

## **Adversity Across the Life Course of Incarcerated Parents: Gender Differences**

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*More than half of the 1.6 million adults in U.S. prisons are parents. Despite growing knowledge regarding the life course adversities of corrections-involved populations, less is known regarding incarcerated parents per se and the implications of cumulative adversities both on their needs and those of their children. Using a gender-balanced (41% minority) sample of incarcerated parents (N=357) from a randomized controlled trial of an in-prison parent training program, this study examines differences between incarcerated mothers and fathers in their exposures to adversities across the life course. Mothers and fathers shared similar patterns of adversity exposure in their families of origin but differed in their experiences of juvenile justice and child welfare systems involvement, as well as in their adult experiences of victimization and related adult social and mental health outcomes. Implications for gender-responsive parent support and prevention programs for their children of incarcerated mothers and fathers are discussed.*

The continuation of disparities in health and health care accessibility for certain subpopulations within the U.S. point attention to possible developmental pathways through which life stress accumulates, progressively building risk for a variety of problems within certain populations. Research on adverse child experiences (ACEs) has highlighted early life adversity of particular concern and has ignited studies on the accumulation and proliferation of adversities and their impact on health across the life course (e.g., Dube, Felitti, Dong, Giles & Anda, 2003). Exploring pathways through which early

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adversities exert their long reaching impact on highly vulnerable and fragile populations of parents is critical, given the importance of interrupting the transgenerational transmission of risk (Brook, Whiteman, & Zheng, 2001). An underinvestigated population of high interest is incarcerated parents (Eddy & Poehlmann, 2010). Interest is due both because of their experiences with adversities and because of their potential role in the intergenerational transmission of risk and adversities.

Informed by life course and stress proliferation frameworks, the present analysis is intended to provide an overview of adversities and disadvantages within the incarcerated parent population as well as to describe the stacking of exposures across the lifespan. The life course perspective underscores that adversity occurs over a considerable span of time and serves as a framework for examining patterns and trends of exposures during various periods of development (Kuh, Ben-Shlomo, Lynch, Hallqvist, & Power, 2003). In a parallel vein, the stress proliferation framework focuses on the processes through which earlier events or hardships increase the likelihood of subsequent stressors (Pearlin, 2010), overwhelm coping capacity, and incrementally result in a layering of adversities (O'Rand, 1996).

This study examines life course exposures to adversity of incarcerated parents, beginning from exposures in their families of origin to more proximal adversities during adulthood. Because of potential differences in pathways for men versus women, we also examined gender differences in order to generate hypotheses relevant for future research regarding potential gendered pathways through which these adversities proliferate as well as the development and testing of services tailored to possible gender-specific needs.

## BACKGROUND

The United States has the highest incarceration rate in the world. More than 1.5 million men and women are currently in prison (Glaze & Maruschak, 2010), a 790% increase since the early 1980s, wherein mandatory sentencing and related policies went into widespread effect across the country (James, 2014). More than half of U.S. prisoners are parents of minor children (Glaze & Maruschak, 2010). Recent decades have produced several generations of children of incarcerated parents whose developmental and lifetime of experiences are often starkly different from their peers (Western & Pettit, 2010). Preventing problems amongst these children will likely require a variety of approaches that engage parents and caregivers, including current and formerly incarcerated parents (Eddy et al., 2008).

### Children of Incarcerated Parents

The high rate of incarceration in the United States has resulted in the exposure of over 1.7 million children to parental incarceration (Glaze &

Maruschak, 2010). Many of these children are exposed to difficult circumstances associated with parental incarceration such as poverty and parent mental health and substance abuse problems (Geller, Garfinkel, Cooper, & Mincy, 2009; Bouchet, 2008; Travis & Waul, 2003). Consequently, children of incarcerated parents often have to contend with unfavorable outcomes associated with parental incarceration and/or these other parental problems, including their own antisocial behavior, associated juvenile justice involvement, emotional difficulties, and mental health problems (Wilbur, Marani, Appugliese, Woods et al., 2007; Murray & Farrington, 2008; Kjellstrand & Eddy, 2011; Poehlmann, & Eddy, 2013; Murray, Farrington, & Sekol, 2012; Arditti, 2005), as well as the influence of these childhood outcomes on their adjustment during adulthood (Kjellstrand & Eddy, 2011). These experiences are nested within the context of their immediate families and call for attention towards a greater understanding of the cumulative adverse experiences of incarcerated parents who are at the cusp of re-uniting with their children.

