:767).

However, the relationship between these focal concerns and the role of a perceptual shorthand is less well developed. Because judges rarely have enough information to determine offenders' culpability and dangerousness accurately, they develop a perceptual shorthand to assist in the decision-making process. This 'shorthand' is thought to result in stereotypical attributions being made about particular types of offenders based on characteristics such as race/ethnicity, sex and age (Steffensmeier et al 1998:768; Mackenzie 2005:28; Johnson 2006:267). Thus, race/ethnicity, sex and age are thought to impact on sentencing because of attributions of increased culpability and threat being made toward certain types of offenders based on social statuses (Steffensmeier et al 1998:768). In short, a finding of a direct effect of race, ethnicity or sex on sentencing is seen as evidence of the impact of this shorthand (Kramer and Steffensmeier 1993; Steffensmeier et al 1998; Spohn and Holleran 2000). Race, sex and age are interpreted as indicators of the presence of this perceptual shorthand.

Further, the empirical evidence suggests that judges' sentencing assessments are shaped by a cluster of offender characteristics (as demonstrated by a statistically significant interaction term). For instance, Steffensmeier and colleagues (1998) found that, in a study of sentencing outcomes in the state of Pennsylvania, young black males received harsher sentencing outcomes than other race-sex-age groups. In a study of sentencing outcomes in three US cities, Spohn and Holleran (2000) showed that unemployed black and Hispanic

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<sup>2</sup> Although we recognise the importance of the third focal concern—practical constraints or social costs—in introducing organisational influences into our understanding of judicial decision-making, this paper focuses primarily on blameworthiness and risk.

males were more likely to receive a prison term than employed white males. Kramer and Ulmer's study (2002) of departures from Pennsylvania's sentencing guidelines found that young, Hispanic males were less likely to receive downward departures than other offender groups. Doerner and Demuth (2010) also found that harsher sentencing outcomes are disproportionately received by young Hispanic and black male defendants.

Although these studies point to the importance of these characteristics in explaining sentencing outcomes, it is not clear whether we should consider these offender characteristics as part of the concepts of blameworthiness and risk, or a separate focal concern that has an independent effect on the sentencing outcome.<sup>3</sup> As focal concerns scholars argue that these characteristics are linked to images and attributions of criminality and threat, we could reasonably envisage that these offender characteristics are part of assessments of blameworthiness and risk, rather than being conceptually distinct from these focal concerns:

Younger offenders and male defendants appear to be seen as more of a threat to the community or not as reformable, and so also are black offenders, particularly those who also are young and male (Steffensmeier et al 1998:767).

Although numerous studies have used the focal concerns perspective as an explanatory framework, we could only find one study (Hartley et al 2007) that explicitly explored the relationship between the concepts of the focal concerns perspective and the observed variables. Using factor analysis, Hartley and colleagues (2007) examined whether the focal concerns concepts (including blameworthiness and risk) and standard variables used in past studies (e.g. current and past criminality) were empirically related in the way suggested by the focal concerns model. Their results showed that the independent variables collapsed into factors that 'made sense' but were not the same as predicted by the focal concerns perspective (Hartley et al 2007:69).

For example, measures of offence seriousness and criminal history failed to factor together, as the researchers had hypothesised. Instead, offence seriousness variables factored together with other offence characteristics (whether the offence was drug-related, and whether the mandatory minimum penalty for a drug offence was applied) to produce a unique factor that Hartley et al (2007:71) subsequently labelled 'nature of the offence'. Further, rather than factoring with race and age (as predicted by the concept of perceptual shorthand), sex factored with criminal history variables. Sex and criminal history were thus reconceptualised by Hartley et al (2007:71) as the concept of 'perceived dangerousness' (or risk), while race and age factored together as 'perceptual shorthand'. These findings led the researchers to conclude that there was little support for the notion of a perceptual shorthand in the form put forward by focal concerns scholars, as a number of variables traditionally associated with this shorthand loaded on other factors.

