

An Examination of Parental Temperament and Rearrest Among a Sample of
Serious Adolescent Offenders

A Thesis Presented for the Master of Criminal Justice Degree

The University of Texas at Arlington

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December 2021

Abstract

The relationship of child to parent, is one that has continuously been regarded as an impactful and important one. Parents are often held responsible for the character of their child as well as being responsible for their actions. Whether or not the parental relationship plays a part in an adolescent's re-arrest is what this paper aims to find, specifically looking at parental temperament. In order to lower the rate of rearrests it is important to unpack the factors that contribute to recidivism and where it may begin. This paper examines an adolescent's rate of re-arrest and analyzes if parental temperament plays a part, if at all, in whether or not an adolescent reoffends. This paper helps to add insight on parental temperament specifically paternal hostility, as the research done in this paper found significance in an adolescent's rate of re-arrest and levels of paternal hostility.

Keywords: Adolescent, re-arrest, parental temperament

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Introduction

The factors which influence human behavior, especially non-conforming behavior, has long been of interest to researchers. One remaining question is the impact of parental temperament on criminal behaviors—this is an argument that has been evaluated and disputed time and time again (Harris, 1998). What exactly is it that causes an individual to become an offender and then continue to reoffend? Is it the nature of who they happen to be, the genes, characteristics, temperament that has been inherited from the parents. Or, do individuals offend and reoffend because of nurture, the way that individual was raised by their parents and guardians, the love and warmth, or lack thereof that has caused them to turn out to be the way they are? This is the question that will be further examined in the current thesis. Specifically, whether parental temperament (i.e., warmth and hostility) impacts serious adolescent offenders' rate of recidivism. Moreover, whether the impact, if any, varies by gender.

There have been many studies that have examined the conditions which can contribute to an individual becoming an offender, however this study more closely examines the impact parental practices may have on a group of known juvenile offenders' ability to reoffend. Research indicates that certain environmental circumstances and stressors can lead individuals to offending (Beaver, Eagle Schutt, Boutwell, Ratchford, Roberts, & Barnes, 2008), and that antisocial parents can be more inclined to have antisocial offspring (Barnes, Boutwell, Beaver, Gibson, & Wright 2014). What the current study aims to uncover is how these variables may have impacted a group of known serious offenders and whether the impact varies by gender. Research in this area is lacking due in large part to limited data on female offenders (Hipwell, Beeney, Ye, Gebreselassie, Stalter, Ganesh, Keenan, & Stepp, S. D. 2018) as well as known serious juvenile offenders.

Before examining the research question, the following section will explore prior research that have examined juveniles and the factors that impact re-offending.

Debate on Genes, Environment & their Repercussions

Many studies have examined recidivism with the intent of understanding how and why individuals recidivate. Are some offenders predisposed when it comes to reoffending if so, why is that, and on what level are they more likely to reoffend? Recidivism is a broad topic and for this reason this paper will specifically be looking into how parental practices impacts a group of male and female serious juvenile offenders. A lot of research that has been conducted typically focuses on males only; (Hipwell, Beeney, Ye, Gebreselassie, Stalter, Ganesh, Keenan, & Stepp, S. D. 2018). Less is known about the factors which impact juvenile female offenders' propensity to reoffend.

Parents

Parental warmth is the main independent variable that this paper will be examining, specifically whether parental warmth or lack thereof could impact whether in juvenile offenders are rearrested during early adulthood. Neglect and the risk of recidivism has been researched in order to foster knowledge about the risk of poor parental practices. As mentioned previously, most of these studies utilize primarily male respondents. For instance, utilizing an all-male sample, Ryan, Williams, and Courtney (2013) examined parental neglect, timing of neglect and recidivism. They found that juveniles who were entering the juvenile justice system who had an open welfare regarding neglect are at a greater risk of recidivism and youths that feel they are more closely supervised by their parents have a lower prediction of recidivism (2013). The current study will examine a similar question however, a sample of males and females will be utilized. Moreover, this sample is consistent of a group of serious juvenile offenders, which has

not been examined previously. In this way, it may be possible to foster knowledge about juvenile recidivism for serious offenders.