### Life Course Adversities

From a life course theory perspective, incarcerated parents' exposure to adversities in their families of origin may impact later life outcomes via long term biological or psychological "chains of risk" (Kuh et al. 2003). The stress proliferation framework also considers the experiences of prior generations as potential sources of later stressors (Pearlin, Schieman, Fazio & Meersman, 2005), highlighting further the importance of exploring the early exposures of incarcerated parents to adverse conditions and experiences. A cumulative depiction of these adversities combines the benefit of the stress process and life course lenses to reveal the dynamic circumstances and contexts (Pearlin & Skaff, 1996) of the experiences of incarcerated parents.

### SOCIOECONOMIC DISADVANTAGE

Parental incarceration is strongly associated with poverty and related socioeconomic disadvantage, including lower levels of education, setting the stage for worsening financial outcomes relative to the general population (Western & Wildeman, 2009). Poverty-related adversities is common among families experiencing parental incarceration (Greene, Haney, & Hurtado, 2000) such as lower household income (Kjellstrand & Eddy, 2011; Western & Wildeman, 2009; Wildeman, 2009) and neighborhood deprivation (Arditti, Burton, & Neeves-Botelho, 2010). Fathers in prison disproportionately come from impoverished urban neighborhoods (Travis, 2005), and most report incomes below the poverty line (Mumola, 2000). Many incarcerated fathers were primary sources of financial support for their children prior to incarceration (Glaze & Maruschak, 2010), pointing to the potential for worse economic conditions for their families following their incarceration. The exposure of

incarcerated parents' children to these poverty-related challenges is almost inevitable as they grow up in the context of family poverty, potentially increasing their vulnerability to poor life outcomes.

#### FAMILY INSTABILITY

Disruptions of relationships have become the norm in families experiencing incarceration, intensified by social disconnection inherent to incarceration but also by geographic distance, when inmates are housed a great distance from their families (Western & Pettit, 2010). These disruptions include interruptions of parent–child relationships, especially when circumstances require the involvement of child protective services (e.g., lack of available or qualified relative caregiver, child victimization/endangerment-related offenses), further exacerbating family instability. Some children affected by parental involvement with corrections transition into foster care (Dallaire, 2007) and may be burdened further by consequential loss and trauma due to additional family/caregiving disruptions.

The incarceration of male partners often leaves mothers as sole caregivers and providers for their children; on the other hand, when mothers are incarcerated, separations and divorce are likely (Sharp, Peck, & Hartsfield, 2012). These disruptions suggest important gender difference, with the children of incarcerated women differently and disproportionately affected. Incarceration of mothers highlights the overlapping dimensions of poverty, child welfare intervention, and incarceration; the lack of institutional support to maintain connection; and institutional barriers to reunification with their children (e.g., 1997 Adoption and Safe Families Act; Schen, 2005). In addition, the stigma of incarceration imposes a heavy burden on the family and undermines parental relationships (Western & Wildeman, 2009).

#### HEALTH CONCERNS

Recent theories on psychological stress points to its physical embodiment, where adversities “get under the skin” and manifest in health concerns (Ferraro & Shippee, 2009). There is now compelling evidence that stress can result in physiologic disruptions that are associated with higher levels of chronic diseases (Shonkoff & Garner, 2012). The wear and tear of the body's organ systems and regulatory function can begin as early as childhood, when stress can impact brain development.

Adversity imposes stress on individuals, and higher levels of stress are associated with experiencing additional adversities. As a result, the many adversities in families impacted by incarceration have health implications that are cause for concerns. Several studies have found that adults in prison have multiple physical and mental health concerns. They have a higher prevalence of chronic medical conditions compared to the general population (Glaze &

Maruschak, 2010; Wilper, Woolhandler, Boyd, Lasser et al., 2009), an issue that is especially significant given the relatively young age of many prisoners (Schnittker, Massoglia & Uggen, 2011). The health burden of this population is further complicated by limited access to quality health care, particularly outside of the prison setting (Lee, Fang and Lou, 2013).

