

Conventional capital, criminal capital, and criminal careers in drug trafficking

by

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Abstract

Although the criminal career paradigm has explored various crime types, little effort has been conducted to systematically examine the pattern of drug trafficking careers. Ethnographic studies on drug trafficking have proposed that different forms of capital have an impact on the patterns of drug trafficking careers. The effects of conventional and criminal capital, however, have been the subject of much less empirical attention. Drawing from information on the criminal careers of 182 incarcerated drug traffickers, this study examines the role of conventional and criminal social capital on three dimensions of the criminal career perspective: the timing of entry into the illicit drug trade, the entry positions as a type of criminal achievement that traffickers first obtain in the drug distribution chain, and the progression of trafficking careers. Results suggest that weak conventional capital (e.g. legitimate employment) is associated with the early onset into trafficking careers. An offer coming from a friend or family member to enter the trade and self-initiation trigger the early onset. High levels of both criminal human (skills) and criminal social (contacts) capital are linked to starting at the most prestigious positions in the trade. In addition, criminal social capital is the most important factor to predict the progression of trafficking careers, while legitimate employment negatively affects the progression. Limitations and policy implications are discussed.

Keywords: criminal careers, drug trafficking, conventional capital, criminal capital

Dedication

To my husband and parents. Your support has been my best source of power.

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1. Introduction

The criminal career perspective emphasizes a sequence of crime committed by an individual offender (Blumstein et al., 1986). Research examining this perspective has emphasized a variety of dimensions that contain the onset of criminal offense, frequency, escalation, criminal career length, specialization, criminal achievement, and desistance (DeLisi & Piquero, 2011; Piquero et al., 2003). It has been applied to almost every type of criminal activities, including property and violent crimes (e.g. Farrington & Maughan, 1999; Kempf-Leonard et al., 2001; Laub & Sampson, 2003), sexual assault (e.g. Lussier et al., 2011; Lussier & Mathesius, 2012), domestic violence (e.g. Buzawa & Hirschel, 2008; Piquero et al., 2006; Winstok, 2008), and drug users (e.g. Ragan & Beaver, 2010). Furthermore, different criminological theories such as self-control (DeLisi & Vaughn, 2008; Morselli & Tremblay, 2004) and social bond theory (Laub & Sampson, 1993) have been employed to examine aspects of the criminal careers. These studies have shown that the criminal career perspective is applicable to various criminal activities and amenable to be analyzed under a diversity of theoretical perspectives.

Researchers have long been interested in illicit drug markets. Numerous studies have been conducted to research the entire operations from producing to retailing, the motives of drug traffickers to enter and desist from trafficking, or the tactics to avoid risks of legal enforcement (Adler, 1993; Bouchard & Nguyen, 2010; Decker & Chapman, 2008; Desroches, 2005; Zaitch, 2002). It is found that most high level traffickers are typically more mature than other offenders without major psychological problems (Adler, 1993; Desroches, 2005; van Koppen et al., 2010). Drug market entry may often be a matter of connections (Adler, 1993), and the structure of drug networks is loosely connected (Bright et al., 2012; Heber, 2009; Reuter and Haaga, 1989). Studies have shown that “contact” plays a vital role in the entry, continuity, and risk avoidance in the illicit drug trade (Adler, 1993; Bouchard & Nguyen, 2010; Bouchard & Ouellet, 2011; Decker & Chapman, 2008; Desroches, 2005; Heber, 2009; Zaitch, 2002). Although

scholars have used different terms to name those significant individuals or connections, the effects of such resources embedded in various forms of relations and networks are well documented in the literature on drug traffickers (Adler, 1993; Bouchard & Nguyen, 2010; Bright et al., 2012; Desroches, 2005; Decker & Chapman, 2008; Nguyen & Bouchard, 2013).

Social capital is defined as resources embedded in social relations and networks (Lin, 2001), while human capital refers to knowledge and skills acquired by individuals (Coleman, 1988). Research in conventional settings has found that social capital facilitates the process of job seeking, status attainment, and promotions in legitimate occupations (Adler & Kwon, 2002; Lin, 1999, 2001; Seibert et al., 2001). McCarthy and Hagan (2001) argued that a criminal version of social capital was needed in analyses of criminal activities. Therefore, criminal social capital is embedded in criminal relations and criminal networks, whereas criminal human capital indicates one's knowledge and skills of committing criminal offenses (McCarthy & Hagan, 2001). The primary assumption is that criminal social and human capital have a similar impact on criminal activities as social and human capital do on conventional behaviours (McCarthy & Hagan, 1995; 2001).

Kleemans and de Poot (2008) proposed a "social snowball effect" that people were approached through their social relations and introduced to organized crime (also see Kleemans & van de Bunt, 1999). After the offenders became more independent in terms of money, resources, knowledge and contacts, they progressed to develop their own ways of committing the offenses, and then they started to recruit people from their own social environment. This idea is central to the current dissertation. It highlights the importance of resources, personal characteristics of seeking opportunity to progress, and social relations that facilitate potential offenders to get involved in the criminal activities. However, it does not make a clear distinction between conventional and criminal capital, and it has not been examined systematically.

The emerging knowledge based on the qualitative studies has illustrated that both conventional and criminal capital embedded in social networks play a role in the criminal careers of drug traffickers including the onset, progression, and desistance

(Adler, 1993; Desroches, 2005; Morselli, 2001; Zaitch, 2002). It is suggested that potential traffickers may be introduced into the markets by acquaintances, friends, or family members (Desroches, 2005). Their legitimate employment (e.g. truck driver) and certain skills (e.g. pilot) may be the reason for why they are chosen (Decker & Chapman, 2008). Having criminal contacts and earning their trust are the most important factors that lead them to a higher position (Adler, 1993). Criminal networks are assumed to be key in maintaining and developing the business of illicit drug trafficking. Criminal networks facilitate access to criminal earnings and offer protection from detection and apprehension (Bouchard & Nguyen, 2010; Bouchard & Ouellet, 2011; Tremblay & Morselli, 2000). These findings have indicated the importance of resources embedded in different networks on the activities in the illicit drug trade.

This dissertation addresses two gaps in the literature on the criminal careers of drug traffickers. First, criminal career researchers have made little effort to analyze the trajectories of drug traffickers using quantitative methods to investigate a relatively large sample. Existing efforts have concentrated on the criminal careers in a general context of crimes, such as the onset of delinquency in childhood or adolescence (Blumstein et al., 1986; Elliott, 1994; Farrington, 2002; Farrington & Maughan, 1999; Piquero, 2000; Piquero et al., 2002), and the progression from status offense to serious criminal activities (Ayers et al., 1999; DeLisi et al., 2008; Piquero et al., 2006; Rojek & Erickson, 1982; Sheldon et al., 1989; Winstok, 2008). More attention is needed to explore whether the models developed for general offenders can be used to explain the criminal careers of drug traffickers, especially given some of the unique characteristics of that particular type of crime (consensual crime, older offenders, etc).

Second, this dissertation aims to examine the roles of two types of resources embedded in different networks in influencing the careers of traffickers: conventional capital and criminal capital. Conventional capital may play a role of informal social control, which refrains individuals from committing criminal offenses due to the fear of losing the investment they have made in the conventional world (Nagin & Paternoster, 1994; Sampson & Laub, 1990, 1993). Criminal capital, on the other hand, may facilitate access to information, resources, and contacts to start dealing drugs, get progression,

and achieve higher status. The criminal career outcomes of interest are three-fold. First, I will be interested in the onset of the trafficking careers, and especially its timing of the entry. Some traffickers are not involved in the illicit drug trade until late in adulthood, while others start trafficking in childhood or adolescence. Criminal achievement indicated by the entry positions is the second outcome that is frequently neglected in the analyses of criminal careers. Not surprisingly, the first position a trafficker achieves vary from transporter who carries drugs across borders to wholesaler operating large quantities of drugs in one transaction. Third, the progression of the trafficking careers will also be of interest. Some traffickers may enter at lower level jobs and make their way up to more prestigious positions, while other trajectories are equally possible (e.g. no progression, horizontal entry at high levels, etc).

I aim to fill these gaps by analyzing the criminal careers of 182 drug traffickers incarcerated in the UK. These traffickers were all convicted of a drug trafficking offence. The role they occupied in the trade, however, varied greatly. The sample contains one-time drug couriers, experienced couriers, financial investors and brokers, transport managers, retailers who dabbled into importation, and so forth. The specific objectives of the dissertation are three-fold. The first objective is to assess the age of onset of drug trafficking. Research has suggested that offenders involved in drug trafficking are relatively older as adults, compared to their counterparts committing other types of crime (Adler, 1993; Desroches, 2005; Laub & Sampson, 2003; van Koppen et al., 2010). The current study attempts to explore the factors that may influence the timing of entry into the drug trade. On one hand, it is suggested that conventional social capital (e.g. legitimate employment) is considered a type of investment and social bond, which may restrain potential offenders from committing crimes and delay the age of onset (Nagin & Paternoster, 1994; Sampson & Laub, 1990). On the other hand, research on drug trafficking has revealed that criminal capital embedded in the criminal network or the knowledge and skills of committing criminal activities is important to entering into drug markets (Adler, 1993; Decker & Chapman, 2008; Desroches, 2005). Therefore, the effects of the conventional forms of capital and criminal capital on the age of onset into the drug trade will be examined.

The second objective of the current study is to explore the first positions achieved by drug traffickers when they start working in the illicit drug markets. Since the position in the drug distribution chain is associated with power, resources, and risks, it could be considered another dimension of criminal achievement (Tremblay & Morselli, 2001). Scholars have argued that criminal capital is an important factor for predicting criminal achievement in the way of illegitimate earnings and risk avoidance (Bouchard & Nguyen, 2010; Bouchard & Ouellet, 2011; Morselli, 2001; Morselli & Tremblay, 2004). Differential abilities of access to criminal capital might also affect the starting positions gained by drug traffickers. If the relationship is revealed, it will have important implications for the understanding of criminal careers as these factors have hardly been considered in the past.

Finally, this dissertation explores the predictors of the progression in the illicit drug trade. According to ethnographic studies on drug offenders, progression in the drug markets may refer to dealing from small quantities of drugs to large ones, increasing frequencies of trafficking, and moving from lower-level positions to the higher-levels (Adler, 1993; Descroches, 2005; Zaitch, 2002). Past research has suggested that only a small proportion of traffickers can move up the ladder from street level to higher-level positions (Adler, 1993; Descroches, 2005; Zaitch, 2002). Based on the findings from the organizational literature that forms of conventional capital are key to career success (Seibert et al., 2002), criminal capital might have a similar impact on progression in drug markets. It is suggested that, beyond personal characteristics, an efficient criminal network plays an important role in criminal careers (Adler, 1993; Decker & Chapman, 2008; Desroches, 2005). Strong criminal capital may provide more information and resources regarding how to accomplish the job successfully, establish a solid reputation and trust that might increase the chances of progression, and indicate a form of co-offending that could help traffickers avoid detection and survive longer (Adler, 1993; Bouchard & Nguyen, 2010; Decker & Chapman, 2008; Desroches, 2005).

This dissertation makes several contributions to the criminal career perspective and research on the illicit drug markets. First, it will expand the criminal career paradigm by applying it to a specific population - drug traffickers who have not yet been examined

outside of ethnographic studies. Second, criminal achievement as another dimension of criminal careers will be examined, since it not only indicates an offender's performance but also may explain persistence in criminal activities. Finally, this dissertation considerably enhances knowledge of the role of conventional and criminal capital in criminal careers.

2. The Criminal Career Perspective

The criminal career perspective has long been the major concern in criminology. Researchers have proposed that the ideal criminal statistics should contain information on the life history of individuals (Piquero et al., 2003). Since the beginning of the 1980s, scholars started to pay more attention to the relationship between age and crime, and to examine whether and why the rate of committing criminal activities peaks in the late teens through mid-twenties. Researchers have questioned whether we can employ similar models to those found in the examination of legitimate careers to analyze patterns in crimes. Therefore, a criminal career perspective is defined as “the characterization of the longitudinal sequence of crimes committed by an individual offender” (Blumstein et al., 1986, p.12). Although numerous theoretical models have been proposed since the report of the Panel on Research on Criminal Careers initiated by the National Academy of Sciences in the U.S. (1986), many dimensions of the criminal career, including prevalence, frequency, onset, specialization, desistance, career length, and criminal achievement, have not been examined empirically until recent years (DeLisi & Piquero, 2011; Piquero et al., 2003). DeLisi and Piquero (2011) have summarized several of the well-supported conclusions of the criminal career perspective: 1) the onset of criminal careers in childhood is central in social behaviour and individual crime pattern studies; 2) although there are short-term specializations and versatilities, offenders are more likely to be generalists; 3) maturation, changing peer networks, and important life events, such as marriage, may trigger desistance as a gradual process rather than a discrete event; and 4) some highly active offenders could get extreme scores on almost every criminal career measure. Although these findings have approximately covered the dimensions of the criminal career paradigm, more efforts are still needed to explore models on the explanations of the onset of crime in adulthood (Eggleston & Laub, 2002), to evaluate the capability of applying the criminal career perspective to a different context – such as organized crime (van Koppen et al.,

2010), and to assess the effects of social and/or criminal network on the progression of criminal careers (DeLisi & Piquero, 2011).

2.1. The age of onset

Numerous studies have explored the onset of criminal careers, mainly to address three issues. The first is to assess the age of onset of a criminal career and to analyze the possible factors that influence the timing of the onset (Ayers et al., 1999; Blumstein et al., 1986; Carroll et al., 2006; DeLisi et al., 2008; Elliott, 1994; Farrington & Maughan, 1999; Le Blanc & Frechette, 1989; Nagin & Smith, 1990; Paternoster, 1989; Piquero, 2001; Weiner, 1989). The second concerns late onset in adulthood and the similarity/difference between early and late starters (Dean et al., 1996; Eggleston & Laub, 2002; Gomez-Smith & Piquero, 2005; van Koppen et al., 2010; Zara & Farrington, 2010). The last is to examine the effects of early onset on other dimensions of criminal careers, including subsequent criminal activities, the length of the career, persistence, specialization, progression and desistance (Bacon et al., 2003; Carpentier et al., 2011; DeLisi, 2006; Loeber & Farrington, 2000; Mazerolle et al., 2010; McCluskey et al., 2006; Nutsuaki et al., 2008; Piquero et al., 1999; Zhang et al., 2011). Each is explored in turn.

When exploring the relationship between age and participation in criminal activities, one of the biggest concerns of researchers is the average age at which individuals initiate a criminal career. Although the definition of the age of onset varies from the first criminal offense, first police contact, to first conviction, findings from longitudinal studies and self-reported surveys have indicated that initiation age peaks around mid to late teens – from fourteen to eighteen years old (Blumstein et al., 1986; Elliott, 1994; Farrington & Maughan, 1999; Kelley et al., 1997; White & Piquero, 2004). For instance, Farrington (2001) analyzed data from the Cambridge Study up to age 40 and found that the average age of the first conviction was around 18.6 years. However, the age of onset is not stable but varies from one type of offense to another (Le Blanc & Frechette, 1989). The initiation age of serious offense including violent crime, for instance, is older than less serious offenses. Weiner (1989) suggested that violent crime was likely to occur relatively late in life between age eighteen and twenty-four.

Furthermore, empirical studies have examined the predictors of the onset of criminal careers and revealed that biological factors such as gene X and birth weight (DeLisi et al., 2008; Tibbetts & Piquero, 1999), psychological factors including low IQ, risk-taking disposition, poor child rearing, poor mental inhibitory control, and high impulsivity (Carroll et al., 2006; Nagin & Farrington, 1992a; Piquero, 2001), as well as social factors such as attachment to parents and exposure to delinquent peers (Ayers et al., 1999; Nagin & Smith, 1990; Paternoster, 1989) are associated with childhood onset for law breaking behaviours and initial convictions. For instance, Sampson and Laub (1993) argued that lack of informal social control in family and school could be a factor causing the onset of delinquency in childhood.

Although most studies on the onset of criminal careers focus on youths and adolescents, researchers have asserted that it is important to analyze the factors associated with late onset of crime (Sampson & Laub, 1993). However, the studies that emphasize late onset offenders remain limited. One possible reason could be the conventional belief that onset in adulthood is rare and uncommon (Eggleston & Laub, 2002; van Koppen et al., 2010). While McGee and Farrington (2010) argued that most adult onset offenders had already been involved in previous delinquent activities in childhood and/or adolescence but were not detected by the criminal justice system, an increasing amount of research has revealed that a large proportion of offenders committed their first criminal activities as adults (Blumstein et al., 1986; Eggleston & Laub, 2002; Gomez-Smith & Piquero, 2005; van Koppen et al., 2010). Researchers have revealed that several factors can be associated with late onset, such as biological and psychological factors including having a mother who smoked cigarettes during pregnancy (Gomez-Smith & Piquero, 2005), childhood anxiety and adulthood neuroticism (Zara & Farrington, 2010), and social factors including employment, income, and marital status (Eggleston & Laub, 2002; Harris, 2011; Sampson & Laub, 1990).

An increasing number of studies have attempted to question whether the mechanism of the onset in childhood and adolescence is different from those who are involved in crimes in adulthood. Some researchers argue that although early and late starters might have different characteristics in childhood and adolescence, when they

age, the differences between the two groups become smaller (Sampson & Laub, 1990; Zara & Farrington, 2010). For instance, Sampson and Laub (1990) examined continuity and discontinuity of delinquent behaviour in Glueck's sample of 438 male delinquents and 442 non-delinquents in Boston. The results indicated that job stability was negatively associated with crimes and deviance committed in adulthood among both early and late starters. In addition, for ever-married males, attachment to spouse and job stability were significantly negative predictors of adult onset offenders. The authors concluded that early and late onset offenders shared a similar mechanism of offending and that informal social bonds played an important role in adult crime and deviance. Eggleston and Laub (2002) further investigated whether the processes of adult offending were different from onset of crime before age eighteen. The question was addressed by examining a sample of 889 males and females who were born in 1942 or 1949 in Racine, Wisconsin. The results indicated that the predictors associated with juvenile delinquency had similar effects on adult offending: delinquent peers, employment, and substance use were significantly associated with adult onset. When comparing the effects of these variables on adult offenders and persistent offenders, almost no significant difference was found. Rate of employment since high school was the only significant variable to distinguish the two groups. More continual employment increased the possibility of getting involved in criminal activities in adulthood. The authors stated that the reason for this positive relationship remained unclear and required more attention.

In addition to considering the age of onset as an outcome variable, scholars have also explored how the age of onset, as a predicting factor, can influence other dimensions of criminal careers. A most commonly acknowledged correlation is between early onset and the future involvement in criminal offenses (Bacon et al., 2009; Hawkins et al., 1999; White & Piquero, 2004; Zhang et al., 2011). In addition, age of onset has been found to be associated with crime variety, as most persistent offenders who begin to get involved in criminal offenses early in life are more likely to commit a variety of crimes rather than specializing in one type of offense (Carpentier et al., 2011; DeLisi, 2006; Marzerolle et al., 2000; Piquero et al., 2007).

For the inverse relationship between early onset and subsequent delinquency, researchers have different theories on whether early onset is causally associated with future delinquency/criminal offense (Gottfredson & Hirschi, 1990; Nagin & Farrington, 1992b; Nagin & Paternoster, 1991). Some argue that early onset is significant not only to subsequent crimes, but also the frequency and severity of the offending because early onset is a sign and label that reduces the inhibitions to delinquent behaviour and pushes the offenders away from conventional society to the criminal world (Bacon et al., 2009; Nagin & Paternoster, 1991). Others propose that early onset is simply a marker of some significant personal traits, such as low-self control and/or antisocial attitudes, indicating a criminal propensity that is the actual reason for further crimes (Gottfredson & Hirschi, 1990). Empirical studies have found evidence supporting the significant impact of early onset on the continuity and progression of criminal careers (Loeber & Farrington, 2000; McCluskey et al., 2006; Natsuaki et al., 2008). For instance, children who engage in disruptive behaviour or minor aggression are more likely to escalate to serious criminal behaviours (Hawkins et al., 1998; Loeber et al., 1993; Loeber & Farrington, 2000). Early starters are also at higher risks of committing serious violent crime (Marzerolle et al., 2004), using weapons (McCluskey et al., 2006), and starting to use illicit substances at an early age (Loeber & Farrington, 2000).

The above studies on the age of onset have demonstrated that: 1) the initiation of a criminal career usually occurs in late teens or early to mid twenties depending on the type of criminal activities committed by the offenders; 2) adulthood onset is not a rare event, and the comparison between early onset in childhood/adolescence and late onset in adulthood is essential to provide better understandings of both groups; and 3) early onset is associated with many other aspects of the criminal career perspective, and it affects future criminal behaviours in terms of continuity and progression. However, several questions remain unresolved in studies. One of the problems is that most analyses merely emphasize property and violent crimes. Although other types of crime have been included into the analyses of criminal careers in recent years, such as sexual assault (Lussier et al., 2011), drug abuse (Ragan & Beaver, 2010), and domestic violence (Buzawa & Hirschel, 2008), organized crime, especially drug trafficking, has rarely been examined (for an exception, see Kleemans, & de Poot, 2008). Due to the

substantial differences between conventional crimes and organized crime, criminal careers might be different for offenders involved in organized crime in the way of preparation, specific skills and contacts (van Koppen et al. 2010). Research on the age of onset of organized crimes suggests that the initiation age is assumed to be higher than those for property and violent crimes mid-twenties (van Koppen et al., 2010). The unique characteristics of those offenses and offenders may explain this result. For instance, compared to ordinary offenders, organized crime offenders are likely to “take advantages of their circumstances as a result of opportunities becoming available to them, or becoming more appealing to them compared with other alternatives” (van Koppen et al. 2010, p. 371). Therefore, extending the focus of criminal careers to various crime typologies is needed to explore whether the general pattern of the initiation of criminal careers can be applied to offenders committing crimes usually categorized as “other” in the official crime index (DeLisi & Piquero, 2011).

Another issue lies in the comparison between early and late starters. Most analyses draw the line at distinguishing early and late onset for early teens at age thirteen or fourteen (Loeber & Farrington, 2000; Mazerolle et al., 2004; Stattin & Magnusson, 1995). This could be problematic because for certain types of crime, the initiation age of offending is much older. Researchers have argued that the average initiation age of organized crime including drug trafficking is much older, around mid-twenties (Kleemans & de Poot, 2008; Laub & Sampson, 2003). For instance, Kleemans and de Poot (2008) found that none of the offenders in their sample committed organized crime were younger than age eighteen and the majority of them were involved in organized crime until thirty years old. It is suggested that sociological factors might provide appropriate explanation of why certain offenders got involved in criminal activities in adulthood, since they did not show either sign of low self-control or psychological problems in childhood (Kleemans & de Poot, 2008; van Koppen et al., 2010). Therefore, a better distinction between early and late starters needs to be considered. Further comparisons between adolescent onset and adult onset are crucial to understand patterns of the onset in criminal activities (Eggleston & Laub, 2002).

Most ethnographic studies on drug traffickers may not clearly use the term “onset”, but they discuss the process of entering into the illicit drug trade. The findings of interviews and observations have suggested that the average onset age of drug trafficking is relatively older than expected (Adler, 1993; Decker & Chapman, 2008; Desroches, 2005). Moreover, drug traffickers who began trafficking at the middle or upper levels were relatively older than those starting at the lower levels (Alder, 1993). Entering into drug markets may not be as straightforward as predatory crimes. Some drug users move up the ladder from street level deals to the wholesale level, whereas a certain number of drug traffickers simply jump in the market at the middle or higher-level (Adler, 1993; Desroches, 2005). For instance, using a sample of 70 Canadian higher-level drug traffickers, Desroches (2005) described three major pathways to entry into the illicit drug trade: moving from retail level dealing to wholesale levels, direct entry through recruitment, and actively pursuing opportunities. The finding suggested that around 25% of the traffickers started as retailers, while the majority of drug traffickers (64%) were recruited directly into a higher-level position by friends, relatives, associations, or prison inmates. The rest of the traffickers were actively seeking opportunities to start drug trafficking. Adler (1993) discussed different entry pathways based on the different positions they played in the drug distribution chain. There were two levels of entry for drug dealers: lower-level and middle or upper-level. The former referred to the typical routine wherein some drug users gradually purchased a larger amount of drugs than their personal daily usage and then became lower-level dealers supplying other users. In the later pathway, traffickers entering into the higher level of the drug distribution chain had no previous involvement in drug trafficking but connected to the existing middle or upper level traffickers, whose first purchases were typically large amounts of drugs. For smugglers, however, recruitment or invitation was more common. Given the nature of international drug transportation, capability, skills and knowledge of navigating the certain types of vehicles were important characteristics when recruiting potential transporters.

2.2. Escalation and progression

Studies on the stability and changes of antisocial individuals have found that criminal careers progress linearly in terms of the seriousness and specialization of offenses (DeLisi & Piquero, 2011; Loeber & Hay, 1997). When exploring the development of criminal careers, researchers employed “escalation” to describe “the tendency for offenders to move to more serious offense types as offending continues” (Blumstein et al., 1986, p. 84). While many criminal career researchers prefer to use “escalation” (Ayers et al., 1999; DeLisi et al., 2008; Piquero et al., 2006; Rojek & Erickson, 1982; Sheldon et al., 1989; Winstok, 2008), several scholars employ the term “progression” to indicate the tendency to move from minor offenses to serious criminal activities (Brame et al., 2010; Kempf, 1988). No clear difference between these two terms has been distinguished. For instance, Kempf (1988) indiscriminately switched from escalation to progression when exploring the seriousness of offenses among a group of youth. Brame and his colleagues (2010) employed progression to analyze recidivism. For the purpose of this dissertation, progression would be more appropriate to describe the development of criminal career among drug traffickers due to the organizational nature of drug trafficking.

To assess the tendency of conducting serious offenses, researchers have emphasized offense type switching in different occasions and the average number of serious offenses committed during a period of time (Ayers et al., 1999; Blumstein et al., 1988; Liu et al., 2011). However, these two common ways of defining progression do not cover all the aspects of progression for drug traffickers. For instance, a transporter could be promoted to manage a particular routine by recruiting others to complete the delivery that remains the same quantity of drugs as he/she used to carry across the borders. Here, the offense type is still drug smuggling and the number of offenses could be stable, but the trafficker actually moves to a higher-level position that provides more power, resources, and protection, which should also be considered a type of the progression in drug trafficking careers.

Past research on drug trafficking has illustrated that the progression of drug traffickers might have multiple forms (Adler, 1993; Decker & Chapman, 2008;

Descroches, 2005). For instance, an international transporter may get promoted to a higher level to recruit others and manage the transportations in a particular routine; a wholesaler who primarily sells drugs in one city may start dealing to multiple cities; a specialist in money laundering may begin to invest some profits in smuggling cocaine into the country (Adler, 1993; Decker & Chapman, 2008; Descroches, 2005). Le Blanc and Frechette (1990) used a broader approach to define escalation as “the movement on a sequence of diverse forms of delinquent activities” (p. 102). This definition removes the focus on “serious offenses”, indicating that all types of criminal activities can be developed subsequently, and when continuing in the criminal activities, the changes of the offenses can be both quantitatively and qualitatively (Le Blanc, 2002). A progression for drug traffickers, therefore, is not only the increase in the quantities they deal, but also the changes of positions they achieve in the drug distribution chain when the trafficking career continues. The progression here reflects the promotions in conventional careers analyses (Burt, 1992, 1997; Seibert et al., 2002), indicating individual capabilities of accomplishing illicit drug operations transactions.

