8-1-2012

Interactionist Labeling: Formal and Informal Labeling's Effects on Juvenile Delinquency

Daniel Ryan Kavish

Southern Illinois University Carbondale, danielkavish@gmail.com

Follow this and additional works at: http://opensiuc.lib.siu.edu/theses

Recommended Citation

INTERACTIONIST LABELING: FORMAL AND INFORMAL LABELING'S EFFECTS ON

JUVENILE DELINQUENCY

by

Daniel Ryan Kavish

B.A., University of Illinois Springfield, 2009

A Thesis
Submitted in Partial Fulfillment of the Requirements for the
Masters of Arts in Criminology and Criminal Justice

Department of Criminology and Criminal Justice
in the Graduate School
Southern Illinois University Carbondale
August 2012

THESIS APPROVAL

INTERACTIONIST LABELING: FORMAL AND INFORMAL LABELING'S EFFECTS ON

JUVENILE DELINQUENCY

By

Daniel Ryan Kavish

A Thesis Submitted in Partial

Fulfillment of the Requirements

for the Degree of

Master of Arts

in the field of Criminology and Criminal Justice

Approved by:

Dr. Christopher Mullins, Chair

Dr. Danielle Soto

Dr. Kimberly Kempf-Leonard

Graduate School
Southern Illinois University Carbondale
June 29, 2012

AN ABSTRACT OF THE THESIS OF

Daniel Ryan Kavish, for the Masters of Arts degree in Criminology and Criminal Justice, presented on June 29, 2012, at Southern Illinois University Carbondale.

TITLE: Interactionist Labeling: Formal and Informal Labeling's Effects on Juvenile Delinquency

MAJOR PROFESSOR: Dr. Christopher Mullins

This thesis critically reviews prior labeling theory research concerning juvenile delinquency and crime; it adds to current work by using contemporary data. Labeling events are described in detail to provide an overall understanding of where labels originate, who is casting the label, and what research suggests concerning different types of labels. An interactionist labeling model is tested to explain levels of juvenile delinquency among a nationally representative sample of American adolescents: the first three waves of the National Longitudinal Study of Adolescent Health (Add Health). Finally, negative binomial regression models are estimated in order to better explain the dynamic relationship between labels and delinquency.

Keywords: labeling, delinquency, symbolic interactionism

ACKNOWLEDGMENTS

I would like to thank my major professor, Dr. Christopher Mullins, for all of his guidance and support throughout graduate school. You were extremely dedicated to helping me and always made yourself available. Thank you for continually challenging me to do my best. Also, I would like to thank the rest of my thesis committee. Thank you Dr. Kimberly Kempf-Leonard for sharing your wisdom and advice with me. Thank you Dr. Danielle Soto for the many hours you spent teaching me statistics. I consider myself lucky for having the opporutunity to work with you all.

Furthermore, I would like to thank all of the faculty in the criminology and criminal justice department at Southern Illinois University. You have all had a profound impact on my life. I am very grateful for all of the help you provided throughout my graduate career. Thank you for all of the time you spent educating me. I would like to specifically thank Dr. Nancy Morris for the many hours you spent discussing labeling theory with me. You inspired me more than you know. I am blessed and grateful for the opporutunity I had to work with you.

Finally, I am thankful for the love and support of my family. You encouraged me to continue with my education and taught me how to overcome the many obstacles I have encountered in life. I would like to specifically thank my sister and brothers for never letting me give up on my dreams. I could not have made it this far without you. I love you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

Introduction

Labeling Theory in criminology explains labels applied by members of society, whether formally or informally, and the effect these labels have on recidivism. Labeling theorists assert that society creates deviance by creating laws. Furthermore, they tend to agree that the original action of deviance displayed by an offender is not as important as the continuation and escalation of deviance (see Akers & Sellers, 2009; also Bernard, Snipes, & Gerould, 2010).

Labeling theory, as conceptualized by Becker (1963), Lemert (1951), and Schur (1965), seemed to be fading until Matsueda (1992) and Chiricos and colleagues (2007) revived the perspective under two very different concepts. The study of "structural impediments" and "reflected appraisals" are easily the new corridors of research for labeling theorists, and must be examined more closely in order to provide stronger empirical support for the once fading criminological theory of criminal behavior and the behavior of law.

This paper will outline the labeling perspective as it was originally presented, and highlight the theoretical elaborations that have taken place since. Distinctions will be made between formally applied criminal justice labels and the informal labels that are applied by educational institutions, significant others, and parental figures. Further elaboration will review the empirical attempts to show direct and indirect relationships between labeling and future criminality.

The purpose of this paper is to critically review prior labeling theory research concerning juvenile delinquency and crime, and to propose a new study using a recent data set. Labeling events will be described in detail to provide an overall understanding of where labels come from, who can cast labels, and what empirical research suggests concerning these many different types of labels. Contemporary research will be examined to provide a deeper understanding of the

current state of labeling theory literature. Finally, an interactionist labeling model will be

presented in order to explain levels of juvenile delinquency among a nationally representative

sample of American adolescents.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Historical Background

Labeling theory's roots can be traced back to Mead's (1934) work on "self-concept" and the development of symbolic interactionism (see Bernard et al., 2010; also Knutsson, 1977). The contemporary equivalent of this line of labeling research is Matsueda's (1992) study of juvenile "reflected appraisals." According to Mead (1934), the actual construction and formation of the self begins during childhood. Unlike other criminological theories that examine the "self" as static across an individual's life course development, Mead (1934) asserts that the development of one's "self" continues long after childhood (see also Knutsson, 1977).

Mead was not the only pioneering contributor to the development of labeling theory. Cooley (1902) and Tannenbaum (1938) were two sociologists that could also claim credit for lending support to the creation of the labeling perspective. Tannenbaum's (1938) "dramatization of evil" describes the process by which offenders acquire deviant labels from members of society. If an act has been characterized as evil by society, then the offender associated with the act will be simultaneously associated with the act and labeled as deviant (see Knutsson, 1977). Cooley (1902) presented his idea of the "looking-glass self" before Mead (1934) had fully conceptualized the idea of an individual's "self-concept." Essentially, Mead (1934) made Cooley's (1902) model of self richer and more specific. Cooley (1902) believed that an individual's view of *self* was formed depending upon how that individual thought others in society viewed him or her, and how that individual reacted to his or her perceptions of their views. This same conceptually dynamic complexity can be seen throughout Matsueda's (1992) contemporary discussion of juvenile "reflected appraisals." Matsueda (1992; also Bartusch &

Matsueda, 1996) defined reflected appraisals as how an individual perceives how other people view him or her.

Throughout the 1950's and 1960's it was the labeling works of Becker (1963), Lemert (1951), and Schur (1965) that dominated criminological literature. The works of these three authors were widely popular throughout criminal justice and sociological networks because they offered an alternative to the well known deterrence theory (see Akers & Sellers, 2009; also Knutsson, 1977). Becker (1963) and Lemert (1951) used labeling theory to explain an individual's development of a criminal identity and the continuation of criminal careers. Examinations of criminal careers were characteristic of labeling studies originating from this era of criminological research; Becker (1963) studied marijuana smokers while Lemert (1951) looked at check forgers. Although these theoretical works were widely popular, they were argued to be empirically weak and subject to many methodological limitations. Akers (1994), for instance, claimed labeling theory had a clear deterministic aspect about it (see Akers, 1994; also Gove, 1980; Hirschi, 1980; Inciardi, 1980). These critics declared labeling theory to be empirically weak or even invalid (Gove, 1980; Hirschi, 1980). Labeling research continued modestly throughout the 1980's but was greatly rejuvenated by the works of Matsueda (1992; also Bartusch & Matsueda, 1996; Heimer & Matsueda, 1994), and Chiricos et al. (2007) throughout the last two decades.

Formal and Informal Labels

Formal Labels

Formal labels are applied to individuals that have come into contact with educational or correctional systems with the authority to officially label the individual (or juvenile) as deviant (Bontrager, Bales, & Chiricos, 2005; Chiricos et al., 2007; Ray & Downs, 1986). One clear and

commonly seen formal label is "Felon". This formal label is also one of the most severe labels that can be applied by the American criminal justice system. Simply, formal labels such as "felon" are tools of social control reacting to an individual's deviant behavior (Ray & Downs, 1986).

Stimulated by high recidivism rates, there has been a recent revival in the research into the criminogenic effects of formal labels (Chiricos et al., 2007). The high recidivism rates suggest that secondary deviance is likely behavior for convicted felons. Johnson, Simons, and Conger (2004) make it very clear that there is new support of labeling theory when they wrote, "Although labeling theory has a history of being very problematic, current theory and research has reconsidered its merit as an explanation of deviance." (Johnson et al., 2004, p. 5).