Juvenile recidivism is also explored by Wolff and Baglivio (2016), but again, with a large male sample. Wolff and Baglivio (2016) concluded that having childhood maltreatment can increase the likelihood of delinquency, and that those who have suffered from adverse childhood experiences may be more likely to recidivate. A meta-analysis by Cottle, Lee, and Heilbrun (2001) provide much insight to identifying risk factors that can identify why some juveniles may recidivate. The meta-analysis, published prior to Wolff and Baglivio's study, supports their finding as they similarly found that having significant family problems can increase the risk of recidivism in juveniles. Cottle, Lee, and Heilbrun (2013) reviewed 23 published articles and found that juveniles that were abused, from single parent homes, and experienced significant family problems were at an increased risk of recidivism.

Does a parental practices impact whether juveniles who have already committed a serious offense become arrested as an adult? Many studies have examined parenting styles to understand what role if any, they may play as well as to examine whether types of parenting style may lead to delinquency (Blokland, et al., 2007; Dubas, et al., 2009). While parenting styles may not distinguish more serious trajectories (Blokland, Dubas, Hoeve, Loeber, Gerris, & Van der Laan 2007) it can be concluded that poor parenting can increase the likelihood of a child becoming a delinquent (Dubas, Hoeve, Gerris, Smeenk, & Van der Laan, 2009). While this is apparent from these studies, and studies that research the same question (Lippold, Hussong, Fosco, & Ram 2018), what the present paper is focusing on is the long-term implications of parental practices and whether it leads to re-arrest in adulthood. In order to examine this, the current study utilizes a sample of known serious juvenile offenders from the Pathways to Desistance data. Being that

these youth have already offended, it will allow for the examination of parental behavior and its impact, if any, toward their children's recidivism.

Environment

When taking parental behaviors into consideration and their children's chances of reoffending you are taking their environment into consideration. After all, parents are a large part of their children's environment and they also are responsible for shaping that said environment, which is why it was also important to look into published articles and research that have examined juveniles' environment. A study by Chung and Steinburg (2006), examined how the effects of both environment and parental behavior could attribute to an individual becoming a delinquent - parental warmth was also examined in this study. The study concluded that weak structural neighborhoods can be attributed to delinquency, as well as a link between neighborhood disorder and deviant peers. (Chung & Steinberg 2006). Whether or not an individual becomes a delinquent because of parental reasoning or social environment has been researched fairly heavily, in fact, social disorganization, and the focus on macro-level units such as the neighborhood is something that has been researched since the 1940's. Shaw and McKay (1942) proposed the theory of social disorganization and the ties it has with juvenile delinquency. Both social disorganization and findings by scholars such as Chung and Steinburg (2006) points to the environment when examining factors that impact criminal behavior and recidivism. Leaving unanswered as to what impacts juvenile's delinquent behavior.

The idea of peer group, delinquency and environment is still being researched extensively, in an attempt to answer this question TenEyck and Barnes (2015) examine whether and how genes play a role in juvenile's behavior. Examining the measure of peer delinquency, while controlling for genetic self-selection, they found that genetic factors are not the whole

reason to as of why individuals select their peer group but it can play a role in the process (TenEyck & Barnes 2015). Therefore on some level it can be said that genes do play a role in regards to delinquency and offending.

Genes

Recently, increasing research has looked closer at genetics and whether it impacts the likelihood of becoming an offender. What if the genetics you are born with play a larger role than originally believed? In an article published by Barnes and Boutwell (2016), they state that while it may be an unpopular take “genes... make some folks more likely to break the law than others.” (Pg.3). For example, if personality is partially heritable and low levels of social control is as well, then it may not be too far of a reach to believe that your genes could play a part in determining how likely you are to offend (Boutwell & Barnes 2016). In their findings, they also stress the importance of the environment in engaging with certain genes that ultimately produces behaviors of delinquency.