Several aspects of escalation/progression have been explored in the context of general crimes. First, empirical studies have examined whether offenders exhibit escalation in seriousness, and if so, in what context. Certain offenses in particular have been shown to lead more often to escalation, such as from domestic violence to serious assaults (Piquero et al., 2006; Winstok 2008), from theft to violence (Osgood & Scheck 2007), from robbery to homicide (DeLisi et al., 2008), and from status offenses to serious offenses (Rojek & Erickson 1982; Shelden et al., 1989). Second, scholars have put some effort in assessing what personal characteristics might influence the process of escalation. For instance, Blumstein and his colleagues (1988) revealed that among adult offenders, whites were more likely to show trends of specialization and escalation in seriousness than their non-white counterparts. Gender may also play a role on the escalation of criminal careers (Shelden et al., 1989). Kyvsgaard (2003) examined the escalation among a large sample of Danish individuals aged 15 and older and found that males were more likely to escalate to serious criminal activities than were females.

In addition to the examination of the static characteristics such as gender and ethnicity, an increasing number of studies have assessed the dynamic factors that can predict the progression of criminal careers (Le Blanc, 2002). For instance, Hoffmann and Cerbone (1999) examined the relationship between stressful life events and escalation of delinquency in early adolescence and found that negative events increased escalation of delinquency for male offenders from lower-income families, or with low self-esteem. Ayers and his colleagues (1999) examined the effects of social bond more closely. Using a sample of 566 youths in Seattle, Ayers et al. (1999) found that social bonds and social relationships played a role in the escalation of the offenses, although the effects were significant to identify female escalators than their male counterparts. They also found that interactions with delinquent peers were significantly related to committing serious crimes. Their findings suggested that type of contacts (delinquent or not) is more important than presence or absence of social interactions. Brenda and his colleagues (2000) echoed this finding by examining the escalation from serious adolescent offenders to adult felons. They found that negative family factors including being neglected or abused and having unlawful behaviours among family members, association with delinquent peers, and gang affiliation were significantly predict of escalation. These findings illustrate the importance of sociological factors in the analyses of change in criminal careers. Strong bonds to conventional society reduce the likelihood of progression, while strong connections to the criminal world through delinquent peer association and gang affiliations facilitate the progression of criminal careers. This dissertation draws from these findings to build a framework examining progression in the criminal careers of drug traffickers.

Several shortcomings of the existing studies on identifying the progression patterns need to be highlighted. First, most research has employed a limited age range from late teens to mid-twenties to assess the escalation/progression of criminal careers (e.g. Ayers et al., 1999; Brame et al., 2010; Hoffmann & Cerbone, 1999; Kemf, 1988). As discussed previously, a non trivial amount of offenders commit their first criminal activities as adults. Therefore, it is important to expand the analyses of the progression into adult onset offenders and explore whether they have similar or different developmental pathways. The second shortcoming is that many studies rely heavily on

official data to analyze progression (Armstrong & Britt, 2004; Brame et al., 2010; Liu et al., 2011; Sheldon et al., 1989). This approach uses a relatively narrow definition of progression with a focus on the seriousness of offense, which may restrain the understanding of progression into certain areas, like promotion to a better position inside drug markets. Third, although researchers have started to include various crime types in the analyses including domestic violent offenders (Piquero et al., 2006; Winstok 2008) and drug users (Dabney & Hollinger, 2002), the primary focus of most studies is still on property and violent offenses.

In terms of drug trafficking, little is known about the particular patterns of the progression in the criminal career literature. Some researchers have discussed a general progression of drug trafficking: from drug users to dealers. Faupel and Klockars (1987) proposed a four-step process of progression among a group of heroin users. With the consideration of two main factors, availability referring to the opportunities to access to drugs and drug dealers, and life structure (defined as daily activities of occupation, recreation, and crime), the authors found that users with high drug availability and scoring higher on life structure were more likely to start dealing heroin. To understand the factors associated with progression in the illicit drug trade, it is suggested that making, developing, and maintaining appropriate contacts are crucial to progression (Faupel & Klockars, 1987). Kleemans and de Poot (2008) highlighted that capital accumulation, skills or expertise, and social networks were the most important factors that fuelled progression in organized crime. Prior qualitative research on drug traffickers like Desroches' (2005) study described detailed patterns of progression in the illicit drug markets. For those who started small at a lower level, some retailers developed higher-level contacts after spending some time on the streets who were willing to trade with them. Concerns regarding the risks of being arrested and the problems of doing business with drug users and addicts provided incentives to some street-level dealers who started to seek opportunities through their contacts to move upwards (Desroches, 2005). Adler (1993) discussed two types of upward mobility among dealers and smugglers: rising through the ranks and stage-jumping. She found that forming particular connections at the upper levels is important for both types of progression.

2.3. Criminal achievement

Scholars have recently argued that in addition to prevalence, frequency, and specialization in the criminal career paradigm, criminal achievement is an important element that should draw more attention as it emphasizes the “performance” of offenders. When repeatedly failing to accomplish the offenses and encountering frustration, the likelihood of desistance in criminal activities will increase (Laub & Sampson, 2003; Paternoster & Bushway, 2009; Shover & Thompson, 1992). On the other hand, the experience of being successful in criminal activities may have an impact on the development and length of criminal careers (Laub & Sampson, 2003; Nguyen & Bouchard, 2013). For instance, Shover and Thompson (1992) revealed that criminal financial success was positively associated with the level of incarcerated offenders’ expectations that committing crimes was beneficial to their lives in terms of providing more friends and happiness. Reuter and Haaga (1989) found that the unusually large amount of illegitimate earning from illicit drug markets was one of the important reasons for drug dealers to stay in the business. Therefore, criminal achievement can be a crucial motivation to make certain “chronic” offenders stay in the criminal lifestyle (Bouchard & Nguyen, 2010; Lussier et al., 2011; McCarthy & Hagan, 2001; Morselli & Tremblay, 2004; Tremblay & Morselli, 2000).

To answer what makes some offenders more successful than others, two main dimensions of criminal achievement have been investigated: illegitimate earnings (McCarthy & Hagan, 2001; Morselli & Tremblay, 2004; Nguyen & Bouchard, 2013; Tremblay & Morselli, 2000), and risk avoidance (Bouchard & Nguyen, 2010; Bouchard & Ouellet, 2011). In legitimate careers, these outcomes would translate into analyses of how much employees earn and how good they are at keeping their jobs. Past research has highlighted several characteristics of criminal achievement. First, higher offending rates may not necessarily enhance criminal achievement (Bouchard & Ouellet, 2011; Tremblay & Morselli, 2000). Some of the most successful offenders are involved in infrequent but large pay-off transactions. In addition, similar to legitimate businesses in which only a few individuals are high-income earners, scholars suggest that only a small proportion of offenders can earn a large amount of money in an efficient way (Reuter et

al., 1990; Reuter & Haaga, 1989), and that most offenders are low earners (Tremblay & Morselli, 2000; Wilson & Abrahamse, 1992). Third, mobile offenders who would like to travel and move from their familiar areas are likely to have larger amount of criminal earnings (Morselli & Royer, 2008). Finally, co-offending, the structure of the criminal network, and mentorship significantly reduce the risks of being detected by law enforcement (Bouchard & Nguyen, 2010; Bouchard & Ouellet, 2011; Morselli et al., 2006).

Although criminal achievement has been operationalized more frequently in terms of monetary gain and cost avoidance, it may also be measured in other dimensions. Lussier et al. (2011) expanded criminal achievement by examining productivity and sexual gratification among sexual offenders. They argued that the frequency of criminal commission, the number of events committed by the same offender, and the amount of gratification from each offense could indicate how productive and successful the sexual offender has been. This argument not only effectively translated criminal achievement to sexual offending, but also illustrated that there could be other measures of criminal achievement, rather than earnings and cost avoidance. Scholars have argued that criminal status attainment is another dimension of criminal achievement (Tremblay & Morselli, 2000). This can be better explained with the comparison of occupational achievement in conventional careers. Certain positions not only embody success in an area of specialty, but also indicate one's prestige, reputation, and capability of accomplishing a variety of tasks. Translating this idea to the criminal world for offenders involved in the illicit drug trade, the positions attained in the drug trade might be used as a proxy to represent their reputation, commitment, and capability of collaboration with others. Positions in the illicit drug trade are found to vary in access to power and resources, easiness of replacement, and risks of detection and apprehension (Adler, 1993; Desrochers, 2005; Dorn et al., 1998; Zaitch, 2002). For instance, Dorn and his colleagues (1998) found that drug traffickers at higher positions were more likely to build multiple layers to reduce the possibilities of being arrested, while lower level traffickers, such as transporters, likely had less knowledge of the entire operation and faced higher risks of detection and apprehension.

Therefore, positions attained in the drug distribution chain can be taken as an indicator of the level of criminal success that a trafficker can achieve, as they represent not only the potential opportunities of earning money but also the prestige, power, and the level of control in the drug markets (Adler, 1993; Dorn et al., 1998; Zaitch, 2002). An increasing number of studies on drug traffickers reveal that individual characteristics, skills, contacts, and financial capital are important factors that influence the status one can achieve through his/her criminal career. For instance, Dorn et al. (1998) found that some entrants with sufficient start-up capital could quickly enter into drug markets at a higher level with more control over handling operations of drug importation and risks of law enforcement. Adler (1993) suggested that skills and knowledge of navigating certain equipment such as aircrafts or vessels would lead potential traffickers to the position of smuggling drugs from Mexico to the USA. The current study examines the differences in traffickers who occupy low, middle, and high level positions in the trade.

3. Conventional and criminal capital

Scholars have long been interested in examining how different forms of capital can affect individual's life and different aspects of society. In particular, social and human capital are the main concern (Burt, 1997; Coleman, 1988; Lin, 2001). Several definitions of social capital have been discussed as the interpretation of the concept varies according to what scholars decide to emphasize. Coleman (1990) emphasized the function of social capital that was "a variety of different entities having two characteristics in common: they all consist of some aspect of a social structure, and they facilitate certain actions of individuals who are within the structure" (p. 302). Portes (1998) focused on the actor side and defined social capital as the ability of actors to protect benefits within social networks or social structures. Other researchers have paid attention to resources and argued that social capital consisted of resources embedded in social networks, which could be assessed and used by actors (Lin, 2001). With slight differences, all these definitions address benefits and resources that individuals could gain through important social relations and networks. Lin (2001) identified two functions of social capital accessed by expressive and instrumental actions. The first type of action was to maintain existing valued resources an individual already had, which typically led to acknowledgement, well-being, and recognition, whereas the second type was to gain additional resources that one had not yet possessed, such as promotion, bonus increase, or seeking a job. Human capital, on the other hand, refers to individual ability (Burt, 1997). It is considered "the added value within the laborer themselves" (Lin, 2001, p. 9), such as knowledge, skills, and other assets. Most researchers agree that education, training, experience are the common indicators of human capital, while other suggests that health is also a component (Burt, 1997; Coleman, 1988; Lin, 2001). Investment in human capital assists individuals with status attainment and promotion in their conventional careers (Adler & Kwon, 2002; Lin, 1999, 2001; Portes, 1998).

The concepts of social and human capital can be expanded from the conventional settings to criminal settings. As Coleman (1988) proposed that social capital existed in the structure of social relations between actors, embeddedness in criminal relations or networks, therefore, provides recourses in the same way that occurred within the conventional contexts, such as getting a job (McCarthy & Hagan, 1995). Criminal social capital was further defined as the associations with skilled offenders while criminal human capital referred to specialized skills and knowledge of offending (McCarthy & Hagan, 2001). Burt (1997) suggested that while “human capital refers to individual ability, social capital refers to opportunity” (p. 339). Therefore, when borrowing social capital to analyze crime, both conventional forms of capital and criminal capital should be considered, since the resources provided by these two types of capital are different. In short, in the current study, conventional capital is defined as the resources embedded in conventional social relations and social networks, while criminal capital is the general term used to refer to resources within criminal networks (criminal social capital) and offender's knowledge and skills of committing crimes (criminal human capital).

Criminologists have widely employed the concept of social capital to explain deviant activities. Stemming from different theoretical perspectives, two approaches have been proposed. The first one employs social capital as an expansion of informal social control and emphasized the expressive function of social capital. The second approach has developed from differential association theory and focused on instrumental actions. Arguably, the first approach highlights the function of conventional capital, such as legitimate employment and marriage, which restrains rational individuals from criminal offenses (Nagin & Paternoster, 1994; Sampson & Laub, 1990). The second approach indicates the importance of criminal capital that facilitates different dimensions of the criminal career paradigm (Bouchard & Nguyen, 2010; McCarthy & Hagan, 1995, 2001; Morselli, 2001; Nguyen and Bouchard, 2013).

3.1. Conventional capital and criminal careers

Scholars have employed conventional capital (whether human or social) to examine criminal activities. For instance, at the macro level, social capital is considered an important predictor of crime rates among neighborhoods. Rosenfeld et al. (2001) argued that lack of social capital (measured as trust and civic engagement) in a community would increase the levels of homicide rates. Browling and his colleagues (2004) operationalized social capital as social networks and reciprocated exchange, solidarity, and trust, and they found that higher levels of network interaction and reciprocated exchange would significantly reduce the neighborhood homicide rate in Chicago. At the micro level, it is argued that lack of family support, and/or absence of a significant relationship such as marriage would result in insufficient social capital that triggered criminal activities (Sampson & Laub, 1990). Recognition and trust were key to maintain the conventional status and to inhibit individuals from committing crimes. For example, Salmi and Kivivouri (2006) found that weak social capital measured as low parent support, low teacher control, and low interpersonal trust was associated with juvenile delinquency. In addition, parental support and the sense of belonging obtained from expressive actions would offer protection and reduce victimization rates. McCarthy et al. (2002) found that street youths who reported belonging to fictive street families (how street-related social capital was operationalized) were less likely to be victimized in violent crimes.

3.1.1. *Conventional capital and the onset of a criminal career*

Coleman (1988) suggested that “social capital is productive, making possible the achievements of certain ends that in its absence would not be possible” (p.98). Adler and Kwon (2002) proposed that one benefit of social capital was solidarity in the form of social norms, beliefs, and trust, which enhanced informal social controls and established higher involvement with the association. Additionally, the notion of solidarity could guide criminologists to analyze why individuals began involved in criminal activities. The basic assumption was that social norms, beliefs, and coherent relationship created compliance and inhibited individuals from committing crimes (Adler & Kwon, 2002). Those with little

social investment or weak social capital had a higher chance of getting involved in criminal offenses. In addition, by linking social capital to social bond theory as a form of investment or commitment, involvement of criminal activities could be explained in the following way: rational individuals would be deterred from breaking the law when they had more investment in social capital in the conventional world; conversely, when there was little social investment or damaged social capital (losing one's job), the chance of engaging in the criminal world increases (Nagin & Paternoster, 1994).

A number of studies have revealed that legitimate employment may play a role in the onset of drug trafficking (Adler, 1993; Decker & Chapman, 2008). For traffickers who entered at middle or upper levels, individual and social characteristics highlighted in legitimate careers, such as intelligence, skills, knowledge, and connections, could be noticed by recruiters and then provide opportunities to potential offenders to start their careers. For instance, Adler (1993) found that when recruiting new members, some existing drug traffickers likely recruited those they had known through legitimate business. The interview data of Decker and Chapman's study (2008) of a sample of 34 high-level drug smugglers echoed this finding that individuals involved in import-export businesses had a higher chance of being recruited into drug smuggling due to the legitimate cover and their expertise in the knowledge and skills of transportation. On the other hand, traffickers starting at lower-levels - either dealing drugs on streets or transporting drugs cross borders between countries - were more likely to get involved in drug trafficking due to unsatisfied employment. They might be paid poorly from legitimate occupations, or have debts, needs, or other financial problems. When someone provided an illegitimate opportunity of trafficking drugs to double their income or solve their problems, they might simply take it. The Colombian couriers in Zaitch's study (2002) illustrated this scenario. Most transporters were recruited to smuggle cocaine either packed in suitcases or swallowed/hidden in their bodies from Columbia to the Netherlands because they were desperate for money at the moment a friend or relative proposed the opportunity.

3.1.2. Conventional capital and progression

Organizational studies on legitimate careers have illustrated that social capital affects the career success in terms of salary, promotions, and career satisfaction (Burt, 1992, 1997; Podolny & Baron, 1997; Seibert et al., 2001). Expanding this idea to the criminal world, most criminologists emphasize the resources embedded in the criminal network rather than conventional social network to analyze the progression of criminal careers, although some of them still use the term “social capital” (Stephenson, 2001; von Lampe, 2009). However, few scholars have examined how conventional capital can affect the developmental process of criminal careers. Informal social control is the primary concern to apply conventional capital to the progression of criminal careers. Sampson and Laub (1993) argued that social capital went beyond simple investment or commitment, which was produced by social relations. It is argued that changes in roles and environments in one’s life, considered as social investment or social capital, are important to understand the progression in the life course of criminal activities. Social capital is crucial to facilitate “effective ties that bond a person to societal institutions” (Laub & Sampson, 1993, p.310). Because of the reciprocal nature of social capital, the investment made by the employer may trigger a return investment by the employee. Therefore, having legitimate employment could indicate the strength of social capital. The investments of employees and spouses would reduce the possibility of committing further crimes.

Although social capital has been used to analyze the development process of criminal careers, more attention has been paid to how rebuilding social capital such as legitimate employment in adulthood and marriage affects the turning point of juvenile offenders, when they begin to commit fewer or less serious criminal offenses than before (Lamb & Sampson, 1993, 2003). To our knowledge, no empirical study has employed the concept of conventional social capital and examined its effect on the progression of criminal careers. However, studies have revealed that relations to parents or family members are associated with the progression of criminal careers (Ayers et al., 1999; Benda et al., 2000). These findings indicate the importance of taking conventional capital into consideration to predict progression, although it is not directly measured and examined.

3.1.3. *Conventional capital and criminal achievement*

Researchers rarely use the term conventional capital to assess criminal achievement, although some of them have found that legitimate employment and income are positively associated with criminal achievement (Lussier et al., 2011; Reuter et al., 1990; Tremblay & Morselli, 2000). The basic assumption of connecting conventional capital to criminal achievement is two-fold. The first emphasizes that certain forms of conventional capital, such as legitimate employment and income, may indicate the capability and specific organizational skills of the offenders, which leads to a higher level of criminal achievement. Illegitimate earnings and risk avoidance are the two common measures of criminal achievement have been assessed in these studies. For instance, Tremblay and Morselli (2000) examined criminal achievement among a group of 410 inmates in California and found that legal monthly income is positively related to the illegal monthly earnings when the offenders were working. Lussier and his colleagues (2011) examined what factors made sexual offenders more “successful” than others in terms of avoiding imprisonment and found that having a part-time or full-time legitimate job was positively associated with risk avoidance. The skills and capability shown in the legitimate sector can be crucial to the positions a trafficker can achieve in the illicit drug trade. Decker and Chapman (2008) found that individuals employed in auto body repair shops were likely to be recruited as specialists, due to their expertise in boat or truck construction and capability of building compartments.

The second assumption of the relationship between conventional capital and criminal achievement is widely discussed in ethnographic studies on drug traffickers. Different legitimate occupations lead to different positions in the illicit drug trade. Desroches (2005) found that the first roles played by traffickers varied based on the types of legitimate employment they had. Being unemployed was likely to result in starting at lower levels, while being involved in money-managing companies led traffickers to begin as a wholesaler or money laundering specialist. In sum, although researchers may not clearly use the term conventional capital in their studies, the effect of conventional capital on criminal achievement has been observed in various forms. The current study expands these studies to another dimension of criminal achievement

and examines the relationship between conventional capital and the positions that traffickers first obtain in the illicit drug trade.

3.2. Criminal capital and criminal careers

Social capital has been used to explore the dynamic of the relationship between peer influence and delinquency. Here, it is not the absence but presence of social capital that contributed to deviant behaviours, since individuals might use the resources within the social relations and social network to gain new things that they have not possessed yet. In other words, beyond the mere effect of the association with delinquent peers, the resources and/or benefits one could achieve within the groups influence involvement in delinquency. Haynie (2001) have illustrated that juveniles with higher social capital (having a high network density) are more likely to engage in deviant behaviour when peer delinquency is controlled because delinquency was supported by such peer groups and would return more social capital to youths who committed deviant behaviours. This finding illustrates the important of resources embedded in criminal relations and how it benefits criminal behaviours. From this perspective, the concept of social capital is extended to the consideration of resources and skills in the criminal relations and criminal network. Therefore, criminal capital is the more appropriate term to use in examining the effects of those particular resources on criminal offenses.

3.2.1. Criminal capital and onset

Criminal social and human capital are considered the “bad” versions of social and human capital, since they are expected to facilitate criminal, as opposed to legitimate activities. Criminal networks appear to be important, especially in crimes like drug trafficking. Kleemans and de Poot (2008) proposed the concept of “social opportunity structure” to describe how offenders get access to organize crime, while others are never in a position to seize such an opportunity. Family members, friends, co-workers, and acquaintances from leisure activities are all potential contacts connecting the conventional world and the criminal world together. Stephenson (2002) examined the creation and use of criminal capital among a group of street youth in Moscow and found

that adolescents needed to help incarcerated adult offenders as a way of earning the opportunity to be introduced to the adult criminal world. Studies on illicit drug markets revealed the importance of social network or connections to the onset of drug traffickers (Adler, 1993; Decker & Chapman, 2008; Descroches, 2005; Reuter & Haaga, 1989). For instance, Decker and Chapman (2008) found that both personal ties including ethnic groups, family members, and friendship, and organizational ties, such as involvement in boating and import-export business, were ideal ways to recruit other individuals into drug smuggling. Although some potential smugglers, such as boat captains or pilots, had certain skills or knowledge, Decker and Chapman (2008) found little evidence that they were simply recruited because of their specific skills, if they were unknown to any existing smugglers. This finding, therefore, indicated that the criminal network might play a more important role than personal skills for specific positions of the drug distribution chain.

3.2.2. *Criminal capital and progression*

A number of studies suggest that the structure of social networks has an impact on the progression of legitimate careers. For example, Granovetter (1973) proposed that weak ties were “strong” and important because compared to the strong ties that bound individuals to particular social cliques, weak ties could connect individuals from different social groups or associations and then bridge different social cliques. Therefore, individuals with relatively large numbers of weak ties were rich in information and opportunities to improve occupational status. Similarly, Burt (1992, 1997) argued that patterns of relations among the actors in one’s ego network played more important roles than the characteristics of direct ties when analyzing the effects of network structure. He used the term structural holes to describe those situations when there is an absence of connections between two actors in one’s social network. The more structural holes in an individual’s network, the more unique information, resources, and opportunities can be gained. Then actors with ego networks rich in structural holes have more power to bargain, and are more likely to control the resources and specific outcomes in negotiations. Empirical studies have supported the notion that structural holes are

positively related to the upwards promotions in entrepreneurial organizations (Burt, 1992, 1997; Podolny & Baron, 1997).

Another approach to social capital for analyzing career success focused on the resources embedded within social relations and social networks. Lin (2001) suggested that to provide advantages to actors, it was the resources, rather than weak ties, bridging different social groups or structural holes that indicated the uniqueness of the actor. For actors involved in purposive actions, resources gained from actors who controlled more resources would fulfill their instrumental goals. Such resources were typically available through heterophilous interactions, indicating that the actor and the contact had differential social positions. Therefore, it was not the number of weak ties one had nor the particular structure of one's ego network, but the resources or contacts in relatively higher position enhanced the process of progression.

A study by Seibert et al. (2001) combined all of these approaches into an integrated model to examine progression in legitimate careers. The authors found that weak ties and structural holes enhanced the level of resources embedded in the ego network, while social resources were positively and directly associated with salary, promotions, and career satisfaction. The results revealed that weak ties had positive impacts on the quality of contacts both in other functions and at higher levels, but were less likely to provide access to information and career sponsorship. Structural holes facilitated contacts at higher levels, but had no direct impact on access to information or resources. Type of contacts also played a role in access to resources: contacts at higher levels in the organization were directly related to access to information and career sponsorship that affected numbers of promotions in the entire career. The study suggests that in order to gain more opportunities for promotions, an individual needs to develop a relatively large and unique network with weak ties and structural holes to establish contacts at higher positions in the organization, which facilitates access to information and offers sponsorship. These lessons are applied to the analyses of promotions in drug trafficking careers in this dissertation.

Similar findings have been found in the illicit market literature. Progression in illicit drug markets, as Adler (1993) pointed out, were not the result of "their individual

entrepreneurial initiative but through the social network they formed in the drug subculture” (p. 130). Therefore, when translating the effect of social capital on career success into the criminal contexts, one difference is that criminal capital embedded in the criminal network matters more. For instance, Descroches (2005) found that although personal characteristics and interpersonal skills could have an indirect impact on the progression process as these factors would determine who the retailers might know and how well they could use the resources that embedded into the social connections, criminal networks directly provided access to sufficient opportunities to move up the ladder. Knowing someone at a higher position who would provide information and introduce additional contacts is also an important factor of progression in drug markets. For example, Morselli (2001) conducted a case study on the criminal career of a successful international cannabis trafficker, Dennis Howard Marks, who survived in drug trafficking for around 20 years without much interruption. Marks began involvement in the drug trade as an apprentice with his principal dealer through whom he developed more contacts in the drug distribution chain and successfully expanded his own network. Marks had criminal capital in the strictest sense of the definition: he was skilled at using his set of non-redundant contacts for his own benefit.

3.2.3. *Criminal capital and criminal achievement*

Social capital has been used to explore achievement in legitimate careers. Findings have revealed that it plays an important role in both monetary status and status attainment (Flap & Boxman, 2001; Lin, 2001; Seibert et al., 2001). Using a sample of 365 individuals in the Netherlands, Flap and Boxman (2001) tested the effects of models of social capital on the job-seeking process and argued that “social capital was the resultant of social network, the structure of the network, the investment in network members, and the resources of these network members” (p. 4). Taking both job seekers and employer's characteristics into account, social capital was significantly associated with a high income, while having contacts of high prestige was an asset in order to return a high prestige position.

Criminologists have translated these findings into the criminal context and explored how social capital and criminal capital may affect criminal achievement (Bouchard & Nguyen, 2010; McCarthy & Hagan, 2001; Nguyen & Bouchard, 2013). It is suggested that both forms of social capital such as legitimate employment and criminal social capital are important to predict criminal achievement in terms of illegitimate earnings and risk avoidance (Bouchard & Nguyen, 2010; McCarthy & Hagan, 2001; Nguyen & Bouchard, 2013). For instance, Morselli and Tremblay (2004), using a group of 156 inmates in Quebec, revealed that effective network size was significantly associated with criminal achievement. The offenders with higher score of effective network size were more likely to gain monetary status from illegitimate business. This finding reflected the argument that criminal social capital embedded in the connections with other offenders would enhance the benefit from criminal activities.

A recent study on a sample of 1166 young cannabis growers moved the analysis to a further step by taking a close look at whether the type of criminal network would affect criminal achievement in the way of illegitimate earnings (Nguyen & Bouchard, 2013). The authors considered criminal social capital separately by measuring the associations with adults and youth growers. The results not only echoed the previous studies, suggesting the importance of social capital on illegitimate earnings, but also revealed that working with a large group of young growers would enhance monetary success, whereas association with a large group of adult growers would return more in the form of cannabis. In other words, adults often pay adolescent co-offenders in the form of cannabis, and these adolescents can then sell a portion of this amount to others to make a profit. It was also found that criminal human capital increased monetary payments, as well as amounts of cannabis obtained. The findings indicate that it is not merely connections in the criminal network but types of connections (adult growers or young offenders) that matter more to predict criminal achievement.

Prior studies have also found that a strong criminal capital may protect offenders from detection and apprehension. Using a sample of 193 prison inmates, Morselli et al. (2006) found that compared to other co-offenders, criminal mentors were more likely to provide criminal capital to their protégés, which enhanced criminal achievement. Having

a mentor would significantly reduce the number of days incarcerated. Bouchard and Nguyen (2010) also shed some light on this issue by investigating cost avoidance and criminal network structures. The findings suggested that having an adult network would reduce the likelihood of being arrested. These studies suggest that certain resources embedded in the criminal relations is key to avoid risks of law enforcement.