Overall, Hartley and colleagues (2007) found support for the focal concerns perspective in explaining sentencing outcomes. The factors/concepts identified were used to create indices that were entered into regression analyses of the imprisonment decision and once

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<sup>3</sup> The other argument is that the characteristics of race, age and sex interact with the underlying concepts of risk and blameworthiness, modifying the impact of other offender and case information in judicial assessments. This argument is not tested in this paper.

imprisoned, months in custody.<sup>4</sup> Results indicated that there were substantial and significant effects of the blameworthiness and dangerous (risk) factors on sentencing outcomes, mirroring the findings of models estimating the effects of the variables individually.

This paper further explores the question of the empirical distinctiveness of the concepts of blameworthiness and risk in judicial sentencing decisions. In particular, we investigate the relationship between offender characteristics such as Indigenous status, sex and age ('perceptual shorthand') and the concerns of blameworthiness and risk, using data from a non-US jurisdiction.

## Description of Study Site and Method

The current study focuses on judicial sentencing decisions in Western Australia. Sentencing in Western Australia is governed by the *Sentencing Act 1995* (WA), which preserves a broad sentencing discretion for judges. Appellate courts have the legislative power to give sentencing guideline judgments, which are judgments that go beyond the particular case to suggest appropriate sentences for broader circumstances and variations (Frieberg 2005). However, this option does not appear to have been exercised. Minimum and maximum penalties are specified in statutory criminal law.

We rely on administrative court data for Western Australian higher courts (District and Supreme) for 1996 to 2005, supplied by the Western Australian Crime Research Centre.<sup>5</sup> Our analysis uses indictable offences heard in the District and Supreme Courts. Between 1996 and 2005, a total of 25,789 unique adult offenders had final appearances in the Western Australian higher courts. Of these, 12.83 per cent were female defendants, 21.99 per cent involved a defendant identified as Indigenous, and the average age of the defendants was 29.42 years. Due to missing information (in 9.71 per cent of cases), 23,283 cases were used in the analysis.

## Measures

The measures used in this study reflect the types of variables used in previous work on sentencing outcomes. Like most statistical studies of sentencing outcomes, information such as defendants' family circumstances and employment status as well as the context of the offence is not available. We recognise that this introduces concerns about model misspecification, but this is a problem that plagues research in this area.

The measures, their coding and summary statistics are reported in Table 1. Although we do not put forward formal hypotheses, we present some expectations about the relationships between these observed measures and the underlying latent constructs.

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<sup>4</sup> The researchers do not clearly specify how they calculated individual scores on the identified factors (e.g. factor scores, unweighted additive index).

<sup>5</sup> Like much quantitative research on sentencing outcomes, we rely on administrative data which does not directly measure judges' thinking about defendants, their cases, and the appropriate sentences. Official classifications of offence type, seriousness or other case characteristics do not necessarily match the ways in which judges interpret case information. We infer from the patterns of empirical findings the presence of particular perceptual processes. Thus, both qualitative and quantitative approaches are vital to improve our understanding of the exercise of sentencing discretion.

**Table 1: Summary Statistics of Case and Offender Characteristics (Western Australia, Higher Courts, 1996-2005)**

Measures	Description	Summary Statistic <sup>a</sup>
Age	In years (at time of sentence).	29.37 (10.41)
Sex	0=male; 1=female.	0.13
Indigenous status <sup>b</sup>	0=non-Indigenous; 1=Indigenous.	0.23
Offence seriousness (of principal offence)	Reverse-coded National Offence Index (NOI). Developed by the Australian Bureau of Statistics, the NOI ranks all offence classifications contained within the Australian Standard Offence Classification System in order of seriousness. The NOI ranks were reversed coded, with higher scores indicating more serious offences.	102.19 (34.23)
Total conviction counts	Number of conviction counts.	2.56 (8.28)
Violent offence (principal offence)	0=not an offence against the person; 1=an offence against the person.	0.29
Prior prison terms	Number of prior prison terms received.	2.06 (2.94)
Prior arrests	Number of arrests since 1984	12.56 (15.26)
Guilty plea	0 = no plea/not guilty plea; 1 = guilty plea.	0.69
In/out decision	0 = not sentenced to prison; 1 = sentenced to prison.	0.62
Length of term <sup>c</sup>	In months.	33.98 (33.76)
Total number of cases		23,283



## Notes:

- a. Means (with standard deviations in brackets) are reported for continuous variables. Proportions are reported for dichotomous variables.
- b. Indigenous status is derived from code determined by the attending police officer's subjective assessment of the person's appearance. This information is collected and recorded for operational purposes. Care should be exercised in the interpretation of this variable, as it is based on a subjective assessment which might have misattributed a person to a particular group.
- c.  $n$  (for length of term) = 14,378.