These health concerns, however, are not limited to the incarcerated individual. Poor health outcomes are also observed in partners of incarcerated adults (Murray & Farrington, 2005) and other immediate family members (Foster & Hagan, 2007). Parents whose own parents had histories of incarceration may be more depressed and have worse physical health than parents without such a history (Kjellstrand & Eddy, 2011; Lee et al., 2013). Children of incarcerated parents may also be exposed early to substance abuse due to its prevalence among incarcerated parents (Mullings, Hartley & Marquart, 2004), potentially contributing to poorer health outcomes.

#### VICTIMIZATION

Layering onto adversities related to socioeconomic disadvantage, instability in their families of origin, and health concerns, many incarcerated adults are exposed to multiple types of victimization. Women, compared to men, report higher prevalence of childhood victimization, especially physical abuse (Carlson & Shafer, 2010), although recent findings also suggest that many men also were victimized as children (Hochstetler, Murphy & Simons, 2004; Carlson & Shafer, 2010). Youth in the juvenile justice system report similar experiences and are likely to have experienced multiple traumas, including witnessing violence at home (Maschi, MacMillan, Morgen, Gibson, & Stimmel, 2010). In addition, exposure to victimization extends to adulthood. Incarcerated fathers commonly report traumatic experiences related to war, homicide, and witnessing killing, whereas victimization reports of incarcerated mothers are more likely to focus on abuse within the family (Carlson and Shafer, 2010). The lifelong exposures to violent victimization may lead to debilitating physical and mental health as well as other adverse social consequences.

In summary, the dramatic increase in incarceration has spurred research on adults in prison. However, these studies have had a rather limited focus on prisoner health and behavior (Tonry & Petersilia, 1999), and fewer still on trauma and victimization and the collateral impact of incarceration on the children of incarcerated parents (e.g., Poehlmann & Eddy, 2013). Only recently has the emergent lens of life course accumulation of adversities showed momentum towards elucidating the layered disadvantages experienced by the prison population. Even then, studies have largely focused on specific adversities such as socioeconomic disadvantage or abuse and trauma histories (Carlson & Shafer, 2010), with the typical study offering snapshots of adversities at one or a few developmental period(s). In short,

the empirical evidence regarding incarcerated parents remains limited. The present analysis begins to address this gap, providing a more linked understanding of adversities in incarcerated parents, spanning distal adversities in their families of origin and concluding with more proximal adulthood adversities.

## THE PRESENT STUDY

The present analyses extend existing research on incarcerated parents by examining the adverse experiences of incarcerated parents and the extent to which multiple adversities accumulate over three time periods, using life course and stress proliferation frameworks as a guide. Because of potential differences in pathways to early vulnerability and later life outcomes for men versus women, we focus on life course profiles within gender with the purpose of illuminating possible gender-specific vulnerabilities and service needs and to generate hypotheses relevant for future research regarding potential gendered pathways through which these adversities proliferate.

## METHODS

Data were drawn from the initial assessment of the Parent Child Study, a randomized controlled trial of a parent management training program, Parenting Inside Out (PIO), designed specifically for incarcerated mothers and fathers (see Eddy et al., 2008; Eddy, Martinez, & Burraston, 2013). The program was delivered in prison and comprised three 3-hr meetings each week for a period of 12 weeks. The goal of the intervention is to increase parenting-relevant knowledge and skills, including communication with other caregivers, to assist not only with parenting while incarcerated, but parenting in the post-incarceration period in preparation (Eddy et al., 2008). The development of the PIO program is discussed in detail in Eddy et al. (2008). The study was conducted in four minimum or medium security level Oregon Department of Corrections (DOC) facilities designated as “releasing institutions” where incarcerated parents transferred to prior to their release. Women and minority inmates were oversampled from an eligible pool of participants to achieve a diverse sample that is approximately 50% women and 40% ethnic minority. Participants were individually randomized, blocking on gender and on race/ethnicity, into either an “intervention” condition (i.e., the parenting program) or a “control” service-as-usual condition, and were assessed pre- and postintervention as well as 6- and 12-months postrelease (Eddy et al., 2013). The study was conducted with the approval and under the oversight of the federal Office of Human Research Protections and the Oregon Social Learning Center Institutional Review Board.