Chiricos et al. (2007) examined the relationship between an individual's identity and secondary deviance. Following labeling theory, they (Chiricos et al., 2007) claimed that the transformation of an individual's identity could lead to increased criminal behavior or secondary deviance, yet, the authors add the concept of "structural impediments" that occur in an individual's life after going through a labeling experience. They reiterated the commonly known effects of being formally labeled by the criminal justice system, "The label of *convicted felon* strips an individual of the right to vote, serve on juries, own firearms, or hold public office." (Chiricos et al., 2007, p. 548). These are the very definite effects of being formally labeled as a *felon* by the criminal justice system, and these are the "structural impediments" that the authors are referring to in their study. Although these impediments may not significantly impact recidivism directly, it is quite possible that they are indirectly affecting secondary deviance by blocking access to legitimate opportunities (Adams, 1996; Bernburg & Krohn, 2003; Chiricos et al., 2007; Thomas & Bishop, 1984).

The question the authors sought to answer in their study was whether an official conviction leads to subsequent recidivism, or if withholding felony adjudication would prevent subsequent recidivism (Chiricos et al., 2007). Their interest in this research question and study came from the creation of a Florida state law that allowed judges to withhold adjudication for offenders sentenced to probation. This process of withholding felony adjudication removes the "structural impediments" that individuals normally experience after convictions, and the authors examined whether this had an effect on recidivism (Chiricos et al., 2007).

Chiricos et al. (2007) did not shy from bringing forth the limitations in concluding that felony labels increase the likelihood of recidivism. The main limitation was that even though felony adjudication was officially withheld, other various labeling experiences occurred for that individual before reaching the judicial process of the system. These informal labels could then lead to a transformation of the individual's identity (Chiricos et al., 2007). They argued that even though individuals did not receive a formally applied label, that the process of being arrested and prosecuted is likely to lead to the development of informal labels or negative self-labeling (Chiricos et al., 2007).

The findings of their study showed that receiving a felony conviction significantly increased the probability of recidivism by approximately 17% in comparison to individuals that had adjudication withheld due to the Florida state law (Chiricos et al., 2007). This result is independent of the effects of all other predictors that were used in their analyses. The most surprising finding of their study was an increased likelihood of recidivism in white males that were formally adjudicated guilty compared to Hispanic or black males that were adjudicated guilty, and suggests the deviance amplification effects of labeling are stronger in white males than black males (Chiricos et al., 2007). The findings were surprising because Bernburg and

Krohn (2003) found labeling effects to be stronger in black males than white males. The authors strongly asserted that the evidence from their study should provide encouragement for new empirical analyses of labeling theory (Chiricos et al., 2007).

The "structural impediments" outlined by Chiricos and his co-authors (2007) could have dramatic implications on criminal behavior, but there are other effects that are not related to crime or criminal behavior. Official formal labeling can alienate an individual, and the label of "convicted felon" can have lasting implications on an individual, and on society's perception of an individual (Braithwaite, 1989; Chiricos et al., 2007). The effects of these "structural impediments" could have implications involving criminal behavior, and the authors make it clear that more research needs to be focused towards labeling theory (Chiricos et al., 2007).

"Felon" is not the only formal label examined by labeling theorists. In a more recent test of labeling theory, Quinn (2010) tested whether an official formal label of "gang member" would impact juvenile justice dispositions. A "gang member" in her study was any individual flagged as such by the Juvenile Justice Information System (JJIS). Quinn (2010) found that probation officers were more likely to recommend judicial processing instead of diversion programs for flagged gang members. Furthermore, once embedded in the judicial process, she found that gang members were more likely than non-gang members to receive a recommendation for incarceration. Finally, gang members were incarcerated an average of 15 days longer than non-gang members (Quinn, 2010).

Overall, Quinn (2010) found that a formal label of "gang member" increased contact with the juvenile justice system. She, like other labeling theorists, warns of the unanticipated consequences of formal labeling. Predictors she originally believed to play mediating roles between the formal "gang member" label and juvenile justice decision-making were found to

only mediate a small amount of the relationship. This indicated the relative strength and impact of formal labels.

Even more recently, Lopes and her colleagues (Lopes, Krohn, Lizotte, Schmidt, Vasquez, & Bernburg, 2012) found that formal labeling, such as police intervention during adolescence, has a significant indirect effect on criminal and non-criminal outcomes later in life. Formal labeling, or police intervention, significantly effected non-criminal outcomes such as education, employment, and financial stability (Lopes et al., 2012). These findings are consistent with labeling theory.

Although Bernburg and his colleagues (2006) emphasized the mediating role of deviant peer groups; they were careful not to rule out the role that self-concept may play in the relationship between labels and delinquency. They carefully made this statement because in 1992, Matsueda clearly outlined a "self" that changes and indicated the multiple dimensions of an individual's self. In other words, he asserted that one's "self" consisted of others' actual appraisals, reflected appraisals, and self-appraisals.

Informal Labels

Informal labels are labels applied to individuals by someone without the official or professional authority to distinguish between deviant and non-deviant behavior (Liu, 2000; Ray & Downs, 1986). This, when viewed as a process, is known as informal labeling. Ray and Downs (1986) argued that parents are the primary source of informal labels, and that informal labels can have a direct affect on an individual's self-concept or self-esteem.

The study of self-concepts is an intricate part of labeling theory research. Chassin, Presson, Young, and Light (1981) examined the effects of labeling on institutionalized adolescents, focusing on the development of self-concepts as they pertain to labeling theory. The

authors stated that if a self-concept is redefined as deviant, then the probability of further

"deviant" behavior will increase (Chassin et al., 1981). They further stated that labeling theory

argues that deviant behavior is interpreted by people in society within some type of stereotype

(informal/formal labels). This reaction from society will push the individual towards behavior

that will conform to that stereotype. The authors acknowledged inconsistent empirical support

for labeling theory, and further stated that the definition of self-concepts is the most problematic

aspect of labeling theory (Chassin et al., 1981). The lack of empirical support and

methodological problems are both characteristics that clearly display the dynamic nature of

testing labeling theory and investigating interpersonal relationships.

It is important to note that Chassin et al. (1981) argued that self-esteem and self-labeling

are two separate entities. To the authors, the most important question for labeling theory is

whether or not a person views his or herself as delinquent. When self-concepts were examined in

relation to the society-applied labels, the data did not support labeling theory. The authors stated

that even though deviant individuals had more deviant self-concepts, the individuals did not

conform to their socially-applied labels (Chassin et al., 1981). The authors offered future

directions regarding their newfound questions such as examining why deviant labels might *not*

lead to secondary deviance. They argued that an individual could possibly adopt a deviant

identity in response to society's labels, but that the deviant identity may be unimportant in

relation to that individual's self-concept (Chassin et al., 1981). Another possible alternative is

that other interacting positive labels are playing a role in why a deviant label might not lead to

secondary delinquency.

Chassin and colleagues (1981) did not find evidence necessarily favorable of labeling

theory. However, they did figuratively open the door for the study of informal labels and

reflected appraisals. Argueably, it was not until 1992 when Matsueda introduced his symbolic interactionist perspective that the study of informal labeling processes began to be examined more closely by criminological scholars. First though, Smith and Paternoster (1990) were going to challenge the core deviance amplification postulation of labeling theory.

Smith and Paternoster (1990) claimed they found no empirical support for the deviance amplification hypotheses commonly theorized by labeling scholars. If early critics of the labeling perspective figuratively put a stake in labeling theory's heart, then Smith and Paternoster (1990) supplied the nails for its coffin. The popularity of labeling theory began to fade among scholars over the next decade, but that did not mean that labeling research ceased to continue. The authors had hoped that their results would inspire future empirical studies to address the problem of a selection artifact, but very few scholars decided to confront the problem over the next decade. A selection artifact is when a variable representing a process of official formal labeling serves as a proxy for correlates of secondary deviance that are not included in the analyses. If this occurs, the reported effects of labeling would be inconsistent and biased (Smith & Paternoster, 1990).

Matsueda (1992) could easily be attributed as the scholar responsible for not only keeping the labeling perspective on life support, but also as the first major researcher to explain how informal labels could possibly explain both primary and secondary deviance. Just two years after Smith and Paternoster (1990) published their study, Matsueda (1992) published his examination of reflected appraisals, parental labeling, and juvenile delinquency. He did not elaborate upon labeling theory as it was known up to that point, but rather, he specified a symbolic interactionist theory that primarily examined the effects of parental labels and reflected appraisals. Both of these types of labels are considered informal labels by criminologists (Bartusch & Matsueda, 1996; Liu, 2000; Matsueda, 1992).

