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Gender as a Moderator in Predicting Re-arrest Among Treated Drug-Involved Offenders

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Abstract

The primary aim of the current study is to explore gender differences on the relationships of pre-treatment risk factors (i.e., substance use severity and criminal history) and psychosocial functioning (i.e., decision making, risk taking, self-esteem, social support, and peer support) with time to re-arrest following termination from prison. With gender as a moderator variable, survival analysis was used to model time to re-arrest in terms of pre-treatment risk factors and psychosocial functioning. The sample consisted of 697 participants (384 males and 313 females) who were admitted to four prison-based substance abuse treatment programs. Female inmates experienced a longer time to re-arrest than male inmates. Better decision making and more peer support were associated with lower levels of re-arrest for males. Males with higher self-esteem were more likely to be re-arrested than their counterparts. Females with more self-reported criminal involvements had a higher rate of re-arrest than those with less criminal involvement. In contrast to males, females with relatively high self-reported self-esteem had a lower rate of re-arrest than their counterparts. Clinical implications include the importance of enhancing decision-making ability and peer support for males and self-esteem for females.

Keywords

re-arrest; psychosocial functioning; pretreatment risk; gender difference

1. Introduction

Criminal history and substance use severity have been found to be associated with re-offending and post-treatment substance use (Evans, Huang, & Hser, 2011; Hawken, 2008; Moos, Finney, & Cronkite, 1990). Criminal history not only directly predicts a high likelihood of re-arrest, but also influences the levels of criminal thinking and treatment engagement which in turn impact re-arrest (Yang, Knight, Joe, Rowan-Szal, Lehman, & Flynn, 2013). Furthermore, high recidivism rates (e.g., 67.5% of prisoners typically re-arrested within 3 years post-release, Langa & Levin, 2002) suggest that a large proportion of individuals with past criminal involvement will recidivate in the future. Drug use severity also has been found to be associated with a higher likelihood of re-arrest (Du, Huang, Zhao,

& Hser, 2013). Many parolees are returned to prison as a result of violating their conditions of parole because of substance abuse (Lynch & Sabol, 2001). Drug use also has been found to significantly impair young men's ability to mature out of delinquency (Welte, Barnes, Hoffman, Wieczorek, & Zhang, 2005; Zhang, Welte & Wieczorek, 2002). For example, among a sample of young delinquent men, alcohol dependence and negative consequences of drug use were found to be associated with a more rapid increase in criminal activity (Welte et al., 2005). Moreover, studies involving drug treatment clients have demonstrated that reduced drug use is associated with reduced posttreatment criminal activities (Anglin & Perrochet, 1998; Farabee, Shen, Hser, Grella, & Anglin, 2001; Federal Bureau of Prisons, 1998; Fletcher, Tims, & Brown, 1997), further supporting the link between drug use severity and criminal conduct.

While drug treatment for those involved in the criminal justice system typically addresses both drug use and criminal activity, the effectiveness of treatment often is moderated by gender. For example, Green, Polen, Lynch, Dickinson, and Bennett (2004) found that men and women were similar in the rate of treatment completion, but they differed significantly on posttreatment drug abstinence. Specifically, female completers were abstinent from drug use nine times longer than were female non-completers, whereas male completers were abstinent three times longer than their male non-completer counterparts (Green et al., 2004). Based on a sample of 951 male and female clients from residential or outpatient drug-free treatment programs, Grella, Scott, and Foss (2005) found that women were more likely than men to participate in self-help groups, have family involvement, and be employed during a 36-month follow-up period. Likewise, Hser, Huang, Teruya, and Douglas (2003), found that in comparison to female drug treatment clients, male clients reported greater criminal involvement at baseline and more crimes at follow-up. The authors also discovered gender-specific predictors of a lower likelihood of crime desistance, including legal involvement and lower treatment readiness at baseline for women, and legal involvement, use of multiple drugs, and not living with children for men.

The reasons for different treatment outcomes between genders are complex, but may be attributed to different life experiences and substance use backgrounds. Women are more likely to initiate substance use as a result of traumatic life events and often are introduced to substance use by their male partners and family members, whereas men often are drawn into drugs by their peers and friends (Henderson, Boyd, & Mieczkowski, 1994; Nelson-Zlupko, Kauffman, & Dore, 1995; Semple, Grant, & Patterson, 2004). Male offenders are more likely than female offenders to commit violent crimes, have prior criminal histories, and return to prison; female offenders are more likely to commit property or drug-related crimes (Henderson, 1998; Harrison & Beck, 2006). Females also are more likely to report sexual abuse, mental illness, marital stress, and the absence of positive social support in the recovery process (Belknap & Holsinger, 2006; Greenfeld & Snell, 1999; Office of Applied Studies, 2003; Spjeldnes & Goodkind, 2009; Walitzer & Dearing, 2006). From a life-course perspective, men and women differ in various aspects of their substance use and recovery.