A large part of the research has been done by Boutwell and Barnes (2008), examines how both genes and environment can be a predictor for juvenile delinquency (Beaver, Eagle Schutt, Boutwell, Ratchford, Roberts, & Barnes 2008). Boutwell and Barnes (2008) also state how the formation of the brain and how the brain functions reflect genetic differences and could result in varying levels of self-control. They found that low self-control and contact with drug using peers may be genetically influenced to some degree. In understanding why people offend it is important to also take into account the genes and not solely the environment (Barnes, Boutwell, Beaver, Gibson, & Wright, 2014). This further complicates the nature versus nurture debate as some researchers seem to suggest it is a mixture of both

When examining gene and criminal behavior, there are some research which looks at differences, if any, for females. According to Vaske, Wright, Boisvert and Beaver (2011) females may exhibit more environmental and genetic risks than their male counter parts. However upon further examination it was concluded that males have a higher risk than females do, but when there is a large concentration of genetic risk for females they have the same odds that low risk males do (Vaske, Wright, Boisvert, & Beaver 2011). So while genetic risks may affect males at a higher rate, it can still affect females in regards to offending.

Environment vs Parents - Judith Rich Harris

Interesting research and literature that has been added to the study of understanding why criminals offend is that of Judith Rich Harris, who believes that parents do not have a role or play a part in whether or not someone ends up committing crimes and becoming a delinquent. Harris believes (1995) that even siblings who grow up in the same home and in the same environment can vary drastically in personality and the roles they play outside of the family home and environment. However Harris believes that social interactions outside of the home can be a better explanation to as of why individuals end up the way that they do. Specifically peer groups and how you interact with them are of greater importance when shaping an individual's personality and their levels of self-control (Harris & Pinker 2011). More recently, Harris has proposed a theory that there are three mechanisms that can help explain the development of personality and socialization in young adults: (1) having beneficial relationships, (2) being a part of a group, and (3) successfully competing with rivals. In this theory, parents and their parental practices have little to anything to do with the behavioral development of their children including deviant and delinquent behavior (Harris, 2011).

The prior literature highlighted above helps lay the ground work for what this paper is further trying to understand. However, as evidenced by prior literature, it is unclear whether parents impact juvenile's delinquent behavior and recidivism. Much less is known about the parental styles and its impact on known juvenile offenders. Is it possible that there could be more of a middle ground between genes, parenting, and association with peer groups when it comes to young offenders and their rates of recidivism? Does the warmth and relationship that they have with their parent(s) play some role and can it determine to some degree the chance of recidivism? While there is much to go off of, there is still more left to understand. The current study aims to address these questions by using a sample of male and female offenders who also happen to be known serious offenders.

Current Study

As outlined above, most studies examine nature or nurture in determining the factors that impact recidivism for youth. Less clear is which factor, nature or nurture, impacts recidivism for youths when examined together. To fill this gap in the literature, the current study will examine the following research question using negative binominal regression: (1) the impact of parental relationships and the environment on recidivism among a group of known serious juvenile offenders. The current paper will be using the Pathways to Desistance data which are a longitudinal study that examines respondents during the transitional period of adolescence to early adulthood. In between the years of November 2000 and January 2003, the Pathways to Desistance study has collective data from 1,354 youths that are within the criminal justice system, 654 of those youths are from Arizona and the remaining 700 are all from Pennsylvania (Mulvey 2012).