The above studies have primarily focused on criminal earnings and risk avoidance. Little efforts have been devoted to examining the effect of social capital on occupational attainment in criminal activities. The ethnographic studies on drug traffickers indicate that knowing the right contacts will benefit traffickers to access higher level positions in the distribution chain (Adler, 1993; Desroches, 2005). Potential traffickers are more likely to start at a higher-level if they have friends who have already worked in the markets, or if they are actively seeking opportunities through ethnic-based and/or business networks (Desroches, 2005). Here, accessed and mobilized social capital complement each other and benefit the trafficker at the beginning of the drug trafficking career.

3.3. The Current Study

Using interview data from a sample of 182 incarcerated drug traffickers, the current study analyzes their criminal careers systematically by examining how conventional and criminal capital affect onset, progression, and criminal achievement. Compared to general types of crimes, drug trafficking requires more effort in planning, preparation, collecting information, and establishing contacts, and is likely to return more profits (Desroches, 2005; Kleemans & de Bunt, 1999; Morselli, 2001). Given the high-risk nature of drug trafficking, the entry into trafficking is not necessarily fully open to anyone. Drug traffickers, therefore, are less likely to be impulsive and short-sighted, at least those found at the higher levels of the trade (Caulkins & MacCoun, 2003; van Koppen et al., 2010). They may have to develop certain connections in order to get into the illicit drug trade. Therefore, one main objective of this study is to assess the effects of conventional and criminal capital on the age of onset of drug trafficking. In addition, the starting positions that traffickers achieve may vary due to their abilities to access

conventional and criminal capital. Furthermore, since most traffickers work with their contacts in a loosely connected network (Desroches, 2005), this study examines how criminal capital embedded in such networks can affect their performance in drug trafficking. The effects of conventional capital on the progression of the criminal careers of drug traffickers will also be analyzed under a similar framework.

This study extends the literature on criminal careers and drug trafficking in several ways. First, by analyzing the detailed interview transcripts of a relatively large sample, the study expands the criminal career paradigm to account for drug trafficking. Although the criminal career paradigm has been applied to almost all type of criminal activities (DeLisi & Piquero, 2011), drug trafficking has not been systematically analyzed under this perspective using quantitative methods. It is unclear whether the models built for the general types of crimes can be employed to explain drug trafficking. Second, the current study primarily focuses on adult onset as the majority of drug offenders initiate drug trafficking in their late twenties (Laub & Sampson, 2003). The importance of understanding late onset has been pointed out multiple times in prior literature, as most previous studies have merely emphasized the late onset of juvenile delinquency (Eggleston & Laub, 2002). Moreover, since the distinction between early and late starters is set at an older age (at age 25) rather than in the mid teens, the current study contributes to the literature by extending understanding of the age of onset to adulthood.

Third, past studies on youth and adult offenders have suggested that criminal capital plays an important role in examining performance, such as monetary success and risk avoidance (Bouchard & Nguyen, 2010; Desroches, 2005; Morselli et al., 2006; Morselli & Tremblay, 2004). Following this tradition, this study focuses on drug traffickers specifically, distinguishing between conventional and criminal capital. Since research has revealed that the motivation for engaging in drug trafficking is not simply due to the desperation for money when losing one's job or due to knowing individuals inside of the business (Adler 1993; Decker & Chapman, 2008; Desroches, 2005), the distinction between conventional and criminal capital takes the specific characteristics of drug trafficking into the consideration and helps to provide a detailed analysis of entry into the illicit drug trade. Meanwhile, similar to legitimate employment where connections and

personal skills may have different levels of impact on the opportunities of being progressed, the effects of criminal social capital and criminal human capital in criminal careers on drug traffickers will also be assessed separately.

Finally, the current study investigates how conventional and criminal capital will influence another dimension of criminal achievement - positions attained and changed during the period of drug trafficking. Although factors associated with status attainment have been well documented in past research on legitimate careers (Flap & Boxman, 2001; Lin, 2001; Seibert et al., 2001), most previous studies on criminal achievement have not examined this aspect yet. Adler (1993) found that traffickers' positions could be affected by both the personal entrepreneurial characters and the resources embedded in social and criminal relations and networks. Therefore, the exploration of the relationship between conventional and criminal capital and positions attained will contribute to both the criminal career and the drug trafficking research traditions.

4. Data and Methodology

4.1. Data

The current study uses secondary data to examine the effects of conventional and criminal capital on the criminal careers of drug traffickers. Data in this study were drawn from an interview sample of 222 inmates who were convicted of drug trafficking offences in the United Kingdom. In late 2005, the Matrix Knowledge Group was commissioned to conduct the interviews as part of the project, *The Illicit Drug Trade in the United Kingdom*, by the U.K. Home Office (Matrix Knowledge Group, 2007). The purpose of the project was to understand the markets and operations of illicit drug trafficking conducted by high level drug traffickers (defined as offenders who were sentenced seven years or longer for drug related offenses by the Matrix Knowledge Group). Data were collected through a large-scale interview program. Following the pilot phase, a purposive sampling method was adopted by the Matrix Knowledge Group to identify high level drug traffickers who had the most insightful information on the illicit drug trade. The research team attempted to achieve the maximum number of participants by using two stages.

On the first stage, all prison service area managers were contacted by the researchers informing them of the ethical approval of the project. The research team then contacted the prisons holding the largest number of drug-related offenders serving long sentences (seven years or more) and high profile drug dealers to request permission to conduct the interviews. A link worker was nominated by each prison to cooperate with the project from inside of the prison. On the second stage, offenders in these prisons were encouraged to participate in the research. Informed consent letters were sent to all offenders sentenced seven years or longer for drug offences in 22 prisons. The letters explained the project and all related ethical issues such as

confidentiality. A small number of participants were introduced to take part in the interview by the link workers or other participants who had finished the interview. No financial incentives were used to encourage participation, but a letter indicating that the offender had taken part in the project could be included into their file by request.

A total number of 1390 offenders qualified to engage in the project were invited, and 263 of them agreed to participate in the interview. In 2006, 222 interviews were conducted. The overall response rate of 19 percent was quite low, but considered acceptable because the project aimed to obtain sensitive information on the operation and networks of the offenders. A high refusal rate is a typical difficulty that researchers frequently faced when studying incarcerated high-level drug dealers through interviews. In a study of high level drug smugglers in the U.S., Decker and Chapman (2008) identified 135 cases as potential interview candidates, approached 73 for an interview request, and finally successfully interviewed 34 of them. Desroches (2005) provided little information on the sampling population, but he stated that after a long waiting time for permission from prisons or correctional services, and a careful process of selection the suitable sample based on the law enforcement files and reports, 70 high level drug traffickers incarcerated in Canadian prisons were interviewed. Refusing to help, being advised by the lawyer not to participate, and believing in their innocence were the common reasons that offenders refused to take part in these studies (Decker & Chapman, 2008). With all these difficulties, to our knowledge, the Matrix research team collected the largest ever sample of qualitative data from high level drug traffickers.

Most interviews containing a mix of semi-structured and structured questions took place in private prison rooms. The interviews lasted one hour and a half on average, and they ranged from one to four hours in length. The interview focused on three research discipline including business that aimed to examine the sustained profitable growth in the illicit drug trade, economics that explored the reason for the variation of drug prices over types, market levels, time and locations, and social networks that attempted to discover traffickers' entry to the market, roles, and contacts they worked with (Matrix Knowledge Group, 2007). Questions related to these three areas were incorporated into the interview script that was revised after a pilot phase.

Thirteen sections were included in the semi-structured questions. The interview started with questions on career pathways, including entry into drug trafficking, types and quantities of drugs dealt with over the course of their careers, roles conducted and method of working, people they worked with and knew about, and considerations of desistance. General market knowledge was also assessed through sections on costs, customers, competition, and branding of the drugs (if any). The last part of interview focused on risks the traffickers faced, the effects of law enforcement activities, and how they got arrested and imprisoned. Structured questions on traffickers' demographic information were asked at the end of the interview, which were created and coded in an SPSS dataset by the researchers. The raw dataset included both variables from semi-structured and structured interview questions. The Matrix research team also validated the results of the interviews through discussion and interviews with Serious Organised Crime Agency practitioner focus groups, Asset Recovery Agency financial investigators, prison staff, and experts in different aspects of drug trafficking.

In the current study, both interview transcripts and the raw dataset were used in order to create dependent and independent variables that were as accurate as possible. A total of 40 respondents were excluded from the initial sample of 222, for at least one of the following reasons: they provided too little or unreliable information, they claimed their innocence, or they refused to complete the interview. After this quality control, the sample in this study is composed of 182 drug traffickers. The majority of them were male, while 6 females were included. The average age of the participations was 39 years. The youngest participate was 20 years old when taking part in the interview, while the oldest trafficker was 67. Although the participants represented a variety of ethnic and racial backgrounds, the majority of them were white (68%). Their sentence lengths varied from less than three years to over twenty years. The participants in the sample played various roles in the drug distribution chain. Most respondents were transporters (n = 81), who typically delivered drugs from one dealer to another. A total number of 61 wholesalers were interviewed, who operated drug sales of at least 1 kg per deal. The remaining 40 traffickers were selling at the retail level on street, storing and mixing drugs, or managing the transportations.

The current study uses the full sample of 182 traffickers to examine the effects of conventional and criminal capital on the age of onset and the entry levels. For progression, however, a restricted sample is more appropriate. Respondents who got caught on their first deal are not an appropriate group to analyze for this type of outcome. After excluding traffickers who were caught on their first deal/transportation, the restricted sample has a total number of 122 traffickers. A note should be added regarding “length of time as trafficker” as a control variable in analyses of progression. The length of time spent as a trafficker likely affects the possibility of progression. Respondents, however, were not selected from the same birth cohort and had a large age range, from 20 to 67 years. In addition, some dealt once a month, others once a year. Therefore, it could be confusing to use “length of active years” to control for “active time”. With this limitation in mind, an alternative way to control the possible impact of the length of criminal career on progression is to use the number of deals that traffickers successfully completed.

4.2. Measurements

The following sections describe the measures that are used in the current study. Three dependent variables are discussed. Two variables focus on the beginning phase of the criminal career. The variable *early starters* looks at the age of onset of drug trafficking and *entry levels* indicate the roles that traffickers started at when they first got involved into the illicit drug trade. In addition, *progression* examines the development of the criminal career of drug traffickers. Two sets of independent variables indicating conventional and criminal capital are presented in the following sections. *Financial satisfaction* and *legitimate employment* are two variables measuring conventional capital. Three forms of criminal capital are measured including criminal personal, social, and human capital. Furthermore, as conventional and criminal capital can change in a given period, they are measured both before and while the traffickers are in the illicit drug trade. Control variables are presented in the last section.

4.2.1. Dependent Variables

Early starters were identified based on the interview transcripts. The age of onset was not directly asked in the original interview questions. Only a small number of traffickers reported their ages when their trafficking careers started. In the first interview section, traffickers were asked to describe how they became involved in drug trafficking. The entry year was recorded for most traffickers. As the interviews were conducted in 2006 (Matrix Knowledge Group, 2007), and the age of the respondents were documented during the interview, the age of onset, therefore, can be estimated as

$$\text{Age}_{\text{Onset}} = \text{Age}_{\text{interviewed}} - (2006 - \text{Year}_{\text{entered in the drug trade}})$$

It is more appropriate to code this variable as a nominal level measurement, as some traffickers did not provide a specific year when they were involved in the illicit drug trade, but a period of time, such as “late 1980s” or “early thirties”. Thus, in order to keep as many valid cases as possible, it would be better to code the age of onset into a categorical variable of early and late starters. However, it is difficult to determine the proper “cut-off” to indicate when is early or late to start trafficking drugs. As 18 years of age is used by most countries to define an adult, most studies on non-drug related crimes typically employed 18 as the age cut-off (Eggleston & Laub, 2002; Sampson & Laub, 1990). However, researchers have suggested that drug traffickers are relatively older when they start trafficking than those committing predatory and property offenses (Laub & Sampson, 2003). For example, Adler (1993) found that the age when people entered into the middle or upper levels was from 25 to 35. Moreover, the upper level traffickers in Desroches’ study (2005) were also in their late twenties when entering into the drug trade. Therefore, a cut-off at 18 years old may not be suitable for drug traffickers. As Laub and Sampson (2003) suggested that the average age of drug related crime was around 25, in this study, the traffickers are considered early starters if they got involved in the illicit drug markets younger than 25 years old. Approximately 36% of the respondents start drug trafficking early in life.

Entry levels were created by examining the first positions attained by the traffickers when engaging in the drug distribution chain. Prior studies did not define

clearly where each level starts and ends. Adler (1993) used the term “upper-level dealers and smugglers” referring to those who were not dealing small amount of illicit drugs to users on streets. Decker and Chapman (2008) described their higher-level drug smugglers as those who were not one-time or street dealers but who operated large quantities of illicit drugs on a frequent basis. Desroches (2005) used roles that they played to identify higher-level drug traffickers. He defined them as importers, manufacturers, and wholesalers of illicit drugs. The current study employed Desroches’s approach and distinguished entry levels by the roles that traffickers first played in the illicit drug trade. Although most drug networks are not hierarchical, there are still differences from one role to another in terms of resources, power, risks, and levels of control that a trafficker can access. The variable was a nominal level measurement with three categories: lower, middle and upper levels. Transporters and storers are considered lower level positions, because they have little power and control of the trafficking operations, but face greater risks, especially when travelling across borders. Retailers and specialists usually have a few more resources, power and control than transporters and storers, but they still face a high level of risk of being arrested. Thus, these two roles are considered to be the middle levels. Wholesalers, transportation managers, investors, and legitimate contacts are at the upper-level because these people are rich in resources, having more power and control of the operations, and are less likely to be apprehended, although they face longer sentences when convicted. In the current sample, 51% of the respondents started at the lower level, while there are 34% middle level starters and 15% upper level starters.

Progression was measured as a dichotomous variable. In the second section of the interview, traffickers were asked to describe whether they were dealing the same type of drug at time of incarceration compared to when they first started, whether the quantities of drugs changed over time, and whether they attempted to grow their business. Here, many traffickers mentioned their experience of developing their illicit business. In addition, details on how their roles changed in the drug trade were also frequently provided in the first section of the interview. Therefore, the variable indicating progression was created based on these questions. Even if many scholars have described how drug traffickers can progress in the trade, what is considered progression

and how to measure it, however, varies from one study to another. Moving from street level to a higher level, increasing quantities of drugs operated by the traffickers, and role changes are the common patterns indicating progression. For instance, Adler (1993) used the term “upward mobility” to describe traffickers’ progression, which happened when traffickers 1) increased quantities of drugs and 2) moved from lower levels to higher levels of the illicit drug trade. Desroches (2005) employed a similar approach to determine progression as moving from retail to wholesale drug trafficking. Purchasing large quantities of drugs was usually accompanied with moving up the ladder. Decker & Chapman (2008) considered role changes as an indicator of moving up in the organization that the trafficker works with. For instance, progression can occur when a pilot become a manager of transporters after gaining trust of the wholesaler. Drawing from these studies, the current study considers progression to be present if a trafficker moves either from a lower-level position to higher-level one, operates significantly larger quantities of drugs per transaction, or increases transaction frequency in a way that signals “business growth”. Examples of what this mean in the context of our sample will be illustrated using the interview transcripts, in Chapter 7 of the results. In the restricted sample of 122 traffickers, approximately 40% showed progression in their drug trafficking criminal careers.

4.2.2. Measures of conventional capital

Conventional capital is measured by two separate variables, *financial satisfaction* and *having legitimate employment* before trafficking drugs. Table 1 presents the independent variables used in the analyses for each dependent variable. Two forms of conventional capital are used in the analyses, including personal and social conventional capital, whereas the effects of three forms of criminal capital are examined: criminal personal, social, and human capital. McCarthy and Hagan (2001) defined personal capital as “attitudes, preferences, and personal characteristics that are potential resources for securing desired outcomes” (p. 1039). They measured personal capital in general as the desire for wealth, risk preferences, collaboration, and competence. Financial satisfaction reflects this argument by emphasizing an individual’s attitudes and opinions on their financial situation. In the interview transcript, respondents were asked

to describe their reasons for getting involved in the drug markets. Most of them mentioned their financial situation before entering into the illicit drug trade. Some were satisfied with their financial situation, while others reported that they encountered financial difficulties before getting involved in drug trafficking. Financial satisfaction before trafficking was coded as 1 = yes if respondents were satisfied, and 0 = no if the respondents connected their entry into drug trafficking with financial difficulties such as difficulty operating and/or maintaining their legal business, being in debt with others (usually their dealers for personal drug use), or lack of money to cover their living expenses. In the current sample, 51% of the respondents reported that they were satisfied with their financial situation before trafficking. Financial satisfaction in the conventional world is expected to delay the onset of drug trafficking. This predictor is used in connection to the first two dependent variables (it is excluded for “progression” as the logic of the coding makes it a concern for the patterns of entry, not necessarily after). For entry position, traffickers desperate for money are expected to begin trafficking drugs at lower-level positions in the distribution chain, while those who have sufficient funds are more likely to start at the upper-level.

Table 1 **Description of independent variables¹**

	Conventional capital	Criminal capital
Personal capital	Financial satisfaction	Self-initiation
Social capital	Having legitimate employment before trafficking drugs	Having friends or family members already working in the drug markets Knowing other persons at the same position
Human capital		Having knowledge of the drug markets before trafficking Committing other types of crime before/while trafficking

¹ All variables in this table are dichotomous (1 = yes).

The second variable indicating conventional capital is measured by examining the descriptions of respondents on legitimate employment status. Most respondents mentioned whether they had legitimate jobs in the first section of the interview transcript. Employment is widely considered a form of informal social control, which can reduce criminal activities (Harris, 2011; Laub & Sampson, 1993; Sampson & Laub, 1990). It is a conventional form of capital, since it taps into conventional resources that respondents may have. Legitimate employment has been measured differently in previous studies including being legitimately employed (Sampson & Laub, 1990), the length of time the jobs last (Sampson & Laub, 1990), the amount of time one has been employed (Eggleston & Laub, 2002), and satisfaction with the legitimate employments (Harris, 2011). It is arguable that a better measurement of conventional capital would combine employment status with employment stability and personal work habits. However, employment status is the only variable that can be created from the interview transcripts in the current study.

When predicting early starters and entry levels, legitimate employment was coded as 1 = yes, if the respondents reported they were legitimately employed before trafficking drugs. This variable does not intend to examine traffickers' whole life, but the time right before they made the decision of entering into the illicit drug trade. Therefore, if a respondent reported he/she was laid off or had quit a job at any time before engaging in the illicit drug trade, the respondent would be considered as unemployed. Although it is expected that legitimate employment is associated with entry (the age of onset, or entry levels), the direction of the effect is not clear from the outset. One reason is because traffickers may lose their job early or late in life, with unclear effects on the age of onset. As for entry levels, a legitimate job as a lorry driver who cross borders on a regular basis may restrain the traffickers at the lower level (as transporters), whereas the owner of the haulage company may use the legitimate business as a good cover to transport drugs internationally, and start trafficking at the upper-level as a wholesaler. The vast majority of respondents in the current sample had legitimate jobs before they started trafficking drugs (83%).

Note that legitimate employment while trafficking is used in this analysis to predict progression. Employment can be unstable for some traffickers. They may have legitimate jobs before trafficking drugs and then quit because they want to commit to drug trafficking. They may also get a job after entering the trade as a way of supporting their family. Therefore, legitimate employment while trafficking was coded as 1 = yes, if the respondents reported they kept or found jobs in the conventional world after they entered into the illicit drug trade (or found a new one). It was coded as not having legitimate employment (0 = no), if they reported that they lost or quit their jobs after they started trafficking. Note that some traffickers mentioned that they began to run some legitimate business after trafficking as a way of laundering money. In this case, they were not considered as legitimately employed. In the current sample, approximately 50% of respondents reported they had legitimate jobs while they were trafficking drugs. Again, the direction of the effect is unclear from the outset. On the one hand, legitimate employment may restrict traffickers' freedom and reduce opportunities for traffickers to move up the ladder. On the other hand, having a foot in a legitimate business may also facilitate promotions if the position can be used strategically within a trafficking scheme.

4.2.3. Measures of criminal capital

Three forms of criminal capital are measured in the current study. *Criminal personal capital* is measured as self-initiation: traffickers who get their start in the trade by actively searching for opportunities. Recall that personal capital indicates one's attitude, preference, and other personal characteristics that provide resources the actor can access (McCarthy & Hagan, 2001). Traffickers who self-initiate embody this sort of attitude when translated into the criminal world. Previous studies have shown that driven by the profits that could be earned in the drug markets, potential traffickers may seek opportunities to start trafficking rather than wait to be recruited (Alder, 1993; Desroches, 2005). Around half of the respondents in the current sample entered into the illicit drug trade based on their own initiative. It is expected that self-initiated traffickers are likely to have more knowledge of or preparation for activities they are planning to get involved. Yet, it is unclear how this type of personal capital is associated with the main dependent variables in this study. Self-initiation may be associated with less vulnerability and thus

more appealing entry positions, a more ambitious approach that may translate into opportunities for progression. Being a personal trait, it may also appear earlier in life, and be associated with early entry into trafficking.

Criminal social capital is the second form of criminal capital measured in the current study. Similar to the measure of social capital in the conventional world, the size of the criminal network or volume of the contacts is frequently used to measure this construct. For instance, McCarthy and Hagan (2001) measured criminal social capital by asking street youth to indicate the numbers of street friends who sell drugs. Similarly, Nguyen and Bouchard (2013) operationalized this construct by using the number of adolescents and adults who grew cannabis and were known by the participants. Although an imperfect measure of social capital, scholars usually assume that bigger size of the network size indicates stronger criminal social capital. Unfortunately, in the current study, detailed information on the number of co-offenders who have worked in drug markets is not available. Although many respondents reported that they had friends involved in trafficking drugs, few of them provided exact numbers on how many people they knew. Most respondents only discussed several significant contacts who facilitated their entry into the trade, or to grow their business. Thus, an alternative way to measure criminal social capital was necessary in the current study. As ethnographic studies on drug trafficking have shown that knowing the right people is key to getting involved in the trade and to determine what role they will play at the beginning (Adler, 1993; Decker and Chapman, 2008; Descroches, 2005), criminal social capital is measured by examining whether the respondents had certain types of contacts before and after they were involved.

Two indicators are used, the first for the dependent variables associated with entry, the other for progression. For early starters and entry levels, criminal social capital is measured when respondents reported the presence of “strong ties” in the illicit drug trade. Strong ties is coded as 1 = yes when the respondents had friends and/or family members working in drug markets. Every potential trafficker has to have some contacts to get involved in drug trafficking, but here, only close relationships are considered. Acquaintances, neighbours, co-workers, and school mates are not included. A total of

60% of the respondents reported they knew friends and/or family members working in the drug trade before they started trafficking. Research has suggested that having contacts already working in the market may make the entry process easier (Adler, 1993; Morselli, 2001; van Koppen et al., 2010). Therefore, it is expected that contacts in the drug market will lead the traffickers to engage into the drug trade at a younger age. Furthermore, prior studies on legitimate occupations have indicated that knowing others with higher status might facilitate personal access to higher status (Flap & Boxman, 2001; Lin, 2001; Seibert et al., 2001). In the illicit drug markets, this variable may influence the starting position in either direction as drug studies suggested that having contacts in the trade might bring opportunities of getting involved at a higher level through established solid connections (Adler, 1993; Descroches, 2005; Morselli, 2001), while it is possible that the inside person simply needs someone at a low level to buffer the risks (Dorn et al., 1998).

After entering, the capability of collaborating with other offenders can be considered as a form of criminal social capital. In terms of continuity and development of the criminal career, previous studies have shown that offenders who have better skills in collaborating and managing their criminal network are likely to stay longer in the illicit drug market (Bouchard & Nguyen 2010; Bouchard & Ouellet 2011; Morselli, 2001). Although longer survival time does not guarantee progression, it can provide more opportunities for traffickers to grow their business. Again, it would have been ideal to have the number of traffickers the respondents worked with in their network as a variable to predict progression. Without this information, criminal social capital is measured as whether the respondents knew other traffickers who had a similar role in the trade. This measurement indicates the resources that a trafficker can access in the criminal network. Approximately 51% traffickers reported they knew others working at the same position as they did. Descroches (2005) found that criminal social capital was crucial to move from street to whole level trafficking. It is expected that this variable is positively associated with progression.

Criminal human capital is the third form of criminal capital used in the current study. McCarthy and Hagan (2001) argued that criminal human capital should include

both knowledge and skills related to committing crimes. Specialization is the most common measurement of criminal human capital. For instance, Lussier et al. (2011) used the proportion of sex crime charges among all criminal charges in adulthood. McCarthy and Hagan (2001) measured specialization by asking whether participants only sold drugs on the street. Other variables such as criminal experience have also been used to measure criminal human capital (Nguyen & Bouchard, 2013). The current study uses a similar approach and employs knowledge and skills of committing crimes to measure criminal human capital.

For early starters and entry levels, criminal human capital is measured by two variables: 1) whether the traffickers have knowledge of drug trafficking before entering into the illicit drug trade (1 = yes), and 2) whether they have committed other types of criminal activities before their trafficking career (1 = yes). The first variable was created from the interview transcripts. Traffickers were considered to have knowledge of drug trafficking when indicating that they understood the trafficking business, knew the pricing, and/or were able to examine the quality of drugs. Traffickers with strong criminal human capital are expected to enter into higher level positions when they start trafficking drugs. Around 48% of the sample reported that they had knowledge of drug trafficking before their entry. As for the second variable, half of the respondents had committed crimes prior to the trafficking career. Experience of committing crimes might accelerate the process of entering into illicit drug markets as these individuals had more investment and resources in the criminal world. Furthermore, this type of criminal human capital might facilitate traffickers to upper level entry positions due to their capability of committing crimes and the reputation they have already established.

For progression, only specialization is considered, an indicator of commitment. Criminal human capital is measured by whether the offenders had committed other types of criminal activities while they were in the illicit drug trade. Most traffickers were specialized in drug trafficking, whereas 28 traffickers (approximately 23% in the restricted sample) reported they committed other types of crimes while they were trafficking drugs. Previous research has found that higher level traffickers frequently refuse to work with lower level traffickers who are not specialized in trafficking

(Desroches, 2005). Therefore, specialization is expected to increase the probability of the progression of criminal careers of drug traffickers.

4.2.4. Control variables

Few traditional control variables in the form of socio-demographics were available in the dataset or interview transcripts. Two main control variables are used to analyze the criminal career of these drug traffickers. The first control variable is *ethnicity*. It is measured dichotomously as 0 = non-white and 1 = white (65%). The international characteristics of drug trafficking may affect recruitment of individuals of various ethnic origins, including individuals from the exporting countries (Adler, 1993; Descroches, 2005; Zaitch, 2002). The second control variable is *drug use*. When examining the age of onset of drug trafficking and starting positions, drug use before trafficking is controlled. Approximately 56% of the traffickers were using drugs before entering into the illicit drug trade. If one starts using drugs at a young age, he/she might be more likely to enter into the illicit drug trade dealing or trafficking drugs as a way of feeding their drug habits. When examining entry position, drug using history may also be important since a typical pathway for entering into the drug markets begins with the desire to seek opportunities to feed personal drug habits, which reduces the opportunities for the traffickers to access to the upper-level positions (Alder, 1993). To predict progression, drug use while trafficking is controlled for. Most respondents reported they used (or did not use) drugs all the way through their trafficking career, while some respondents reported that their habits had changed. They were not using drugs before getting involved, but started to use after they were in the drug trade, or vice versa. In the restricted sample, around 59% of traffickers were drug users as well. Drug use may affect progression as drug users may be less likely to be trusted by traffickers above them.

