Chinese Narcotics Trafficking: A Preliminary Report
Kaicheng Huang, Jianhong Liu, Ruohui Zhao, Guoling Zhao and Paul C. Friday
Int J Offender Ther Comp Criminol published online 2 December 2010
DOI: 10.1177/0306624X10389776

The online version of this article can be found at:
http://ijo.sagepub.com/content/early/2010/12/01/0306624X10389776

Additional services and information for *International Journal of Offender Therapy and Comparative Criminology* can be found at:

Email Alerts: http://ijo.sagepub.com/cgi/alerts

Subscriptions: http://ijo.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Chinese Narcotics Trafficking: A Preliminary Report

Kaicheng Huang[1], Jianhong Liu[2], Ruohui Zhao[2], Guoling Zhao[3], and Paul C. Friday[4]

Abstract

Questions of existence of the "China Route" for drug smuggling and trafficking have been important in the literature. The profile of the offenders, particularly whether they are primarily members of traditional criminal organization, is a hotly debated issue. Much qualitative evidence has been collected and it provides important insights into these questions. However, little quantitative data has ever been collected and analyzed to provide a broader picture of these issues. The present study involves the systematical collection of data from court sentencing files from seven high courts whose jurisdictions cover the China Route. The findings provide valuable information that sheds light on the debated questions. Some evidence consistent with the China Route arguments is found. No evidence supports the idea that traditional organized criminal syndicates are behind most offenses. Logistic regression results reveal interesting associations between offender characteristics and types of offenses.

Keywords

narcotics trafficking, drug smuggling, China Route, drug offenders, Chinese court data

Chinese narcotics trafficking has been argued to have a major impact on international drug problems, including an impact on the United States (Drug Enforcement Administration, 2004). A suspected route of narcotics trafficking is from the Golden Triangle

[1]Center for Drugs, Crime, and Public Policy, Southwest University of Political Science and Law, Chongqing, P.R. China
[2]University of Macau and Southwest University of Political Science and Law, China
[3]Peking University, P.R. China
[4]University of North Carolina at Charlotte

Corresponding Author:
Kaicheng Huang, Center for Drugs, Crime, and Public Policy, School of Law, Southwest University of Political Science and Law, 301 Baosheng Rd, Yubei District, Chongqing, P.R. China
Email: skyhkch@yahoo.com.cn

of Southeast Asia (bordering the areas of Laos, Myanmar, and Thailand) to the United States. It is believed that drug traffickers enter China through the border between the Golden Triangle and Yunnan Province and then move narcotics through Guangxi and Guangdong provinces to Hong Kong and Macau, which have long been known to be centers of drug collection and distribution to international markets, including the United States and Europe. This movement is known as the China Route.

The role of China is also becoming increasingly important because of the rapidly expanding Chinese economy and the trade and exchange of visitors between the United States and China. Historically, Chinese immigrants to the United States formed *Tongs*,[1] and Tongs have been active in operating or providing protection for opium use and dealing in the United States (U.S. Senate, 1978). During the past three decades, many Tong members have been arrested for narcotics trafficking or immigrant smuggling (S. Zhang & Chin, 2003). The culture of reliance on Guangxi and links between Chinese emigrants and associations in the United States can facilitate visitors and immigrants, either legal or illegal, being used to do business—including smuggling illegal drugs. These changes, along with China's recent dramatic increase in drug use and clandestine drug lab numbers, have been considered as contributing factors to the increasing role of China in drug trafficking to the United States (Chen & Huang, 2007).

The present study explores three issues. First, the study examines data collected from Chinese court sentencing files to see if the China Route plays a role in drug trafficking from the Golden Triangle to destinations outside of China, including the United States. Second, the study reexamines the opposing views on drug traffickers' profile and their patterns of association with criminal organizations. We specifically address the modus operandi of drug trafficking in China and look at the characteristics of those arrested for drug trafficking in China. Particularly, what evidence is there for the involvement of traditional organized criminal syndicates, versus new kind of crime networks? Is trafficking a business run by business-like criminal organizations, groups of offenders, or individual drug dealers? Third, the study examines how offender characteristics are related to each of the four major types of offenses: smuggling, trafficking, possession, and transporting. Because of lack of data, little research has addressed the third issue.