The concept of blameworthiness is argued to be linked to current offending behaviour (see earlier). So we would anticipate that offence seriousness and the number of conviction counts would tap the underlying concept of blameworthiness. Offence seriousness is measured as the rank of the principal offence on the National Offence Index. As this index ranges from 1 (most serious) to 155 (least serious), we reverse coded this variable to aid interpretation. Conversely, assessments of risk are concerned with future behaviour of an offender (see earlier review). We expect that criminal history (number of prior arrests since 1984 and number of prior prison terms received) will load on a risk factor, along with whether the principal offence was violent (1 = violent offence). Although the characterisation of an offence (such as violent) may be seen as measuring the circumstances or nature of the offence (see e.g. Hartley et al 2007), the presence of violence may tap into perceptions about the risk of re-offending or danger that an offender may pose to the community.

Finally, we are agnostic about the relationship of offender characteristics, such as Indigenous status, sex and age and the underlying concepts of blameworthiness and risk. We expect that these characteristics may well load on the substantive factors, rather than forming an external, separate perceptual shorthand factor (Hartley et al 2007; Kautt and Mueller-Johnson 2009).

### *Sentencing Outcome*

The sentencing outcomes of interest are the decision to imprison and the length of the imprisonment term. The decision to imprison is a dichotomous variable, coded 1 if the defendant was sentenced to a term of imprisonment, and 0 if not.<sup>6</sup> In our sample, just over 62 per cent of offenders were sentenced to prison (see Table 1). Length of term is measured in months, with a mean term of 33.98 months (see Table 1).

### *Analytic Technique*

The analysis was conducted in two stages. In the first stage, we used a factor analysis to investigate the latent structure of the observed measures.<sup>7</sup> This analytic approach allows us

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<sup>6</sup> Suspended sentences of imprisonment were coded as '0' as the offenders are released back into the community (only potentially serving time if charged for another offence).

<sup>7</sup> A correlation matrix was used as many of the variables did not have meaningful scaling. The correlation matrix is available upon request from the authors.

to see which measures empirically cluster together; however, the labelling of each factor is subjective, but ideally informed by a larger theoretical framework.

We adopted an exploratory approach, especially as we did not have strong expectations about how offender characteristics such as Indigenous status, sex and age would load on the factors. The Kaiser-Meyer-Olkin (KMO) statistic (0.583) indicated that the sampling was adequate (values of at least 0.5 indicate acceptable, although higher values are best: Walker and Madden 2009:331). Originally, we included a dichotomous variable indicating whether the principal offence was drug-related. However, this produced an unacceptable KMO value (0.468). An examination of the anti-image matrix also suggested that this variable might be a problem, as it had high off-diagonal absolute values greater than 0.5. Thus, we dropped this variable from our analysis. Further, although prior prison terms also had a high off-diagonal value, deleting this variable from the analysis only resulted in a marginal improvement to the value of the KMO statistic. Consequently, number of prior prison terms was retained. Based on eigenvalues (cut-off of approximately 1.0 or higher) and a visual examination of the scree plot, we decided to retain four factors, explaining just over 66 per cent of the variance in the data. (The final factor retained had an eigenvalue of 0.999 and added 11.1 per cent to the variance explained.) The retained factors were rotated using varimax.<sup>8</sup>

The second analysis stage consisted of a logistic regression of the identified factors on the decision to imprison, and an OLS regression of the identified factors on logged length of term.<sup>9</sup> As is standard in sentencing research, the length of term variable was logged due to its skewed distribution. The fit of the estimated models is acceptable: 71.12 per cent of the cases were successfully predicted in the decision to imprison model, and 22.32 per cent of the variance was explained in the logged length of term model.<sup>10</sup>

There are two key technical issues that need to be briefly addressed. First, factor analysis requires interval-level, or at least continuous, data, as it uses a correlation or covariance matrix. As many of our measures are dichotomous, Pearson's product-moment correlation may not be a correct measure of the relationship between these types of variables. However, there appears to be a consensus that the use of dichotomous variables in a principal components (factor) analysis is acceptable, although there is less agreement about rotated solutions in the case of dichotomous variables (Walker and Madden 2009:327). Also, Kim and Mueller (1978) note that the use of dichotomous variables may be permissible provided the underlying metric correlations between the variables are 0.7 or lower, as is the case here. Thus, we feel comfortable in using the factor analysis, although caution must be exercised in drawing conclusions.