Matsueda (1992) relied heavily on labeling theory when he hypothesized that disadvantaged background characteristics should increase negative parental labeling and possibly decrease the probability of positive labeling. In other words, he expected to see juveniles from broken homes, that engaged in prior delinquent acts, from low-income neighborhoods, and juveniles that were black more likely to be labeled rule-violators by parents. This was a hypothesis that was eventually supported by his data. Arguably, the most important hypothesis presented was that parental labeling of a child as a "rule-violator" would have a substantial effect on the child's future levels of delinquency. He presented hypotheses from labeling theory and the symbolic interactionism perspective. Matsueda's (1992) results, consistent with a deviance amplification hypothesis, showed that parental labels had a substantial effect on delinquency. Reflected appraisals, influenced future delinquency as well, but even when youth-reflected appraisals were controlled for, parental labels still had a considerable effect on delinquency. To put it another way, he found that parental labels influenced youth-reflected appraisals, which finally influenced delinquency.

Matsueda's (1992) findings were significant because he found support for a deviance amplification hypothesis, and addressed many issues that had been previously raised by Smith and Paternoster (1990). Matsueda's (1992) summary conclusion that parental labels of adolescents as "rule-violators" are much more likely among nonwhites, individuals living in urban environments, and juveniles that are delinquent, is consistent with labeling theory. He eventually concedes that incorporating formal labels, such as those derived from the juvenile justice system, would allow for a stronger test of a deviance amplification proposition. The current study intends to address Matsueda's (1992) concession by providing a test of an interactionist labeling model using multiple types of formal and informal labels.

Also consistent with labeling theory, Matsueda (1992) found that prior delinquent behavior influenced youth's reflected appraisals of self. Furthermore, he found that this effect worked indirectly through parental appraisals, but that prior delinquency also affected youth's reflected appraisals of self directly. This implied that reflected appraisals, a type of informal label, are the result of earlier behavior, the individual's perceptions or understandings of that behavior, and the "selective perception" of other individuals. Matsueda (1992) did not conduct a test of self-esteem. On the contrary, he examined highly specific aspects of the self in order to understand their effects on future delinquency. In general, he provided fertile soil for contemporary labeling theorists to place their roots, and introduced an innovative new method of understanding "the self" as it was originally presented by Cooley (1902) and others (Chassin et al., 1981; Mead, 1934).

Drawing on symbolic interactionism, Bartusch and Matsueda (1996) developed a micro-level model of gender and delinquency to explain the gender gap. Using much of the same methods utilized by Matsueda (1992), the authors tested fifteen hypotheses. Three of these hypotheses were directly related to labeling theory, and six others were linked with the closely related symbolic interactionism perspective. Bartusch and Matsueda (1996) concluded that their study supported a symbolic interactionist theory of gender and delinquency. In other words, parental labels had strong effects on youth's reflected appraisals as a "rule violator". Furthermore, reflected appraisals were found to significantly impact delinquency levels. The overall message was clearly that reflected appraisals, especially as a "rule violator", can increase the likelihood of future delinquency (Bartusch & Matsueda, 1996).

Kiota and Triplett (1998), using methods similar to those employed by Matsueda (1992), examined Matsueda's (1992) assertion that race and gender may affect the processes of reflected

appraisals and actual appraisals. Their overall findings supported the interactionist model of self with one notable exception: Their models did not result in a proper fit for juvenile black females. Furthermore, the authors found that parental appraisals (or labels) significantly effected reflected appraisals and finally, increased delinquency.

A more recent study of reflected appraisals was unique because it included measures of peer reflected appraisals. Brownfield and Thompson (2005) examined the relationships between identity and delinquency. The authors were primarily concerned with the effects of parental and peer reflected appraisals. Their initial bi-variate analyses indicated support for a relationship between parental reflected appraisals and delinquency. However, this relationship was eliminated upon controlling for peer reflected appraisals and self-concept (Brownfield & Thompson, 2005). The authors clearly attested that their findings showed that the way parents, teachers, peers, and siblings react to an individual's behavior could potentially have implications for the probability of delinquency or a delinquent self-concept. Brownfield and Thompson (2005), in sum, found significant support for the inclusion of measures of reflected appraisals in delinquency research.

In the most recent test of reflected appraisals reviewed, Asencio and Burke (2011) found that criminal and drug-user identities were both a function of the reflected appraisals of "significant others." These findings are supportive of Matsueda and his colleague's (1992; also Bartusch & Matsueda, 1996) earlier studies of reflected appraisals. Furthermore, and most importantly, Asencio and Burke (2011) indicated that the different sources of reflected appraisals had different effects on the identities of the respondents. They found that the reflected appraisals of "peers" and "significant others" were the most relevant to criminal and drug-user identities (Asencio & Burke, 2011).

Clearly, a line of research that began in 1992 has established its empirical merit. The debate, then, is no longer whether reflected appraisals impact delinquency. Clearly, the discussion now revolves around how reflected appraisals interact with other key variables commonly examined by researchers. Brownfield and Thompson (2005) noted that future studies should seek to include measurements of prior delinquency, appraisals from parents, and reflected appraisals of teachers. The current study will ambitiously try to answer Brownfield and Thompson (2005) by including those exact measures.

CHAPTER 3

METHODS

The current study seeks to build off prior labeling theory research, but at the same time, it also offers a fresh perspective of labeling processes and dynamics. An interactionist labeling model of delinquency and crime will be outlined and tested using a contemporary longitudinal data set. First, a basic conceptual model will be presented. Next, the sample will be outlined thoroughly. Then, the variables essential to the current study, and their methods of operationalization, will be covered in detail. Finally, the proposed plan of analysis for the study will be thoroughly advanced.

Interactionist Labeling

The current study intends to use multiple methods of measuring self-concepts and labeling effects. Prior labeling theory analyses have tested only a limited number of labeling types, but this more comprehensive labeling model incorporates formal labels, informal labels, parental labels, as well as self-imposed labels. These different types of labels, based on prior labeling literature, should then either directly or indirectly influence individual levels of delinquency. Figure 1 shows the basic conceptual model for the current study. The interactionist labeling model followed for the purposes of this study dictates that delinquent behavior is influenced, in part, due the application of negative labels.

The primary concerns of the current study are whether formal labeling experiences influence self-reported involvement in delinquency, and whether that relationship is mediated by other informal labels or reflected appraisals. The role of reflected appraisals has been studied in-depth by Matsueda (1992) and others (Asencio & Burke, 2011; Bartusch & Matsueda, 1996; Brownfield & Thompson, 2005; Kiota & Triplett, 1998). However, what is missing in this prior

research is an examination of how reflected appraisals and informal labels might affect or be effected by formal labels. The current study seeks to fill this gap in criminological literature.
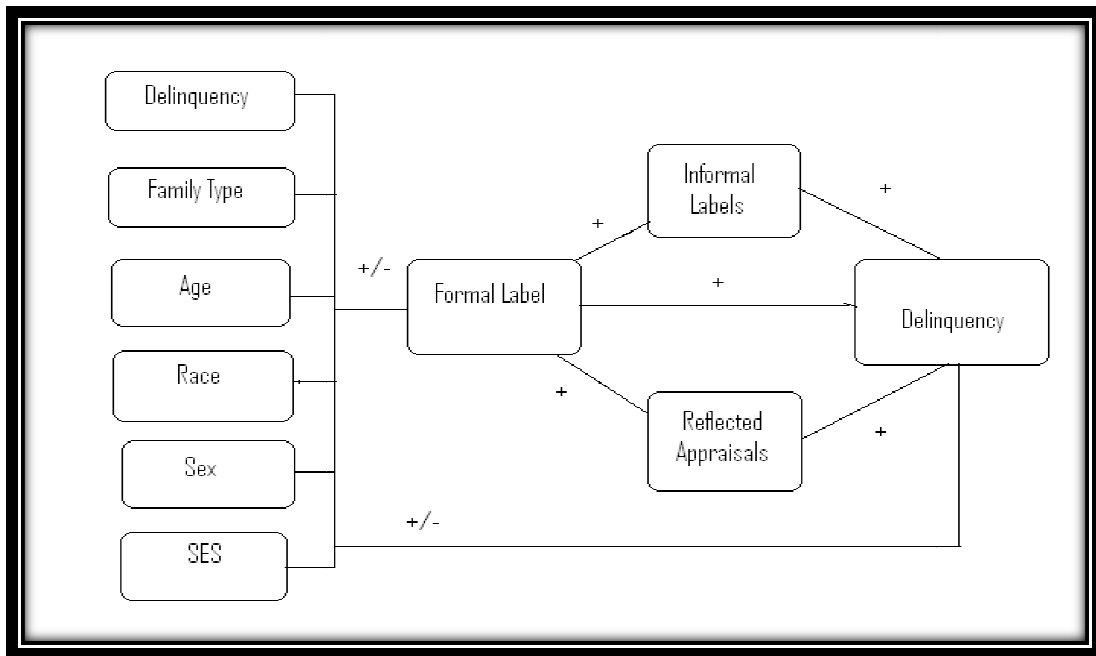
Figure 1. Interactionist labeling conceptual model

Sample

The sample used in the current analysis is derived from the National Longitudinal Study of Adolescent Health (Add Health). Add Health is a nationally representative sample of adolescents in grades 7-12 in America during the 1994-95 school year. These adolescents were followed up with into young adulthood with continued in-home interviews. The most recent wave of data used in this analysis was collected in 2008 (wave 3), when respondents had reached adulthood. Several minority groups were oversampled in order to ensure that the respondents included in the survey were racially and ethnically diverse. For a more detailed description, see Harris, Halpern, Whitsel, Hussey, Tabor, Entzel, and Udry (2009).