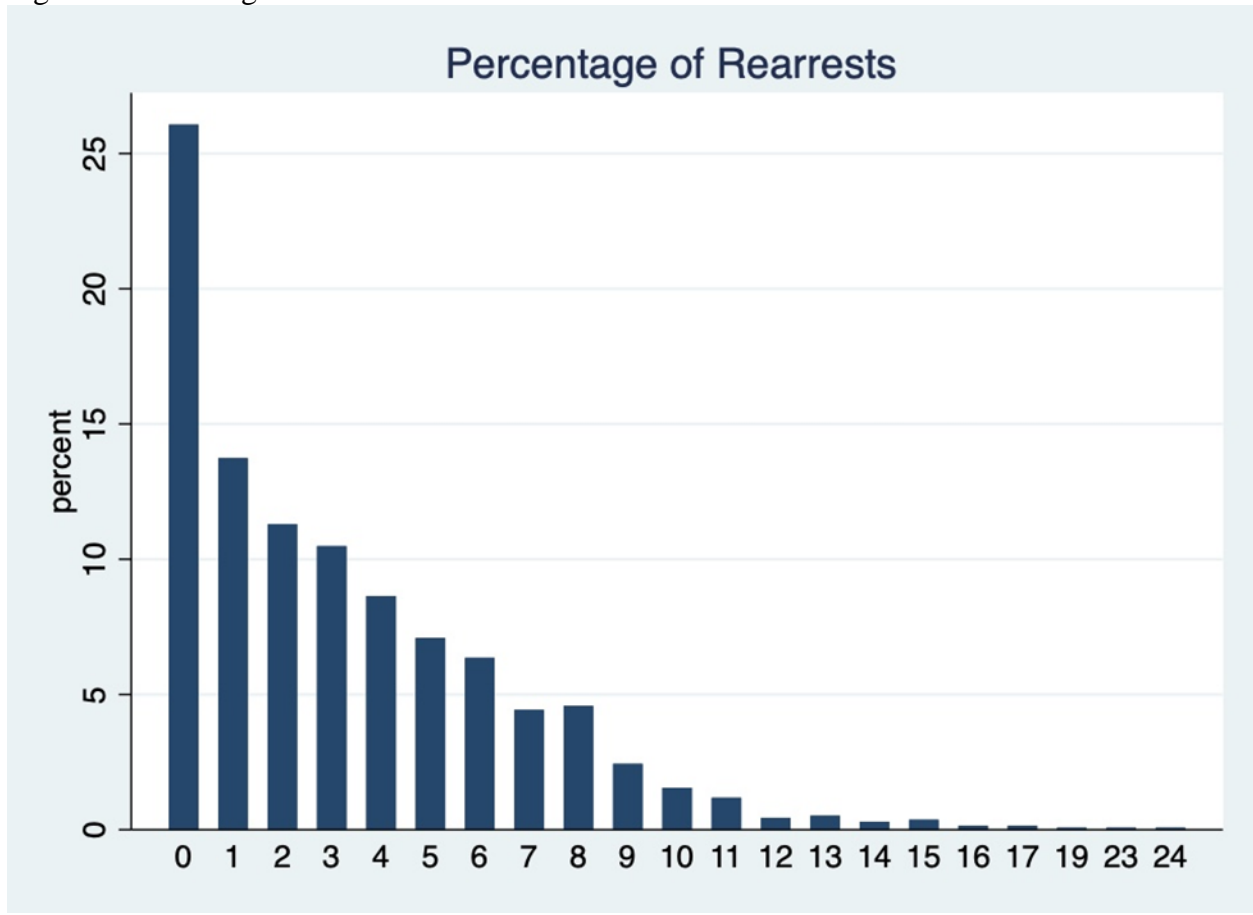
Methods

Data & Analysis:

This paper will be using data from the Pathways to Desistance Study. There is a total of 1,354 participants involved, 654 from Arizona and 700 from Pennsylvania. Of the total sample, 185 participants identify as female. It is a longitudinal study that examines respondents during the transitional period of adolescence to early adulthood in between the years of November 2000 and January 2003 (Mulvey 2012). Youth enrolled in the study were at least 14 years old and up to 18 years old when committing their offense and were found guilty of committing a serious offense (predominately felonies). Applying listwise deletion, after running the models for the present paper the final sample was 803, with 100 females in the sample.

Negative binomial regression was used to analyze the research questions. This analysis was applied to account for the large amount of zeros, representing the individuals who did not get rearrested, in the data set (see Figure 1). The dependent variable in this study is the rate of recidivism, among the respondents in the Pathways to Desistance study. The independent variables that are going to be controlled for are: demographics, characteristics of family, characteristics of friends, early onset behavior problems, friendship quality, gang involvement, importance of spirituality, moral thinking, parental monitoring, parental warmth and hostility and peer delinquency offense history, age of the offender as well as race/ethnicity and age of first offense. The key independent variables of mother and fathers warmth and hostility (as perceived by the respondent). Following is a description of all measures used in the present study.

Figure 1: Percentage of Rearrests



Measures

Dependent Variable

The dependent variable that is being measured is whether or not the adolescent offenders that were studied reoffended and the rate of recidivism.

Number of Rearrest

The average rate of re-arrest for the sample data that was used when running the variables was 3.10. Looking at figure one, it shows that there was a large amount of respondents that did not reoffend, there is a also a sharp decrease after about ten and the max amount is 24. Which

indicates that out of the sample of adolescents there was at least one adolescent who was a part of the initial study that reoffended 24 times.