In addition to treatment effectiveness and drug use background, gender also has been found to be an important moderator in other relationships, such as between self-esteem and delinquency. One study found that high self-esteem predicted less delinquency for girls but

not boys (Kort-Butler, 2006). Based on a sample of 581 homeless women, one study found that greater self-esteem predicted less depression and few substance use problems; childhood abuse also had indirect impacts on depression and substance use problems and was mediated by physical abuse and self-esteem (Stein, Leslie, Nyamathi, 2002). Female juveniles were more likely than their male counterparts to endorse negative self-esteem statements in terms of wanting more self-respect, feeling useless, being a failure, and being “no good at all” (Belknap & Holsinger, 2006). In the same vein, Broidy and Agnew (1997) claimed that men had a stronger sense of mastery and self-esteem than did women and were more likely to respond to anger and strain by committing crime.

Offenders and substance users often display poor decision making, impulsivity, and risk-taking behaviors with little concern for the consequences of their actions (Syngelaki, Moore, Savage, Fairchild, & Van Goozen, 2009; Grant, Contoreggi, & London, 2000). With respect to decision making and risk taking, women are more risk averse than men in making decisions and tend to make low risk decisions under uncertainty (Eckel & Grossman, 2002; Lighthall, Mather, & Gorlick, 2009). Studies adopting laboratory decision tasks have found that men tend to make more high-risk disadvantageous choices under stress, but women tend to make more low-risk advantageous choices (Lighthall, Mather, & Gorlick, 2009; van den Bos, Harteveld, & Stoop, 2009). This account suggests that males would be more likely than females to misjudge the costs and benefits of their action and opt for risk-taking behaviors to solve everyday problems which eventually lead to their deviant behaviors. A meta-analysis comparing risk taking between male and female adolescents found that males were more likely than females to self-report risky behaviors (e.g., drinking/drug use, sexual activities, driving) and an earlier onset of these behaviors (Byrnes, Miller, & Schaefer, 1999). In light of these findings, further research is needed to provide a better understanding of the role gender plays in moderating these relationships.

Finally, the relationship between social support and criminal activity is another variable potentially moderated by gender (Cullen, 1994; Hochstetler, Delisi, & Pratt, 2010). One study with a sample of 1289 young adults found that social support was a significant protective factor in terms of buffering the negative impact of strain on delinquency for females, but not for males (Robbers, 2004). This finding could be attributed to women reporting more social support and a greater likelihood of utilizing social support to cope with stress in comparison to what men report (Robbers, 2004).

The present study examines pretreatment risks (i.e., criminal history, substance abuse severity) and psychosocial functioning (i.e., self-esteem, decision making, risk taking, social support, and peer support) of offenders having received substance abuse treatment and recently released from prison, and assesses if the relationship between these factors and post-treatment re-arrest is moderated by gender. It is hypothesized that female offenders will not only be less likely than their male counterparts to be arrested after release from prison, but among those arrested, females also will have a longer time to re-arrest.

2. Materials and Method

2.1. Participants

Out of 831 participants in the Disease Risk Reduction (DRR) project (R01DA025885, W. E. K. Lehman, principal investigator), 698 completed the TCU Short Forms that were used in the study. Six hundred and ninety-seven had documented criminal history information. Participants were criminal justice clients from four residential prison-based treatment facilities in a southwestern state. All four facilities were classified as minimum security and operated as stand-alone substance abuse treatment programs. Two facilities were all-male units and two were all-female units. The duration of the programs ranged from 6 to 10 months. Participants included 384 males (55%) and 313 females (45%), with a mean age of 35 (range: 18-67) years (see Table 1). Males were evenly distributed across three ethnic groups, 32% White, 30% African American, and 38% Hispanic. Among the female participants, the majority were White (60%), followed by African American (23%), and Hispanic (16%).

2.2. Measures

Pretreatment risks included measures of criminal history and substance abuse severity. Psychosocial functioning included measures of self-esteem, decision making, risk taking, social support, and peer support. All risk measures, except peer support, were self-administered shortly after admission to the program. Peer support was self-administered approximately 30 days after admission.