## Participants

Participants were incarcerated fathers and mothers ( $N=357$ ) who were parents of at least one “focus” child between the ages of 3 and 11 years, who have had some role in parenting their children in the past, who expected to have some such role in parenting them after release from prison, and who had 9 months or less remaining on their prison sentence. Approximately 59% of participants were White, 13% African American, 11% multiracial, 8% Native American, and 8% Latino (Eddy et al. 2013). The average number of children per incarcerated parent was 3, and most parents reported having a focus biological child with an average age of 8 years. Prior to incarceration, only 34% had lived with their children full time. Incarcerations for fathers were more likely a result of a person crime. Fathers were serving longer sentences than mothers. Mothers, on the other hand, reported being older when first arrested as adults (see Eddy et al., 2013).

## Measures

Data were collected through in person interviews conducted in private rooms in prison. Adversities across the life course of incarcerated parents were classified into adversities in their families of origin, adversities in childhood, and adversities in adulthood. Most of the constructs of interest were measured with one-item questions that had face validity. Items were summed within categories to construct cumulative indexes of exposure across an array of risk factors. This indexing approach is consistent with cumulative stress and disadvantage research methods that aim to gauge and contrast aggregate loads (Bauman Silver, & Stein, 2006; Schafer & Ferraro, 2013).

Family of origin (FoO) adversity is based on 14 dichotomized items summed to calculate each incarcerated parent’s score of FoO adversities. These items include educational background of the parents of inmate (below high school), substance abuse problems of the parents of inmates (two items), criminal justice involvement of the parents of inmates (experience of arrest, jail, or prison, six items), and histories of substance abuse and criminal justice involvement by extended family members (four items). Unlike the Center for Disease Control and Prevention measure of ACEs, this study’s measure of FoO adversity also includes parental education, which is often associated with socioeconomic status, but does not include parental histories of mental illness, victimization and divorce. These differences are due to the information available in the existing dataset.

Childhood adversity comprises a sum of five dichotomous items of incarcerated parent’s own experiences in the juvenile justice system (i.e., arrest, detention, or lockup) and child welfare system (i.e., foster care, group home, or treatment facility). Summed indices were created for child welfare and juvenile justice experiences as well as their combination.

Adult adversity was based on 12 items distinguishing nonviolent adversities and victimization. Nonviolent adversities were a summed index of nine dichotomous items: family income below poverty; unstable housing condition (i.e., lived in shelter, on streets or motel); physical problems (i.e., physical injury, major illness and chronic illness); taking medication; and drugs and alcohol. Violent victimization dichotomous items assessing sexual assault, being hit, and or physically hurt by a romantic partner were summed into an index.