In addition to these two general control variables, early starters and entry levels will be considered control variable in some analyses. When assessing entry levels, the age of onset needs to be controlled for. The logic is simple: traffickers may only access lower level positions when they are involved in drug trafficking at a young age. Late starters, on the other hand, may have more financial and social resources, which may

lead them to higher level positions. However, it is also possible that late starters are so desperate for money that they accept risks by playing roles at the lower levels of the distribution chain. Therefore, in the models of predicting entry levels, “early starter” is one of the control variables.

When examining progression, both early starters and entry levels are considered as control variables. In the legitimate workplace, older individuals are considered more mature and reliable. A similar assumption applies to progression in the criminal career. As it is a cross-sectional dataset and the respondents are not from the same age cohort, simply controlling for the age of respondents can cause bias. An alternative way to handle this is to control for the age of onset. In addition, entry levels can also have some impact on progression. Although lower level starters may have more opportunities to move up the ladder, upper level starters may be more likely to increase the quantities of drugs they traffick in one transaction.

4.3. Analytic strategy

Several statistical methods are employed to examine how conventional and criminal capital can affect different dimensions of criminal careers among the incarcerated drug traffickers in the current sample. Bivariate analyses are first run to provide a general understanding of the relationship between independent and dependent variables. Then multivariate methods are used to examine the effects of the main predictors when all other possible confounders are considered. Chi-square Automatic Interaction Detector (CHAID) is employed in order to investigate some of the possible interactions between independent variables, which may not be shown in the multivariate models. Content analyses are also employed to explore some of the underlying mechanisms at the origin of our findings.

The analyses in the current study seek to answer the following questions:

- What are the factors associated with traffickers getting involved in drug trafficking early in adolescence and young adulthood? Does conventional

capital delay the age of onset? How does criminal capital affect the entry process of drug trafficking?

- What are the factors associated with traffickers starting at higher level positions when they enter the illicit drug trade? Do different forms of capital have an impact on the entry levels achieved by the traffickers?
- What are the factors associated with traffickers moving up the ladder from lower level positions to higher level positions? What roles do conventional and criminal capital play in the process?

4.3.1. *Multivariate methods*

Logistic regression can be used to predict discrete dependent variables and it allows predictors that do not have normal distributions, are not linearly related, or do not have equal variance (Tabachnick & Fidell, 2007). The two dependent variables in the current study are categorical and discrete, and most of the independent variables are dichotomous, which justifies the use of logistic regression for predicting 1) early starters, and 2) progression. Control variables will be assessed first. Conventional capital measures will then be added into the models. It is expected that conventional capital delays the age of onset and affects the possibility of progressing in the illicit drug trade. Criminal capital will be analyzed in the third model. These variables may pull the potential traffickers into the illicit drug trade when they are at a younger age, and facilitate them to grow their business. The final model will examine the effects of both conventional and criminal capital on these two dependent variables.

The third dependent variable, entry level, has three categories (lower, middle, upper levels). Multinomial (polytomous) logistic regression is an extension of binomial logistic regression and can be used to predict dependent variables having more than two outcome values (Hosmer & Lemeshow, 2000). The categorical dependent variables can be either ordered or unordered (Long, 1997). This is an advantage of using multinomial logistic regression to predict the entry levels because it is debatable to consider this variable ordered or unordered. On one hand, different levels can be ranked as lower, middle and upper, but on the other hand, these levels are measured based on the roles the traffickers play, which can be different to have an order. Multinomial logistic regression offers analyses that avoid biases due to the measurement levels. It is also

more appropriate than discriminant analysis because it does not require normally distributed predictors (Tabachnick & Fidell, 2007). Therefore, multinomial regression is employed to assess factors that may influence the entry levels. Lower level position is considered as the reference category.

CHAID analyses are also used to further examine the effects of conventional and criminal capital on each dependent variable. CHAID is a method of data segmentation, which creates nodes of respondents based on a statistical algorithm. It splits the data members by assessing any significant association between dependent and independent variables, until it identifies the most statistically significant value of chi-square (Silver & Chow-Martin, 2002). CHAID starts with one node that includes every case in the dataset, and then discriminates them based on significant differences for each independent variable. The procedure continues until no significant subgroups are detected (McCarty & Hastak, 2007). The selection procedure is similar to cross-tabulations, but provides better results because it primarily focuses on the significant associations that require more of the researcher's attention (Kass, 1980). Compared to other methods that predict relationships among variables, CHAID is flexible and feasible for non-linear, highly skewed variables. Specifically, the explanatory power and effectiveness of the result will be enhanced, when the outcome variable is dichotomous (Magidson, 1994). Although this is a binary examination, CHAID can provide a criterion for further multi-level analyses of the data (Kass, 1980; Magidson, 1994). Because of these characteristics, CHAID analysis can provide more detailed assessments on how conventional and criminal capital can affect the criminal career of traffickers. In this study, the statistical significance for CHAID analyses is at .10 level. The minimal group size for the parent node is no less than 15 cases, while the child node stops if it contains fewer than 5 cases. Although these settings are less strict, it could help grow a more complex tree and maximize the effect of each independent variable on dependent variables. It can provide additional explanations of the differences between early and late starters.

4.3.2. Content analysis

Content analysis has been used for decades as a tool to bring meaning to a variety of materials such as newspapers, websites, diaries, court documents, films, and so on. Not only is the method effective to summarize and describe events, but in some cases also make it possible to make a prediction (Osgood, 2009). This study will use content analysis as a supplement to the quantitative analyses. The interview transcripts will be used to explore the mechanisms underlying every dependent variable considered in this study: 1) early entry into trafficking, 2) entry position, and 3) progression. For example, this qualitative approach could provide in-depth information on how conventional and criminal capital might interact with each other – interactions which may not emerge in the logistic regression models due to the small number of cases.

Structural coding that texts are coded according to the particular research questions is found to be useful for large databases (MacQueen et al., 2009). The current study employs this approach to analyze the interview transcripts. The responses of the drug traffickers were coded in a similar framework as that for the quantitative analyses. Different forms of conventional and criminal capital were the major themes. For instance, the code of FINSAT (financial satisfaction) was scored 0 (not satisfied) when respondents mentioned they faced financial difficulties or desired for money, such as “his garage business was not doing well and he needed some extra money” (RH_3), “in debt to some people and wanted to earn money quickly” (RH_13), and so on. LEGEMPBE (legitimate employment before trafficking) applies to references to traffickers who mentioned being legitimately employed before entering into the illicit drug trade, such as “he had couple of legitimate jobs – painting and decorating, bricklaying” (GA_25), “he was happy with his job as a dog trainer” (LG_19), “running a Turkish restaurant” (MA_01), etc. The codes of indicators of criminal capital were operated in the same approach. Self-initiation, strong ties to the criminal world, and knowledge and skills of trafficking drugs were the primary focus.

4.3.3. Data screening

Most variables have missing values (see Table 2). Except for some of the main variables such as entry position, progression, and criminal social capital, all other variables have cases with missing values. The number of missing values for most variables, however, is relatively small. For instance, self-initiation has only one missing case. One of the measures of criminal human capital, having knowledge of drug trafficking, has the highest percentage of missing cases, for which 47% (n = 86) of data are missing. Drug use before trafficking also has a high percentage of missing values (36%). To select an appropriate imputation method, the pattern of missing values was investigated. Comparing the means of particular variables for those cases with and without data present, respondents reporting financial satisfaction and criminal social capital have a younger average age when they started trafficking than those who did not answer this question. Furthermore, cases that have values of drug use before trafficking have an older age of onset. These results violate the assumption of “missing completely at random” (MCAR) that requires the missing values are independent of both observed and unobserved variables in the dataset (Allison, 2002). However, the data can be handled as “missing at random” (MAR), referring to “if the probability of missing data on Y is unrelated to the value of Y, after controlling for other variables in the analysis” (Allison, 2002, p. 4).

Table 2 Descriptive statistics for the original and pooled sample

	Original data			Pooled (Multiple imputation)		
	N	Mean	Std. Deviation	N	Mean	Std. Deviation
<i>Dependent variables</i>						
Early Starters	174	.368	.482	182	.362	.482
Entry positions	182	.632	.729	182	.632	.729
Progression	122	.590	.494	122	.590	.494
<i>Control variables</i>						

White	182	.648	.479	182	.648	.479
Using drugs before trafficking	117	.564	.498	182	.517	.501
Using drugs <u>while</u> trafficking	127	.591	.494	182	.539	.501
<i>Conventional capital</i>						
Financial satisfaction before trafficking	160	.506	.501	182	.509	.500
Having legitimate jobs before trafficking	166	.831	.376	182	.833	.382
Having legitimate jobs <u>while</u> trafficking	139	.504	.502	182	.518	.501
<i>Criminal personal capital</i>						
Self-initiation	181	.497	.501	182	.497	.501
<i>Criminal social capital</i>						
Having friends/family members in drug markets	164	.598	.492	182	.602	.490
Partnership/Knew people working at the same position	182	.511	.501	182	.511	.501
<i>Criminal human capital</i>						
Having knowledge of drug trafficking	96	.458	.501	182	.482	.501
Conducting other criminal activities before trafficking	134	.508	.502	182	.501	.501
Conducting other criminal activities <u>while</u> trafficking	133	.226	.420	182	.260	.434

Several methods to handle missing data were considered, but multiple imputation is the most appropriate for the current dataset, because other methods have more flaws – although no methods can be absolutely better than any other (Allison, 2002). First, listwise deletion was examined, which led to a loss of 46 cases. For a relatively small sample size, this weakens the statistical power and also provides biased estimates of regression analyses when the missing pattern is MAR (Allison, 2002; Tabachnick & Fidell, 2007). Pairwise deletion utilizes more information and fits for linear models. However, it still produces biased standard errors and test statistics when the data are not MCAR (Allison, 2002). The EM algorithm is a better approach for handling missing data because of the imputation procedure rather than simple deletion. Two steps are

involved: expectation and maximization. The first step identifies the general expectation of missing values based on the estimates of parameters, such as correlations, while the second step fills in the missing values with the process of maximum likelihood estimation. The two steps are repeated multiple times in one iterative process until convergence is achieved. As a single imputation method, however, it may lead to underestimating standard errors due to the estimates of means and an unrestricted correlation matrix (Allison, 2002).

Multiple imputations have statistical properties that could be considered a better method than the EM algorithm, because the method is more consistent, efficient, and flexible with various types of data and models. It can be used for asymptotically normally distributed variables, and eliminate the biases when the data are MAR. In addition, multiple imputation methods work well when some variables are not distributed normally (Schafer, 1997). One serious problem is that when analyzing imputed data, it is common to get results with too low standard errors and too high test statistics (Allison, 2002; Rubin, 1987). A possible solution is to repeat the imputation process multiple times. The estimates of parameters will differ in each imputed data, which can adjust the impact of low standard errors.

In the current study, the imputation process is repeated five times. Recall that most variables in the current study were dichotomous and ranged from 0 to 1. For these variables, the imputation of values was restricted to greater than 0 and less than 1, and also rounded to the nearest integer. The convergence of data was checked and there was no specific pattern identified. Many procedures supported pooling of results from the imputed data set in SPSS 19, which could provide more accurate statistical results than those in the single imputation data set. Therefore, the results of bivariate and multivariate analyses are based on the pooled output.

5. Results – Who starts early?

This chapter discusses how conventional and criminal capital can influence the age of onset among drug traffickers. The results of both quantitative and qualitative analyses are presented to provide a detailed picture on why some traffickers enter into the illicit drug trade at a young age. Recall that most traffickers in this sample start trafficking at older than 25 years, while around 36% of respondents were younger than 25 when their career of drug trafficking began. Once again, the hypotheses are that 1) strong conventional capital delays involvement in the illicit drug trade, and 2) criminal capital, on the other hand, facilitates access to drug trafficking at an early age. This chapter first discusses the results of the proposed relationship at the bivariate level. Next, a series of logistic regression analyses provide information on whether conventional and criminal capital can affect the age of onset. In addition, the results of the CHAID analysis further indicate the importance of certain variables and how different forms of capital may interact with each other to predict early starters. Finally, content analysis based on the interview transcripts provides in-depth assessments of the effects of conventional and criminal capital on the age of onset of drug trafficking.

5.1. Predicting early starters

Table 3 and 4 show results of the effect of conventional and criminal capital on the age of onset among these drug traffickers in particular. The bivariate relationships between conventional capital, criminal capital and early starters are examined first. The results (see Table 3) show that most of the independent variables are statistically associated with early starters. However, the indicators of criminal human capital do not significantly affect the age of entering into the drug markets. It is suggested that drug users are more likely to start trafficking at a relatively early age since 66% of early starters are drug users before getting involved in the drug trade, whereas 44% of late

starters have ever tried drugs before. Although having financial problem is marginally significant, it is indicated that most early starters (over 70%) were satisfied with their financial situation before entry, whereas less than a half (46%) of late starters had not struggled with financial problems prior to drug trafficking. Having legitimate jobs, on the other hand, is less prevalent among early starters (73%) than their counterparts who have started trafficking late in life (89%). Traffickers who entered into the drug markets based on their own initiations are more likely to start their careers of drug trafficking early (66% vs. 41%). Similarly, those who have strong criminal capital - having friends or family members who already worked in the markets - are more likely to be early starters (72%), while only 54% of late starters have reported that they had this form of criminal social capital before engaging into the drug trade. It should be noted that early starters are more likely to have criminal human capital in the way of having knowledge of drug trafficking (54%) and skills of conducting criminal activities (64%) than late starters (45% for knowledge and 50% for skills), although the two variables are not significant at the bivariate level.

Table 3 *Bivariate results predicting early starters (n = 182)*

	Late Starters	Early Starters	χ^2
<i>Control variable</i>			
White	68.10%	59.00%	1.499
Using drugs before trafficking	43.90%	65.70%	9.505***
<i>Conventional capital</i>			
Financially satisfied before trafficking	45.70%	70.20%	3.076*
Having legitimate jobs before trafficking	89.10%	72.80%	8.129***
<i>Criminal personal capital</i>			
Self-initiation	40.80%	65.70%	10.331***
<i>Criminal social capital</i>			
Having friends or family members in the drug markets	53.60%	71.90%	5.399**
<i>Criminal human capital</i>			
Having knowledge of drug trafficking	45.20%	53.70%	1.222
Conducting other criminal activities before trafficking	49.80%	63.90%	2.407

*** $p < .01$, ** $p < .05$, * $p < .10$

The next step is to examine the relationship between early starters and the independent variables at the multivariate level using logistic regression models². The first

² Survival analysis was also considered and tried to obtain better understanding of effects of different forms of capital on early starters. Because not every respondent provided an exact year or age when they started trafficking, I have a smaller sample of 167 traffickers for survival analysis. I used the age of onset as timer starting at age 9 and divided the traffickers into categories of early and late starters in the Cox analysis. The results, however, indicate that self-initiation is the only significant factor predicting early starters in the model at .05 level. Having legitimate jobs is marginally significant (sig. = .062). Thus, logistic regression models could provide more information on the factors that affect the age of onset among these traffickers.

model focuses on the personal background of the traffickers. Ethnicity and using drugs are investigated in this model. Then, the second model assesses conventional capital, while controlling ethnicity and using drugs. Variables indicating criminal capital are examined in the third model along with the control variables. The final model explains the effects of both conventional capital and criminal capital on early starters while controlling for the variables of traffickers' personal backgrounds.

Table 4 *Logistic regression predicting early starters*

	Personal background		Conventional capital		Criminal capital		Criminal social capital
	B (S.E.)	Exp(B)	B (S.E.)	Exp(B)	B (S.E.)	Exp(B)	
<i>Control variable</i>							
White	-.542 (.350)	.582	-.593 (.364)	.553	-.663* (.390)	.515	-.663* (.390)
Using drugs before trafficking	.984*** (.347)	2.674	.863** (.353)	2.370	.781** (.386)	2.183	.781** (.386)
<i>Conventional capital</i>							
Financially satisfied before trafficking			.671* (.365)	1.957			.671* (.365)
Having legitimate jobs before trafficking			-.967** (.447)	.380			-.967** (.447)
<i>Criminal personal capital</i>							
Self-initiation					.911** (.389)	2.488	.911** (.389)
<i>Criminal social capital</i>							
Having friends or family members in the drug markets					.510 (.390)	1.667	.510 (.390)
<i>Criminal human capital</i>							
Having knowledge of drug trafficking					-.100 (.374)	.905	-.100 (.374)
Conducted other crimes before trafficking					.468 (.408)	1.597	.468 (.408)
χ^2	12.048***		23.117***		26.215***		32.117***
Cox and Snell pseudo R ²	.064		.119		.134		.164

*** p < .01, ** p < .05, * p < .1

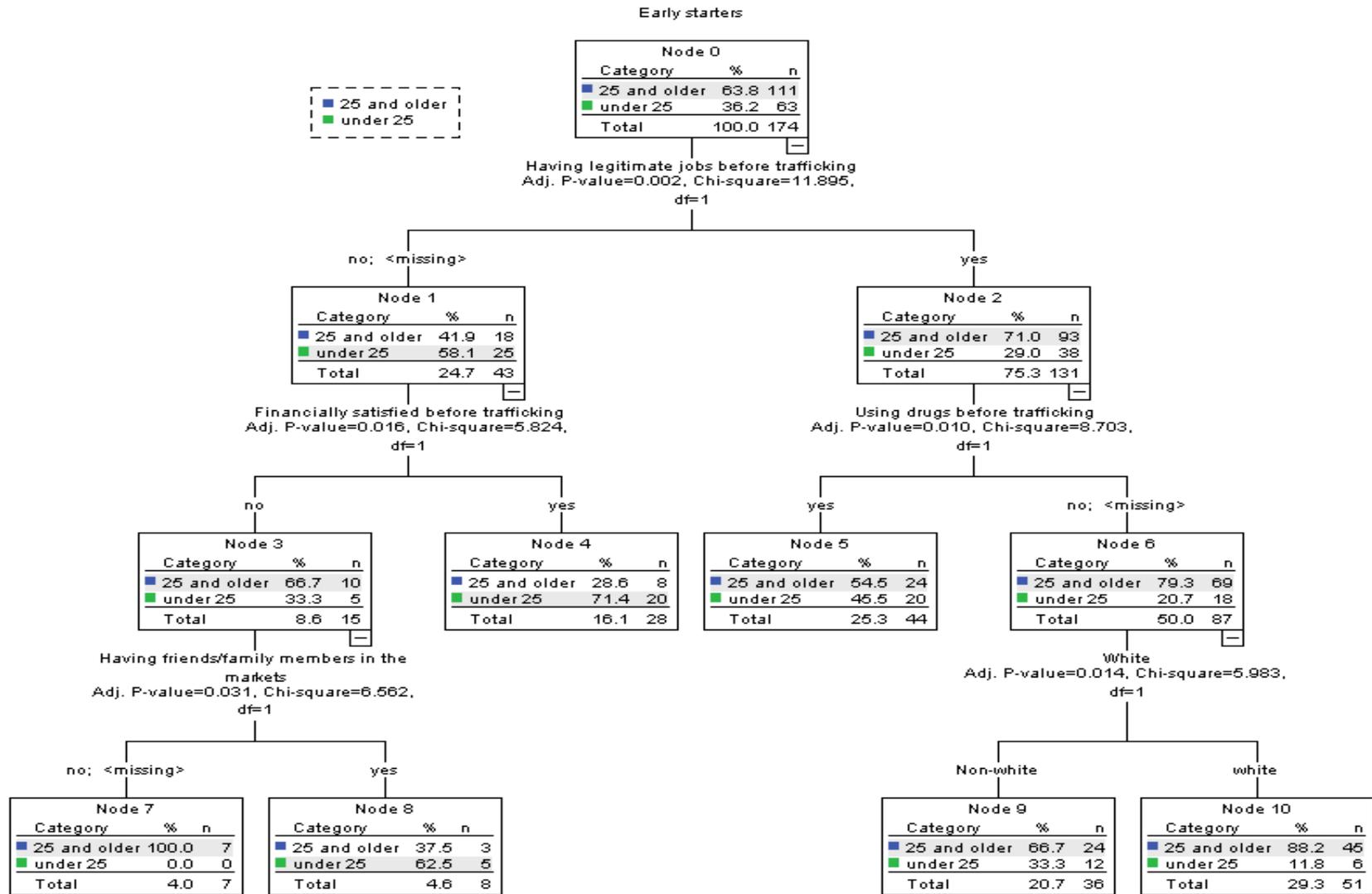
Table 4 presents the results of the logistic regression analyses. Model 1 is significant ($\chi^2 = 12.048$, $p < .01$). Using drugs is positively associated with early starters ($B = .984$, $p < .01$), suggesting that drug users are more likely to enter into the drug markets at a relatively young age. After including the variables indicating conventional capital, the fitness of Model 2 considerably improves and becomes highly significant ($\chi^2 = 23.117$, $p < .01$). The Cox and Snell pseudo R^2 suggests that this model explains around 12 percent of the variance. The two forms of conventional capital are both significantly related to early starters. This finding is consistent with the results at the bivariate level. Early starters were more likely to be financially satisfied when they began trafficking ($B = .671$, $p < .10$), whereas late starters are more likely to have problems with their financial situation, when they enter into the illicit drug markets. Not surprisingly, legitimate employment is negatively associated with early starters, suggesting that traffickers who have had legitimate jobs are less likely to be early starters, compared to those who are not employed in the conventional world ($B = -.967$, $p < .05$). This result reveals that legitimate employment could delay the age of onset and might restrain individuals from committing criminal activities for a longer period. Moreover, using drugs before trafficking is still statistically associated with early starters, although the significance is weakened ($B = .863$, $p < .05$).

Model 3 specifically examines the effects of three forms of criminal capital while controlling for ethnicity and using drugs prior to trafficking. The model is provided a good fit ($\chi^2 = 26.215$, $p < .01$) and the explained variance improves up to 13 percent. Among four variables indicating criminal capital, self-initiation is the only significant indicator associated with early starters ($B = .911$, $p < .05$). The two variables are positively related, suggesting traffickers who willingly seek opportunities to get involved in the drug trade have a higher possibility of beginning trafficking at a young age, whereas those approached by a third party are more likely to start trafficking late in life. The positive relationship between early starters and strong ties in the drug markets might indicate that criminal social capital might facilitate an early start, although it is not strong enough to be significant. Neither of the criminal human capital variables is significantly associated with early starters. In this model, the effect of using drugs before trafficking remains positive and significant ($B = .781$, $p < .05$), while being of white ethnicity is marginally statistically associated with early starters ($B = -.663$, $p < .10$).

The final model³ assesses the influence of both conventional and criminal capital on early starters. This model remains highly significant ($\chi^2 = 32.058$, $p < .01$) and explains a little more variance (16 percent) than the prior models. While controlling for personal background information and criminal capital, variables indicating conventional capital are statistically associated with early starters, although the significance is marginal. Financial problems might be more likely to trigger the entry into drug markets when individuals are older. Lack of legitimate jobs might increase the possibility of an early start in drug trafficking. The effect of criminal personal capital remains strong when adding conventional capital into the model. Self-initiation is positively associated with early starters ($B = .903$, $p < .05$). Furthermore, the results of this model suggest that using drugs and ethnicity also play a role on the age of onset.

³ I have tried to add the different models of interactions between forms of conventional capital and criminal capital, such as having legitimate jobs before trafficking * criminal personal capital, and financially satisfied before trafficking * having friends/family members in the drug markets. However, none of the interactions is significant in the logistic regression models.

Figure 1 CHAID tree diagram predicting early starters



The classification tree reveals more details of the interactions between early starters conventional and criminal capital. Figure 1 shows the results of CHAID analyses on early starters. It is suggested that legitimate employment is the most important indicator distinguishing early and late starters. Traffickers without legitimate jobs are twice as likely to start their career of drug trafficking before the age of 25 (58% vs. 29%). When they are not employed, if the traffickers are financially satisfied, they are more likely to enter into the drug markets early in life (71% vs. 33%). Criminal social capital plays a role when traffickers lack both forms of conventional capital. Unemployed individuals with financial difficulties could easily enter into the drug markets at an older age, only when they have friends and/or family members working in the business (63% vs. 0%). Not only does this result illustrate the importance of conventional capital in restraining individuals from trafficking at a relatively early stage of life, but reveals that criminal social capital facilitates the access to drug trafficking when conventional capital is weak or broken.

When the traffickers are legitimately employed, the factors that affect the age of onset are quite different from those effective for unemployed traffickers. Using drugs has a strong effect on early starters with legitimate employment. Drug users are more likely to start trafficking before the age of 25 (46% vs. 21%). Moreover, ethnicity might also have an impact on early starters. The result suggests that a non-white person who has legitimate employment and has not used drugs before are more likely to enter in the drug market at a younger age (33%), whereas all else is equal, whites have less opportunity to become early starters (12%). The findings echo the importance of legitimate employment discussed in the logistic regression analyses and reveal that drug use history and ethnicity are factors that cannot be neglected when predicting the early onset of drug trafficking.

5.2. Content analysis on early starters

Content analysis on the interview transcripts not only provides supplements for the findings that different forms of capital could affect and the age of onset, but offers in-depth explanation on how a certain form of capital is different from early to late starters. The primary focus is on the factors that were found to be statistically significant in the quantitative analyses.

Furthermore, details on the interactions between conventional and criminal capital will be discussed, although none of these interactions were significantly associated with early starters in the logistic regression models.

The effect of personal background

Some respondents emphasized that personal background could be an important factor that affects their entry. In terms of ethnicity, some white traffickers noted that they were recruited to transport drugs across borders because they were less suspicious to customs officers, while others said they were involved through the particular ethnic group to which they belonged. For instance, WS_04 came to the UK from Turkey in 1992 and he had found that

“learning English and the culture was a problem so he stayed within the Turkish community. He gained work in one of the Turkish social club...The drug traffickers who frequented the social club always needed new people to work for them... He was offered by a number of different people but took up the offer of one individual he met at the social club...”

Respondents also illustrated the well-known routine of entering into drug markets: they started dealing because they needed to feed their habit of using drugs and sold the drugs to their friends at the beginning of their criminal careers. This is more typically for early starters. WE_03 became involved in the drug trade at age 15 and described that he:

“was a cannabis user and needed money to pay for his habit. He had friends lined up when he purchased his first batch...”

Late starters, on the other hand, seemed to have fewer experiences of using drugs. For instance, LG_17 started to transporting cocaine from Mexico to the UK at age 29 and claimed that he had never taken drugs before.

The effect of conventional capital

Traffickers have suggested that conventional capital is an important factor in starting the career of drug trafficking. It helps potential traffickers hold up in the conventional world for a longer time. However, when it is weakened, they might be pulled into the illicit drug markets much more easily. For instance, GA_09, who started when he was age 50, explained that:

“(he) set up a legitimate business...and things were OK for a while. Then in early 2000s the business collapsed...He met an Irish...who asked him if he would be interested in a one-off import a small quantity of Ecstasy from Holland and shipping out to Dublin...He said yes.”

Interview transcripts reveal that although many traffickers do not have legitimate jobs before enter into the drug trade, early starters seem less concerned about being unemployed, while late starters are more likely to suffer from weak conventional capital before they are involved in the illicit drug market. Some traffickers who started at a very young age claimed that they rarely had legitimate jobs. For instance,

“LG_26 had left school at 16 and have never had a job... He claimed unemployment benefit and lived with his parents... He decided to take on selling (cannabis) and through conversation with the people he knew, he arranged so that he could buy whatever amount of cannabis he wanted.”

In contrast, other respondents, especially late starters, might have legitimate jobs before but they become laid off or lose their jobs, which triggers the entry into the drug trade at a relatively old age. RH_09 said that “prior to his involvement (he) had worked in local government for 22 years. However, he lost his job...and had a semi-breakdown...He was offered 500 to take a parcel of a few ounces from Liverpool to Lowestoft.”