2.2.1. Pretreatment risks—The Lifetime Criminal Involvement (LCI; 5 items) subscale from the TCU Criminal History Scale (TCU CRHS) was used to measure criminal history, including lifetime arrests (e.g., In total, how many times have you been arrested in your lifetime?), convictions (e.g., How many times were you arrested before age 18?), and incarcerations (e.g., In total, how many days have you ever spent in jail or prison?) (Joe, Simpson, Greener, & Rowan-Szal, 2004). The scores of the LCI subscale consisted of the overall mean score of five items, ranging from 1 to 5 (Yang, Knight, Joe, Rowan-Szal, Lehman, & Flynn, 2013).

The TCU Drug Screen II (TCUDS II; e.g., Did you use larger amounts of drugs or use them for a longer time than you planned or intended?) was used to measure the current severity of drug-related problems (e.g., problems in employment due to addiction) prior to incarceration (Knight, Simpson, & Hiller, 2002; Rowan-Szal, Joe, Bartholomew, Pankow, & Simpson, 2012). The composite score of the TCUDS II was used to produce a single total score ranging from 0 to 9, with score values of 3 or greater indicating relatively severe drug-related problems (Knight, Simpson & Hiller, 2002).

2.2.2. Psychosocial functioning—Self-Esteem ($\alpha = .76$; 6 items; e.g., You have much to be proud of) and Decision Making ($\alpha = .78$; 9 items; e.g., You consider how your actions will affect others) were measured using the TCU Psychological Functioning Form (TCU PSYForm). Risk Taking ($\alpha = .80$; 7 items; e.g., You like to take chances) and Social Support ($\alpha = .83$; 9 items; e.g., You have people close to you who motivate and encourage your

recovery) were measured using the TCU Social Functioning Form (TCU SOCForm). Peer Support ($\alpha = .82$; 5 items; e.g., Other clients at this program care about you and your problems) was measured using the TCU Treatment Engagement Form (TCU ENGForm). Each item was rated on a scale of 1 (strongly disagree) to 5 (strongly agree). All of the scales have evidence of good reliability and validity (Simpson, Joe, Knight, Rowan-Szal, & Gray, 2012).

2.2.3. Re-arrest and the time to re-arrest—In the current study, recidivism was defined as re-arrest for a felony offense, based on a September 2012 search of official state criminal history records. Participants were coded as “0” for no felony arrest, and “1” for one or more felony arrests. The time to re-arrest (i.e., survival time) was measured as the days between participants’ discharge and the time they were re-arrested or the time of search for those not re-arrested. Participants had been in the community between 33 and 972 days after release from incarceration.

2.3. Data Analysis Method

When addressing research questions involving time to re-arrest, two concerns arise: (1) the percentage of recidivism typically increases as offenders stay in the community longer (censoring); and (2) individuals have different starting points but share the same survival endpoint (time to event). Therefore, the use of survival analysis is more appropriate than the use of a linear model because it takes into account censoring and time to event. It also allows the comparison of time-to-event between categorical groups, and addresses the relationships of predictive variables with time-to-event.

Analyses were conducted using SAS 9.2. The survival curves were generated with R programming. With regard to gender difference in the time to re-arrest, Kaplan-Meier estimates were used to examine the shape of survival curves for the two gender groups, and the test of log-rank equality across strata was used to compare gender differences in the survival curves. SAS PROC PHREG was used for estimating the predictors on the risk of re-arrest based on the Cox proportional hazard model. Effect coding was used to code gender (male = -0.5 , female = 0.5). Because gender was used as a moderator, main effects of predictors, and the interactions between gender and each predictor in the Cox proportional hazard model, were included. The two gender groups were then analyzed separately to test the gender-specific predictors of re-arrest. Estimates of raw weights were converted to hazard ratios which were used to determine the percentage change in hazard for each unit change in the predictors.