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<sup>8</sup> Although we did not initially assume that the factors would be uncorrelated, the oblique solution had highly similar results, leading to the same interpretation. Thus, we report the varimax solution.

<sup>9</sup> This study is unable to account for the impact of selection (the influence of previous decisions on the nature of the cases and offenders that form part of our study of sentencing). Standard corrections for selection bias require information on the immediately preceding decision stage; we did not have this information. However, our aim is not to make inferences to the population, but to explore the conceptualisation and operationalisation of the focal concerns perspective.

<sup>10</sup> Data was not available on variables to control for other models of sentencing (e.g. nature of courtroom workgroups).

Second, sentencing data usually does not conform to assumptions of multivariate normality. Thus, we adopted a two-stage estimation process, rather than rely on structural equation modelling techniques. Violations of assumptions of normality (particularly kurtosis) are an issue for that technique (Kline 1998). Although there are assumptions of normality underlying factor analysis, violations are generally of concern depending on the extent to which correlations are affected, or whether hypothesis testing is required (Leech et al 2005:76).

## Findings

Table 2 provides the means and proportions (as appropriate) of the variables in these analyses by the decision to imprison. There are no surprises in the bivariate findings. Those who were imprisoned had more serious and extensive current and past offending, as shown by higher mean seriousness score, higher mean number of conviction counts, and higher mean number of previous prison terms and prior arrests. Offenders with a prison sentence were less likely to have pleaded guilty, and more likely to be Indigenous and male.

**Table 2: Offender and Case Characteristics by the Decision to Imprison (Western Australia, Higher Courts, 1996-2005)**

Measures	Imprisoned Mean (SD)	Not imprisoned Mean (SD)	Difference <sup>b</sup>
Age	30.33 (10.50)	27.80 (10.06)	2.53***
Indigenous status	0.25	0.20	0.05***
Sex	0.10	0.18	0.08***
Offence seriousness	106.41 (33.67)	95.26 (34.04)	11.15***
Violent offence	0.35	0.20	0.15***
Total conviction counts	3.15 (10.22)	1.58 (2.84)	1.57***
Prior prison terms	2.76 (3.25)	0.91 (1.85)	1.85***
Prior arrests	15.53 (17.21)	7.70 (9.52)	7.83***
Guilty plea	0.64	0.79	0.15***
Total number of cases	14,472 (62.16%)	8,811 (37.84%)	

# p<0.10, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

- a. Means (with standard errors in brackets) are reported for continuous variables. Proportions are reported for dichotomous variables.
- b. T-tests for equality of the means were calculated for continuous variables; z-tests for equality of proportions were calculated for dichotomous variables. Differences are subject to rounding error.

***Empirical Identification of the Focal Concerns***

The findings of the exploratory factor analysis are presented in Table 3. Factor loadings above 0.4 are shaded. Although there is no firm rule, in practice, loadings above 0.6 can be seen as high, and those below 0.4 as low (Hair et al 1998; Walker and Madden 2009). The aim is to identify a simple structure with ideally no cross-loadings (same variable across different factors) of greater than 0.4. We note that three of the four extract factors have less than three items, indicating that the factors may be unstable (Costello and Osborne 2005). However, at this stage, our purpose is not to build definitive scales, but to assess the empirical relationship between the latent concepts and the observed variables.