Independent Variables

Parental Warmth & Hostility

Respondents were asked about the bonds they have with their parents and how close they may or may not be. Questions such as, how often does your parent tell you they love you, how often do you hug and how often is your parent angry with you, were used to gauge the parents warmth and hostility. For warmth a low percentage indicates level of warmth of received, and for hostility a high percentage indicated a high amount of parent child hostility.

Age of First Offense

The age of the offenders first offense ranging from 9 to 17 was also used as an independent variable. Respondents were asked to report their age of first offense.

Peer Pressure

A respondents resistance and response to peer pressure was an independent variable that was taken into account with the data set. Two different scenarios were presented to the respondents scenario one "some people go along with their friends just to keep their friends happy", and scenario two "Other people refuse to go along with what their friends want to do, even though they know it will make their friends unhappy". Respondents were then asked to rate how much they personally either agreed or disagreed with the two scenarios. A higher score indicated a high likelihood of being impacted by peers.

IQ

A Wechsler Abbreviated Scale of Intelligence, WASI, test that was administered to the participants to test their IQ. The WASI test is quick 15 minute assessment in which respondents

are tested on their vocabulary and matrix reasoning and is an independent variable used in the data set. The WASI test was coded by a higher score indicating a higher intelligence.

Impulse

Impulsivity and control of impulse is another independent variable that this data set has taken into account. Respondents are read a series of statements for example “I say the first thing that comes to mind” and then are asked whether they believe the statement is true or false for themselves. The responses are coded by a higher percentage indicating more sense of impulse control and a lower percentage indicating a lower control of impulse.

Neighborhood Conditions

Condition of the neighborhood and significance of the participants neighborhood is another independent variable accounted for. The measure of neighborhood conditions was adapted from Sampson & Raudenbush (1999) in which respondents are asked 21 questions in regards to their neighborhood and environment. Condition of neighborhood is coded by a greater score indicates a greater degree of disorder within the neighborhood.

Gender

Gender is another independent variable that is controlled for in the current study. A “0” represents that the participant is a male and “1” represents female.

Race/Ethnicity

Lastly race was another independent variable that was used in the current study. Specifically, the categories were white, black, Hispanic and other coded dichotomously. White (0 = non-White, 1 = White), Black (0 = non-Black, 1 = Black), and Hispanic (0 non-Hispanic, 1 = Hispanic) and Other (0 = non-Other, 1 = Other).

Table 1: Descriptive Statistics ($n = 803$)

	<i>Mean</i>	<i>SE</i>	<i>Min.</i>	<i>Max.</i>
<u>Dependent Variables</u>				
Number of rearrests	3.10	0.11	2.88	3.33
<u>Key Independent Variables</u>				
Significance of Maternal Warmth	3.21	0.02	3.16	3.25
Significance of Maternal Hostility	1.60	0.01	1.57	1.63
Significance of Paternal Warmth	2.74	0.03	2.68	2.80
Significance of Paternal Hostility	1.52	0.02	1.48	1.55
Age of first arrest	15.02	0.06	14.91	15.13
Significance of Peer Pressure	2.96	0.02	2.92	3.00
IQ	85.37	0.45	84.48	86.26
Significance of Impulse	2.88	0.03	2.82	2.32
Significance of Neighborhood	2.27	0.03	2.22	2.32
Female	0.12	0.01	0.10	0.15
White	0.24	0.01	0.21	0.27
Black	0.34	0.02	0.31	0.38
Hispanic	0.36	0.02	0.33	0.40
Other	0.04	0.00	0.03	0.06

Results

Table 2: Key Variables With Controls ($n= 803$)

Variables	Model 1		Model 2	
	<i>IRR</i>	<i>SE</i>	<i>IRR</i>	<i>SE</i>
Maternal warmth	1.111	.072	1.111	.072
Maternal Hostility	.96	.100	.956	.100
Paternal Warmth	.92	.045	.923 *	.045
Paternal Hostility	1.22 *	.107	1.216 *	.107
Age of first offense			.897 *	.020
Sig. of Peer Pressure			1.048	.069
IQ			.992 *	.003
Sig. of Impulse			.850 *	.036
Sig. of Neighborhood			1.024	.052
Female			.374 *	.049
White			1.364	.265
Black			1.306	.252
Hispanic			1.317	.248