3. Results

3.1. Descriptive Analyses

Means and standard deviations for all of the predictor variables, re-arrest percentages, and the time to re-arrest (median and range) are displayed in Table 1. Overall, 16% of the total sample were re-arrested, with males being more likely to be re-arrested (20%) than females (12%, $p = .004$). The median time for male participants to re-arrest was 484 days (range: 51-972); the median time for female participants was 503 days (range: 33-820). With regard

to pretreatment risks, male offenders had higher criminal involvement ($Mean = 3.64$, $SD = 0.56$) than female offenders ($Mean = 3.32$, $SD = 0.61$, $p < .001$), although female offenders had a higher level of substance abuse severity ($Mean = 5.89$, $SD = 2.74$ compared to $Mean = 4.11$, $SD = 2.84$, $p < .001$). Male offenders reported significantly higher levels of self-esteem ($Mean = 37.53$, $SD = 6.67$) and decision making ($Mean = 37.57$, $SD = 5.07$) than females (self-esteem: $Mean = 33.07$, $SD = 8.77$, $p < .001$; decision making: $Mean = 35.03$, $SD = 5.870$, $p < .001$), and female offenders reported a significantly higher level of risk taking ($Mean = 32.62$, $SD = 8.39$) than reported by male offenders ($Mean = 30.33$, $SD = 6.93$, $p < .001$). There were no significant gender differences in the self-reported levels of social support (Males: $Mean = 42.03$, $SD = 5.13$; Females: $Mean = 42.28$, $SD = 5.79$, $p = .55$) and peer support (Males: $Mean = 37.24$, $SD = 7.19$; Females: $Mean = 37.73$, $SD = 7.05$, $p = .38$).

3.2. Gender Differences in the Time to Re-arrest

The survival curves for males and females are displayed in Figure 1. The log-rank tests examining gender differences in the time to re-arrest indicated that female offenders had a flatter accumulative survival curve than male offenders (Log-rank: $\chi^2(1) = 7.17$, $p = .007$), which suggests that female offenders experienced a longer time to re-arrest than male offenders. The survival curve for men starts to decline faster than for women, indicating that more male offenders were re-arrested than female offenders during the time period shortly after treatment.

3.3. Gender Differences in the Cox Regression Model

Because gender was the moderator in the current study, both main effects of predictors and interactions between gender and each predictor in the Cox regression full model were included. The results, shown in Table 2, reveal that the full model was significant (Likelihood ratio: $\chi^2(15) = 59.45$, $p < .001$), and that criminal history was the only significant main effect of risk of re-arrest (Hazard Ratio [HR] = 2.00, 95% Confidence Interval [CI]: 1.45 – 2.77, $p < .001$). The interactions of gender with criminal history (HR = 2.09, 95% CI: 1.09 – 4.01, $p = .03$), peer support (HR = 1.08, 95% CI: 1.01 – 1.14, $p = .02$), self-esteem (HR = 0.92, 95% CI: 0.86 – 0.98, $p = .01$), and decision making (HR = 1.11, 95% CI: 1.03 – 1.23, $p = .01$) were significant, indicating that the impact of criminal history, self-esteem, decision making, and peer support on the risk of re-arrest differed by gender.

In the next step, the model was limited to the four predictive variables that had significant interactions, and the analyses were conducted separately by gender to examine the impact of these four variables on the risk of re-arrest within each gender group (see Table 3). The reduced Cox regression model was significant for males (Likelihood ratio: $\chi^2(4) = 12.59$, $p = .013$) and showed that self-esteem (HR = 1.05, 95% CI: 1.00 – 1.09, $p = .05$), decision making (HR = 0.93, 95% CI: 0.88 – 0.99, $p = .01$), and peer support (HR = 0.97, 95% CI: 0.94 – 1.00, $p = .04$) significantly predicted risk of re-arrest. For male offenders, after controlling for the other predictors in the model, the hazard of re-arrest increased by 5% for each unit increase in self-esteem, and decreased by 7% for each unit increase in decision making and by 3% for each unit increase in peer support.

The reduced Cox regression model also was significant in the female group (Likelihood ratio: $\chi^2(4) = 31.01, p < .001$) and the analyses indicated that criminal history (HR = 2.96, 95% CI: 1.81 – 4.84, $p < .001$) and self-esteem (HR = 0.96, 95% CI: 0.92 – 1.00, $p = .03$) significantly predicted risk of re-arrest. The hazard of re-arrest increased 2.96 times for each unit increase on the criminal involvement scale and decreased by 4% for each unit increase in self-esteem.