**Table 3: Results of Factor Analysis (Western Australia, Higher Courts, 1996-2005)<sup>a</sup>**

Measures	'Risk' <sup>b</sup>	'Blameworthiness' <sup>b</sup>	'Practical costs' <sup>b</sup>	Defendant sex <sup>b</sup>
Age	-0.022	0.165	0.515	-0.071
Indigenous status	0.386	0.106	-0.301	0.310
Sex	-0.040	0.007	0.050	0.915
Offence seriousness	-0.043	0.663	-0.002	0.014
Violent offence	0.022	0.679	-0.042	0.015
Total conviction counts	0.057	-0.156	0.666	0.203
Prior prison terms	0.644	-0.007	0.108	-0.100
Prior arrests	0.652	-0.035	-0.009	-0.039
Guilty plea	-0.067	-0.188	-0.430	0.094
Trace <sup>c</sup>	1.236	1.735	1.940	1.034
% variance	13.73	19.28	21.56	11.49

## Notes:

- a. Extraction method was principal components (PASW (SPSS) Statistics, version 18). Rotation method was varimax. Four factors were extracted. The fifth unretained factor had an eigenvalue of 0.916.
- b. Loadings greater than 0.4 are shaded.
- c. Trace and per cent of variance is reported post-rotation.

There are several points to note about these findings. First, clear distinct factors corresponding to blameworthiness and risk were statistically identified. The results show that the measures largely collapsed into factors that had face validity and ‘made sense’ in terms of the focal concerns perspective. Prior arrests and prior prison terms loaded together into a factor that represents risk, or perceived dangerousness. Offence seriousness and being convicted of a violent offence factored together into what conceptually looks like blameworthiness, while total conviction counts, guilty plea and offender’s age statistically form a separate factor. Although its interpretation is less obvious, we believe that this can be conceptualised as a concern with system costs and practicalities of judicial decisions. For instance, more conviction counts can be an indicator of the complexity or size of the case, and thus how much time and resources might be needed in processing the offender. Focal concerns scholars have consistently argued that guilty pleas reduce the time and resources of the court (Steffensmeier et al 1998; Johnson 2003; Ulmer and Johnson 2004). Offender’s age might be capturing other unmeasured characteristics of offenders relating to increasing responsibilities (such as work) and increased health needs of older offenders, which may present extra considerations for judges in making their decisions.

The last factor is defined by one single variable: defendant’s sex. Similar to age, defendant’s sex may represent a range of unmeasured characteristics, such as caretaking responsibilities (which have been shown in past research to influence sentencing decisions: see Daly 1987, 1989; Jeffries et al 2003), as well as a perception of the difficulty for women of ‘doing time’ (an offender-level practical constraint) (Steffensmeier et al 1993).

Second, although distinct factors were identified, these factors were not completely consistent with the expectations from the focal concerns perspective, or the findings of Hartley and colleagues (2007). For instance, measures of past criminality clearly loaded on a construct of risk, not blameworthiness as suggested by some scholars, while total number of convictions counts loaded on a practical constraints/social costs factor, rather than offender responsibility or blameworthiness (cf Hartley et al 2007). In addition, unlike Hartley and colleagues, we extracted fewer factors (4 vs 7), although no explanation is offered in the earlier research about the determination of the number of factors to be used.

Finally, offender characteristics of race, sex and age did not form a single distinct factor. While this is in line with the findings of Hartley et al (2007), we did not find that they clustered in the same way. For example, in our study, defendant’s age clustered with number of conviction counts and guilty plea, indicating that age contributed to assessments about the practicalities of a decision about a case. Of particular interest, Indigenous status did not load on any of the extracted factors, supporting an interpretation that there may be something unique about the impact of Indigenous status on judicial assessments.

*Explaining the Decision to Imprison*

Table 4 shows the logistic regression results for the model of the decision to imprison using the identified factors. Factor scores (using the regression methods) were calculated, and then entered into the model, except for the final factor. Since only one indicator loaded above 0.4 on this factor ( $\Gamma = 0.915$ ), the individual variable was used. Estimated coefficients, standard errors and odds ratios are reported. Odds ratios (OR) indicate the change in the likelihood of receiving a sentence of imprisonment for a unit change in the independent variable.