The 1997 Criminal Law of People's Republic of China defines activities including smuggling, trafficking, transporting, and illegal possession of drugs as crimes. According to the *Supreme Court's Explanation on the Decision of the Standing Committee of the National People's Congress on the Prohibition Against Narcotic Drugs*, smuggling drugs refers to illegal transporting, carrying, and mailing drugs across borders. Buying drugs directly from smugglers, or purchasing, selling, or transporting drugs in the territorial waters is also considered as smuggling behavior. Trafficking drugs refers to involuntary conveyance of drugs for profit or illegal purchase of drugs for peddling. Transporting drugs means carrying, mailing, making use of other people to carry, or by different means of transport, to convey drugs from one place to another within China. Illegal possession of drugs refers to knowingly possessing a certain amount or greater amount of drugs that are stipulated in national laws and regulations as illegal. Cases in

Hong Kong and Macau in the current study were classified by the court judge according to the above four categories.

Literature Review

Literature has suggested some evidence involving the China route of international drug trafficking. Opposing arguments dispute the validity of the evidence. Supporting evidence of the China Route tends to come from qualitative studies, which has been the dominant method of study of the issue. However, the generalization of the conclusion has never been documented with quantitative evidence.

By 1990, it was estimated that 45% of the heroin smuggled into the United States and 80% of the heroin imported into New York City were from the Golden Triangle of Southeast Asia. Law enforcement authorities in the United States, Canada, and Australia claimed that the Chinese dominated the heroin trade in their respective jurisdictions (Black, 1991; Bryant, 1990; Dobinson, 1993; Dubro, 1992; Schalks, 1991; S. Zhang & Chin, 2003). The Department of State concluded that the U.S. heroin market is dominated by high-purity heroin from South Asia. Myanmar alone was thought to account for 60% of the total worldwide production of opium gum in 1996 (U.S. Department of State, 1997). The Golden Triangle is estimated to produce 73% of the global supply of opium (Lyman & Potter, 2003, p. 138).

Most qualitative studies provide support for the China Route conclusion. First, the special geographic and demographic features of the areas of China bordering the Golden Triangle have made the China Route hypothesis easy. Yunnan province shares 4,060 kilometers of border with Myanmar and Laos, with no significant geographic obstacles. It is hardly possible for the limited Chinese border patrol forces to control the border. It is reported that the average patrol frequency of any given section of the boarder is only once a week or less (Liang, Ning, Lu, & Wang, 2000). Drug traffickers can more easily cross the border to China than any other drug routes from the Golden Triangle to Hong Kong and Macau—a center for international distribution, particularly to the United States and Europe (Deng, 2001; Z. Zhang, 2006).

Furthermore, the ethnic minorities in Southwestern China share languages, customs, and kinship ties with ethnic groups across the border. Cross-border trade and other activities are regular and commonplace, facilitating drug trafficking across the border. These special geographic and demographic features make the Chinese border with the Golden Triangle the most preferred choice for transporting narcotics there (Deng, 2001). Once the drugs enter China, the large geographic size and multiple routes within China allow the drug to be easily transported to the port cities of Guangzhou and Shenzhen, which are adjacent to Hong Kong and Macau. Research has reported that Chinese customs authorities tend to focus on entering goods and people in controlling drug trafficking, while being more lax in their exit checks. Hong Kong and Macau customs, on the other hand, tend to be less careful with people and goods that just left China, assuming the chances of smuggling are low since they have just been examined by the Chinese authorities previously (Li & Gao, 2004).