4. Discussion

Consistent with other research, the results of this study showed a higher probability of re-arrest and a shorter time to re-arrest for males than for females (Langa & Levin, 2002), and also found that criminal history predicted re-arrest risk for both males and females (Evans et al., 2011). These results are also consistent with other findings showing that female clients had more favorable posttreatment behavioral outcomes than did their male counterparts (Grella et al., 2005; Hser et al., 2003). However, in spite of having more favorable outcomes (i.e., lower probability of re-arrest and longer time to re-arrest), women had higher risk factors than did men in terms of greater substance abuse severity, lower self-esteem and decision-making, and higher risk taking. These findings have been referred to as the gender paradox, that is, women possess more risk factors, but they tend to perform better in treatment and have a better treatment outcome than men (Fiorentine, Anglin, Gil-Rivas, & Taylor, 1997).

Several of the predictors of re-arrest differed by gender. Although criminal history predicted re-arrest in the combined male and female sample, it was not a significant predictor in the male-only sample. High self-esteem was found to be predictive of re-arrest for males but low self-esteem was predictive of re-arrest for females. Previous findings have found that male offenders with higher self-esteem tended to respond to stress with more criminal behaviors (Baumeister, Bushman, & Campbell, 2000; Baumeister, Campbell, Krueger & Vohs, 2003; Broidy & Agnew, 1997), whereas women with low self-esteem tend to have more delinquent behaviors (Kort-Butler, 2006). Baumeister and his colleagues contended that narcissistically high-level self-esteem people may use aggressive behaviors to defend themselves if a positive view of self is challenged or attacked by others (Baumeister, Bushman, & Campbell, 2000; Baumeister, Campbell, Krueger, & Vohs, 2003). Given that the findings of this study were based on a criminal justice population treated for substance use, it is possible that male offenders tended to report high self-esteem because of their high levels of justification and power orientation. This kind of inflated self-esteem may have increased their propensity for deviant behaviors.

The negative relationship between self-esteem and re-arrest in female offenders might be attributed to female's life experience. Female offenders typically report more dysfunctional family history including a history of family drug abuse (e.g., Nelson-Zlupko et al., 1995). Females are also more likely to report physical, emotional, and sexual abuses which can negatively impacted their self-esteem. Moreover, women may tend to use emotional and avoidance coping styles to cope with stress (Matud, 2004). Their emotion-focused coping style might magnify the extent of negative affect stemming from the events and deteriorate their self-esteem. As Stein et al. (2002) indicated, self-esteem is a protective factor for

women who experience depression and have substance use problems. Women with low self-esteem are at risk for using drugs to cope with stress, which in turn increases their risk for committing crime and being re-arrested. However, for incarcerated women with substance use problems, their self-esteem could be deteriorated by life frustrations and the stigma of being incarcerated. Moreover, low self-esteem places women at high risk of using self-destructive strategies (e.g., self-medication hypothesis; Khantzian, 1997) to cope with stress. Given the fact that women are mostly arrested for drug-related crimes, their self-destructive strategies may increase the likelihood of being re-arrested.

Better decision-making and peer support were found to be protective factors against re-arrest for males but not for females. Young male drug using offenders with poor decision making skills are believed to favor short-term smaller rewards over delayed, but larger, rewards, and thus may be more likely to make risky decisions leading to a higher likelihood of re-arrest (Grant, Contoreggi, & London, 2000; Fernández-Serrano, Pérez-García, Río-Valle, & Verdejo-García, 2010; Syngelaki et al., 2009).

Gender differences in decision making might also account for differences in the relationship with re-arrest. According to Gilligan (1993), men are likely to consider moral issues in terms of justice rules and individual rights, whereas women tend to consider such issues in terms of relationships, caring, and compassion. Thus, in the situation involving moral judgment (e.g., mugging people for money to buy drugs), men with good decision making skills could be less likely to reoffend than their counterparts. However, women's risky behaviors largely depended on the characteristics of their inter-personal relationships rather than their intrapersonal decision making ability. Interestingly, however, peer support protected men but not women from reoffending. More research is needed to help explain the relationship among these factors.

Higher peer support for males was associated with lower risk for re-arrest, consistent with previous findings by Yang et al. (2013). Support from peers who are in the recovery process may cultivate a positive atmosphere which increases treatment engagement (Joe, Broome, Rowan-Szal, & Simpson, 2002). Peers also may share and convey experiential knowledge which may benefit recovery.

4.1. Limitations

Several limitations of the study should be noted. One limitation is that it includes self-reported measures, although studies have shown that self-reported measures can be as good as, or even better, than “objective” measures when administered correctly (e.g., Knight, Rowan-Szal, Hiller, Chatham, & Simpson, 1995). Another limitation is that the data were collected from four treatment facilities in a single state. The generalizability of these findings might be limited to treatment program clients in this state, however the findings are consistent with research conducted in other states (e.g., work by Grella et al., 2005). Despite these limitations, this study provides further evidence of gender as a moderator in the impact of pretreatment risks and psychosocial functioning on re-arrest.