The primary advantages of this data set are that it is a large nationally representative sample, and it includes a wide variety of possible variables to be used in a criminological

analysis. The longitudinal design of the study further allows researchers to examine changes in variables over time, allowing the examination of causal relationships between variables or correlations. One disadvantage of the data is that they are not particularly concerned with labeling events, dynamics, or theory. This shortcoming prevents my study from properly testing reflected appraisals as originally outlined by Matsueda (1992). However, the survey does provide enough valid measures for a partial test of the model.

The current study utilizes waves 1, 2, and 3 of the Add Health data. This means that respondents will have reached adulthood at the third data collection point, but will have not exceeded the age of thirty-two. This method of analysis allows research to trace each individual respondent's behavior, attitudes, and criminality starting when they were children and ending when they have reached adulthood. The final sample used in the current analyses will be limited to survey respondents who had valid weights and valid data in the focal independent variables and delinquency measures.

Imputation

Certain variables used in the analyses are to be imputed. However, threats to validity are to be minimized by not imputing any data relevant to the study's dependent variables and key demographic variables. Single imputation is believed to be reasonably veracious when the amount of missing data does not exceed 5% of the sample (Schafer, 1999). Every variable, with the exception of parental labeling, did not exceed the 5% threshold. The method of imputation used for the parental labeling measure underestimates the prevalence of negative parental labeling. Items that are to be imputed are to be done so using the methods stated in the variable's operationalization description. The operationalization and methods of imputation used for each variable are more thoroughly described in detail below.

Variables

Dependent Variable

Delinquency. A comprehensive thirteen-item delinquency index, incorporating both violent and non-violent delinquent acts, was constructed to be used as the dependent variable. The items related to violence are equivalent in both waves one and three, and include violent behaviors such as robbery, using weapons in a fight, participating in a fight " where a group of your friends was against another group," carrying a weapon to school (and/or work in wave three), pulling a weapon on someone, and shooting or stabbing someone. For the first wave of the study, the index includes non-violent delinquent behaviors such as property damage, joyriding, shoplifting, stealing something worth more than $50, stealing something worth less than $50, burglary, and selling marijuana or other drugs. The non-violent items included in the delinquency index slightly change in wave three reflecting more age-normative behaviors. For instance, shoplifting is removed from the index, and replaced with buying, selling, or holding stolen property. Likewise, joyriding is replaced with using someone else's ATM, debit, or credit card without their permission. In both wave one ($\alpha= 0.7869$) and three ($\alpha= 0.7229$), respondents are asked about their frequencies of engaging in the aforementioned behaviors. Responses ranged from "never" (0) to "5 or more times" (3). The items were dichotomized and summed in order to create one continuous variable (Range: 0-13).

Independent Variables and Controls

Age. The age of the respondent was expressed as the respondent's age in years at the time of the survey's first wave.

Race/Ethnicity. Race and ethnicity was measured by constructing dichotomous dummy variables. The four categories constructed are white, black, Hispanic, or "other." White serves as

the contrasting category. These dummy variables indicate whether the respondent identifies primarily as white, black, Hispanic, or some other race/ethnicity. This measure was taken from the first wave of the survey.

Sex.   Sex was measured with a basic dummy variable (male=1; female=0).

SES.   The variables concerned with the education level of the respondent's residential parents served as a proxy for socioeconomic status (*SES*) in the current study. The survey items were concerned with the highest degree completed by each of the respondents' residential parents. If only one residential parent was listed, then that parent's education level was used as the respondent's SES. If two parents were available, then their education levels were averaged. The final analytical variable used for the current study was a continuous variable.

Using the income of the respondents' residential parents as a proxy for SES was initially considered for the study. However, the income measures were found by the data collectors and other scholars to be highly unreliable. To be more specific, there is a substantial amount of missing data pertaining to parental income. Recent studies have concluded that these missing data may not be random, but rather, represent a distinct subset of the study's population (see Harris et al., 2009).

Public Assistance.   Public assistance was measured using a single survey item from the parent questionnaire. This measurement of public assistance served as a second proxy-measure of SES for the current analyses. The respondent's parents were asked if they were recipients of public assistance. The variable used in the current study was a dichotomous dummy variable with "yes" responses (yes=1) denoting that the respondent's parents answered that they were receiving public assistance or welfare. On the other hand, "no" (no=0) responses indicate that an individual's parents answered that they were not receiving public assistance or welfare.

Family Type.   Respondents' family type was measured with a series of dummy variables indicating the family type structure in which the respondent lives. The manner of operationalization used for this variable was identical to that used in the variable concerned with the respondents' races and ethnicities. This measurement was taken at the first wave of data collection. Respondents were categorized based on whether they indicated that they lived with both biological parents, one biological parent and a step-parent, one single biological parent, or some other family type. Respondents that indicated they lived with adoptive parents were coded as living in some "other" household type.

Formal Labeling.   Official formal labeling was measured by retroactively tracking self-reported arrests listed by respondents in wave 3. This was possible due to the addition of questions in Add Health regarding the prevalence, frequency, and timing of any criminal arrests and convictions. The final analytical variable used in the current study was a dichotomous dummy variable with "yes" responses (yes=1) denoting that the respondent was officially processed by the criminal justice system. On the other hand, "no" (no=0) responses indicate that an individual was not formally processed.

School Stigmatization.   Respondents' school stigmatization experiences was measured by using a summed index of four items indicating stigmatizing school experiences. Respondents were asked whether they had ever been in trouble at school due to drinking, been suspended, been expelled, or ever repeated a grade. Higher scores indicated more experiences of school stigmatization. Missing cases were modally imputed (0= no) prior to being added to the index. Finally, this index was reduced into a single dichotomous dummy variable indicating any incidence of school stigmatization experiences.

Parental Labeling.   Parental labeling was measured by constructing a dichotomous dummy variable using a single survey item from the wave one parent questionnaire. The parent questionnaire survey items address a multitude of questions directly pertaining to the study participants. One survey item asked the respondents' parents if they believed their child had a bad temper. "yes" responses (yes=1) denote that the respondent's parent believes that they have a bad temper. On the other hand, "no" (no=0) responses indicate that the parent does not believe that their child has a bad temper.

Negative Reflected Appraisals.   Negative reflected appraisals were measured by constructing two variables derived from wave two survey items. These survey items asked respondents how much they felt adults, parents, teachers, and family cared about them. Responses ranged from "not at all" to "very much". Missing cases were replaced for each item by imputing the mean. Two variables were reverse coded (5= "not at all"; 1= "very much") and used in the current study. Negative reflected appraisals of adults and parents held little explanatory value, and therefore, negative reflected appraisals of family and teachers served as the final analytical variables used in the current study.

Research Hypotheses

Multiple hypotheses will be tested by estimating a series of multivariate regression models.

H$_1$:   *Controlling for wave 1 delinquency, formal labeling at wave 1 will result in an increase in delinquency measured at wave 3.*

H$_2$:   S*chool stigmatization at wave 1 will mediate the effect of formal labeling at wave 1 on delinquency at wave 3.*

H₃: *Parental labeling at wave 1 will mediate the effect of formal labeling at wave 1 on delinquency at wave 3.*

H₄: *Negative reflected appraisals at wave 2 will mediate the effect of formal labeling at wave 1 on delinquency at wave 3.*

Plan of Analysis

Negative binomial regression will be the analytical strategy employed for the purpose of this study. This strategy is optimal because the dependant variable to be used in the analyses is continuous and highly skewed (i.e. there are many zeros in the data). Poisson regressions are often utilized by researchers dealing with dependant variables that are not normally distributed. Furthermore, Poisson regression strategies that better handle problems of overdispersion have been developed by scholars. However, past research has suggested that negative binomial regression should be the preferred analytical method employed by researchers when it is imperative to estimate the probability distribution of an individual count (see Gardner, Mulvey, & Shaw, 1995). An earlier criminological study that used the same outcome variables that are used in the current analyses have also noted the appropriateness of using negative binomial regression, rather than a Poisson regression model (see Demuth & Brown, 2004).