**Table 4: Estimated Effect of Risk and Blameworthiness on Sentencing Decision (Western Australia, Higher Courts, 1996-2005)**

Focal concerns <sup>b</sup>	Decision to Imprison <sup>a</sup>			Logged Length of Term <sup>a</sup>		
	b	se	OR	b	se	$\beta$
Risk	0.898***	0.053	2.455	0.014**	0.005	0.027
Blameworthiness	0.278***	0.017	1.320	0.219***	0.004	0.381
Practical costs	0.459***	0.034	1.582	0.115***	0.005	0.183
Sex	-0.551***	0.026	0.576	-0.152***	0.020	-0.058
Indigenous status	-0.674	0.028	0.510	-0.189***	0.018	-0.105
Constant	0.946***	1.366		3.210***	0.007	
Pseudo/Adjusted R <sup>2</sup>	0.155			0.223		
AIC	26,118.57			29,982.71		
Number of cases	23,283			14,378		

# p<0.10, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

- a. Logistic regression was used to estimate the decision to imprison model; OLS regression was used to estimate the model of the logged length of term. We report pseudo R<sup>2</sup> for the logistic model, and adjusted R<sup>2</sup> for the OLS model.
- b. Factor scores were calculated for the concepts of risk, blame and practical costs, based on the results of the analysis shown in Table 3.

The results in Table 4 are illustrative of the relationship between the underlying concepts and the decision to imprison. The factor of ‘risk’ (or perceived dangerousness) has the strongest effect on the decision to imprison: for each increment change on the ‘risk’ factor, offenders are approximately 2.5 times as likely to be sentenced to prison after controlling for

the other factors in the model. Increased 'blameworthiness' also significantly increased the odds of imprisonment (OR = 1.320).

Of particular interest, the 'practical costs' factor significantly increased the odds of imprisonment (OR = 1.582). The tenor of focal concern arguments around practical constraints and social costs has been on features of cases and offenders that might reduce the risk of imprisonment (e.g. characteristics of offenders that might make it difficult to 'do time'). However, in our analysis, the three variables that loaded highly on this factor were total conviction counts, defendant's age and guilty plea, with total convictions counts having largest loading ( $\Gamma = 0.666$ ). Due to the nature of our available indicators, the 'practical costs' factor only relates to the difficulties which might be encountered by the court (and not broader organisational and community constraints). Our findings suggest that as difficulties and complexities increase, so does the likelihood of a prison term. In other words, increased complexity means that the judge must spend more time considering the case, and cannot rely on more routine decision-making processes. The development of routine decision-making processes, or 'patterned responses' (Kautt and Spohn 2007:169), has been suggested as a possible way of thinking about the sentencing process (Farrell and Holmes 1991; Bond et al 2002).

Both defendant's sex and Indigenous status reduced the likelihood of receiving a prison term, controlling for the other factors in the model. These findings are consistent with previous research on the impact of gender (Daly and Bordt 1995) and Indigenous status (Jeffries and Bond 2009).

### *Explaining the Logged Length of Term*

Table 4 also presents the results of the impact of the identified factors on the decision about the length of term. As traditional in sentencing research, an OLS regression of logged length of term was estimated. Once again, factor scores were used, except for the final factor, where the individual variable (defendant's sex) was entered into the model (see earlier discussion). Estimated coefficients, standard errors and standardised coefficients are reported.

In contrast to its impact on the decision to imprison, the 'blameworthiness' factor had the strongest influence on the logged length of imprisonment term ( $\beta=0.381$ ), after adjusting for the other factors in the model. The factors of 'risk' and 'practical costs' also significantly increased the logged imprisonment term. The defendant's sex and Indigenous status significantly reduced the logged length of term, controlling for the other factors. The reduction in length of term for Indigenous status was unexpected, as previous work in another jurisdiction suggests that Indigenous status may aggravate the length of imprisonment (Jeffries and Bond 2009). However, our current study does not account for other social factors that may be associated with Indigenous status and lower length of terms (e.g. mental health, past victimisation experiences), and thus may mask the effect of Indigeneity on length of term.

## **Discussion**

In this paper, we explore whether the concepts of blameworthiness and risk from the focal concerns perspective are distinct constructs, with unique indicators. In past research, there has been no clear test of which variables are indicators of the larger underlying focal

concern constructs (cf Hartley et al 2007). Usually, researchers happily interpreted variables in terms of both blameworthiness and risk. Interviews with judges provide empirical support for the view that blameworthiness and risk (or perceived danger) are key dimensions in their sentencing decisions (e.g. Steffensmeier et al 1998; Mackenzie 2005). However, our understanding of what types of information group together to inform assessments of blameworthiness and risk is not well developed (Hartley et al 2007). Moreover, studies framed in terms of the focal concerns perspective have largely been conducted in the United States. An important step in the further development of this approach is to consider whether jurisdictional (and legislative), political and social contexts change the meaning attached to offender and case information.