**TABLE 1** Early Life Adversity Experiences of Incarcerated Parents

	Women ( <i>n</i> = 198) % or ( <i>M</i> / <i>SD</i> )	Men ( <i>n</i> = 159) % or ( <i>M</i> / <i>SD</i> )	$\chi^2$ or ( <i>t</i> )	<i>p</i>
<u>Family of origin (FoO)</u>				
<u>Parent's level of education</u>				
Father			1.99	.16
<High school	72.4	84.7		
Mother			.32	.57
<High school	78.1	75.4		
Father				
Drug & alcohol	66.0	63.6	.17	.68
Arrest	64.0	61.9	.12	.73
Jail	56.7	55.0	.08	.78
Prison	20.4	26.1	1.20	.27
Mother				
Drug & alcohol	40.2	43.7	.42	.52
Arrest	42.4	34.0	2.7	.10
Jail	33.0	25.7	2.08	.15
Prison	8.1	6.7	.22	.64
<u>Extended family</u>				
<u>Aunts/uncles</u>				
Drug & alcohol	71.4	79.4	2.9	.09
Jail/prison	55.9	58.4	.23	.63
<u>Grandparents</u>				
Drug & alcohol	51.3	42.4	.14	.71
Jail/prison	20.9	22.6	2.76	.10
At least one FoO adversity	96.2	95.2		
Mean # FoO adversities	(5.43/3.16)	(5.54/3.39)	(- .21)	.83
<u>Childhood adversity</u>				
<u>Juvenile justice</u>				
Arrest	46.7	69.8	19.15	.00
Detention/lockup	30.8	55.7	22.27	.00
At least one juvenile justice	38.9	61.1		
Mean # juvenile justice	(.78/.87)	1.26 (.89)	(-5.06)	.00
Child welfare	27.7	22.2		.23
<u>Foster care</u>				
Group home	20.7	24.7	1.42	.38
Treatment facility	22.5	22.6	.00	.99
At least one child welfare	40.1	42.7		
Mean # child welfare	.72 (.95)	.70 (.93)	(.27)	.79
At least one childhood adversity	64.7	75.2		
Mean # childhood adversities	(1.52/1.57)	(1.96/1.56)	(-2.54)	.01



## Analytic Procedures

To examine the extent that adversities accumulate in incarcerated parents' lives, descriptive statistics were calculated, including means and standard deviations (Table 1). Pearson chi-square tests of differences among proportions and independent sample *t*-tests for equality of means were used to test differences between incarcerated fathers and mothers, including both item and total indices for each set of life course adversities. Bivariate correlations by gender were used to assess relations among aggregate life period adversities.

## RESULTS

### FoO Adversity

Ninety percent of incarcerated mothers and fathers endorsed at least one type of FoO adversity, with almost half reporting 6 or more of the 14 types (see Table 1). A considerable majority came from educationally disadvantaged backgrounds, with more than 75% reporting having parents with less than a high school education. Particularly marked is the prevalence of substance abuse and involvement in criminal justice, not only among the parents of inmates, but also among extended family members. The lack of significant gender differences reflects comparability between incarcerated fathers and mothers in their FoO adversity histories.

### Childhood Adversity

During childhood, the majority of incarcerated fathers and mothers experienced childhood adversity through involvement with one or more systems. In contrast to the absence of differences across FoO adversities, a greater proportion of incarcerated fathers reported at least one form of system involvement (75% for fathers vs. 65% for mothers), due predominantly to greater juvenile justice system involvement with 61% of fathers and 39% of mothers reporting juvenile arrest, detention, or lock up. Fathers and mothers were comparable in their experiences of out of home foster care, group home care, or treatment care settings, with approximately 40% having experienced at least one such placement.

### Adult Adversity

Virtually all incarcerated mothers and fathers reported experiencing at least one type of adversity besides incarceration during adulthood. The most prevalent was alcohol and drug abuse, followed by intimate partner violence, and having a condition that requires medication. Although the presence of a

**TABLE 2** Adult Adversity Experiences of Incarcerated Parents

	Women % or (M/SD)	Men % or (M/SD)	X <sup>2</sup> or (t)	p
Adult adversity				
Nonviolent adversities				
<Poverty line	43.3	29.1	6.9	.01
Lived in shelter	23.9	19.0	1.23	.27
Lived on streets	48.7	48.1	.01	.91
Lived in motel	58.4	51.3	1.79	.18
Mean # <i>unstable housing</i>	(1.31/1.08)	(1.18/1.03)	(3.53)	.32
Physical injury	31.6	35.4	.57	.45
Major illness	21.7	17.7	.92	.34
Chronic illness	41.5	29.3	5.65	.02
Mean # <i>physical problems</i>	.95	.82	(6.27)	.10
Taking medication	61.3	33.8	26.08	.00
Drug & alcohol	93.4	86.7	4.47	.04
At least one nonviolent adversity	98.8	95.7		
Mean # nonviolent adversities	(4.33/1.97)	(3.34/1.94)	(3.25)	.00
Violent victimization				
Hit by a partner	77.2	61.4	10.41	.00
Physically hit	71.1	31.0	56.50	.00
Sexually assaulted	51.4	12.8	56.06	.00
Mean # <i>victimizations</i>	(1.98/1.15)	(1.04/.90)	(8.18)	.00
At least one adult adversity	98.4	96.8		
Mean # adult adversities	(6.29/2.50)	(4.56/2.21)	(6.31)	.00

major illness was the least prevalent adversity, a notable proportion of participants (20%) reported experiencing a major illness.