In addition, although legitimate employment might delay the entry into trafficking, certain jobs might also offer opportunities as they can provide covers and excuses to some suspicious activities, such as across borders frequently. Some traffickers have reported that they were recruited due to their legitimate occupations. Individuals who worked in the transportation and import-export business could have a higher possibility to engage into drug trafficking when they were older and had developed sufficient skills for their legitimate jobs, which were also crucial to engage in and accomplish drug transportations. For instance, VE_13 started trafficking at age 28 and described:

“(he) was employed as a lorry driver regularly doing routines throughout Europe...He had taken a load down to Belgium and was stopping over in a lorry park in Gent when he was approached by a man...He was offered 500 Euro to take a package to the UK.”

“VE_28's (44 years old when started trafficking) new job involved buying and selling used mobile phones. He traveled to London to buy mobile phones to take back to sell in Lagos. This was a legitimate business...An old college

friend in Lagos asked VE_28 to transport some pharmaceutical products (cocaine) from Lagos to London.”

Legitimate employment might have some effect on restraining potential traffickers from the drug trade. However, when they are not satisfied with the current financial situation, or the existing employment fails to help the financial problems that they encountered, the possibility of entering the drug markets would increase. For instance, DG_14 explained his entry was because he was getting married and had a child and was not earning enough money in his job. GA_16 shared a similar story that:

“he worked as a wagon driver and lived in rented accommodation... He wanted to buy a house with his new partner and needed to raise £10,000 for the deposit... They had seven children... He had always been a hardworking man and worked very long hours but no matter how hard he worked, they were not able to make any savings... He met a driver who told him about some work he had been doing for one of his customers abroad...The driver insisted he could earn up to £10,000 per job...”

It is not surprising that late starters are more likely to report that they were not financially satisfied. SU_02 got involved in the illicit drug trade in 1997 when he was 47 years old. He “had lost his business in 1993 and had been out of work since then...He decided to get involved because of financial reasons...” Some early starters, on the other hand, indicated that they might not even need capital if they had known some friends who had already worked in the illicit drug trade, their friends could loan drugs to get them started. LH_10 began smoking cannabis at age 16 and used to buy extra to sell to his friends.

“He sold small amounts of cannabis, until he could afford to buy larger amounts... His dealer provided him with contacts...Once he was well established, people would loan him drugs and he could pay back once he had sold the drugs on.”

Similarly, WE_20 who started selling Ecstasy at 17 thought it was easy to get into the illicit drug market. He explained that

“he had always hung around with people into illegal activities so it wasn’t difficult to find a supplier and the knowledge to get him started. Initially, he ‘borrowed’ the drugs and then sold them on, paying for his stock after sale.”

Furthermore, respondents indicated that having a legitimate job might not bring financial satisfaction. Instead, when they felt unsatisfied about their financial situation and were lured by

the huge profits, they were involved in the drug market anyway. A small group of traffickers who had legitimate jobs and did not struggle with life explained their choice of drug trafficking as they admired the “luxury” criminal life style. These traffickers are more likely to start at an older age. VE_17 got involved in the drug markets when he was 48. He was a transport driver travelling all over Europe. He said that:

“his friend had asked if he was interested in transporting drugs once before and he had said no...He realized he would go to prison but when his friend asked him again the money offered persuaded him to do it...”

MA_01 who started trafficking at 42 was a restaurant owner and said that:

“he worked very long hours to manage his businesses (a Turkish restaurant). Business was steady but MA_01 wanted more money to enhance his standard of living.”

The effect of criminal capital

The interview transcripts provide further illustrations that criminal capital plays an important role in the entry into illicit drug trade. Many early starters indicate that they decide to get involved in the drug markets based on their own initiative, especially when they were using drugs, as they felt drug trafficking was a good way to make a profit. A sudden call of trafficking drugs might simply pull them into the markets.

“At 15, he (GA_12) started to smoke a bit of weed and by the time he was 18 he was into the club culture and doing Ecstasy tablets. He was doing quite a lot and one day it just occurred that if he bought a few more than he needed himself he could sell them on to his mates and other club go-ers... (Then, he) began his dealing career by passing on the excess tablets he had bought to others 'on-tick' during a night at a club.”

Some respondents noted that the knowledge of drug markets gathered through the way of using drugs could help them start trafficking quickly. The entry was considerably easy for these drug users, as they had already known some local dealers on streets and established good sense of qualities and the pricing of drugs. Their ages of onset are relatively younger than non-users. For instance, BU_03 was 21 when he became a street retailer:

“he started smoking on a daily basis and needed money to finance his habit. He sold cannabis to users the same age as him...(he) purchased an ounce

from a local supplier who he knew through friends...As a user, he was aware of prices and quantities ...”

In contrast, those who entered into the drug trade late in their life were more likely to be approached by a third party. Many of them report that they were introduced into the drug trade by “a friend” when they lost their jobs or they were desperate of money. In addition, when their legitimate jobs fit the recruitment criteria, even a stranger can come with a profitable proposal and persuade them to get involved into the drug trade. For instance, VE_13 was a lorry driver at 28 when:

“he was approached by a man who asked him where he was going. He told him he was heading to the UK via Dunkirk in France. The man invited him to go for a drink which he did. During this time he was offered 500 euro to take a package to the UK...”

As it is shown in the logistic regression models, strong ties to the illicit drug trade is positively associated with early starters, some respondents indicate that “knowing the right people” is the most important factor that accelerates their entry at a young age. They explained that the entry into drug markets was not even difficult when they had the right contacts. Parents or relatives helped them get involved into the drug trade smoothly. For instance, when DG_06 was 16:

“(he) got involved through his Dad - he had been around crime and criminals all his life... He got involved because of the money and the lifestyle.”

Other early starters began trafficking through friends who either directly invited them into the markets, or introduced them to some “solid” dealer who then became their bosses after the meeting in most cases.

GR_02, “had been involved with drug activities since the age of 16 when he left boarding school and returned to his local area... He met people who were involved in criminal activity and through knowing them he said he gained respect and trust...”

DG_9 “started dealing when he was 18... He got involved through a friend... It was no struggle to get involved - he knew the right people”.

In contrast, most late starters were not rich in criminal social capital. Some late starters also reported that they knew someone already working in the drug trade. However, their criminal social capital might be weak ties as the relationship with the contacts, through whom they get

involved, is often not close enough. For example, VE_37 starting at 46 was offered £3000 by an ex-business partner to take cocaine to the UK.

Interaction between conventional and criminal capital

The interaction between conventional and criminal capital is also identified by the respondents in the interview transcripts. Some traffickers are weak in conventional capital but had strong criminal social capital. These two factors together led them to the illicit drug trade at a young age. For some traffickers, even though they had friends who worked in the drug markets, they could still act as law-abiding citizens for years or even decades, but eventually entered into the illicit drug markets when they lost their jobs, had broken families, or were not satisfied with their financial situation. VE_25 who started trafficking at 46 described that:

“he needed money to pay for his sister's HIV treatment...(his) Tanzanian friend in Brazil offered him some work to earn some extra money...(he) was asked to transport 1 kilo and 30 grams of cocaine from Brazil to London.”

DV_2, “had problems with bank credit and didn't know what to do. She had Nigerian friends who she met when in bars...(and) had been doing business for many years”.

Some traffickers showed how conventional capital could work together with more than one forms of criminal capital to facilitate them access to the drug markets. When having financial difficulties, they actively sought opportunities to start trafficking through those “dodgy” friends who had already worked in the markets. For instance, DG_4 started trafficking when he was 23. He explained that:

“(he) became involved in drug dealing because he had financial issues. He was married (and had) four children and was struggling to pay his debts. He knew one of his friends was involved with drugs so he asked to be involved too. ”

A similar scenario happened to VE_03, when he was 24:

“(he) had some financial problems, including difficulty paying his mortgage. His wife was pregnant at the time and they had another small child. He was working as a waiter, estate agent and security at a disco...He had gone with a friend who was purchasing drugs (for personal use) and it was during this visit...he became aware that this dealer could pay him to import drugs.”

Other traffickers who were also desperate of money noted that their entry into drug markets was benefit from criminal human capital. The criminal activities they committed before trafficking provided these traffickers a “good” reputation, respect, and trust. Therefore, they were more likely to be recruited into the illicit network of drug trafficking. For instance, RH_13 involved at 29, said:

“(he) was approached because he had been involved in other illegal activities and was known as trustworthy. He was also in debt to some people and wanted to earn money quickly.”

5.3. Summary

This chapter examines the effects of conventional and criminal capital on the age of onset of the criminal careers of drug traffickers. It provides explanations on why some offenders start to enter into the illicit drug trade at a young age, whereas most traffickers become involved after their late twenties. The findings suggest that conventional capital delays entry into the illicit drug trade. Notably, legitimate employment is likely to keep potential offenders away from getting involved in a career of drug trafficking. Criminal capital, on the other hand, accelerates the process of engaging in drug trafficking. Early starters are more likely to begin dealing on their own initiative, whereas most late starters are approached or introduced to the illicit business by their friends or acquaintances. Moreover, as a form of criminal social capital, knowing someone who has already worked in the market facilitates access to drug trafficking at a young age. Qualitative analyses reveal more detailed reasons for why a trafficker enters into the illicit drug trade early in life, and how different forms of capital can interact with each other and provide opportunities for the involvement in the drug trade at a young age.

6. Results – who starts with better positions?

This chapter examines the relationship between different forms of capital and the entry levels that traffickers can achieve when they are first involved in the illicit drug trade. In the current sample with 182 incarcerated traffickers, around half of them started at the lower level as transporters or storers. Approximately 35% of them played roles at the middle level, and 15% of respondents indicated they entered into the drug trade with more prestigious status as wholesalers or managers organizing importation and/or transportation. As discussed in the previous chapters, the main hypothesis is that both conventional and criminal capital can affect the entry levels traffickers first achieve in the illicit drug trade. It is expected that conventional capital prevents some traffickers from having a necessary contact to start at the higher levels. Criminal capital, however, might provide valuable resources to avoid starting at the bottom of the drug distribution chain for some potential offenders. Using both quantitative and qualitative methods, this chapter attempts to examine these hypotheses. The results of bivariate analyses are presented in the first section followed by the findings of a series of multinomial regression models. CHAID analyses provide further explanations indicating the most important factors predicting the entry levels and possible interactions between different forms of capital. Content analysis on the interview transcripts reveals a variety of possessed conventional and criminal capital from lower level starters to upper level starts and explores how these main factors can interact with one other to affect the entry levels.

6.1. Predicting entry levels

Table 5 shows the result of the bivariate analysis. It is suggested that except ethnicity, all variables are significantly associated with entry position. Using drugs is less prevalent among traffickers who started at the lower level (35%), while 75% of middle level starters and 56% of upper level starters have used drugs before beginning the trafficking career. The age of onset is another important control variable. Only 16% of lower level starters begin illicit drug trafficking

younger than 25 years old, whereas 66% of middle level starters enter into the trade early in their life. In addition, 42% of traffickers who begin at the upper level are early starters. Furthermore, most traffickers starting at upper level are satisfied with their financial situation (93%). In other words, they do not encounter financial difficulties in their life before entering into the illicit drug trade. 56% of middle level starters have reported such satisfaction, whereas individuals who struggle with financial problems are more likely to end up playing at the lower level in the drug distribution chain: only 36% of lower level starters are financially satisfied. It is not surprising that lower level starters have a fairly high percentage of legitimate employment (90%). This figure drops to 72% when considering traffickers who start at the middle level, while 85% of upper level starters have legitimate jobs before trafficking. Traffickers who started at the middle (73%) or upper levels (60%) are more likely to begin on their own initiation, whereas around one third of lower level starters initiate their own entry into the drug trade. Approximately half of the lower level starters have reported that they have strong ties to the world of drug trafficking as they have friends or family members already working in the illicit drug trade, while those who started at the middle level are more likely to have this form of criminal social capital (70%). The percentage becomes even higher for upper level starters: 72% of them have such contact working in the illicit drug trade. Criminal human capital is less prevalent among lower level starters. There are approximate 39% of lower level starters having some knowledge of drug trafficking before entering into the market, compared 55% for middle level starters, and 65% for upper level starters. The indicator of criminal skills falls into a similar pattern as the knowledge of committing criminal offenses. Only 42% of lower level starters have committed crimes other than drug trafficking before trafficking, while 63% of middle level starters and 77% of upper level starters break laws prior to the trafficking career.

Table 5 ***Bivariate results predicting entry levels***

	Lower level	Middle level	Upper level	χ^2
<i>Control variables</i>				
White	62.8%	68.9%	63.0%	.650
Using drugs before trafficking	35.1%	75.4%	55.6%	20.459***
Early starters	15.5%	65.6%	41.5%	40.821***
<i>Conventional capital</i>				
Financially satisfied before trafficking	35.5%	56.0%	92.6%	28.171***
Having legitimate jobs before trafficking	90.4%	71.5%	85.2%	8.883**
<i>Criminal personal capital</i>				
Self-initiation	31.9%	72.8%	59.6%	26.286***
<i>Criminal social capital</i>				
Having friends or family members in the drug markets	50.9%	69.5%	71.9%	7.853**
<i>Criminal human capital</i>				
Having knowledge of drug trafficking	39.3%	55.4%	65.2%	6.469**
Conducting other criminal activities before trafficking	41.9%	63.3%	77.0%	13.157***

*** $p < .01$, ** $p < .05$, * $p < .10$

As all independent variables are significantly associated with the entry positions at the bivariate level, multinomial regression analysis is conducted to further assess these relationships. Lower level positions are used as the reference category⁴ and examine two comparisons with middle level and upper level positions. Table 6 presents the results of the multinomial regression analyses. The model is significant ($\chi^2 = 125.119$, $p < .01$) and explains approximately 50% of the variance of the entry positions. When comparing middle level to lower level starters, it is found that both conventional and criminal capital affect the positions in which the traffickers first begin. Financial satisfaction is positively associated with middle level entry, although the relationship is marginally significant ($B = 1.099$, $p < .10$). Specifically, traffickers

⁴ Middle level starters are also used as the reference category to assess their difference from upper level starters. However, none of the variables were statistically significant in the analyses.

who are satisfied with their financial situation are more likely to start at the middle level, whereas individuals begin working in the more risky positions such as transporting or storing drugs when they are suffering from financial problems before entering into the drug trade. Legitimate employment, however, is not statistically significant in this model. Criminal personal capital is significantly associated with entry levels ($B = 1.800, p < .01$). When the entry into the illicit drug trade is driven by self-initiation, individuals are more likely to start at the middle level of the market. However, it seems they have less opportunity to choose except transporting or storing drugs when approached by others. It is notable that other variables of criminal capital are not significantly associated with the middle level position, compared with the lower level ones. Two control variables are significantly related to middle level positions. Not surprisingly, using drugs can lead to the dealing career at a relatively higher level ($B = 1.600, p < .05$). The finding suggests that drug users are more likely to start dealing drugs on streets, while non-users are more likely to start taking transportation jobs. Furthermore, the age of onset also has an impact on predicting the middle level entry. Early starters are more likely to take the role of retailers or specialists when they enter into the illicit drug trade ($B = 2.025, p < .01$). When they start late in life, traffickers have a higher chance to begin as transporters or storers.

Table 6 Multinomial regression predicting entry levels

	Middle level		Upper level	
	B (S.E.)	Exp(B)	B (S.E.)	Exp(B)
<i>Control variable</i>				
White	-.029 (.513)	1.030	-.726 (.683)	.484
Using drugs before trafficking	1.600** (.666)	4.952	.662 (1.009)	1.939
Early starters	2.025*** (.496)	7.578	.908 (.651)	2.480
<i>Conventional capital</i>				
Financially satisfied before trafficking	1.099* (.560)	3.001	3.655*** (.868)	38.663
Having legitimate jobs before trafficking	-.816 (.683)	.442	-.144 (.912)	1.155
<i>Criminal personal capital</i>				
Self-initiation	1.800*** (.500)	6.049	1.188* (.619)	3.280
<i>Criminal social capital</i>				
Having friends/family members in drug markets	.137 (.513)	1.147	.847 (.625)	2.333
<i>Criminal human capital</i>				
Having knowledge of drug trafficking before	-.111 (.594)	.895	.892 (.738)	2.441
Conducted other criminal activities before	.590 (.518)	1.803	1.664* (.864)	5.283
$\chi^2 = 125.119^{***}$				
Cox & Snell pseudo R ² = .497				

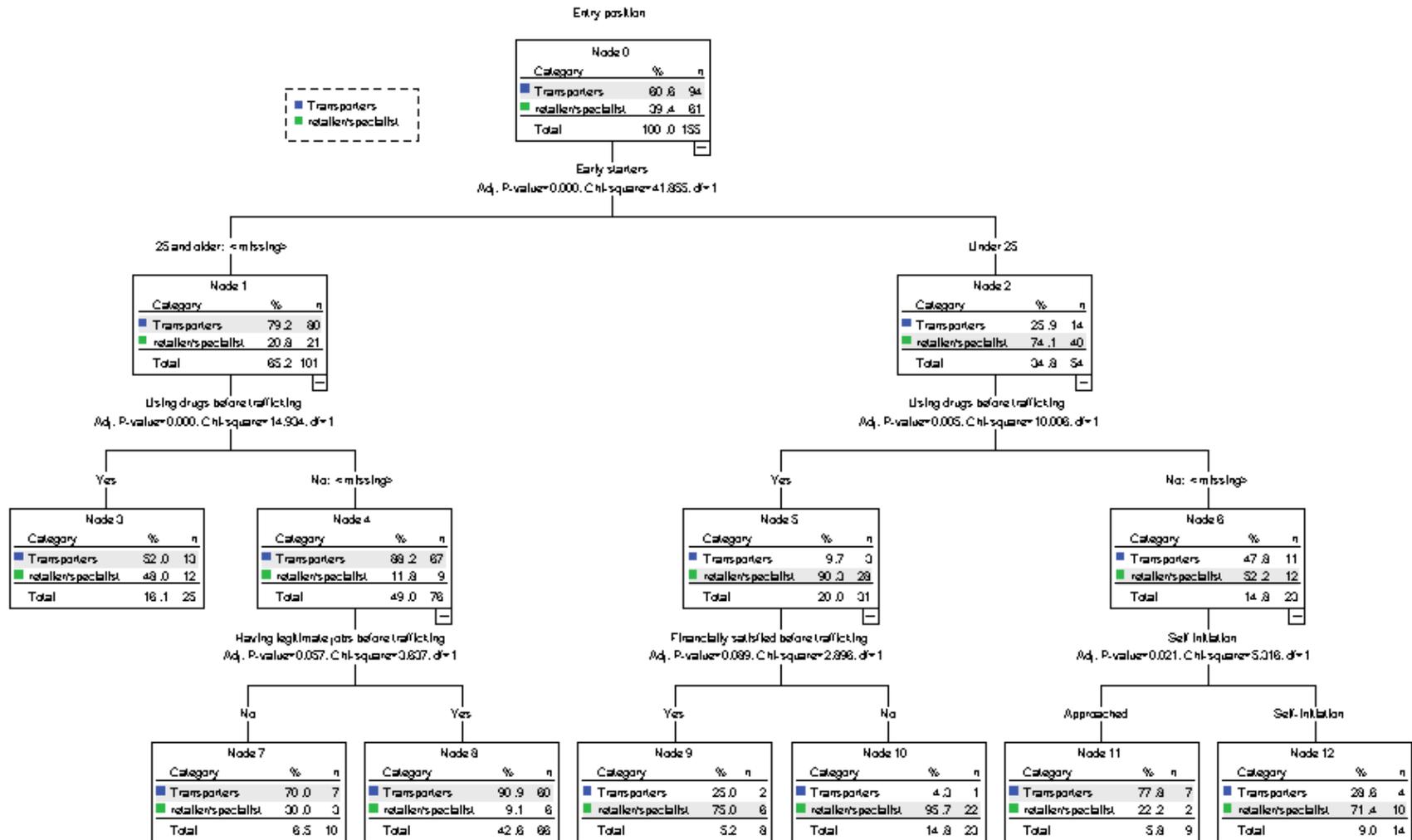
*** p < .01, ** p < .05, * p < .10

The comparison between the lower level and upper level positions shows a slightly different pattern. Again, both conventional and criminal capital are important in predicting upper level positions. Specifically, financial satisfaction plays a more important role in distinguishing transporters from wholesalers as it is positively associated with upper level positions ($B = 3.655$, $p < .01$). The significance is strong at the .01 level. Those who are financially satisfied and have sufficient funds are more likely to skip the lower level positions and start trafficking as wholesalers. Criminal personal capital is positively related to the upper level entry ($B = 1.188$, $p < .10$). However, the significance of this relationship is marginal at the .10 level. Similar to middle level positions, self-initiation can lead to entry into the upper level positions as well. The skill of committing criminal activities is also significantly associated with the upper level positions, although the significance is marginal ($B = 1.664$, $p < .10$). Compared to lower level starters, those who have experience in committing other types of crime before trafficking are more likely to begin operating large drug transactions. Former law-abiding citizens, on the other hand, are more likely to start at the lower level in the illicit drug trade. Notably, no control variables are significant in this comparison. Both drug-using history and early starters are no longer significant indicators for predicting whether potential traffickers might achieve upper level positions when they start their drug trafficking careers.

Although the multinomial regression analyses have illustrated the effects of conventional and criminal capital on the entry positions, none of the interactions between different forms of capital were found to be significant. It would be necessary to run models through CHAID analysis to identify how conventional and criminal capital may interact with each other to affect entry levels. The comparison between middle and lower level positions has been conducted first (see Figure 2). The CHAID tree diagram suggests that the age of onset is the most important indicator for distinguishing these two groups. For those who started trafficking at 25 years old and older, 21% of them held positions at the middle level as retailers or specialists, while approximately 74% of early starters began at this level. If late starters had used drugs before entering into the trade, they were more likely to skip the lower level positions (48% vs. 12%). For late starters who were not drug users, when they did not have legitimate employments before trafficking, they had a higher possibility to achieve the middle level positions (30%). All else being equal, if they were legitimately employed, only 9% of them start their drug trafficking careers as retailers or specialists. The result showed that when comparing lower and middle

level starters, the age of onset and drug use history played an important role. Strong conventional capital, such as legitimate employment, had some effect on restraining certain type of potential traffickers to lower level positions when they started their trafficking careers late in life.

Figure 2 CHAID tree diagram predicting lower and middle level starters



For early starters, the experience of using drugs is also important for predicting the entry positions they can achieve. Early starters who had used drugs before trafficking were more likely to start at the middle level than were non-users (90% vs. 52%). Furthermore, for traffickers who entered into the illicit drug trade younger than 25 and had used drugs before, they had a lower possibility of achieving the middle level positions when they were satisfied with their financial situation (75% vs. 96%). Early starters with a drug use history were more likely to start as retailers or specialists when they had financial difficulties. On the other hand, for early starters who had not used drugs before, criminal personal capital played a role in predicting the entry into the middle level positions. These traffickers were more likely to skip the lower level when they were willing to seek opportunities to enter into the illicit drug trade (71% vs. 22%). These results reveal that conventional and criminal capital can affect different types of traffickers. For early starters, the form of conventional capital that influences entry positions is different from that for late starters. Weak conventional capital facilitates some early starters to begin trafficking at a relatively higher position. Meanwhile, strong criminal personal capital is helpful to achieving better positions for non-users who start trafficking early in life.

Figure 3 presents the CHAID tree diagrams for the lower and upper level positions. It shows that conventional capital - whether traffickers are financially satisfied before trafficking - is the most important indicator. Only 4% of those who were satisfied with their financial situation started at the upper level, whereas 46% of traffickers without financial difficulties started dealing as wholesalers. When they were struggling with financial problems, legitimate employment decreased the possibility of entering at the upper level (2% vs. 20%). For those who were financially satisfied before trafficking, self-initiation helped them to achieve upper level positions: 75% of these traffickers who initiated their entry become wholesalers, while 28% of those who were approached by others started at the upper level. Criminal human capital was the last significant variable in this CHAID analysis. However, it had the opposite effect on approached and self-initiated traffickers. For those who were financially satisfied, approached and offered by others to enter into the illicit drug trade, their former criminal activities increased the possibility of trafficking at the upper level (45%). When all else was equal, if they lacked criminal human capital, they were more likely to start at the lower level as transporters or storers. However, when traffickers with financial satisfaction started trafficking based on their own initiative, they were more likely to start at the upper level if they did not commit the criminal activities before they began trafficking drugs (92% vs. 42%). These findings reveal that conventional capital can interact with criminal capital to predict the level of the entry positions the traffickers achieve in

the illicit drug trade. Not only does it illustrate the common understanding that more money is needed for upper level positions, but indicates the impact of criminal capital on entry positions when traffickers have sufficient funding.