Problems of a selection artifact are to be avoided using a couple of methods. First, the causal ordering of variables allows for the deviance amplification effects from formal labels to be seen if present in the data. Secondly, parental labels are the causal starting point of this conceptual labeling process being examined. This second point is imperative because prior research has noted that appraisals or evaluations by significant others begin early in life. However, delinquency and associations with delinquent peers starts mostly during adolescence (see Adams, 1996).

The study consist of five regression models. The dependent variable for all five models will be the aforementioned *delinquency* variable. Model 1 will only include the study's dependent variable and the focal independent variable, formal labeling.

$$\text{Delinquency} = \alpha + \beta_1(\text{FORMAL})$$

Model 2 will include the focal independent variable, formal lableing and wave 1 delinquency.

$$\text{Delinquency} = \alpha + \beta_1(\text{FORMAL}) + \beta_2(\text{WAVE 1 DELINQUENCY})$$

The third model will include the focal independent variable,formal labeling, and wave 1 delinquency. Reflected appraisals will also be included.

$$\text{Delinquency} = \alpha + \beta_1(\text{FORMAL}) + \beta_2(\text{WAVE 1 DELINQUENCY}) + \beta_3(\text{FAMILY RA})$$
$$+ \beta_4(\text{TEACHER RA})$$

The fourth model will include the variables used in model 3, and also the variables concerned with parental labeling and school stigmatization.

$$\text{Delinquency} = \alpha + \beta_1(\text{FORMAL}) + \beta_2(\text{WAVE 1 DELINQUENCY}) + \beta_3(\text{FAMILY RA})$$
$$+ \beta_4(\text{TEACHER RA}) + \beta_5(\text{PARLABEL}) + \beta_6(\text{SCHOOLSTIGMA})$$

The final model will include all of the variables used in model 4, but will also contain the demographic controls.

$$\text{Delinquency} = \alpha + \beta_1(\text{FORMAL}) + \beta_2(\text{WAVE 1 DELINQUENCY}) + \beta_3(\text{FAMILY RA})$$
$$+ \beta_4(\text{TEACHER RA}) + \beta_5(\text{PARLABEL}) + \beta_6(\text{SCHOOLSTIGMA}) + \beta_7(\text{SES})$$
$$+ \beta_8(\text{FAMILY TYPE}) + \beta_9(\text{PUBLIC ASSISTANCE}) + \beta_{10}(\text{AGE}) + \beta_{11}(\text{RACE})$$
$$+ \beta_{12}(\text{SEX})$$

CHAPTER 4

FINDINGS

The first set of findings for the current study involve the sample's basic characteristics. Table 1 shows the sample's characteristics according to sex, race, and the labels examined in this study. Please note that the percentages displayed are weighted proportions. A small weighted proportion (9.76%) of the sample was formally labeled (N= 877). This finding was expected, as was the finding that a higher weighted proportion of respondents were informally labeled (27.51% and 38.04%) than formally labeled.

The next set of findings were the univariate descriptive statistics for each variable included in the study. Table 2 shows the ranges, means, and standard errors for the variables that were included in the current study. The mean age of the sample at wave 1 was approvimately 15 years old (15.052). More interesting, is that there is an aging out from delinquency involvement from wave 1 to wave 3 in the sample. The mean delinquency score at wave 1 was 1.281. Yet, the mean delinquency score at wave 3 was a smaller 0.530. This indicates a natural desistance from delinquency involvement at wave 1 to delinquency involvement at wave 3 throughout the entire sample.

The next findings were the bivariate proportions and tests of means on the three primary labels that were included in the current study. Table 3 shows the results of the bivariate proportions and tests of means. Delinquency scores at both waves were significantly associated with parental, teacher, and formal labels. Furthermore, the bivariate relationships between parental, teacher, and formal labels were also significant ($p \leq .001$). In addition to the significant relationships between labels and delinquency, reflected appraisals and labels also were significantly associated.

Race, age, and sex, along with the "One Bio/One Step" and the "other" categories of the family type variable, all failed to indicate a significant bivariate association with the parental label used in the current study. In contrast, both proxy measures of SES were significantly associated with parental labeling. SES was not found to be significantly associated with formal labels, though, age ($p \leq .01$) and sex ($p \leq .001$) were. Similar to parental labeling, both the "Both Bio" and "Single Bio" categories of family types were significantly related to formal labeling in the bivariate analyses. Unlike formal and parental labels, every variable included in the current study was found to be significantly associated with school labels.

Five multivariate negative binomial regression models were estimated in order to test the three hypotheses of the current study. The dependent variable in all five models was delinquency measured at wave 3. Table 4 shows the results of the five regression models, with the exponentiated coeffeicients provided to ease interpretation of the data.

Model one shows the results of regressing the study's focal independent variable, Formal Labeling, on delinquency scores measured at wave 3. Results at this stage of the analyses indicated that formal labels significantly contribute to later self-reported incidences of delinquency involvement. Without any controls, results indicated that formal labels were a significant predictor of delinquency scores measured at wave 3 (exp(b)= 4.28, $p \leq .001$).

Model 2 included the same variables that were included in model 1, but also controlled for respondents' delinquency scores measured at wave 1. Formal labeling was found to be strongly predictive of wave 3 delinquency involvement (exp(b)= 3.64, $p \leq .001$) even when controlling for respondents' prior delinquency involvement. However, as expected, wave 1 delinquency scores significantly contributed to wave 3 delinquency scores (exp(b)= 1.20, $p \leq$

.001). This finding suggests that formal labels significantly contribute to future levels of delinquency, net of prior delinquency involvement.

Model 3 was utilized to determine the effects of formal labels on delinquency while controlling for prior delinquency and the two measures of reflected appraisals that were included in the current study. Four measures of reflected appraisals were initially considered for the analyses, but preliminary investigations indicated that reflected appraisals of adults and parents held no explanatory importance. In model 3, only reflected appraisals of teachers were significantly predictive of wave 3 delinquency scores (exp(b)= 1.10, p ≤ .01). At this stage of the analyses formal labels (exp(b)= 3.57, p ≤ .001) and wave 1 delinquency scores (exp(b)= 1.19, p ≤ .001) still significantly contributed to wave 3 delinquency scores. Formal labeling was the strongest significant predictor of wave 3 delinquency in model 3, followed by wave 1 delinquency scores. The results indicated that reflected appraisals only have a minimal mediating influence on the effect of formal labels on delinquency. The introduction of reflected appraisals to the model accounted for only a 7% decline in the effect formal labels had on delinquency. In model 2, formal labels contributed to a 264% increase in wave 3 delinquency scores. However, after the introduction of reflected appraisals in model 3, formal labels still resulted in a 257% increase in wave 3 delinquency scores.

In model four, formal labels, reflected appraisals, school labeling, parental labeling, and wave 1 delinquency were regressed on wave 3 delinquency scores. Formal labeling, once again, was the strongest significant predictor of future delinquency (exp(b)= 3.65, p ≤ .001). Like the previous models, the second strongest significant predictor of delinquency was prior delinquency measured at wave 1(exp(b)= 1.20, p ≤ .001). Reflect appraisals of family, like in model 3, had no significant impact on delinquency. Reflected appraisals of teachers had the same significant

influence on delinquency that was seen in model 3 (exp(b)= 1.10, p ≤ .01). Of the two new variables introduced in model four, only school labeling had a significant impact on wave 3 delinquency scores (exp(b)= 0.87, p ≤ .05). Unlike the other significant predictors, the effect of school labeling on wave 3 delinquency was negative. In other words, school labeling resulted in decreased wave 3 delinquency scores. This finding suggests that there *may* be a specific deterrent value of school punishment. As was the case with the introduction of reflected appraisals in model 3, the introduction of parental and school labeling measures had little to no mediating effect on formal labeling.

The final multivariate regression model included all of the variables that were included in model 4 and the additional control measures (Age, Race, Sex, Family Type, SES, Public Assistance). Formal labeling, as in the four previous models, was the strongest significant predictor of wave 3 delinquency (exp(b)= 2.85, p ≤ .001). The second strongest predictor of wave 3 delinquency was being male (exp(b)= 2.49, p ≤ .001), followed by being black (exp(b)= 1.33, p ≤ .001). Both school and parental labels were found to not be significant predictors of wave 3 delinquency scores once the control measures were added. On the other hand, both reflected appraisals of family (exp(b)= 1.07, p ≤ .05) and teachers (exp(b)= 1.09, p ≤ .01) were found to be significant predictors of wave 3 delinquency scores in this model. The control variables mediated the effect of formal labels on wave 3 delinquency moreso than was mediated by both the reflected appraisals measures.