The analysis was conducted in a stepwise fashion. The first model, examined the key independent variables, parental behaviors (i.e., maternal warmth, maternal hostility, paternal warmth, and paternal hostility), with the dependent variable, number of rearrests in early adulthood. This allowed for a close examination of the independent and dependent variables. The second model included the key independent variables as well as the controls. The addition of control variables accounts for spuriousness and determines whether other variables are impacting the dependent variable. As seen in table 2 model 1, when running the data with the key variables,

parental warmth and hostility. The results of negative binomial regression are reported as IRR's, rather than coefficients. IRRs make it easier to interpret the results. Specifically, an IRR above one indicates a positive relationship whereas a value below 1 implies a negative relationship. Results from model 1 found that paternal hostility was the only key variable that was significant with the dependent variable, likelihood of reoffending in early adulthood. Paternal hostility was significant with a p value of .03, with an IRR indicating that for every one unit increase for paternal hostility the likelihood of the respondent reoffending goes up by 22%.

Model 2 introduces the full model with all controls as well as the key independent variables. When looking at the results from model 2, there are six different variables that are significant. First, paternal warmth is significant ($p = .045$) indicating that for every one unit increase in paternal warmth there is a 10% decrease of the adolescent reoffending. Second, paternal hostility was also significant indicating that for every one unit of increase there is a 19% increase in reoffending during early adulthood. Third, the age of the first offense is also significant indicating that for every one unit increase in, age of first offense, there is a 10% decrease of reoffending. Implying that the earlier individuals offend, the greater likelihood s/he will recidivate and potentially be a life-course offender (Moffitt, 1993). Fourth, IQ is a variable that shows significance. For every one unit increase there is a 1% decrease that the adolescent will reoffend. Fifth, the significance of impulse was another significant variable with every one unit increase there is a 15% decrease in reoffending. Six, gender was another significant variable. If the offender is a female there is a 63% decrease of reoffending.

Discussion

There has always been the assumption that parents have a hold on their children, and have an influence on their children that can either help or hinder them. However as more

research is conducted and as children's habits and character is examined more closely it appears that what was previously held to be true may not be. To add to this body of literature, the present study utilized the perceptions of parental behaviors from a group of known serious juvenile offenders to determine whether it impacted their reoffending in early adulthood. When examining the warmth and hostility that children experience with their parents, the results indicated that adolescents were more influenced by the hostility that they received from their father and were not affected by their mothers' warmth, hostility or their fathers' warmth. Although a mother's temperament, whether it be warmth or hostile did not show to be a factor towards an adolescents chance of reoffending it is interesting that, Rijlaarsdam and colleagues (2014) found that mothers who have a history of childhood maltreatment are more likely to partner with a man who has high levels of hostility. While there may not be a direct link to the mother's affection levels there may be an indirect tie. Although not examined by the present paper, this also hints at the intergenerational impact of having a hostile father. The link of a mother with childhood maltreatment and the link of partnering with a man who may have a hostile character could potentially be beneficial to research in the future. While one cannot say exactly why an adolescents likelihood of reoffending goes up when they have a hostile father or why the hostility of the father is influential and the mothers is not, there is clearly some significance there that could be looked and analyzed in the future. According to Allan, Kashani and Reid (1998) hostile parents may not be likely or able to adjust themselves and in relation to their children and often respond in a hostile manner in most situations, even when circumstances change, their hostile attitude may not be able to. Having a hostile parent can effect an adolescents social skills and competence levels (Allan et al, 1998) characteristics that can lead to offending.