Figure 3 CHAID tree diagram predicting lower and upper-level starters

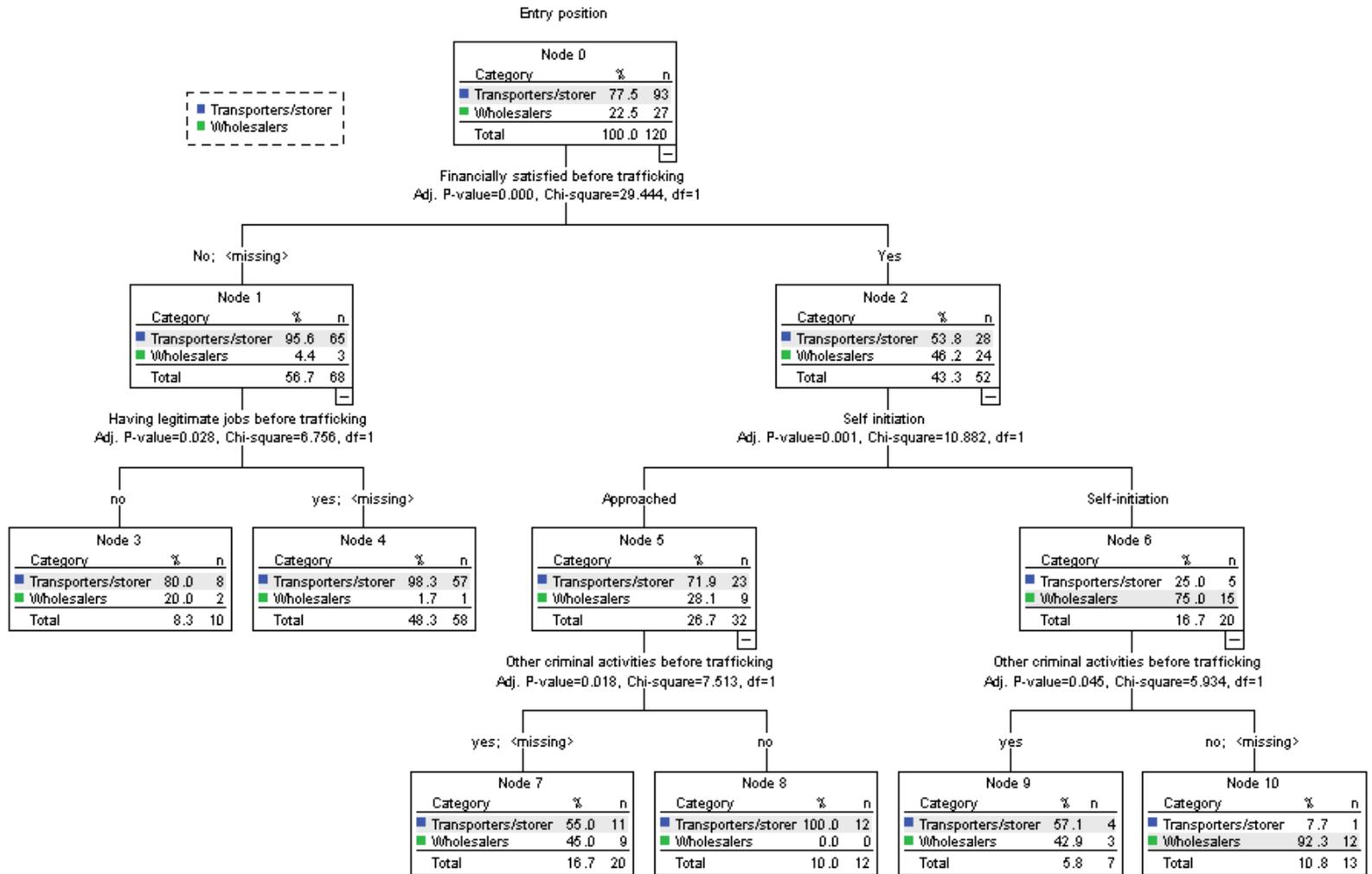
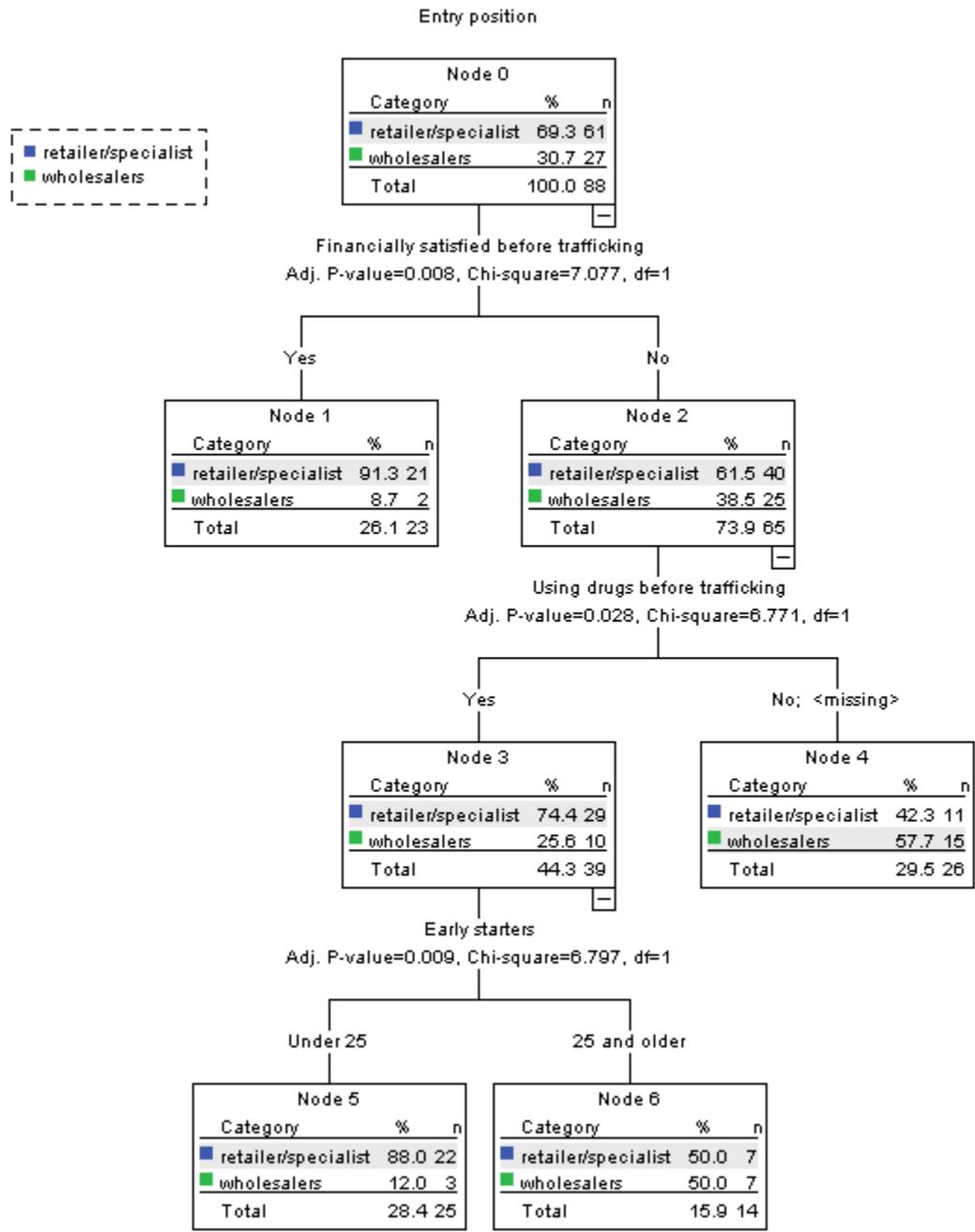


Figure 4 shows the comparison between the middle and upper level starters. Although no variable was found to be significant in the multinomial regression analysis, the CHAID tree diagram provides further examination of these two groups. It reveals that conventional capital plays a crucial role for the middle and upper entry levels. None of the variables of criminal capital were significant in the analysis. A satisfactory financial situation is the most important variable for distinguishing middle and upper level starters. It is suggested that middle level starters were more likely to have financial problems before entering into the illicit drug trade (91% vs. 62%). In contrast, only 9% upper level starters were financially struggling. For traffickers who were satisfied with their financial situation, using drugs before trafficking had less opportunity of entering into the upper level, as approximately 74% of drug users started at the middle level, whereas 42% of non-users began trafficking at this level. In contrast, around 26% of drug users became upper level starters and 58% of non-users played the role of wholesalers or managers at the beginning of their careers of drug trafficking. Moreover, for traffickers who had used drugs before trafficking and been satisfied financially, the age of onset played a role in predicting the entry into upper level positions. Among these traffickers, only 12% of early starters started at the upper level, whereas 50% of late starters achieved the same level when entering into the drug trade. These findings indicate that for traffickers who skip the bottom positions in the drug distribution chain, conventional capital is the key to determining the entry levels they might obtain. This is not surprising for these traffickers often have certain forms of criminal capital in the drug market as discussed in the previous section above. It suggests that financial situation could be the most important factor that predicts whether a potential trafficker can achieve upper level positions in the illicit drug trade.

Figure 4 CHAID tree diagram predicting middle and upper-level starters



6.2. Content analysis on the entry levels

The interview transcripts provide opportunities to assess in-depth information on the history of using drugs, the prestige of their legitimate occupations, and types of self-initiation among traffickers who entered into the illicit drug trade at different levels. Similar to the analysis on the age of onset, the primary focus of the content analysis is on the factors that are significant in the quantitative analyses.

6.2.1. *The effect of using drugs*

As it is suggested in the ethnographic research on drug traffickers that using drugs could affect the positions they achieve at the beginning of their careers in the drug trade, the interview transcripts further demonstrate that feeding their drug habit is one of the reasons for some respondents starting dealing drugs on streets. Lower level and upper level starters, however, often report that they have never used drugs before entering into drug markets. For instance, when DV_10's partner died, she was depressed and short of money. She did not use drugs herself, though she used to help people with drug problems. Through these people, she was involved in transporting cocaine from St Lucia to the UK.

LH_11 who started as a retailer, on the other hand, described the effect of using drugs on his position:

“(he) was a heavy heroin and crack addict and needed to fund his habit. When he first used drugs he funded his own habit, then moved onto shoplifting and then dealing. He choose to deal drugs as it was less risky than shoplifting to fund his habit. He had already been arrested for shoplifting many times and served community sentences. It took longer to get arrested for drug dealing. He had been buying off one guy for a long time and had a good relationship with this man. The guy told him that if he wanted to make some money to help with his habit he could help him sell drugs and he took him up on the offer. His role was to deliver drugs from the ‘main man’ to users. His role was referred to as ‘footsoldier’. (he was) answering the phone and then meeting users to deliver the £10 bags of heroin or crack.”

GA_25 shared a similar story and claimed that “it was an easy transition from user to dealer”:

“he was a user of heroin and crack and started dealing to make the money to get his own score...He was a user so he knew where to go to buy and to sell.”

These cases suggest that for drug users, dealing drugs is a less risky way to feed their drug habit than other types of criminal activities. However, not every drug user starts at the middle level, if they are recreational or social users, or they are smoking cannabis. For instance, WL_03 was smoking cannabis. He set up an import/export “business” and purchased 40 kilos of cannabis from Morocco as his first deal.

Early onset is found to provide opportunities to start trafficking at the middle level. Again, the effect of early onset is usually combined with drug use. Early starters reported that it was not difficult to start buying and dealing small amount of drugs to friends. For instance, HP_03 “started supplying Crack Cocaine and Heroin for himself, (and) was a user of cocaine”.

6.2.2. *The effect of conventional capital*

Financial problems can easily let potential offenders take the lower level positions in the drug distribution chain. Among those started as transporters and storers, their desire for money drove them to start their careers of trafficking drugs. It seems they did not have many options but take the opportunity to make quick money, especially when they lost their jobs or encountered difficulties for their legitimate business. HP_04 explained that a hernia operation made him redundant from his job, and he was

“falling behind on mortgage payments. His bank would not give him a loan so he borrowed money from acquaintance...All he knew about his acquaintance was that he had fingers in lots of pies and was someone that could sort out collection of debts etc. He started driving his acquaintance around and started to take more responsibility - picking up parcels from people, dropping them off etc...(he) thought business was legit - didn't know he was couriating drugs.”

On the other hand, individuals who do not have financial problems may easily start at the upper level, since they have sufficient amount of money to make large purchase, and their legitimate business can provide them human resources that complete the jobs at the lower levels and also play as covers to deceive custom when transporting drugs cross borders. K_02

started as an international wholesaler who operated the transportations in many countries in Europe. He described that he

“owned the largest international haulage company in Liverpool with a £28 million turnover. It was based in Liverpool but there were also depots in Austria, Belgium and Spain...K_02 got involved in 1992...The manager of the depot in Spain got into money problems from gambling. He asked K_02 if he would do him a favor - bringing in 100 kg of pot for them and they would split the profits down the middle”.

When analyzing the effect of legitimate employment, bivariate analysis has indicated that it is more prevalent among lower and upper level starters than middle level starters. The interview transcripts reveal that upper level starters are more likely to be successful in their legitimate business before involved into drug trafficking. For instance, the case of K_02 mentioned above illustrates this fact. Similarly, DG_02 claimed that he served as the “money man” and a wholesaler when he was involved into drug trafficking.

“He was a successful business man before he had anything to do with illegal transactions. He owned a car garage, a nightclub, and a property. He was introduced to Turkish men who did not know what to do with their money as it was piling up and they did not know how to make it legal money... The Turks and also Greeks would import drugs so DG_02 would ‘point them in the right direction’ for a sale...”

In addition, the types of legitimate employment that upper level starters have before entering into the illicit drug trade are likely to be prestigious and well respected. For instance, GA_04 was a retired police officer and became involved in the drug trade as a transportation manager. His job was to recruit suitable candidates to take the jobs of bringing cocaine supplies into the UK.

On the other hand, lower level starters frequently work with labour jobs with minimum wages. For instance, VE_03 was working as a waiter, estate agent, and security at a disco before taking 2 kilos cocaine from Santa Lucia to the UK for his friend. BH_03 was a local transporter in his short career of drug trafficking.

“He worked as a driver fro a legitimate company earning £100 per week...His first job involved collecting a kilo of cocaine...The drug were concealed in a white bag and taped. He was paid £2,000 on delivery.”

Some individuals working with import/export business are likely to be targeted in the recruiting process, as they are capable to use those legitimate means they have established in their jobs to cover drug transportations. For instance, K_05 was picking and delivering packages in Manchester before playing as a local transporter of cannabis for five months.

“He got bits of work with his brother's van. A long time friend of his asked if he knew anyone with a van who would do some work. He agreed. He got a phone call from someone he didn't know to deliver cannabis. The cannabis was in plastic boxes with lids. He carried 12 boxes.”

Not only does these findings echo that legitimate employment affects the entry levels of the potential traffickers, but also suggest the type of legitimate jobs also may play a role in the positions that traffickers could achieve when starting their careers in the illicit drug trade. It is not saying that prestigious legitimate employment merely leads to higher level positions, but the personal characteristics and entrepreneurial skills required in those legitimate positions, and possible contacts made through the conventional network may assist potential offenders to skip the lower levels and to achieve upper level positions in the drug trade.

6.2.3. *The effect of criminal capital*

Many traffickers who start at the lower level indicate that they have weak criminal personal capital. They are more likely to be approached by others who come to propose a job opportunity with large amount of profits they can obtain from it. Most of them are introduced by a friend or acquaintance. For instance, VE_27 was a friend or approached by his friend when he was struggling to start his own business. He explained how he got involved into drug trafficking as:

“A friend asked him if he was interested in earning some extra cash. His friend explained it involved transporting 2.5 kilos of cocaine from Togo to London... He agreed to transport the drugs.”

In contrast, sometimes they are approached by strangers. GA_16 was a wagon driver. He shared a similar story with VE_27, but he hardly knew the person who offered him this job. He described his experience as

"One day he stopped at a truck stop. He met a driver who told him about some work he had been doing for one of his customers abroad...and insisted he could earn up to £10,000 per job. (GA_16) called the driver and told him he would go to Spain to pick up the pallet".

Traffickers who skipped the lower level and start at the middle or upper levels were more likely to start on their own initiative. They were attracted by the huge profit or the luxury lifestyle gained from the trafficking career. Moreover, because they were more likely to have other types of criminal capital, it was not difficult for them to start trafficking at the higher level of the drug distribution chain. RH_15 who started as a wholesaler explained his entry as:

"his Dad was seriously involved with drugs ... and got sent to Prison about 6 months after he had arrived in New York. He saw the money that his Dad could make through drugs and decided he wanted some of it... He did not have to start at the bottom and sell on the streets as he already had people in shops that he could knock it out to."

Upper level starters also emphasized that the importance of having the right person when start the dealing business. Friends and family members working in the illicit drug trade were significant resources, who provide criminal social capital for them to achieve a better position when start trafficking. For instance, FS_01 was a salesman for a long time. He had a mobile phone business and he had:

"lots of contacts through his 'phone business who he knew were involved so it was easy to get started. He started with cannabis (a few kilos)".

Moreover, GA_23 illustrated that the importance of family members. He was involved because his sister bought some weed and asked him if he would sell it. Later on, he was doing business with his girlfriend's dad who was also a drug dealer:

"He went out with him on his rounds selling 'white and brown' (cocaine and heroin), learning the trade. The girlfriend's dad started to do a trade in Speed so he took over his White and Brown round".

Traffickers also mentioned that criminal human capital could be crucial when they started drug trafficking. The knowledge of drug trafficking helped them to skip the bottom level positions. Most retailers gained the knowledge from being a user. WE_09 tried to find his way in life legally after graduated from school, but

"was meeting up with the criminals - minded on the estate and started illegal activity such as stealing car stereos etc... After a while, it becomes a way of life. He had no work, time on his hands and needed to make ends meet. He was a cannabis user and began selling a bit to mates around the estate, just 1-2oz or so... It was easy to get started... He knew the business of selling and could communicate well. He knew his product well, understood the market and knew the suppliers because he was a user himself".

Prior criminal activities also offered the traffickers some opportunity in terms of obtaining the knowledge of drug trafficking, establishing right contacts, and conveying the reputation of being solid and trustworthy. For instance, WH_01 was working as a lorry driver. He served a 20-year sentence for robbery. He had never used drugs before, even in prison. He started to transport drugs when he was released from prison, as:

"someone he had met in prison rang him and asked if he would like to make +/-£700 per week to run drugs around England. He would never have got involved if he hadn't met these types of people in prison".

Traffickers developed skills of committing crimes from prior criminal activities. The profits earned from criminal activities assisted the traffickers to achieve the upper level positions.

"VE_05 was involved in fraud from 1998-2004. He made €75,000 Euros in total... was a cocaine, heroin and cannabis user. He bought drugs from two dealer friends every weekend... They wanted to set up their own business and asked VE_05 if he was interested in investing. VE_05 agreed to help them".

In addition, different forms of criminal capital could work together to facilitate the entry into the upper level positions. As described by GA_02 who started as an international wholesaler, his involvement was caused by his criminal background:

"he had been in borstal at age 19 and at one point mentioned prior to importing he had been a burglar. His life was simply one of criminal link...The main operation he was involved in was a group of 10 people whose set up was the same as investing in a company... 10 people purchasing approximately 3-3.5 kilos (cocaine) per person".

6.2.4. *Interaction between conventional and criminal capital*

The transcripts illustrated the interaction between conventional and criminal capital. Some lower level starters entered into the illicit drug trade because of losing their jobs or having

financial difficulties. They asked their friends or family members for opportunities in the drug markets to earn quick money and to get rid of the financial burdens. For instance, GA_15 worked lived and worked as a taxi driver in Liverpool and he was:

“struggling to make a decent wage. He decided to ask his nephew who was a prominent dealer for some work... (then) started delivering heroin and cocaine (blocks and powder) to street dealers”.

For middle or upper level starters, they reported to have strong conventional capital and were rich in criminal capital as well. They were capable to make large purchases of drugs as they had sufficient fund either saved from their legitimate business or earned from prior criminal activities. They also had friends or family members already involved in the illicit drug trade, who helped them begin trafficking at the upper level. For instance, LG_18 spent most of his life dealing fruit and vegetables. He also laundered money and committed VAT (Value Added Tax) fraud. After these,

“he set up with a partner a business front to import cannabis from Morocco. To do this he created a company that renovated electrical transformers...The renovated devices were sent a warehouse...where the oil coolant was emptied out and reloaded with 150 kg of cannabis. The operation had taken a year to set up using money he made from VAT fraud.”

6.3. Summary

This chapter assesses the relationship between different forms of capital and entry levels in the illicit drug trade. It was found that both conventional capital and criminal capital have a significant impact on entry levels. A satisfactory financial situation increases the likelihood of becoming a middle or upper level starter. Legitimate employment is also associated with entry levels, but it is only significant when comparing lower level to middle level starters. However, the content analysis suggests that the type of legitimate jobs might have some impact to facilitate access to higher level positions in the illicit drug trade. Criminal capital is more prevalent among middle and upper level starters. Self-initiation is positively associated with entry levels. Lower level starters are less likely to initiate the trafficking career on their own. Although criminal social capital is not significant in the quantitative analyses, interview transcripts indicate that traffickers who successfully skip the bottom level positions are likely to

have stronger ties to the criminal world. Criminal human capital also plays a role in the prediction of entry levels. Prior criminal activities might help traffickers establish appropriate contacts who assist them in achieving more prestigious positions in the illicit drug market.

7. Results – Who shows progression?

This chapter represents findings of both quantitative and qualitative analyses on the relationship between different forms of capital and progression achieved by respondents in the illicit drug trade. The analyses exclude traffickers who were caught in their first deal/transportation because progression information of these “one-off” traffickers is not available in the current dataset. The restricted sample has 122 traffickers in total. As shown in Table 1, approximately 40% of traffickers have grown their illicit business. The hypotheses are 1) conventional capital might decrease the probability of progression, and 2) criminal capital could facilitate the promotion of traffickers in the illicit drug market. The results of quantitative analyses will test these hypotheses and provide how these factors affect progression. Furthermore, content analysis will complement the findings in statistical models and reveal complex details that may not be shown in the quantitative analysis. The first section of this chapter presents the results of bivariate analyses predicting the possible relationships predicting progression. In addition, the results of multivariate analyses are shown based on a series of logistic regression models. Lastly, content analysis on the interview transcripts is used in order to explore further details of the pattern of progression among traffickers.

7.1. Predicting progression

The results of bivariate analyses on the relationship between forms of capital and progression in the illicit drug trade are shown in Table 7. All variables indicating conventional and criminal capital are significant. For control variables, the age of onset is significantly associated with progression at the bivariate level. It suggests that starting early in the illicit drug trade is more prevalent among traffickers who are promoted: 56% of them were early starters, while around 34% of those who stayed at the same level started trafficking at younger than 25 years old. Entry level is recoded into two categories of lower positions (transporters/storers) and higher level positions (combined both middle and upper level positions). It shows that higher

level positions are more prevalent among non-progressed traffickers (56%). Conventional capital also has some impact on the progression of in the criminal career. Only 26% of traffickers who showed progression had legitimate jobs when they were involved in drug trafficking. In contrast, most traffickers not showing progression reported that they kept their legitimate jobs when trafficking (65%). Criminal capital, on the other hand, was positively associated with progression at the bivariate level. Around 71% of the progressed traffickers entered into the illicit drug market based on their own initiative, while 53% of those who remained at the same position dealing the same amount of drugs initiated their career of drug trafficking. Criminal social capital also plays an important role in progression. It is more prevalent among traffickers who progressed: 83% reported that they had known other traffickers working at the similar positions as they did. In contrast, 54% of those who were not promoted reported that they had such partnerships when they were working in the illicit drug market. Furthermore, traffickers who moved up the ladder were more likely to be rich in criminal human capital. Around 36% of the respondents indicated that they also conducted other types of criminal activities when they were trafficking drugs, whereas only 24% of those who played the same role throughout their careers reported that they were involved in other crimes.

Table 7 **Bivariate results predicting progression**

	Did not progressed	Progressed	χ^2
<i>Control variable</i>			
White	76.0%	63.9%	2.018
Using drugs <u>while</u> trafficking	59.6%	71.4%	1.729
Early Starters	34.0%	55.7%	5.526**
Entry levels	52.0%	13.9%	20.605***
<i>Conventional capital</i>			
Having legitimate jobs <u>while</u> trafficking	65.2%	26.4%	15.009***
<i>Criminal personal capital</i>			
Self-initiation	52.8%	70.8%	3.980**
<i>Criminal social capital</i>			
Partnership/Knowing people working at the same position	54.0%	83.3%	12.411***
<i>Criminal human capital</i>			
Conducting other criminal activities <u>while</u> trafficking	23.6%	35.8%	3.504*

*** $p < .01$, ** $p < .05$, * $p < .10$

Table 8 presents the results of a series of logistic regression analyses. Model 1 examines the effects of personal background information on the progression of the traffickers. Conventional capital is assessed in Model 2 and criminal capital is analyzed in Model 3. The last model explores how conventional and criminal capital could affect the progression process in a multivariate way. Model 1 is significant ($\chi^2 = 20.282$, $p < .01$). The entry level is significantly associated with progression at the .01 level. Starting at a higher level position increases the possibility of growing their business ($B = .976$, $p < .01$). After including variables of conventional capital, the fitness of Model 2 considerably improves. This model becomes highly significant ($\chi^2 = 30.417$, $p < .01$). As indicated by the Cox and Snell pseudo R^2 , this model explains approximately 22 percent of the variance. Not surprisingly, conventional capital has negative effects on progression in the illicit drug trade. Having legitimate jobs while trafficking is negatively associated with progression ($B = -1.511$, $p < .01$). The finding suggests that legitimate employment could decrease the possibility of being progressed in the criminal career.

In this model, age of onset is no long significant, but entry level is still positively related to progression ($B = .900, p < .01$).

Table 8 **Logistic regression predicting progression (N = 122)**

	Personal background		Conventional capital		Criminal capital		Conventional and criminal capital	
	B (S.E.)	Exp(B)	B (S.E.)	Exp(B)	B (S.E.)	Exp(B)	B (S.E.)	Exp(B)
<i>Control variable</i>								
White	-.497 (.456)	.608	-.664 (.497)	.515	-.517 (.495)	.596	-.665 (.536)	.514
Using drugs <u>while</u> trafficking	.330 (.474)	1.390	.327 (.520)	1.387	.156 (.535)	1.169	.156 (.601)	1.169
Early Starters	.562 (.414)	1.754	.319 (.452)	1.376	.523 (.446)	1.688	.279 (.479)	1.322
Entry levels	.976*** (.306)	2.654	.900*** (.324)	2.459	.783** (.321)	2.188	.720** (.336)	2.055
<i>Conventional / capital</i>								
Having legitimate jobs <u>while</u> trafficking			-1.511*** (.529)	.221			-1.468*** (.549)	.230
<i>Criminal personal capital</i>								
Self-initiation					.608 (.456)	1.836	.583 (.487)	1.791
<i>Criminal social capital</i>								
Partnership/Knew people working at the same position					1.232**	3.427	1.139**	3.122

			(.484)	(.516)	
<i>Criminal human capital</i>					
Conducting other crimes <u>while</u> trafficking			.612	1.844	.677
			(.555)		(.626)
χ^2	20.282***	30.417***	29.302***		42.858***
Cox and Snell pseudo R ²	.153	.221	.214		.296

*** p < .01, ** p < .05, * p < .10

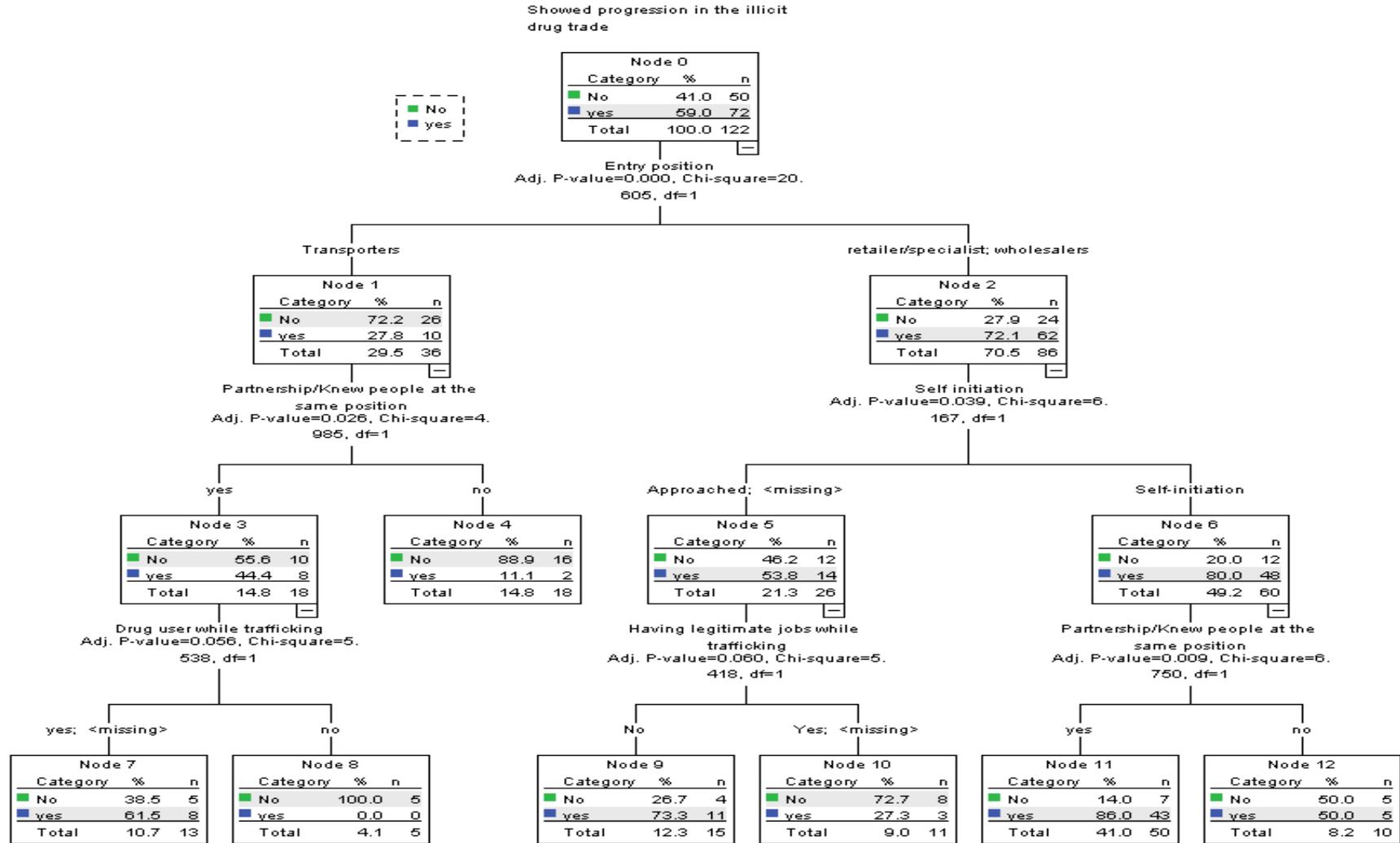
Model 3 examines the effects of different forms of criminal capital on progression. This model is well fitted ($\chi^2 = 29.302$, $p < .01$) and the explained variance is approximately 21 percent. One form of criminal capital is significantly associated with progression in the illicit drug trade. Criminal social capital positively affects the process of progression ($B = 1.232$, $p < .05$). Traffickers who knew others working at the similar positions as they did were more likely to achieve progression. The possibility of progression among those having such partnerships might be three times higher than traffickers who were weak in criminal social capital ($\text{Exp}(B) = 3.472$). Variables indicating criminal personal and human capital are not statistically significant in this model. Notably, entry levels remains robust and positively associated with progression, although the significance is a little weakened at the .05 level, comparing to the previous models ($B = .783$, $p < .05$).