The first hypothesis stated that controlling for wave 1 delinquency, formal labeling at wave 1 would result in an increase in delinquency measured at wave 3. The findings supported the first hypothesis. Formal labels significantly increased subsequent delinquency net of wave 1 delinquency, and the effect of formal labels on wave 3 delinquency was greater than the

significant effect of wave 1 delinquency on wave 3 delinquency. This finding indicates that prior delinquency is less important in explaining future delinquency than is the application of a formal label.

The second hypothesis stated that School stigmatization at wave 1 would mediate the effect of formal labeling at wave 1 on delinquency at wave 3. The second hypothesis was rejected. In fact, school stigmatization initially had a significant ($p \leq .05$) negative effect on wave 3 delinquency when first introduced to the regression models (see model 4). However, the deterrent effect of school stigmatization was no longer significant upon the introduction of the control variables. The third hypothesis stated that parental labeling at wave 1 would mediate the effect of formal labeling at wave 1 on delinquency at wave 3. The third hypothesis was rejected. Parental appraisals did not have a significant impact on wave 3 delinquency at any stage of the analyses.

The fourth, and final, hypothesis stated that negative reflected appraisals at wave 2 would mediate the effect of formal labeling at wave 1 on delinquency at wave 3. The findings supported the fourth hypothesis. Negative reflected appraisals of teachers were responsible for a moderate increase (exp(b)= 1.10, $p \leq .01$) in subsequent delinquency scores. Furthermore, negative reflected appraisals mediated 7% of the effect that formal labeling had on wave 3 delinquency scores (see model 3). Finally, Both negative reflected appraisals of teachers (exp(b)= 1.09, $p \leq .01$) and negative reflected appraisals of family (exp(b)= 1.07, $p \leq .05$) still significantly impacted wave 3 delinquency scores upon the addition of the control variables to the model. In sum, the support and rejection of these four hypotheses has important implications for the future of labeling theory and criminological research. The findings, and their implications, are discussed below.

CHAPTER 5

DISCUSSION AND CONCLUSION

Discussion

Contemporary labeling theorists have examined how official labeling impacts future criminal and non-criminal outcomes. In other words, labeling theorists have become concerned with the possible intervening variables between labeling and future criminogenic behaviors and criminal outcomes. For example, Lopes et al. (2012) recently found that labeling indirectly effected criminal and non-criminal outcomes. However, their study did not include measures of reflected appraisals or any other measure of "label internalization." Matsueda (1992) found that reflected appraisals significantly mediated the effects of informal labels on subsequent delinquency involvement. Yet, only informal labels and reflected appraisals were included in his symbolic interactionist model of delinquency. This study addressed this gap in research by examining the effects of formal labels, informal labels, and reflected appraisals on delinquency. Furthermore, this study utilized contemporary, and nationally-representative, data.

The current findings indicate that formal labeling, measured as a self-reported arrest, has a significant effect on delinquency involvement later in life. Furthermore, the results indicate that this relationship is partially mediated by reflected appraisals of family and teachers, but not significantly influenced by experiences of school stigmatization or parental labels. Both formal labeling and reflected appraisals significantly influenced respondents' subsequent delinquency scores. Arrest is a conceptually poor measure of formal labeling, yet results reveal substantial and significant effects on subsequent delinquency. It is possible, and may be likely, that more extreme labeling experiences would result in an even stronger effect of formal labeling on later

delinquency involvement. For example, it is likely that a formal conviction or "Felon" label would have a stronger effect on subsequent delinquency than being arrested.

These findings highlight the adverse effects official formal labels can have on future behavior. The findings also establish that reflected appraisals partially mediate the relationship between formal labels and delinquency. These findings are particularly supportive of Paternoster and Iovanni's (1989) interpretation of the secondary deviance hypothesis. According to Paternoster and Iovanni (1989), a proper rendering of the secondary deviance hypothesis should propose that if an individual has experienced labeling, then that individual *may* experience a change in his identity, *may* discover conventional opportunities to be restricted or limited in access, and *may* possibly be excluded from conventional groups. Their rendering of the secondary deviance hypothesis proposes that as of a result of the aforementioned processeses, an individual *may* illustrate an increased involvement in delinquency.

The current study found that reflected appraisals significantly impact subsequent delinquency, and that reflected appraisals mediate some of the effect seen between formal labeling and delinquency. This is a significant finding because previous research had only found informal labels to be mediated by reflected appraisals of self (see Matsueda, 1992; also Bartusch & Matsueda, 1996). This finding further supports prior claims that labels can indirectly influence subsequent delinquency. This finding is of further importance because it suggests that labeling experiences, both formal and informal, are mediated by reflected appraisals of self.

The mediation effect produced by reflected appraisals being added to the models was minimal, especially when viewed in contrast to the effect formal labels had on subsequent delinquency. This suggests that negative reflected appraisals may significantly influence future delinquency involvement directly, but also that there may be a change in identity for some

individuals that have been formally labeled. Matsueda (1992) found that informal labels were mediated by negative reflected appraisals, but the current findings also suggest that a similar process may be occurring between formal labels and reflected appraisals as well. Since arrest is a relatively poor measure of formal labeling, even having a small effect that is statistically significant suggests that formal labels matter. It is possible, if not likely, that better measures of formal labeling would show a stronger effect on subsequent delinquency.

The hypotheses concerned with school stigmatization and parental appraisals were both rejected. School stigmatization may be insignificant in predicting secondary delinquency simply because it is unrelated to future delinquency involvement. Another possibility is that the methods used in this study to measure school stigmatization may not have accurately accounted for school stigmatization and labeling experiences. For example, an additional supplemental survey of the respondents' teachers would have allowed for more specific items regarding school labeling and stigmatization experiences. For instance, being expelled from school is a very different stigmatizing experience than being labeled as a deviant or "rule breaker" by a teacher.

The control variables added in the final model (Age, Race, Sex, and SES) were shown to be significant predictors of secondary delinquency. The age variable performed as expected; having a negative impact on wave 3 delinquency scores. Being male strongly influenced wave 3 delinquency scores, second in strength of effect only to being formally labeled. Race was also a significant predictor of secondary delinquency, supporting labeling theory's contention that racial minorities are more prone than non-minorities to being negatively labeled, and as a result, engage in secondary delinquency.

SES significantly influenced secondary delinquency. Individuals with higher SES scores were significantly more likely than those with lower SES scores to engange in secondary

delinquency. These quantitative findings are similar to Chambliss' (1973) qualitative

observations. To be more specific, Chambliss (1973) claimed that the "Saints" in his study were

more actively involved in delinquent behavior than the "Roughnecks." His qualitative work

established that it is possible that social status and social markers of SES influence the likelihood

of encounter negative labels or experiencing negative labeling events. His work further

established that individuals identified as upper class or middle class may possibly engage more

frequently than lower class individuals in delinquent activities or behavior (Chambliss, 1973).

The current study used two proxy measures of SES due to the problems with income reporting

among the respondents in the sample, and this may affect the validity of the current findings.

The current study found both direct and indirect linkages between labeling and

subsequent delinquency. Formal Labels were the strongest predictors of secondary delinquency

throughout the study. It is likely that more indirect linkages would be found, and the extant of

formal labeling's direct relationship with delinquency diminished, upon the inclusion of

variables attempting to measure social exclusion from conventional groups and opportunities.

"Structural impediments," as Chiricos and his colleagues (2007) have suggested, explain how

formal labeling could have such a significant positive impact on future criminal or delinquent

behavior. Formal labeling was the strongest predictor of subsequent delinquency in the current

study, but labeling was measured as an arrest. An arrest, arguably, is a weak measure of formal

labeling because there are relatively few "structural impediments" after being arrested, especially

when compared to the possible "structural impediments" an individual must overcome after

being officially convicted and sanctioned. Regardless, this study has found substantial support

for an interactionist labeling model of delinquency in a nationally-representative sample of

American adolescents. Still, there are lingering questions in need of answers. Future research

should attempt to more closely examine the significant relationships found in the current study in order to conceptually expand upon the dynamic social processes that may occur after being formally or informally labeled.