Overall, incarcerated mothers reported a significantly greater number of types of adversities experienced with a mean of nearly 7 vs. 5 for fathers (see Table 2). Although fathers and mothers were comparable on a history of unstable housing, mothers were more likely to report family income below the poverty line in the year prior to their arrest. Incarcerated mothers reported elevated indicators of poorer health than fathers, such as chronic illness, mental illness, and substance abuse and taking prescribed medications. Markedly greater proportions of incarcerated mothers reported violent victimization histories. Mothers experienced greater multiform victimization, with 23% reporting two forms and 42% reporting three forms, compared to 32% and 3% for fathers.

### Lifetime Adversity

Although gender differences in number of total lifetime experiences of adversity did not achieve significance, gender differences were evident in the types of adversities that constituted these totals. Males reported greater juvenile justice system involvement in their youth and women reported greater poverty, illness, substance abuse, and victimization in adulthood.

**TABLE 3** Correlations Between Life-Course Adversity Measures (Incarcerated Mothers)

	FoO adversity	Child welfare	Juvenile justice	Nonviolent adult adversity	Adult victimization
Child welfare	.25**				
Juvenile justice	.25**	.48**			
Nonviolent adult adversity	.09	.10	.14		
Adult victimization	.15	.25**	.24**	.33**	
Scale Means	4.98	.73	.78	4.33	2

Note. FoO = family of origin.

\* $p < .05$ . \*\* $p < .01$ .

**TABLE 4** Correlations Between Life-Course Adversity Measures (Incarcerated Fathers)

	FoO adversity	Child welfare	Juvenile justice	Nonviolent adult adversity	Adult victimization
Child welfare	.41**				
Juvenile justice	.33**	.46**			
Non-violent adult adversity	.33**	.20**	.05		
Adult victimization	.26*	.13	.12	.158	
Scale Means	5.02	.697	1.26	3.34	1.04

Note. FoO = family of origin.

\* $p < .05$ . \*\* $p < .01$ .

### Associations Among Life Period Adversities

Tables 3 and 4 present correlations for fathers and mothers among the five aggregate adversity indices. Among incarcerated mothers, adversities stemming from FoOs are related to proximal adversities in childhood (child welfare and juvenile justice involvement) but not with adversities in adulthood. However, systems-involvement of incarcerated mothers is subsequently associated with greater victimization in adulthood. In contrast, fathers' FoO adversity showed a stronger relationship with later adversities both in childhood and in adulthood. Male child welfare involvement was more strongly associated with adult non-violent adversity and weaker associations overall were evident for fathers than mothers regarding adult victimization.

## DISCUSSION

This study expands the existing knowledge regarding incarcerated parents and their histories of adversity by examining these experiences within a cumulative adversity framework, establishing a deeper understanding of the burden with which they have to contend. Results of this study indicate

an accumulation of adversities across the life course of incarcerated parents, with similar patterns of exposure between mothers and fathers in their families of origin. Findings reveal gender differences around early systems involvement as well as adult adversities that warrant further consideration. These findings have implications for postrelease services that consider the cumulative histories of adversity of incarcerated parents, many of whom are likely to resume their parenting role upon release.

### Biological and Social Cascades

Very striking is the early exposures to multiple adversities and disadvantage that this group of incarcerated men and women experienced. Many parents were embedded during their childhoods in extended families characterized by poverty, substance abuse and incarceration. Within a stress proliferation perspective, the adverse experiences of incarcerated parents in their families of origin could have first set in motion multiple subsequent stressors (Pearlin, 2010) such as stigma of having a parent in prison and socialization to health damaging behaviors, and later difficulties in the form of educational and economic strains (Foster & Hagan, 2009).