The final model assesses the influence of both conventional and criminal capital on progression in the illicit drug trade. This model is highly significant ($\chi^2 = 42.858$, $p < .01$) and explains a bit more variance (30 percent) than the prior models. Both conventional and criminal capital are significantly associated with progression. The effect of having a legitimate job while trafficking remains negative, suggesting that strong connections to the conventional world might lower the possibility of progression in the criminal career ($B = -1.468$, $p < .01$). Criminal social capital, in contrast, is positively associated with progression. Strong criminal social capital benefits the process of progression. Knowing people working in the same position increases the likelihood of expanding their illicit business ($B = 1.139$, $p < .05$). Comparing to Model 3, this effect is a little weaker but is still strongly significant. It suggests that the possibility of progressing is three times higher for traffickers who have a partnership in the drug trade than those who work alone ($\text{Exp}(B) = 3.122$). In addition, entry levels continues to have a significant effect on progression ($B = .720$, $p < .05$).

The classification analysis has provided more details on the interactions between conventional and criminal capital, although these interactions were not statically significant in the logistic regression analyses. Figure 4 shows the results of CHAID analysis. It suggests that entry level is the most important factor predicting progression in the illicit drug trade. When starting at the lower level as transporters or storers, traffickers are less likely to move up the ladder (27%), whereas 72% of traffickers who start at the middle or upper level grow their

business. For lower level starters, if they know other people who are working at the same position, they are more likely to get progressed (44%), whereas traffickers with weak criminal social capital have a much lower possibility of progression (11%). Furthermore, transporters/storers who know other individuals playing similar roles, are more likely to show progression if they have used drugs while trafficking (62%). However, all else being equal, if the traffickers are not drug users, it seems they do not have much opportunity to get progressed in their criminal careers (0%). The findings reveal that for lower level starters, knowing the right people is crucial to leading to a higher position in the drug trade. In addition, it shows that different types of personal background information can interact with criminal capital: drug use can be an indicator of progression for those who start at the lower level but have strong criminal social capital.

Figure 5 CHAID tree diagram predicting progression



For traffickers who start at the middle or upper level positions, criminal personal capital plays a crucial role in their progression in the illicit drug trade. Self-initiation increases the possibility of progression. Among higher level starters, if they are approached by others, they have a lower chance at being promoted than those who get involved based on their own initiative (54% vs. 80%). Traffickers who are recruited or introduced into the business at a higher level position are more likely to grow their business, if they are not employed in the conventional world while they are in the illicit drug trade (73% vs. 27%). In other words, those who had legitimate jobs were more likely to stay at the same level in the drug distribution chain. For retailers or wholesalers who initiate their drug trafficking business, they are more likely to show progression if they know other people working at the same position as they are (86%). However, all else equal, if they work alone, their chance of progression is much lower (50%). These results reveal further information on the effects of conventional and criminal capital. For higher level starters, conventional capital can interact with criminal capital to predict progression in the illicit drug trade, although the interaction is only found among certain types of traffickers.

7.2. Content analysis on progression

In this section, further effort is targeted at analyzing the factors that were found significant in the logistic regression analyses. Specifically, information on the frequency of using drugs, forms of legitimate employments, and types of criminal activities are explored in detail. Moreover, this section provides more evidence to illustrate how conventional and criminal capital could interact with each other to facilitate the process of progression among drug traffickers.

7.2.1. *The effects of personal background information*

Although it is not surprising that many drug traffickers are drug users as well, it seems that it is not an important factor on progression as the variable of using drugs while trafficking is no longer significant when different forms of capital were added into the analysis. However, interview transcripts reveals that there might be some differences

in the frequency of using drugs between traffickers who were progressed and their counterparts who stayed at where they started in the illicit drug market. The former group are more likely to use drugs in a recreational way and in low frequencies, while the later are more likely to report that they are heavy users taking drugs on a regular basis. For instance, RH_1 remained his role as a wholesaler for seven years in his criminal career of dealing cocaine. He explained that

“he became a heavy user of cocaine himself and as time went on his actions became more unpredictable”.

On the other hand, many of those who get progressed in the illicit drug trade are social users. Some of them only use cannabis, while others might only use small amount of hard drugs, such as 1 gram cocaine per week. They often use drugs with friends or in certain circumstance such as in a pub. For instance:

“WA_07 was a social user of cannabis...He was given a kilo of cocaine on credit...for the first few months he sold 0.1 gram bags per customer in 1996...(after four or five years) WA_07 employed 4 dealers who each sold between 2 - 4 kilos per week. He purchased between 40 - 100 kilos per month.

Although there are numbers of traffickers who have never used drugs in their life, progressed traffickers often have knowledge of drugs learnt from their friends and/or acquaintances who use drugs. For instance, MA_18 quickly developed his business within two months from purchasing one ounce of cocaine to 10 kilos per month. He claimed that his girlfriend “who was a model was also a user (of cocaine) but he did not touch drugs”. In contrast, some traffickers without any promotions in their career reported that they have not even seen drugs in their life as they merely transported or stored them in sealed parcels. GA_29 was one of them. “He was never a user himself and never bought or sold anything himself, only ever mind it.” GA_29 stayed at the same role for months before he got caught.

7.2.2. *The effect of conventional capital*

The results of logistic regression analyses have suggested that conventional capital is significantly associated with progression in the illicit drug trade. The interview transcript further illustrates this relationship. Many traffickers who get promoted in their careers of illicit drug trafficking reported that they believe they do not need to have a legitimate job as the illegitimate earnings can provide them a luxury lifestyle. For instance, WE_03 got involved in drug trafficking when he was 15. He started selling small amount of cannabis to his friends in 1995 and eventually purchased 50 kilos of cocaine per month five years later. He reported that he did not have any legitimate jobs as “he had a regular income from his deals and got a very good return on all his deals”.

Traffickers who play the same role of their entire criminal careers of trafficking drugs often choose to continue their legitimate jobs or business. The reasons for keeping the legitimate jobs vary among traffickers. Some traffickers keep working legitimately because those jobs provide adequate means to cover their illegitimate business and lower the suspicion of being a drug trafficker. These traffickers use legitimate businesses to launder money and/or to conceal their real purpose of frequently travelling across borders between different countries.

“VE_07 was a self-employed HGV (Heavy Goods Vehicle) driver and owned his own unit and trailers. He had lots of long term work with firms, including Pan European. His role and method of working remained the same throughout his career (from 1991 to 1997)... He was transporting approximately 9 parcels of cannabis a year into the UK. Each parcel would be between 40 kilos and 60 kilos... He would meet, have a chat, and hand over the money to one of the two European based members of the ‘firm’... This meeting would take part during his legitimate run to deliver the rest of his load... He invested approximately £ 80,000 in his legitimate business in being a straight goer – owner/driver for long distance delivery. This included a unit and two trailers and tyres...”

In contrast, others might view drug trafficking as complementary to their legitimate employments. They could find a way to balance their dual life in both conventional and criminal world. For instance, in his approximately two years of trafficking career, SU_08 purchased drugs from the same supplier, maintained as a local

wholesaler, and sold to 20-30 customers who retailed drugs to street users. He described his legitimate jobs as

“a chef and managing his carwash (business). He lived a comfortable life... He continued to work as a chef and run his carwash business. He saw the dealing as means to an end – a quick and easy way of making money.”

In addition, it seems that being involved in illicit drug trafficking might not be as profitable as they have thought. Not everyone is satisfied with the earnings they have received in the illicit drug trade. Therefore, they have to keep legitimate jobs to accompany with their illegitimate earnings. MA_17, for example, a cocaine retailer, said that throughout his career in the illicit drug trade, He kept a legitimate job as a dog trainer, as on average he sold 1 gram per customer per week and he had around ten customers.

7.2.3. *The effect of criminal capital*

When describing their progression in the illicit drug trade, respondents illustrate the importance of criminal capital for they often emphasize that trust and knowing the right people are key to grow their business. Similar to the effect on the age of onset and entry levels, self-initiation might also have an impact on progression in the illicit drug trade. Traffickers who are approached or introduced by others into the market might play the same role that they first get. VE_12, for example, was a heavy user of cocaine and moved to south coast from London.

“In 2005, his dealer on the south coast approached him and asked if the knew someone could get hold of kilos of cocaine... He decided to get involved and introduced his dealer to a seller (who he had known for twenty years) in London. He always dealt in kilos and didn’t attempt to grow the business.”

In contrast, those who entered into the illicit drug market based on their own initiative are more likely to report progression. It suggests that they might have better sense of the needs of customers and more sensitive to the changes in the market. For instance,

"RH_12 was involved in drug trafficking for 10 years before he was arrested... It was always his intention to build up enough money and contacts to sell bigger quantities to make more money... He began selling cocaine and weed but eventually moved into selling other drugs depending on what customers wanted... His role in the drug market went from: a) a user, b) selling to friends by buying from people who purchased larger quantities from others c) selling to users other than just friends, and d) promoted to a higher level and selling to dealers rather than users."

The case of RH_12 also reveals that for many traffickers, who get promoted in the illicit drug market, it is difficult to distinguish single effects of one form of criminal capital and a combination of different forms makes the progression easier. Most of them believe that criminal social capital is crucial when they seek opportunities to move up. The experience of RH_12 indicates that establishing right contacts who have more resources and power in the illicit drug trade could help traffickers to grow their business and achieve better positions in the market. The interviews with traffickers have illustrated the importance to meet higher level traffickers, earn trust, and get promoted in their career of trafficking drugs. It could be more effective than self-initiation to facilitate them to access progression.

"WS_04 was a cocaine addict. He was offered work by a number of different people but took up the offer of one individual he met at the social club to store drugs for money. In 1996 he was arrested and went to prison not for trafficking but because he was stopped and was found to have one ounce in his possession. Prison gave him the opportunity to meet other traffickers and learn more about the trade and make more contacts... In 1999 he started to work for a different group. They allowed him to make progress within the hierarchy as people trusted him more. He highlighted that generally users did not make any progress within the hierarchy of the groups given that they were viewed as being less trustworthy...Trust was highlighted as absolutely critical and it was highlighted that it took a long time to build up trust."

Although it is indicated by WS_04 that drug users might have fewer changes to earn trust and get promoted, it is not surprising that non-users without appropriate contacts might stay at the same position and play the same role in their entire career in the illicit drug market. For instance, RH_03 became involved in drug trafficking through a friend.

“He was not a user and he said at first he did not even know what he was dealing with although he knew it was illegal...He was carrying drugs from one location to another (for two years until he got caught)... He knew that his boss got the drugs from Holland but knew little more than this... He did not know anyone and used to work on his own...”

When examining criminal human capital, bivariate analyses reveal that criminal human capital is more prevalent among traffickers who get promoted. This finding is quite interesting because the common assumption is that committing other crimes could increase the risks of being caught, which might lower the possibility of progression. Interview transcripts provide some explanation of this “uncommon” finding. It is indicated that even though those traffickers who have improved their positions in the market might not be specialized in drug trafficking, the criminal activities they committed are quite close to the drug market. Robbery of drugs is one of the most common offenses committed by traffickers. DG_09 started with small bags and eventually improved his role as a local wholesaler, and he began robbing drugs instead of purchasing before he was caught. He explained that “it was easier (to rob drugs)”. In addition, illegitimate transportation is another offense that is frequently committed by traffickers, as some traffickers are illegally transporting not only drugs but other merchandise that could make a profit, such as cigarettes, alcohol, and weapons.

7.2.4. *Interaction between conventional and criminal capital*

As revealed in the logistic regression models among long term traffickers, legitimate job as a common type of conventional capital and having criminal contacts are the most important factors predicting whether traffickers can get promoted in the illicit drug market. Content analysis echoes this finding and suggests how these two factors could interact with each other. Traffickers are less likely to keep their legitimate jobs that they have been doing before trafficking, when they move up in the drug distribution chain. It seems that as their criminal business is growing, many progressed traffickers quit legitimate jobs intentionally. For instance, WD_01 started dealing cannabis at a young age and moved quickly to Ecstasy and cocaine because of the huge demand and

profit for hard drugs. He worked legitimately at the beginning of his career but quit after being involved in the illicit drug trade. Here is his story:

“WD_01 started smoking cannabis aged 16, starting selling it soon after – started small, selling 1/8s, then steadily progressed fairly quickly...In 1988, he started selling Ecstasy with the rise of club scene and also dabbled in selling amphetamines....Started selling cocaine in 1997 after having always said he wouldn't deal in Coke. But the profit didn't lie with cannabis anymore so he started selling Coke...natural progression from cannabis to more profitable drug sales... Until 1991, he had a legitimate job as a draftsman/surveyor. He claims he doesn't know why he gave up his job but this made him more serious about making money from drug sales...Suppliers were introduced to him by friends.”

7.3. Summary

This chapter has shown the results of quantitative analyses and content analysis on the progression of criminal careers of drug traffickers. It found that conventional capital has a negative effect on progression for these traffickers. Traffickers who had legitimate employment while trafficking were less likely to be progressed. As expected, criminal capital is positively associated with progression. Criminal social capital is one of the most important factors predicting whether traffickers could get promoted in the illicit drug market. Partnerships facilitated the growth of their drug trafficking careers. Furthermore, content analysis provides further details on the similarities and differences between conventional and criminal capital on promoted and non-promoted traffickers. It also illustrates the interaction between types of capital and how they might affect traffickers to achieve progression in their criminal careers of drug trafficking.

8. Discussion

This dissertation examines three dimensions of the criminal career perspective among a group of incarcerated drug traffickers. The main goal is to assess how different forms of capital affect the age of onset, entry levels, and the progression of the trafficking careers. Ethnographic studies on drug traffickers have shown that the average initiation age of drug traffickers is among the oldest. It is possible that some offenders gradually engage in drug trafficking after involvement in other types of criminal offenses, while a number of traffickers are found to enter into the illicit drug trade as adults, not following the typical early onset pathway of the majority of career criminals. This study examines the age of onset of the trafficking career and analyzes how conventional and criminal capital can influence the timing of entry into the illicit drug trade. The results show that legitimate employment and financial satisfaction are important for predicting early starters. In addition, self initiation and having friends or family members working in the drug trade facilitate entry of drug trafficking at a younger age.

The effect of the criminal network is well documented in criminal achievement studies. The main argument is that different forms of criminal social capital and criminal network factors can affect both criminal earnings and risk avoidance. Entry positions, as another dimension of criminal achievement, are found to be influenced by criminal capital. Conventional capital is also associated with the first position a trafficker obtains when entering into the illicit drug trade. Research on legitimate occupations has suggested that the structure and resources embedded in social relations and networks are crucial to achieving promotions of one's career. This study tests a similar assumption in a different context - drug trafficking. Criminal capital is found to affect the progression of trafficking careers. On the other hand, conventional capital also plays a role in restraining the traffickers from developing their illicit business.

This chapter will discuss the results found in the quantitative and qualitative analyses. The effects of conventional and criminal capital on early starters will be assessed in the first section. Second, the roles of different forms of capital on entry positions are interpreted. The discussion of factors that are associated with the progression of drug trafficking careers is presented in the last section.

8.1. The age of onset

The respondents in the current study illustrate a pattern that most drug traffickers start their trafficking careers later in life: only 37% of them get involved in the illicit drug trade younger than age 25 and it is a much smaller percentage¹ of those who start trafficking before adulthood. Examining the factors associated with the early starters is important because the resources embedded in the conventional and criminal worlds of this particular group differ from those obtained by the “normal” late starters. The results also expand the application of criminal career paradigm to the context of drug trafficking, which has not been examined systematically.

The results contain the following four important aspects. First, conventional capital is an important factor for predicting early starters. Having legitimate jobs significantly delays the age of getting involved in trafficking careers. Financial satisfaction, on the other hand, is more prevalent among early starters. Second, traffickers who actively seek opportunities to engage in the illicit drug trade start trafficking younger than those who are approached and/or recruited, indicating criminal capital is crucial to understand the age of onset of the trafficking careers. Third, strong ties to the criminal world, as indicated by having friends or family members who have already worked in the market accelerates the entry process and results in an early onset, although this variable is only significant in the CHAID analyses. Finally, personal

¹ Approximately 17% of the respondents became involved in drug trafficking younger than age 19. This number is calculated based on the valid cases (n = 174). In addition, some traffickers only reported a period of time, such as late teens or early 1980s. The estimation of their starting ages may not be very precise. Although the percentage might have some flaws, it still shows the small number of early starters in the illicit drug trade.

background characteristics are associated with early starters, as non-whites and drug users are more likely to deal drugs at a younger age.

The findings of the relationship between conventional capital and the age of onset are consistent with the previous studies examining the effect of legitimate employment on the initiation age of committing criminal offenses with a comparison between early and late starters (Eggleston & Laub, 2002; Harris, 2011; Sampson & Laub, 1990). For instance, Eggleston and Laub (2002) found that the amount of time a person was legitimately employed was associated with the age of onset. They revealed that for adult onset offenders, having legitimate employment increased the probability of committing crimes. Harris (2011) also presented a positive relationship between legitimate employment and onset in adulthood: first-time adult offenders were likely to be employed. A similar result was shown in the current study that late starters are more likely to have legitimate jobs. Legitimate employment, the most significant indicator in the CHAID analysis, is not only a simple means to cover living expenses, but provides conventional social capital embedded in an individual's social structure and social network. This finding is supportive of an extensive version of Nagin and Paternoster's (1994) assumption that individuals with greater investment in conventional society are more likely to be deterred from committing criminal offenses due to the fear of losing such investment. When such capital is weakening or broken, individuals are more likely to be attracted by opportunities for committing crimes.

In addition, it is not surprising to find that financial satisfaction has an impact on the age of onset of trafficking careers, as ethnographic studies on drug traffickers have suggested that financial situation is one of the major reasons for traffickers to engage into the market, especially for adult offenders (Adler, 1993; Decker & Chapman, 2008; Desroches, 2005; Zaitch, 2002). The result cannot be interpreted as individuals with good financial conditions are more likely to start trafficking at a younger age, but suggests that early starters are likely to be satisfied with their financial situation and are less likely to struggle with financial difficulties. This finding is not surprising but consistent with previous studies. In their study on college students who were dealing drugs on campus, Mohamed and Fritsvold (2010) reported a similar result that, except

one respondent, all students in their sample were from middle-upper class to affluent/upper class, and had parents of “considerable prestige, status, and economic standing” (p. 11). High financial satisfaction among early starters in the current study is consistent with Mohamed and Fritsvold’s (2010) study. These young affluent dealers are involved because they wanted to underwrite their own drugs, other incidental and entertainment expenses, pursue certain status, and be a gangster (Mohamed & Fritsvold, 2010). On the other hand, the finding that late starters are likely to face financial difficulties before trafficking is quite common. For instance, in Desroches’s (2005) study, the respondents frequently explained their reasons for the entry as “I wanted money for a house” (p. 75), or “I had a good look at my finances and it was pretty bleak” when offered to smuggle cocaine (p. 66). The results clearly show that conventional capital has the power of maintaining law abiding activities and refraining individuals from committing criminal activities. Potential traffickers who do not have legitimate jobs and do not financially struggle are at higher risks of entering into the illicit drug trade at a young age. However, it is important to note that financial situations vary along levels of stages in life. Adults frequently have more desire for money to purchase a home, support the family, and maintain or expand their legitimate businesses. Therefore, they are less likely feel they are satisfied with their financial situation. Adolescents and young adults, on the other hand, face fewer difficulties simply because they have less to take care of.

Another important finding in the current study is the effect of criminal capital on early starters. Self initiation is found to associate with early entry into the illicit drug trade. While conventional personal capital refers to the attitudes, tastes, and preferences that influence the desired outcome such as legitimate employment (Caspi et al., 1998; McCarthy & Hagan, 2001), criminal personal capital indicates such behavioural characteristics and resources that facilitate criminal offenses. It psychologically complements human and social capital (McCarthy & Hagan, 2001). Self-initiated traffickers are more ready and prepared than those who are approached or recruited. The potential traffickers may ask around to seek for opportunities, or actively earn trust by the existing traffickers, which accelerates the entry process and shortens the pending period. Therefore, for self initiated traffickers, entry into the illicit drug trade is shifted to

an early date. The reason for why many late starters are approached is that some particular opportunities or events occur only later in one's life (Kleemans & de Poot, 2008). Many studies on drug trafficking have discussed the role of self initiation on entry (Adler, 1993; Desroches, 2005), but little has connected it to the age of onset. The results of the study expand the understanding of criminal personal capital by revealing that it not only affects the involvement of drug trafficking, but also influences the timing of entry.

In addition, criminal social capital is another factor that is found to affect the age of onset of the trafficking careers. The influence is not strong enough to become significant in the logistic regression models, but its effect is revealed in the CHAID analysis, where having friends and/or family members is positively associated with early starters for traffickers with poor conventional capital. The finding of the importance of criminal social capital joins other studies that argue contacts and criminal network are key to getting involved in the illicit drug trade (Adler, 1993; Decker & Chapman, 2008; Desroches, 2005; Kleemans & de Poot, 2008; van Koppen et al., 2010). The result extends the understanding of criminal capital: merely having strong criminal social capital may not trigger early onset, but when combined with lack of legitimate employment and financial difficulties, criminal social capital results in entry into the illicit drug trade at a younger age.

These findings provide a comprehensive understanding of the effects of conventional and criminal capital on the age of onset of trafficking careers. Granovetter (1985) argued that most behaviour was embedded in "networks of interpersonal relations" (p. 504), which he called social embeddedness. This argument has been translated to a criminal version with a focus on criminal network (e.g. Hagan, 1993; Pyrooz et al., 2013). The diversity of resources and restrictions embedded in different networks have impacts on the behaviours one performs (Pyrooz et al., 2013). Therefore, the available resources embedded in different social and criminal networks affect the timing of entry into the illicit drug trade. Traffickers in the current study have illustrated that they could access the criminal network to some degree before they started trafficking. Some late starters refused the first couple of offers that they received

because they had legitimate jobs and were satisfied with their earnings. For early starters, on the other hand, they initiated their trafficking careers because they were rich in criminal capital but had less investment in conventional society than traffickers involved in adulthood. Those with poor conventional capital but strong criminal capital are more vulnerable to the criminal world and likely to start trafficking drugs early in life.

In addition, the results of this study are also supportive of the typical understanding of drug use. The finding reveals that drug users are likely to start trafficking at a younger age, which is consistent with past studies on drug dealers. For instance, Mohamed and Fritsvold (2010) found the majority of their respondents smoked a considerable amount of marijuana, which was a common reason for their involvement in their trafficking careers. Early starters in the current study mentioned a similar pathway in that they needed to find a way to feed their habits of using drugs and most of them thought dealing was much “safer” than shoplifting, auto theft, or breaking and entering in terms of getting caught.

The assessment of early starters is merely a first step in examining the relationship between different forms of capital and the age of onset of trafficking careers. Although the results show clear associations among the variables, how the dynamics of these different networks may affect the initiation of the criminal career is an open question. According to interview transcripts, some traffickers who entered into the illicit drug trade late in adulthood indicated that they had financial difficulties or lost their jobs, which triggered them to seeking illegitimate means to survive. Therefore, their criminal relations and networks, as a result, could change, since these potential traffickers were willingly and actively building up more ties to the criminal world. They might benefit from such changing and then initiate their careers of trafficking drugs. On the other hand, for early starters, especially those who started trafficking in adolescence, the relations with their parents and siblings who obey laws and do not commit crimes are important for providing resources that constrain them from entering into the illicit drug trade. Krohn and Thornberry (2001) argue that “the causes of delinquency vary systematically with stages of the life course and with the success or failure with which the life course has been traversed” (p. 293). Relationships with conventional family members are one of the

important factors that affect the onset of criminal offenses. However, few respondents in the sample provided such information and little is known about how the dynamic of this form of conventional capital protects potential traffickers from stepping into the illicit drug markets, or complements other forms of capital that affect the onset of trafficking careers. Research including a variety of variables indicating conventional and criminal capital and examining their effects on the initiation age of trafficking careers is the next step. In particular, more effort is needed to emphasize dynamic indicators of different forms of capital, rather than the dichotomous variables measuring the possession of capital.

In sum, the findings of the study are supportive and consistent with previous research on the age of onset of criminal careers. It provides evidence on how different forms of capital have an influence on the initiation age of drug trafficking. Lack of legitimate employment triggers an early onset, while financial difficulties are more prevalent among late starters. Criminal personal capital is associated with early starters, suggesting that these traffickers are attracted by the trafficking careers and are psychologically ready to enter into the illicit drug trade at a younger age. Friends and family members who have already worked in the drug trade are important resources that facilitate an early entry.

8.2. Entry levels

Although most studies on criminal achievement have often emphasized two aspects: illegitimate earnings and risk avoidance (Bouchard & Nguyen, 2010; Bouchard & Ouellet, 2011; McCarthy and Hagan, 2001; Morselli et al., 2006; Morselli & Royer, 2008; Morselli & Tremblay, 2004; Tremblay & Morselli, 2000), this study examines a third dimension, the positions attained in the criminal careers. This dimension may not be applicable to a variety of criminal offenses, but it is an appropriate indicator of criminal achievement in the illicit drug market. While positions one achieves in legitimate careers indicate the status, prestige, and reputation of the person, the position a trafficker first obtains resembles that in conventional society and represents similar elements in the criminal world. The results of this study suggest that most traffickers

start at the lower level playing roles of transporters or storers, while only a few of them enter into the upper level of the illicit drug trade and start with large amount of drugs or managing transactions.

The results of this study reveal three general points. First, conventional capital significantly predicts the first positions traffickers obtain when entering into the illicit drug trade. Financial situation distinguishes lower level traffickers from middle and upper level ones. Second, strong criminal capital leads potential traffickers to achieve positions with more power and resources in the drug distribution chain. However, forms of criminal capital play different roles of obtaining different levels of positions. Criminal personal capital is key to starting at the middle or upper levels. Self initiated traffickers are likely to avoid the lower level and start dealing drugs as retailers or wholesalers, whereas approached or recruited offenders frequently start at the bottom positions with little power and control of the drug transactions but facing more risks. In addition, criminal human capital provides access to the upper level positions in the illicit drug trade. Those who have committed other types of criminal offenses are likely to start trafficking large quantities of drugs. Third, personal background information is significantly associated with middle level positions. It is easier to start at the middle level positions for drug users, but using drugs is not a significant predictor of upper level positions. Early onset also plays a role in the entry positions. It is important for distinguishing middle level starters from the lower level ones.

The finding that conventional capital is associated with the entry positions is consistent with other studies on criminal achievement (Lussier et al., 2011; McCarthy and Hagan, 2001; Morselli & Royer, 2008; Tremblay & Morselli, 2000). It is not surprising to find that financial satisfaction increase the possibility of entering into the illicit drug trade at a higher level position, as research has illustrated that good financial situations facilitate access to more illegitimate earnings and avoiding risks of apprehension. For instance, Tremblay and Morselli (2000) have found that legitimate earnings are positively associated with legitimate earnings. The findings of this study are supportive of a similar version of Tremblay and Morselli's finding. Traffickers with a better financial situation are more likely to skip the lower level positions and start playing a role with more power and

control of their activities. This result can be simply interpreted as entry into the middle or upper level positions requires financial investment to purchase drugs. If potential traffickers face financial difficulties and are struggling with their lives, it is difficult for them to make the buy-in to positions at a higher level in the illicit drug trade. On the other hand, successful businessmen may simply take the opportunity offered by others to invest into the drug trade, considering it no different from their legitimate investment (Desroches, 2005).