Consistent with the focal concerns perspective, we found that distinct factors related to blameworthiness and risk could be identified. Our regression results confirmed that the identified factors had independent effects on sentencing outcomes, both the decision to imprison and the logged length of term. Indeed, past and current criminality (the core of our blameworthiness and risk factors) remain strong predictors of the decision to imprison and the logged length of term.

We did not find empirical evidence of a separate distinct 'perceptual shorthand' factor. Indigenous status, sex and age did not cluster together. Rather, age loaded on the 'practical costs' factor, while Indigenous status and sex did not load on any of the focal concern factors. This suggests that it might be more informative to think of Indigenous status and sex as interacting with the focal concerns. That is, they condition or modify assessments of blameworthiness and risk. Preliminary factor analyses (not reported here) were also estimated separately by Indigenous status and sex. These analyses suggest that the factor structure may not be invariant across Indigenous status and sex. Narrative analyses of sentencing remarks (e.g. Jeffries and Bond 2010) as well as interviews with judges (e.g. Hedderman and Gelsthorpe 1997; Mackenzie 2005) might also help us to better understand the meanings attached to current and past criminality, and offender characteristics of race, sex and age.

Our analyses did reveal some differences in the types of information that grouped into the identified factors than had been either argued by focal concern scholars, or found in the work of Hartley and colleagues (2007). For instance, we found that age clustered with number of conviction counts and the presence of a guilty plea, not with race as expected from prior research. Although this may be due to different measures (and thus, different underlying structure), this finding suggests that we need to give greater attention to jurisdictional difference. Research on the contexts of sentencing courts is emerging (Ulmer and Johnson 2004; Johnson 2006), but these studies are still within the same state jurisdiction and legislative context. As we argued earlier, a case can be made for Indigenous status to trigger different attributions than African-American or Hispanic social identities. Differing political and legislative contexts could also mean differing legal attributions. The focal concerns of Australian judges may differ than those of U.S. judges: an understanding of these differences will assist in our understanding of how political and historical context matters.

In addition, these analyses suggest that the focal concern of practical concerns and social costs needs further theoretical consideration. The results reported here suggest that there are types of practical concerns/social costs that should be considered distinct influences on the sentencing decision. This study found a distinct factor (number of conviction counts, presence of a guilty plea and defendant's age) that suggested micro-level court constraints



on the efficient processing of the case. However, we could only speculate about how increasing defendant's age was potentially an issue that complicated the processing of a case. Although types of constraints have been recognised by focal concerns scholars, no strong theoretical or empirical distinction has been made between the different constraints and costs on judicial decision-making. The tendency has been to lump all information that might constrain decisions into a single concern, rather than teasing out the (potentially different) implications of the differing types of constraints.

There are some limitations to our study, some of which have been noted earlier. In particular, there are a number of measures relating the social circumstances of offenders (e.g. mental health, victimisation experiences) and the context of the offence (e.g. evidence of premeditation, presence of a weapon) that are not available in this data. These are factors that are known to impact on the sentencing process, and may be linked to blameworthiness, risk and, practical constraints and social costs. Future research should examine the relationship between these types of variables and each of the focal concerns (Hartley et al 2007).

Finally, we are not suggesting that researchers should construct indices of the focal concerns (using factor analysis or other data reduction techniques). Collapsing measures into single factors can hide some differences in the individual indicators. Rather, the purpose of this paper was to explore some arguments suggested by focal concerns, and to clarify issues around the operationalisation of the perspective. Thus, our aim was to test empirically some assumptions made about the measurement of risk and blameworthiness in a perspective that is dominating quantitative sentencing disparities research.

## Conclusions

This study contributes to our understanding of the focal concerns perspective through an examination the relationship between traditional case and offender characteristics and the focal concerns of blameworthiness and risk. Despite the exploratory nature of this study, its findings point to the need for replication across different samples and jurisdictions, extending the focus to other elements of the perspective (such as practical constraints and social costs), and more serious theoretical work on how the notion of a perceptual shorthand relates to assessments of blameworthiness, risk, and practical constraints and social costs.

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