As children, incarcerated parents very likely experienced the biological embodiment of strain imposed by these early adversities during critical and sensitive periods in their life course, when experiences and environments have the strongest impact on their development (Fox & Rutter, 2010). The strain imposed by these adversities on the physical and emotional well-being of incarcerated parents as children are often correlated with problems of emotional regulation and impulse inhibition, and also associated with difficulties in school, problems of peer rejection, and association with antisocial peers (Frick, 2004), potentially influencing risk toward delinquency and involvement with the juvenile justice system. These incarcerated parents were also potentially exposed in their childhood to antisocial and health damaging behaviors through interactions with their parents and extended kin, many of whom had criminal justice involvement and substance abuse histories. As a result, incarcerated parents were at higher risk for poorer adjustment, and particularly the display of antisocial behaviors, during adolescence (Kjellstrand & Eddy, 2011).

Histories of substance abuse and incarceration of inmate parents' extended family suggests that for some children of incarcerated parents, options for prosocial modeling are limited, and sources of less tangible support (e.g., emotional support, moral boost) may be potentially lacking. These early exposures to unstable family circumstances and adversities in their families of origin are related to increased vulnerability to risk, such as later involvement in foster care, a type of adverse experience that is associated with anti-social behavior, negative coping skills, and limited economic opportunities later in life.

## Gender Differences

A notable finding is the lack of gender differences in respondents' exposure to FoO adversities but then emerging gender differences during childhood and adult adversities. These results support current evidence regarding gender-specific stress responses and coping mechanisms that possibly explain this divergence, with women exhibiting internalizing behaviors more than men (Kramer, Krueger, & Hicks, 2008). In addition, differences during childhood potentially suggest gendered intergenerational exposure to adversities into adolescence, demonstrated by significantly higher rate of juvenile justice involvement by incarcerated fathers compared to incarcerated mothers. The higher prevalence of fathers involved in juvenile justice system spurs further question regarding diverging pathways between men and women who later become parents themselves, standing at the cusp of their own intergenerational transmission of risk and disadvantage. Are prior adversities associated with early involvement in criminal justice for fathers? Is the accumulation of adversities a potential pathway of victimization, poor mental health and substance abuse and later criminal justice involvement in their adulthood? Are their gender differences in these pathways?

Within adult adversities, gender differences for more than half of all items indicate the disproportional exposure of mothers to the types of adversities assessed here, supporting prior studies regarding the disproportional burden that women in prison contend with, such as chronic physical and psychiatric disorders (Binswanger, Krueger, & Steiner, 2009) and victimization (Browne, Miller, & Maguin, 1999; Carlson & Shafer, 2010). Lifelong exposure to poverty and the continued accumulation of more adversities in adulthood has expected consequences related to worsening health outcomes as well as a subsequently higher prevalence of further victimization for incarcerated mothers compared to fathers. These mothers may cope with the resulting trauma in ways learned from early exposure to substance use in their families of origin. Arguably, the higher proportion of mothers reporting substance abuse could potentially be explained by the intense histories of victimization with which they have contended. Previous findings suggest the relationship between victimization and substance abuse (Golding, 1999) and that substance use may serve as a way to cope with the emotional pain of victimization and to cope with the related trauma (Wills & Hirky, 1996).

Differences in correlation patterns between adversities further underscore potential gender differences, with incarcerated mothers' experiences highlighted by victimization. On the other hand, incarcerated fathers' experiences are mainly characterized by their exposure to FoO adversities that seem to proliferate through systems involvement into adulthood. These differences present added complexities, warranting further consideration. Do these patterns point to different mechanisms through which early adversities proliferate across the lives of incarcerated mothers and fathers? Furthermore,

the lack of correlation between FoO and adult adversities for incarcerated mothers points to the need to better examine pathways of adversities to later life difficulties in this population. Some of these pathways might include off-time transitions (e.g., early parenthood) and early forms of victimization.