Legitimate employment is found to affect the positions between lower and middle level starters. Its effect is not strong enough to be significant in the logistic regression models, but is identified in the CHAID analysis. The respondents of this study reported a high level of having legitimate jobs before they started trafficking. Over 90% of lower level starters were legitimately employed, and 85% of upper level starters had legitimate jobs before trafficking. This supports the “moonlight” argument that many offenders are legitimately employed, and consider criminal activities a supplement rather than an alternative way of make a living (Holzman, 1993; Tremblay & Morselli, 2000). Some traffickers having full-time legitimate jobs fit the description of “moonlighters” as they agreed to delivery the drugs merely because they wanted to make extra money. CHAID analyses shows that legitimate jobs can distinguish lower and middle level starters. Having legitimate jobs likely results in entry into lower level positions, for late non-user starters. This finding is consistent with other studies. For instance, Lussier et al. (2011) revealed that having legitimate jobs was one of the significant factors that facilitated child molesters in maximizing the numbers of offenses. Since many lower and upper level starters reflect the “moonlight” model, legitimate jobs are not found to be significant, when comparing these two groups.

Another important finding of this study is the relationship between criminal capital and entry positions. Criminal personal capital has an impact on the middle level starters, while criminal human capital affects entry into the upper level positions. Effort devoted to seeking opportunities of trafficking drugs and establishing contacts initiates the development of criminal network and resources. Resources in criminal relations and networks increase the possibility of achieving higher positions in the drug distribution

chain. Self-initiated traffickers are found to be more cautious about risks and likely to employ tactics to avoid being arrested (Dorn et al., 1998). This measure of criminal personal capital can indicate the readiness and entrepreneurial traits of potential offenders. Traffickers actively seeking opportunities to get involved in drug trafficking may be more prepared for the potential risks they can face and carefully choose the entry pathways that avoid the bottom positions. Ethnographic studies on drug traffickers have shown that potential offenders need to establish and develop certain types of contacts, earn their trust, and then start making operations with large quantities of drugs (Adler, 1993; Decker & Chapman, 2008; Desroches, 2005). Therefore, a desire to enter into the illicit drug trade is the first step to building up these connections. On the other hand, traffickers recruit others to complete the transactions, provide venues to store drugs, and build layers of their network to buffer the risks of being caught (Decker & Chapman, 2008; Dorn et al., 1998; Zaitch, 2002). The finding of self-initiation provides evidence to support these arguments.

Criminal human capital is found to increase the level of positions traffickers first achieve when they enter to the illicit drug trade. Specialization in one particular crime has been found to affect criminal achievement by increasing illegitimate earnings (McCarthy & Hagan, 2001; Tremblay & Morselli, 2000), and avoiding detection (Lussier et al., 2011). The findings of this study, however, suggest an opposite relationship that versatile offenders can achieve higher level positions in the illicit drug trade when they start trafficking. The effect is only significant when comparing lower level starters to upper level ones. A possible explanation is that previous experience of committing other crimes provides “training” to the potential traffickers, which improves their skills of offending successfully. In addition, previous criminal activities may help offenders gather more resources and extend the criminal networks (Kleemans & de Poot, 2008; Steffensmeier & Ulmer, 2005). After knowing (or getting known by) the particular offender(s) playing in the illicit drug trade, potential traffickers skip the bottom levels, and successfully proceed to higher positions in the market.

The findings of this study also indicate that personal background information has an impact on achieving a higher position in the illicit drug trade. Drug users are likely to

become dealers, rather than transporting drugs at the bottom level. Early onset is also important to skipping the lower level positions, although it is only significant at predicting middle level starters. This finding joins other studies that have revealed that the age of onset affects other dimensions of the criminal career (Bacon et al., 2009; Le Blanc & Frechette, 1989; Lussier & Mathesius, 2012). This study expands the understanding of the effect of the age of onset and to criminal achievement, indicating that early onset influences the entry positions of drug traffickers. Young traffickers have few options in the roles they can play in the illicit drug trade because they simply lack the equipments or vehicles to deliver drugs as transporters or funds to purchase large amount of drugs as wholesalers. Middle level positions are mostly available for them as these require requests few resources and investment for dealing on the street as a retailer. As a result, when these individuals start trafficking at a younger age, they are likely to begin at the middle level of the drug distribution chain.

This study also observed interactions between conventional and criminal capital that affect the entry positions of drug traffickers. The finding reflects the argument of social and criminal embeddedness (Granovetter, 1985; Hagan, 1993; Pyrooz et al., 2013). Social embeddedness concentrates on the conventional network dimensions that affect legitimate careers such as getting a job and promotion (Granovetter, 1985), while criminal embeddedness emphasizes “the level of involvement in crime, isolation from prosocial networks, positions of leadership within a deviant network, and adoption of deviant values and identities” (Pyrooz et al., 2013, p. 242). Because of the capability of managing time and energy, when individuals have more investment in conventional relations, they can hardly step further in the criminal network, and vice versa. Poor social embeddedness pushes potential traffickers away from the conventional world and weakens the norms and values that protect them from committing criminal activities. Criminal embeddedness, on the other hand, acts as an accelerator that facilitates potential traffickers to achieving a higher level position.

The findings of this study provide a reverse version of Hagan’s (1993) study that illustrates criminal embeddedness constrains youths from getting legitimate employment. Weak social embeddedness was found to trigger the process of seeking criminal

resources and establishing criminal embeddedness. When lacking of legitimate jobs and/or having financial difficulties, some respondents began to send out the message that they were willing to work for existing traffickers, or took a job offered by an acquaintance who happened to be a local dealer. These traffickers can hardly achieve upper level positions, even if some of them have certain resources in the criminal world.

Although the CHAID analyses indicate that variables measuring conventional capital are the most significant factors for distinguishing different entry positions, increasing resources in criminal relations and networks may first break the prosocial norms and values, and make potential traffickers lean away from the conventional world. Noticing the huge profit earned by their friends who operate large quantities of drugs, or being offered an opportunity to join the business, not surprisingly some traffickers quit their legitimate jobs and enter into the drug trade, which is consistent with Hagan's (1993) finding of criminal embeddedness. Therefore, two major interactions between conventional and criminal capital have been demonstrated in the interview transcript. The timing and order of decreasing conventional capital and increasing criminal capital may vary from one trafficker to another. Such a combination is likely to facilitate potential traffickers to starting at a higher level position.

By illustrating that different forms of conventional and criminal capital build up a process leading to a variety of positions traffickers first obtain in the illicit drug market, this study reveals that resources embedded in different networks facilitate criminal achievement. However, lack of information of the level of embeddedness in the data set is a great difficulty to providing a better understanding of the effects of conventional and criminal capital. Simply having a legitimate job may not be strong enough to maintain prosocial behaviours. Factors of job satisfaction, amount of time a person has been employed, and legitimate earnings are important supplements to indicating the level of conventional embeddedness. Numbers of friends and/family members, and the structure of the criminal network will provide more understanding of criminal embeddedness (Heber, 2009). Connections to persons with higher positions increase the likelihood of getting a better position in legitimate careers (Lin, 2001). A parallel argument of the criminal embeddedness is that the positions that their friends and/family members play

in the drug distribution chain affect the entry positions potential traffickers achieve in the illicit drug trade. These problems are not addressed in the current study due to the limited information in the data set. Future studies need to emphasize these assumptions with appropriate measurements of the level of embeddedness in different relations and networks.

In summary, the findings of this study reveal that both conventional and criminal capital play a vital role in predicting the first position a trafficker obtains when entering in the illicit drug trade. The results join others that illustrate that financial satisfaction and legitimate employment influence criminal achievement. Self initiation and experience and skills accumulated from previous offenses are associated with middle and upper level positions. The findings reflect and extend social and criminal embeddedness perspective by representing more dimensions and effects of the embeddedness in different relations and networks.

8.3. Progression

This study not only examines the entry phase of criminal careers, but also assesses the factors that have influenced the progression of drug trafficking. Using a broad definition, progression in this study is not limited to the number of criminal events and the increase in quantities of drugs operated in one transaction, but also includes the changes of roles a trafficker plays in the illicit drug trade, which is consistent with ethnographic studies on drug traffickers that illustrate a variety of forms of the progression in drug trafficking (Adler, 1993; Desroches, 2005). A restricted sample that excluded traffickers who were caught in their first drug operation is employed to analyze the patterns of progression. The finding indicates that progression is not uncommon (over 40%) in the illicit drug trade among those who succeed in avoiding apprehension in their first attempt of trafficking drugs.

Three main findings are important to understanding the factors that affect the progression of trafficking careers. First, conventional capital is significantly associated with progression. While in the illicit drug trade, having legitimate employment reduces

the likelihood of getting promoted. Second, criminal social capital facilitates the growth of the business of drug trafficking. Knowing other traffickers offers an opportunity to move up the ladder. Criminal personal capital is also a significant predictor of progression shown in the CHAID analysis, as traffickers who entered into the drug trade based on their own initiation are likely to make progression. Third, different entry positions affect the later performance of the traffickers. Using drugs also plays a role on the progression process, particularly for traffickers who start at the bottom level and know other traffickers in the drug distribution chain.

The effect of conventional capital is observed in the current study. Legitimate employment is negatively related to the progression of trafficking careers. This finding is supportive of Sampson and Laub's (1990; 2003) assumption that individuals who have strong social investment or ties are less likely to develop criminal connections and increase criminal activities. In the current sample, some traffickers illustrated that they did not intend to grow their illicit drug trafficking business because they were satisfied with their dual involvement in both legitimate business and drug trafficking. It is possible that legitimate employment or business offers a great cover to protect traffickers from detection or apprehension (Decker & Chapman, 2008; Desroches, 2005). However, it restrains them in certain positions constantly trafficking same amount of drugs without any progression of their criminal careers.

On the other hand, it is found that some traffickers quit legitimate jobs because they were lured by the huge profit they could get when concentrating on drug trafficking. They consider legitimate employment an obstacle that blocks them from getting progressed in the illicit drug trade and decide to fully devote themselves to the career of drug trafficking. Therefore, it is not surprising to find a negative relationship between legitimate employment and progression. This finding, however, does not support a causal relationship between the two variables and it is problematic to assume that traffickers need to quite legitimate job in order to grow their illegitimate business of drug trafficking, because the timing of information is limited in the current data set. It is difficult to determine whether traffickers actually leave legitimate jobs first to be promoted or they quit due to progression. An inverse relationship between legitimate employment and

criminal outcomes is found in the literature that demonstrates offenders who are satisfied with criminal earnings are less likely to seek legitimate employment, while criminal returns that are not perceived sufficient keep offenders in the legitimate labour market (Tremblay & Morselli, 2000). Therefore, it is possible that when traffickers cannot move from lower level positions to higher level ones, they remain working with the legitimate jobs; when promoted to better roles or operating larger quantities, they choose to leave the legitimate market and work full-time in the illicit drug trade.

Another important finding of this study is the relationship between criminal social capital and the progression of trafficking careers. Those knowing other traffickers who work at the same position in the drug trade are more likely to show progression. The finding is consistent with previous studies that argue criminal social capital embedded in the criminal relations and networks is crucial to moving upward in the distribution chain (Adler, 1993; Desroches, 2005). Knowing other traffickers working at the same position indicates a relative large network that may provide more opportunities for role changes than those in a smaller network, as it is found in the legitimate occupations (Seibert et al., 2001). Furthermore, knowing other traffickers may provide more information and resources that facilitate progression. In conventional careers, information and resources are two main benefits provided by social capital, which increases the likelihood of getting promotions in the company (Adler & Kwon, 2002). A similar procedure also occurs in the criminal network. Criminal social capital is beneficial to drug traffickers in terms of progression in their criminal careers.

The variable of knowing others working at the same positions in the illicit drug market may also indicate a pattern of co-offending. It is found that serious drug offenders and smugglers commonly had co-offenders (Heber, 2009) and research on criminal careers has illustrated that those with a larger number of co-offenders were the most active offenders (Goldweber et al., 2011). Peer influence can be a reason for the progression of trafficking careers (Desroches, 2005). This reflects a restricted version of differential association theory with a merely focus on the significant co-offenders. Traffickers may learn skills and gain resources from their co-offenders working at the

same position, and then increase the quantities of drugs, change from soft drugs to hard drugs, or move onto a better position.

However, it is not the best variable that measures criminal social capital. As suggested in the studies applying social network analysis to the criminal networks of drug traffickers, density and different measures of centrality are frequently employed to examine the influence of criminal capital and criminal networks (Bright, et al., 2012; Heber, 2009). These measurements provide a better understanding of the structure of the criminal network of a trafficker, which enhances the likelihood of getting progressed in the illicit drug trade. For instance, traffickers with strong betweenness centrality (e.g. a broker) are likely to show progression because their unique position makes them more valuable in drug distribution chain and gives them more opportunities to develop their business of drug trafficking. Therefore, including the consideration of the structure of the criminal network benefits the analysis on progression. In addition, whether and to what extent the trafficker is connected to others playing roles with higher status, prestige, power, and control is also important to one's progression in both legitimate and drug trafficking careers (Adler, 1993; Desroches, 2005; Seibert et al., 2001). Ethnographic studies have found that lower level traffickers have to establish right contacts before moving upward (Adler, 1993; Desroches, 2005). However, information on the ego network of the individual trafficker is quite limited, and it is difficult to identify the types of the contacts a trafficker has. The current study is a first step to systematically examining the effect of criminal social capital on the progression of trafficking careers. Employing better measures of criminal capital is the next step to analyzing the relationship between criminal social capital and dimensions of criminal careers.

Furthermore, another measure of criminal capital is found significant in CHAID analyses. Self initiation increases the likelihood of getting progressed for traffickers who enter at the higher level of positions in the drug trade. Those traffickers are more psychologically ready and prepared than those who are approached or recruited by others. Adler (1993) suggested that the first step of moving upward of the drug distribution chain is the psychological factor: traffickers who start at the bottom are rarely thinking about dealing large quantities of drugs and they need to have the motivation

and vision to operate big sales and move onto higher level positions. Since self-initiated traffickers are attracted to the illicit drug trade to some degree, they may have more knowledge and plans of trafficking careers. As a result, these traffickers have a better chance of getting progressed.

Another notable finding of the current study is that entry positions are important to predicting whether traffickers expand their trafficking business. Higher level starters are found to have higher chances of showing progression in the illicit drug trade; lower level starters, on the other hand, are likely to remain at the same position dealing unchanged quantities and types of drugs. This finding is interesting because the traffickers working at the bottom level positions seem to have more room to progress, whereas wholesalers usually stay at the top of the distribution chain. However, it is not difficult to interpret the results when considering the different characteristics of these positions. Transporters may be blinded from the drug distribution chain: they only take orders from the “boss”, follow the instructions and then deliver drugs to a particular person or a place. The “boss” may be the only person in their criminal network. These traffickers lack both contacts and motivation to make a change. Street dealers and wholesalers are different from transporters because they have more power and control over their activities. After making the conscious decision of moving up, street dealers start making and developing contacts, and then proceed to higher levels of trafficking larger quantities of drugs but face fewer risks. Wholesalers are among those having the easiest way of increasing the quantities they operate, as they can make more purchases by investing the huge profit earned from one successful transaction into the next one. The relationship between entry positions and progression is consistent with the findings in ethnographic studies on drug traffickers. Adler (1993) found that few lower level starters could move upwards to a higher level. Descroches (2005) revealed that direct entry at higher levels was a more accelerated path than starting at the bottom of the illicit drug trade.

This study examines the patterns of the progression in the criminal careers. Conventional and criminal are found to affect the process of getting progressed in the illicit drug trade. The interaction of the two forms of capital is also important: strong

criminal capital accompanied with weak conventional capital increase the likelihood of progression in trafficking careers. Previous research has illustrated the importance of criminal capital on the development of criminal offense. This study partially demonstrates this argument and expands it to focus on different forms of conventional and criminal capital. Criminal career researchers frequently argue that the impact of social investment in conventional society should be taken into consideration, and young offenders may desist from criminal activities when they are employed and/or married (Sampson & Laub, 1990, 2003). A parallel examination of the effect of conventional on the progression of criminal careers is necessary. This study sheds some lights on this argument by indicating that legitimate jobs might hinder the opportunities of getting progressed in the illicit drug trade.

In summary, this study examines how of conventional and criminal capital affect the progression of trafficking careers. Legitimate employment and criminal partnership are the most important factors associated with progression. Traffickers who keep legitimate jobs are less likely to show progression, while those knowing others working at the same positions in the drug distribution chain have a higher chance of growing their illegitimate business of drug trafficking. This study contributes to the literature on criminal career by systematically exploring the patterns of the progression in the context of drug offenses.

9. Conclusion

This study systematically analyzes three dimensions of the criminal career in the context of drug trafficking. The primary focus is on the entry and continuity phases of criminal careers. The age of onset, criminal achievement indicated by the entry levels in the illicit drug trade, and progression are examined. The findings extend the understanding of drug traffickers by distinguishing the effects of different forms of capital. Human behaviours are influenced by a variety of resources embedded in different relations and networks (Pyrooz et al., 2012). The findings of this study are supportive of this argument. In general, this study reveals that both conventional and criminal capital play an important role on each examined dimension of the criminal career perspective.

In terms of the age of onset, having legitimate employment delays entry into drug trafficking into adulthood, whereas financial satisfaction and self initiation pushes potential offenders to start early. Moreover, traffickers who are financially satisfied are likely to start at a higher level in the drug distribution chain, and self initiation also facilitates potential traffickers to skip the bottom level positions. Previous criminal experience is significant to distinguishing upper level starters from the lower level ones. For the progression of trafficking careers, having legitimate employment while trafficking is a negative indicator, while knowing others working at the same position in the drug market positively affect the growth of traffickers' illegitimate business of drug trafficking.

The findings in this study, however, need to be interpreted with the consideration of a number of limitations. The following section will discuss these limitations in details. Suggestions for future research are also articulated.

9.1. Limitations

The first limitation of this study lies in the sample of this study. Although it presents the largest number of drug traffickers who were interviewed in a single study, these traffickers were all convicted and incarcerated in prison at the time the interview proceeded. This could be problematic because it may lead to a biased conclusion in examining their criminal careers of drug trafficking. Two main reasons may cause the bias. One reason is that traffickers in the current sample may have different career pathways from those who are not arrested, particularly for the progression of trafficking careers. Recall that criminal human capital, committing other types of crime, is found significant to distinguish lower and upper level starters. This is not consistent with previous studies that specialization, rather than versatility, is associated with the progression of criminal careers (DeLisi & Piquero, 2011; Loeber & Hay, 1997). In addition, Adler (1993) successfully engaged in the secret community of drug traffickers and found that upper level traffickers had “a low degree of prior criminality” (p. 5). It is possible that the current sample has a large number of traffickers who had previous criminal records, which may increase the power of the statistical analysis and affects the results. Another reason for the bias is that incarcerated traffickers may not provide correct, full, and detailed information on some variables, intentionally or unintentionally. Some of them may provide little information on other traffickers who worked with them before but were still at large. Or, they may not remember clearly how they got involved at the first place, if they had a long career of trafficking. This may affect the accuracy of the measures of conventional and criminal capital. Therefore, in order to get a better understanding of the criminal careers of drug traffickers, examining traffickers who are not incarcerated is necessary and important, although access to this particular group is extremely difficult.

A second limitation is the use of cross-sectional data to examine the dimensions of criminal careers. The onset of criminal careers would be ideally analyzed in a sample of individuals in the same birth cohort. In this way, it would be possible to trace the changes different forms of conventional and criminal capital and assess their effects on the initiation age of drug trafficking and entry positions. In the current sample, traffickers

were aged from 20 to 67. Their capabilities of achieving resources embedded in conventional and criminal capital vary, which may simply be because of their age differences. The meaning of having legitimate employment is also different from young adults to middle-aged individuals. For progression, the situation remains. In the current sample, the range of involvement in drug trafficking varies from a couple of days to over thirty years, which was even longer than some one's length of living at the time of interview. Accumulated criminal capital differs among these active years of trafficking. These problems within the cross-sectional data may affect the strength and significance of variables in predicting the trafficking careers. However, higher level traffickers are rarely included in the existing longitudinal data set, and their presence is a strength of the current study.

The respondents in the current sample are exclusively male, which is the third limitation of this study. It is quite common that many studies on drug traffickers only examine male offenders (Decker & Chapman, 2008; Desroches, 2005). However, Adler (1993) found in her field study that both male and female were included in that particular drug dealing and smuggling society. In addition, Denton and O'Malley (1999) interviewed a group of female drug dealers in Australia and found that females were not simply victims and drug users but played various and sometimes prestigious roles in the drug distribution chain. The authors also revealed that family and friends were the common resources that facilitated female dealers to enter the illicit drug trade, and making and maintaining criminal contacts were important skills in developing their business. However, females were often viewed as employees rather than partners by male traffickers, which made it difficult for female dealers to progress. The female traffickers in the current study reported a similar pattern in that they entered the drug trade merely through their husbands or close friends and the positions they achieved were at the bottom level. It would be interesting and important to analyze the similarities and differences among male and female traffickers. However, the small number of female traffickers in the current data set does not allow for such analyses.

A fourth limitation relates to the measurement of conventional capital. Studies on criminal careers have illustrated the importance of family on different dimensions (Ayers

et al., 1999; Benda et al., 2000; Farrington, 2001; Harris, 2011; Laub & Sampson, 2003; Sampson & Laub, 1990). A common finding is that relations to conventional family members reduce the likelihood of committing crimes. Since the idea of conventional capital is developed from social bond theory, relations to conventional family members would be an important indicator of conventional capital, as it is a commonly used measurement to indicate social bonds. Marriage is also highlighted by researchers, which protects youthful offenders from adult crime (Laub & Sampson, 2003; Sampson & Laub, 1990). Although some traffickers mentioned their marital status, this variable is not generally available in the data set. However, a reverse relationship between marriage and the onset of the trafficking careers was reported in the interview transcripts. Some traffickers decided to enter into the illicit drug trade because a serious relationship with their partners stimulated their desires for money to establish a stable life and raise children. They were lured by the profit earned in the illicit drug trade and willingly sought opportunities to get started or took the offer by others with little hesitation. Future studies should include indicators of marital status to provide a better understanding on how conventional capital affects trafficking careers.

Measurements of criminal capital are another limitation in the current study. As mentioned in the discussion section, the variables indicating criminal capital are not perfect. When examining the age of onset and entry positions, the level of embeddedness is important. Variables such as numbers of friends who have already been working in the drug trade and the closeness with delinquent family members will improve the measurements of criminal capital. Furthermore, including indicators of the structure of the criminal networks in the analysis is one approach to providing better answers to the relationship between criminal capital and the progression of the trafficking careers. Without network measures, it is impossible to assess how rich is the social environment of traffickers, and exactly how it was used to enter the drug trade.

Finally, the level of measurement is another methodological limitation in the current study. Except entry positions, all indicators are dichotomous variables, because most of them were created based on the interview summaries. Although these are the best measurements available in the data set, the low level of variables may weaken or

strengthen the significance in the analyses. Future studies should develop and employ better variables to measure both different forms of capital and dimensions of criminal careers. For instance, the amount of time one has been legitimately employed is a better indicator of conventional capital. Measures of centrality (e.g. degree centrality and closeness centrality), which are frequently used in social network analysis (Bright et al., 2012; Heber, 2009), provide more details of the structure of the criminal network and are more powerful for predicting progression.

9.2. Implications and future research

This dissertation has several implications to future research on the criminal career perspective and drug trafficking. First, it shows that this perspective is applicable to the context of drug trafficking. Although previous research has illustrated that the criminal career perspective can be used to analyze various types of criminal offenses, this study first systematically examines the onset, progression, and criminal achievement of the criminal careers in drug trafficking. More research is needed to expand the understanding of drug trafficking by analyzing different aspects of trafficking careers. For instance, what makes certain individual specialize in drug trafficking rather than committing other types of criminal offenses? What factors can affect the decision of stopping trafficking or leaving the drug trade? Conventional and criminal capital may also play a role in answering these questions and have impacts on career dimensions. Future studies should provide some understandings related to above questions and evaluate the effectiveness of different forms of capital on trafficking careers.

In addition, the current study analyzes the effects of conventional and criminal capital separately. Although using the concept of social capital is not new in the domain of criminology, most previous studies have paid little attention to distinguish different forms of capital. Researchers either consider social capital a type of informal social control or use it to indicate the resources embedded in the criminal relations and networks. Few studies have analyzed the distinctive effects of conventional and criminal capital on criminal activities. The study of McCarthy and Hagan (2001) illustrates the necessity and importance of taking different forms of capital into consideration, but it

only emphasizes one dimension of the criminal career perspective – criminal achievement. This study follows their argument and expands the analysis to other dimensions. The results have demonstrated that the effects of conventional and criminal capital are significant and differential when analyzing the criminal careers in drug trafficking. It is illustrated in the current study that when weak conventional capital but strong criminal capital not only trigger early entry of trafficking careers but facilitate access to better positions in the drug distribution chain and the growth of trafficker's illicit business. It is possible to apply this model of combining conventional and criminal capital to the general context of crimes, since legitimate employment and criminal contacts are usually found to be associated with numerous criminal activities. Therefore, future studies need to examine the effects of both conventional and criminal capital on other types of criminal activities. It will be interesting to explore whether conventional and criminal capital have similar impacts on property and violent offenses and what the differences are when comparing their effects of different types of criminal offenses.

Moreover, additional studies are needed to explore criminal achievement in terms of measuring position attained. The current study has examined the factors that influence entry positions traffickers first obtain. More attention should be paid on exploring the prestige and status an offender could achieve in the criminal world, as little is known on this particular dimension of criminal achievement. Arguably, the consideration of position attained is applicable to many other criminal offenses, especially when analyzing organized crime and gang members. In addition, the relationship between position attained and other dimensions of the criminal career perspective is worth examining. For instance, better positions may be associated with the length of the criminal career. It could be important for an offender to making decisions on continuing or desisting criminal activities. Higher positions may result in longer involvement, whereas lower positions may cause desistance at a younger age. The effects of position attained should be identified and carefully evaluated in future studies.

Finally, the current study echoes the argument that adult-onset offenders should be paid more attention in the literature of the criminal career, as the majority traffickers in

the sample started trafficking until they were older than mid-twenties. Although the current study have examined how different forms of conventional and criminal capital can distinguish early starters from late starters involved in drug trafficking, it is necessary to examine how conventional and criminal capital can influence late onset of criminal offenses by comparing late starters to those who do not engage in criminal activities (but who are otherwise relatively similar). It could be a useful way to provide better understandings of adult-onset offenders and examine the effects of forms of capital by using a different approach. Compared to law abiding citizens, adult-onset offenders might have more criminal capital, in particular criminal personal capital, which drives them to get involved in criminal offenses at an older age. A sample of respondents selected from the same age cohort, containing both offenders who did not start their criminal careers until in adulthood and those who never start such a career, will be ideal for such analyses.

In conclusion, this study contributes to the literature on criminal careers by exploring the onset, criminal achievement, and progression in a different context, drug trafficking, which most studies have not paid attention to. The findings suggested different forms of capital play crucial roles on the age of onset, entry positions, and the progression of trafficking careers. This study reveals that the entry and continuity of the illicit drug trade are affected by the balance of resources embedded in both conventional and criminal capital. Lack of conventional capital pushes potential traffickers to seek alternative opportunities that may break laws, whereas strong criminal capital increasingly pulls them to enter faster and stay deeper in the criminal world.

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