4.2. Conclusions

Ultimately, the collective findings regarding gender-specific predictors of re-arrest risk suggest clinicians may want to adapt interventions to address gender-specific treatment needs. For male offenders, interventions focusing on decision making and peer support could help protect them from re-offending. Clinicians may also consider redirecting the self-esteem of male offenders towards a way of constructively perceiving the events and relevant influences. Interventions for females might need to focus on enhancing self-esteem to help reduce the odds of re-offending.

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Figure 1.
The survival curves of days being in the community until re-arrest for male and female offenders after discharge.

Table 1

Sample Characteristics and Predictive and Dependent Variable Means (Standard Deviations)

	Total (N = 697)	Male (n = 384)	Female (n = 313)	p
Ethnicity ^a				
Caucasian	44%	32%	60%	
African American	27%	30%	23%	
Hispanic	28%	38%	16%	
Other	1%	0	1%	
Age (mean; range) ^b	35 (18-67)	35 (18-67)	36 (19-61)	
Variable Means (SDs)				
Pretreatment risks				
Substance abuse severity	4.91 (2.93)	4.11 (2.84)	5.89 (2.74)	< .001
Criminal history	3.49 (0.60)	3.64 (0.56)	3.32 (0.61)	< .001
Psychosocial functioning				
Self-esteem	35.53 (7.99)	37.53 (6.67)	33.07 (8.77)	< .001
Decision making	36.43 (5.59)	37.57 (5.07)	35.03 (5.87)	< .001
Social support	42.14 (5.43)	42.03 (5.13)	42.28 (5.79)	.55
Peer support	37.46 (7.13)	37.24 (7.19)	37.73 (7.05)	.38
Risk taking	31.36 (7.70)	30.33 (6.93)	32.62 (8.39)	< .001
Felony Re-arrest	16%	20%	12%	.004
Time to Re-arrest (median, range in days)	485 (33-972)	484 (51-972)	503 (33-820)	

Note. Results of the Chi-square test indicated that the distribution of participants in ethnic groups was different across genders, $\chi^2(2) = 47.35$, $p < .001$. The ethnic group "Other" was excluded in the chi-square test because the frequency in this group was less than 5. There was no age difference between gender groups, $t = 1.47$, $p = .14$.

Table 2

Cox Regression: The Full model

	Hazard Ratio	95.0% CI		$\chi^2(1)$	<i>p</i>
		Lower	Upper		
Substance abuse severity (SAS)	0.85	0.93	1.10	0.04	0.85
Criminal history (CH)	2.00	1.45	2.77	17.48	< .001
Peer support (PS)	1.00	0.97	1.03	0.07	0.94
Self-esteem (SE)	1.00	0.97	1.03	0.06	0.80
Decision making (DM)	0.97	0.93	1.01	1.77	0.18
Risk taking (RT)	1.00	0.97	1.03	0.01	0.91
Social support (SS)	1.01	0.97	1.05	0.18	0.67
Gender	0.01	0.00	4.84	3.12	0.07
Gender $\times$ SAS	0.91	0.77	1.07	1.38	0.24
Gender $\times$ CH	2.09	1.09	4.01	4.90	0.03
Gender $\times$ PS	1.08	1.01	1.14	5.70	0.02
Gender $\times$ SE	0.92	0.86	0.98	6.83	0.01
Gender $\times$ DM	1.11	1.03	1.23	6.78	0.01
Gender $\times$ RT	1.05	0.99	1.11	2.10	0.15
Gender $\times$ SS	0.93	0.86	1.01	2.65	0.10

Cox Regression: The Reduced Model

	Males				Females					
	Hazard Ratio	95.0% CI		$\chi^2(1)$	p	Hazard Ratio	95.0% CI		$\chi^2(1)$	p
		Lower	Upper				Lower	Upper		
Criminal history	1.36	0.91	2.05	2.20	0.14	2.96	1.81	4.84	18.59	< .001
Peer support	0.97	0.94	1.00	4.43	0.04	1.03	0.98	1.09	1.62	0.20
Self-esteem	1.05	1.00	1.09	3.91	0.05	0.96	0.92	1.00	4.91	0.03
Decision making	0.93	0.88	0.99	6.22	0.01	1.01	0.95	1.07	0.10	0.75