### Implications for Practice, Policy, and Research

The findings from this study highlight the accumulation of adversities throughout the life course of incarcerated parents. They shed light on the potential diverging pathways between fathers and mothers towards later life adversities and poor outcomes. This information has important implications for practice and policy, especially in the context of preventive services. The correlations between families of origin and childhood adversity for both genders suggest the potential of preventive interventions during childhood and adolescence to prevent further adversities and worse outcomes in adulthood. They also argue for a comprehensive assessment of adversities that include intergenerational and childhood histories of adversities in addition to adversities, traumatic experiences, and difficulties in adulthood. Information collected from these assessments could inform the design of interventions for incarcerated parents that have potential impact in interrupting the intergenerational proliferation of adversities by reducing their own children's exposure to consequential adversities.

Findings regarding gender differences underscore the importance of developing prevention and intervention services that are more attentive to trauma histories, as women in prison appear to be more likely to have been exposed to personal victimization than their male counterparts. Significant differences between incarcerated mothers and fathers regarding juvenile justice involvement and child welfare experiences also need further investigation. Key questions for subsequent investigation include the following. Do gender differences in childhood systems involvement define diverging pathways to later adversities for incarcerated parents? Do diverging experiences translate into gender differences in adult adversities? Further research should proceed towards further illuminating potential gendered pathways, and investigate factors that protect men or protect women and that offset the long reaching and damaging impact of adversities.

### Limitations

These analyses used an existing data set that was collected to examine outcomes from a randomized controlled trial, rather than the present purposes. Thus, a variety of adversities at each point in the life course were not assessed. For example, specific experiences of physical, sexual, emotional abuse, and neglect during childhood were not queried. Thus, it is not known how incarcerated mothers and fathers differ in their experiences of these and

other types of adversities in this sample. The sample was drawn from a certain geographic region, the Pacific Northwest, and this may limit the generalizability of the findings. Part of the assessment of life course experiences was retrospective, raising questions of accuracy. However, a growing body of retrospective measurement of early life adversity has indicated adequate variance, stability of linear trends between retrospectively assessed adversity and subsequent outcomes, and weak to no evidence of current mood state effects on reporting (Hardt, Vellaisamy, & Schoon, 2010; Yancurra & Aldwin, 2009), particularly for concrete experiences such as prior incarceration or child welfare system involvement.

Despite these limitations, our findings provide valuable information regarding parents in prison. First, this analysis elucidates the unnoticed background of current difficulties of incarcerated parents by looking at the accumulation of adversities across their lives. Second, it provides some evidence towards life course proliferation of adversity, highlighting how early adversities accumulate and almost inevitably lead to subsequent adversities over time. Third, these findings suggest gendered differences in the accumulation of adversities underscoring a need for further investigations of the experiences of incarcerated mothers and fathers across the life course.

## CONCLUSION

From birth we found a life course lined with adversities for incarcerated mothers and fathers. The lives of the participants in this study have been compromised by a pile-up of adversities since birth, including having families characterized by high percentages of criminal justice involvement and substance abuse and with personal lives characterized by chronic adversities related to poverty, illnesses and histories of violent victimization. The findings suggest compromised support systems defined by histories of intense exposure to substance abuse and incarceration from their FoOs and patterns of juvenile justice and foster care. In adulthood, incarcerated mothers were more likely than fathers to endorse substance abuse problems, chronic illness, and live below the poverty line, notably a pattern that has been observed in incarcerated women regardless of parenting status. Mothers were also disproportionately victimized. We see a replication of adversities from the families of origin of these parents that points to intergenerational patterns of adversities. Individuals born into families with extensive histories of adversities are also at greater risk of taking on the greater consequences of intergenerational adversities manifesting in different ways related to poor health and behavioral outcomes.

Disentangling these patterns and differences is important but must consider the context of cumulative adversities that continue to pile up in their lives and the gender related roles and statuses that further complicate such

a cascade. Future research should focus on the processes and mechanisms linking these adversities, elucidate the ways that proliferation takes place, and most importantly, rigorously test both clinical and preventive interventions that reduce and mitigate the impact of risk factors in the lives of incarcerated parents and their families.

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