Limitations and Future Directions

The current study is not without its methodological limitations. The sample and data used for these analyses will only allow the findings to be generalized to American adolescents. Future studies will need to examine adolescents from other nations, and use the results to compare to labeling research conducted in America. Furthermore, the data itself was not particularly concerned with labeling events or processes. It is strongly suggested that future surveys strive to include the items needed for a proper test of labeling theory. In fact, for the purposes of improving criminological research, social surveys of adolescents should begin including items considered to be the most pertinent among criminologists of all types. This would allow social research of all types to improve, and would simultaneously foster a new wave of theoretical elaboration and integration.

Another limitation of the current study is that only one formal label was examined. The current study operationalized a self-reported arrest as an important formal labeling experience. Existing criminological and criminal justice research shows that there are other noteworthy formal labels that could influence secondary deviance and future criminal justice outcomes. For example, Quinn (2010) examined the relationship between a formal "gang member" label and juvenile justice dispositions. Other studies have operationalized formal labeling as an official conviction or adjudication (Chiricos et al., 2007).

To compound this limitation, all labels do not impact or influence an individual's life equally. Becker (1963) made this clear when he described the idea of a "master status." Quinn

(2010) elaborated by pointing out that not all labels are negative, and that labels might be more or less important to individuals based on their individual and family chacteristics. To put it another way, specific labels can hold more or less weight for certain individuals. Future research should make a greater attempt to elaborate conceptually on Becker's (1963) notion of a "master status" and to better explain how different types of labels specifically effect different types of people.

The multitudes of relationships that have been identified by existing labeling theory research should be further examined. For example, the relationship between socioeconomic status, race/ethnicity, and labeling should be more closely examined. Future research could further benefit from an attempt to better measure and operationalize concepts such as identity and self-concept. At the crux of labeling theory is the notion that a label can influence or impact behavior through a change in identity. In other words, labeling theorists must continually strive to better examine and measure self-concepts, changes in identity, and the internalization of labels.

Arguably, the most important limitation of the current study is that a specific grounded labeling theory has not been established by prior research (see Melossi, 1985). Therefore, this author is hopeful that this study, and other contemporary labeling works, will someday be reviewed and used to construct an interactionist labeling theory that is no longer viewed as "radical." A more grounded and precise labeling theory would allow for the wide-scale use of replication and comparative studies that are essentially the backbone for proper theory testing. The future of labeling theory should be one that involves elaborating on the original ideas of Mead (1934), Becker (1963), and other early sociologists interested in labels and the self (Cooley, 1902; Lemert, 1951; Schur, 1965).

Conclusion

This study adds to existing criminological research by providing a contemporary test of labeling theory using a nationally-representative and longitudinal data set. Thomas and Bishop (1984) suggested that labeling theorists place too much emphasis on the significance of formal sanctions. For this reason, the current study provided a comprehensive test of an interactionist labeling model using multiple types of formal and informal labels. Furthermore, a new and innovative conceptual approach towards labels and delinquency was taken.

The findings were generally supportive of labeling theory. However, the strongest significant effect of labeling on subsequent delinquency was found to be caused by formal labeling. Therefore, unlike Thomas and Bishop (1984), I suggest that formal labels should continue to be emphasized by theorists as extremely important. The current study found that formal labels were much more important than parental appraisals, school stigmatization, and reflected appraisals. For this reason, it is difficult to play down the importance of formal labels and sanctions as was suggested by Thomas and Bishop (1984). On the contrary, it is important that *all* forms of labeling are examined and emphasized. The current study did not find a significant effect between parental appraisals and subsequent delinquency, but this is not to say that parental appraisals should be played down in the future or ignored. Rather, it is likely that this findings is simply a function of how parental labeling was operationalized in the current study. Labeling theorists should emphasize labels in general, and not construct distinctions of importance between different types of labels. Labeling theory will be better served in the future by *not labeling*, or designating, which labels should be emphasized. The true emphasis of contemporary labeling theorists should be on the development of a general theory of crime that incorporates all dimensions of prior labeling theory research.

EXHIBITS

Table1: Sample Characteristics

Race/Ethnicity

	White	Black	Hispanic	Other	TOTAL
n	5702	2124	1660	860	10346
Weighted %	67.87%	15.09%	11.95%	5.09%	100%

Sex

	Male	Female	TOTAL
n	4742	5604	10346
% of Full sample	48.88%	51.12%	100%

Formal Label

	Yes	No	TOTAL
n	877	9469	10346
% of Full sample	9.76%	90.24%	100%

Parental Label

	Yes	No	TOTAL
n	2744	7602	10346
% of Full sample	27.51%	72.49%	100%

School Label

	Yes	No	TOTAL
n	3879	6467	10346
% of Full sample	38.04%	61.96%	100%

Note: Reported n's are actual observations in the sample. Reported %'s are weighted proportions.

Table 2. Descriptive Statistics

		N	Range	Mean	Standard Error
1	MALE	10346	0-1	0.489	0.007
2	AGE	10346	11-21	15.052	0.113
3	RACE				
	WHITE	10346	0-1	0.679	0.029
	BLACK	10346	0-1	0.151	0.020
	HISPANIC	10346	0-1	0.120	0.017
	OTHER	10346	0-1	0.051	0.008
4	FAMILY TYPE				
	BOTH-BIO	10346	0-1	0.574	0.013
	ONE BIO/ONE STEP	10346	0-1	0.156	0.005
	SINGLE BIO	10346	0-1	0.216	0.010
	OTHER	10346	0-1	0.055	0.004
5	SES	10346	1-5	2.713	0.047
6	PUBLIC ASSISTANCE	10346	0-1	0.098	0.008
7	REFLECTED APPRAISALS				
	TEACHER	10346	1-5	2.448	0.024
	FAMILY	10346	1-5	2.049	0.015
8	PARENTAL LABEL	10346	0-1	0.275	0.008
9	SCHOOL LABEL	10346	0-1	0.380	0.014
10	FORMAL LABEL	10346	0-1	0.098	0.005
11	DELINQUENCY (W1)	10346	0-13	1.281	0.035
12	DELINQUENCY (W3)	10346	0-13	0.530	0.023
	Valid N (listwise)	10346			

Table 3: Bivariate proportions and tests of means

Analytic Sample (N=10346)

	Parental Label			School Label			Formal Label		
	Yes		No	Yes		No	Yes		No
<u>Dependent Variable</u>									
Delinquency (w3)	0.60	*	0.50	0.62	**	0.48	1.74	***	0.40
<u>Focal Independent Variables</u>									
Delinquency (w1)	1.65	***	1.14	1.88	***	0.92	2.35	***	1.17
Parental Label	-		-	36.85%	***	21.77%	36.22%	***	26.57%
School Label	50.96%	***	33.14%	-		-	53.48%	***	36.37%
Formal Label	12.85%	***	8.59%	13.72%	***	7.33%	-		-
Reflected Appraisals									
Family	2.15	***	2.01	2.16	***	1.98	2.19	***	2.03
Teachers	2.60	***	2.39	2.62	***	2.34	2.69	***	2.42
<u>Control Variables</u>									
Male	49.91%		48.50%	58.93%	***	42.72%	80.13%	***	45.50%
Age	15.02		15.06	15.47	***	14.80	14.88	**	15.07
SES	2.48	***	2.80	2.37	***	2.92	2.79		2.70
Public Assistance	13.32%	***	6.48%	13.47%	***	5.22%	7.84%		8.42%
Race									
White	67.57%		67.98%	57.54%	***	74.21%	70.11%		67.62%
Black	15.42%		14.96%	23.39%	***	9.99%	16.11%		14.98%
Hispanic	12.72%		11.66%	15.10%	***	10.02%	9.76%		12.19%
Other	4.29%		5.40%	3.98%	*	5.78%	4.02%		5.21%
<u>Family Processes</u>									
Family Type									
Both Bio	51.54%	***	59.65%	44.21%	***	65.53%	50.90%	***	58.13%
Bio/ Step	16.70%		15.13%	18.07%	***	14.02%	16.15%		15.50%
Single Bio	26.05%	***	19.84%	28.70%	***	17.16%	26.03%	**	21.07%
Other	5.71%		5.37%	9.02%	***	3.28%	6.92%		5.37%

* p ≤ .05   ** p ≤ .01   *** p ≤ .001

Table 4: Negative Binomial Regressions of Delinquency at W3

Full Sample (N=10346)

	Model 1		Model 2		Model 3		Model 4		Model 5	
	exp(b)		exp(b)		exp(b)		exp(b)		exp(b)	
Independent Variables										
Formal Label	4.38	***	3.64	***	3.57	***	3.65	***	2.85	***
W1 Delinquency	-		1.20	***	1.19	***	1.20	***	1.17	***
R. A. - Family	-		-		1.00		1.01		1.07	*
R. A. - Teachers	-		-		1.10	**	1.10	**	1.09	**
Parent Label	-		-		-		0.95		0.98	
School Label	-		-		-		0.87	*	0.91	
Control Variables										
Male	-		-		-		-		2.49	***
Age	-		-		-		-		0.85	***
SES	-		-		-		-		1.13	***
Public Assistance	-		-		-		-		1.06	
Family Type										
One Bio/One Step	-		-		-		-		1.10	
Single Bio	-		-		-		-		1.00	
Other	-		-		-		-		0.97	
Race										
Black	-		-		-		-		1.33	***
Hispanic	-		-		-		-		1.08	
Other	-		-		-		-		0.89	
F Statistic	369.25	***	389.97	***	188.67	***	124.52	***	60.44	***

$* p \le .05$ $** p \le .01$ $*** p \le .001$

REFERENCES

Adams, M. S. (1996). Labeling and Differential Association: Towards a General Social Learning Theory of Crime and Deviance. *American Journal of Criminal Justice, 20*(2), 147-164.