A father to child relationship tends to involve more leisure activity and play between parent and child, if that quality leisure and play time is instead disrupted with a hostile parent then it could be possible that the adolescent is stressed to appease and gain the approval of their father (Lippold, Hussong, Fosco, & Ram 2018). In turn internalizing the hostile nature of the relationship and later externalizing the emotion when they are met with their father's hostility could become a stressor that effects behavior. Lippold and Colleagues (2018) examined adolescents' substance abuse in correlation to parental hostility, and found that an increase in father hostility increased a child's likelihood of delinquency. An adolescent experiencing a hostile father is potentially fueling the adolescent's anger and aggressiveness (Kim, Cardwell & Lee, 2021). Parental hostility affecting the rate of recidivism for their child could also possibly be attributed to time. Adolescents typically spend more time with their mothers than they do with their fathers (Padilla-Walker, Nielson & Day 2016). Research has found that adolescents who have a sense of closeness with their fathers can help protect the adolescent from delinquency and can help the adolescent in transitioning into adulthood (Harris, Furstenberg & Marmer, 1998). If an adolescent has limited time with their father and in that time they experience more hostility than warmth then that could possibly have an effect on the adolescent's behavior. In the second model, data showed that adolescents are also impacted by their father's warmth, it follows that there if there is an impact from a father's hostility that there then may be some impact as well based off of the father's warmth.

The results also indicated that if the adolescent is a female then there is a 63% decrease in the likelihood of the adolescent reoffending. Generally males are more likely to be involved and participate in delinquent behavior more so than their female counterparts (Dubas, Hovee, Loeber, Gerris, & Van der Laan, 2009) - which could also indicate that male adolescent offenders are

more likely to reoffend than are female adolescent offenders. There are also gender-responsive programs that are beneficial to females (Rettinger & Andrews, 2009) and if a female adolescent has the opportunity to be involved in such a program then the program may work as a deterrent to prevent her from reoffending. Overall, this finding speaks to the importance of having gender-specific programs that aim to reduce recidivism. Currently there is The Ohio Gender Specific Services Work Group, which is a program for girls created and designed specifically for young female offenders that has been important in creating a nourishing environment that is tailored to issues young women themselves face and the implementing programs such as this one may prove to be beneficial.

The idea that an adolescent is affected by their parents hostility, more so than warmth is somewhat supported by Judith Rich Harris (2011). Overall, her belief is that children are more likely to be shaped by their peers than their parents. Harris (1995) regard parents as having next to nothing to do when it comes to the characteristics of a child and the current study supports that, overall the mother has no effect on an adolescents likelihood of re-arrest in early adulthood whereas father's hostility does affect future arrests. In fact, Harris believes that a hostile difficult child creates a hostile difficult parent, because the parent is reacting to the child's behavior rather than the child reacting to the parents (Harris, 1995). While the data indicates that an adolescent have an increased likelihood of recidivism if they were experiencing paternal hostility, Harris may argue that the fact that the adolescent's difficult temperament is what evokes the paternal hostility.

In conclusion, the results indicate that when examining parental practices it is the father's behavior, both hostility and warmth that is impactful in determining whether youthful offenders recidivate in adulthood. Having limited time with a father could be a greater impact on

adolescents than what was previously thought. A father's work or relationship with the mother could cause the father to be less involved when it comes to the adolescent's childcare and the quality time that the adolescent needs (Lamb, Pleck Charnov & Levine, 1985). Having paternal involvement has linked to an adolescents behavior problem, even when controlling maternal involvement, there has been strong evidence for a link of negative behavioral problems and the paternal involvement (Amato & Rivera, 1999). The research shows and supports that an adolescent having a strong relationship with their father can be beneficial specifically in regards to the adolescents delinquency and rate of reoffending.

Conclusion

In conclusion the current study found that there is a link between parental temperament and an adolescent's risk of re-arrest. A paternal relationship that is a hostile one increases the propensity of re-arrest in early adulthood, however a maternal relationship, whether it be a warm or hostile, does not play a role in regards to the adolescent's chance of re-arrest. A paternal relationship is one that is important to an adolescent, if the adolescent has limited time with their father and that time is filled with a hostile tension (i.e., yelling, belittling, anger) then it is going to affect an adolescent more so than any other parental temperament. There could possibly be some benefit in having the father of an offending adolescent be involved in counseling, or have it be communicated that having a hostile paternal relationship can increase the rate of reoffending for an adolescent.

Further research that examined an adolescent's initial time of offense and the nature of the relationship they have with their father could possibly provide more insight. This research found that a fathers' temperament could impact an adolescent's likelihood of reoffending, and that there is significant importance that comes from having a hostile paternal figure once an

adolescent has offended. However, it would be interesting to look at whether or not a hostile paternal figure increases an adolescent's likelihood of committing an initial offense.

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