Akers, R. L. (1994). *Criminological Theories: Introduction and Evaluation*. Los Angeles: Roxbury.

Akers, R. L., & Sellers, C. S. (2009). *Criminological Theories: Introduction, Evaluation, and Application* (5th ed.). New York: Oxford University Press.

Asencio, E. K., & Burke, P. J. (2011). Does Incarceration Change the Criminal Identity: A Synthesis of the Labeling and Identity Theory Perspectives on Identity Change. *Sociological Perspectives, 54*(2), 163-182.

Bartusch, D. J., & Matsueda, R. L. (1996). Gender, Reflected Appraisals, and Labeling: A Cross-Group Test of an Interactionist Theory of Delinquency. *Social Forces, 75*(1), 145-176.

Becker, H. S. (1963). *Outsiders*. New York: Free Press.

Bernard, T. J., Snipes, J. B., & Gerould, A. L. (2010). *Vold's Theoretical Criminology* (6th ed.). New York: Oxford.

Bernburg, J. G., & Krohn, M. D. (2003). Labeling, Life Chances, and Adult Crime: the Direct and Indirect Effects of Official Intervention in Adolescence on Crime in Early Adulthood. *Criminology, 41*(4), 1287-1318.

Bernburg, J. G., Krohn, M. D., & Rivera, C. J. (2006). Official Labeling, Criminal Embeddedness, and Subsequent Delinquency: A Longitudinal Test of Labeling Theory. *Journal of Research in Crime and Delinquency, 43,* 67-88.

Bontrager, S., Bales, W., & Chiricos, T. (2005). Race, Ethnicity, Threat and the Labeling of Convicted Felons. *Criminology, 43*(3), 589-622.

Braithwaite (1989). *Crime, Shame, and Reintegration*. New York: Cambridge.

Brownfield, D., & Thompson, K. (2005). Self-Concept and Delinquency: The Effects of
Reflected Appraisals by Parents and Peers. *Western Criminology Review, 6*(1)*, 22-29.

Chambliss, W. (1973). The Saints and the Roughnecks. *Society, 11* (1), 24-31.

Chassin, L., Presson, C. C., Young, R. D., & Light, R. (1981). Self-Concepts of Institutionalized
Adolescents: A Framework for Conceptualizing Labeling Effects. *Journal of Abnormal
Psychology, 90,* 143-151.

Chiricos, T., Barrick, K., Bales, W., & Bontrager, S. (2007). The Labeling of Convicted Felons
and Its Consequences For Recidivism. *Criminology, 45,* 547-581.

Cooley, C. H. (1902). *Human Nature and the Social Order*. Chicago: Charles Scribner's Sons.

Demuth, S., & Brown, S. L. (2004). Family Structure, Family Processes, and Adolescent
Delinquency: the Significance of Parental Absence Versus Parental Gender. *Journal of
Research in Crime and Delinquency, 41*(1), 58-81.

Gardner, W., Mulvey, E. P., & Shaw, E. C. (1995). Regression Analyses of Counts and Rates:
Poisson, Overdispersed Poisson, and Negative Binomial Models. *Psychological Bulletin,
118*(3), 392-404.

Gove, W. (ed.). (1980). *The Labelling of Deviance: Evaluating a Perspective*.
New York: Wiley.

Harris, K. M., Halpern, C. T., Whitsel, E., Hussey, J. Tabor, J. Entzel, P., & Udry, J. R. (2009).
The National Longitudinal Study of Adolescent Health: Research Design [WWW
document]. URL: http://www.cpc.unc.edu/projects/addhealth/design.

Heimer, K., & Matsueda, R. L. (1994). Role-Taking, Role Commitment, and Delinquency: A
Theory of Differential Social Control. *American Sociological Review, 59*(3)*, 365-390.

Hirschi, T. (1980). Labelling Theory and Juvenile Delinquency: An Assessment of the Evidence. In Walter Gove (ed.), *The Labelling of Deviance: Evaluating a Perspective*. 2d ed. New York: Wiley.

Inciardi, J. A. (Ed.). (1980). *Radical Criminology: The Coming Crises*. Beverly Hills, CA: Sage Publications.

Johnson, L. M., Simons, R. L., & Conger, R. D. (2004). Criminal Justice System Involvement and Continuity of Youth Crime: A Longitudinal Analysis. *Youth & Society, 36,* 3-29.

Knutsson, J. (1977) *Labeling theory: A critical examination*. Scientific Reference Group, Report no. 3. Sweden: National Council for Crime Prevention.

Koita, K., & Triplett, R. A. (1998). An Examination of Gender and Race Effects on the Parental Appraisal Process: A Reanalysis of Matsueda's Model of Self. *Criminal Justice and Behavior, 25*(3)*,* 382-400.

Lemert, E. (1951). *Social Pathology*. New York: McGraw-Hill.

Liu, X. (2000). The Conditional Effect of Peer Groups on the Relationship Between Parental Labeling and Youth Delinquency. *Sociological Perspectives, 43*(3), 499-514.

Lopes, G., Krohn, M. D., Lizotte, A. J., Schmidt, N. M., Vasquez, B. E., & Bernburg, J. G. (2012). Labeling and Cumulative Disadvantage: The Impact of Formal Police Intervention on Life Chances and Crime During Emerging Adulthood. *Crime & Delinquency, 58*(3)*,* 456-488.

Massoglia, M., & Uggen, C. (2010). Settling Down and Aging Out: Toward an Interactionist Theory of Desistance and Transition to Adulthood. *American Journal of Sociology, 116*(2), 543-582.

Matsueda, R. L. (1992). Reflected Appraisals, Parental Labeling, and Delinquency: Specifying a Symbolic Interactionist Theory. *American Journal of Sociology, 97*(6), 1577-1611.

Mead, G. H. (1934). *Mind, Self, and Society*. Chicago: University of Chicago Press.

Melossi, D. (1985). Overcoming the Crisis in Critical Criminology: Toward a Grounded Labeling Theory. *Criminology*, *23*, 193-208.

Paternoster, R., & Iovanni, L. (1989). The Labeling Perspective and Delinquency: An Elaboration of the Theory and an Assessment of the Evidence. *Justice Quarterly, 6*(3)*, 359-394.

Quinn, S. T. (2010). The Gang Member Label and Juvenile Justice Decision-Making. *Electronic Theses, Treatises, and Dissertations,* Paper *2245,* 1-154.

Ray, M. C., & Downs, W. R. (1986). An Empirical Test of Labeling Theory Using Longitudinal Data. *Journal of Research in Crime and Delinquency, 23,* 169-194.

Schafer, J. L. (1999). Multiple Imputation: A Primer. *Statistical Methods in Medical Research, 8*(1)*, 3-15.

Schur, E. M. (1965). *Crime Without Victims*. New Jersey: Prentice-Hall.

Smith, D. A., & Paternoster, R. (1990). Formal Processing and Future Delinquency: Deviance Amplification as Selection Artifact. *Law & Society Review, 24*(5), 1109-1131.

Tannenbaum, F. (1938). *Crime and Community*. Columbia University Press.

Thomas, C. W., & Bishop, D. M. (1984). The Effect of Formal and Informal Sanctions on Delinquency: A Longitudinal Comparison of Labeling and Deterrence Theories. *The Journal of Criminal Law and Criminology*, *75*(4), 1222-1245.

VITA

Graduate School
Southern Illinois University

Daniel R. Kavish
Dkavi2@siu.edu

University Of Illinois Springfield
Bachelor of Arts, Criminal Justice, December 2009

Special Honors and Awards:
Outstanding Graduate Student Award - 2011

Thesis Title: Interactionist Labeling: Formal and Informal Labeling's Effects on Juvenile Delinquency

Major Professor: Dr. Christopher Mullins