The second line of evidence addresses economic factors. Huge profits can be made from the drugs trafficked through the China Route. The bordering areas of China, Myanmar, and Laos are quite impoverished and traffickers can hire local residents to cross the border for extremely low costs. Most statistics estimate that the original price of 1 kg of heroin is between 10,000 and 20,000 Chinese yuan (¥), that is, between 147 and 294 U.S. dollars (US$1 ≈ ¥6.8). Once trafficked to Guangzhou, its value rises to about ¥100,000 (US$14,700). According to Deng (2001), when it enters Hong Kong, its market value is doubled to ¥200,000 (US$29,400). When the product reaches the United States, heroin of 40% to 70% purity will sell for anywhere from US$150,000 to US$260,000 per kilogram at the wholesale level (Office of National Drug Control Policy, 1998).

The third line of argument suggests that the increased effectiveness of American law enforcement in containing the South American drug cartel has forced the drug cartel to find easier routes to the United States and other parts of the world and to find new areas and new markets for their drug enterprises. This is evidenced by data suggesting that in recent years, crime organizations based in Hong Kong, Macau, and Taiwan have dramatically increased their drug trafficking activities into the mainland, particularly in Guangdong (Li & Gao, 2004). A recent drug trafficking case illustrates the involvement of a Colombian drug cartel in the trafficking of drugs via China. Chinese and U.S. drug control authorities issued a joint declaration on the arrests of drug trafficking groups led by Colombian drug traffickers and seized 142.7 kg of cocaine and also drug money valued US$29,400 (Hong Kong Phoenix TV, 2006). These explanations, along with direct interviews of drug traffickers (e.g., Chin & Zhang, 2007), provide support for the role of China Route.

The second research question for the present study addresses the profile of drug traffickers. Investigating who the offenders are and how they operate is a central research task. Because larger scale drug trafficking is typically well planned and coordinated among multiple offenders across national borders, among other profile questions a particularly important question is the link between drug traffickers and organized criminal groups. Are drug traffickers members of traditional organized criminal syndicates or temporarily formed criminal groups? If a criminal organization is behind drug trafficking, what are the attributes of the organization and their patterns of operation?

The dominant view regarding the profile of drug traffickers, particularly heroin traffickers, is that they are closely linked to the traditional organized criminal syndicates, such as Hong Kong–based Triads (Penn, 1990; Powell, 1989; President's Commission on Organized Crime, 1984; Seper, 1986; Zhu & Wang, 2005). American law enforcement considers Chinese crime groups some of the most serious organized groups (U.S. Senate, 1992) and likely behind most serious transnational organized crime, including drug trafficking. U.S. authorities believe that an elaborate international network exists to facilitate the transport of Chinese via various transit points, and that Chinese human smugglers are connected with traditional organized criminal syndicates, such as Triads and Tongs (Thompson, 2000).

An opposing view was voiced by S. Zhang and Chin (2003). Based on evidence from five studies of Chinese transnational crimes, one of which is about transnational drug smuggling, they propose that there is little evidence that links transnational human smuggling and drug trafficking to any traditional organized criminal syndicate, such as a Triad society. S. Zhang and Chin propose that contemporary transnational crime groups are very different from traditional organized crime groups in many dimensions—the profiles of the contemporary offenders are different from the traditional ones.

These studies used field observations and interviews. One interviewed 52 drug users and 35 drug traders. Chin's study is the most important study on the characteristics of Chinese drug traffickers so far. His in-depth interviews provide rich information about the profiles of the offenders and details on aspects of the drug trade. However, it is well known that although the qualitative interview method provides valuable in-depth information, it has inherent limitations. First, drug dealing and use are in violation of law and are subject to particularly severe punishment. Interviews relying on reports by the drug offenders, particularly when under the environment of institutional confinement, have difficulty in soliciting truthful answers. Second, the number of interviews tends to be limited by the availability of interviewees and resources of the project. Selection of samples is often limited by convenience, rendering the findings difficult to generalize. Because of the nonscientific nature of the sampling methods, there is no statistical basis to make clear inferences and perform hypothesis testing. Given these limitations, findings based on qualitative interviews should be further examined with more data from other independent sources, preferably from a scientific sample based on a clearly defined population.

Present Study

The present study uses Chinese court data on drug trafficking offenses to investigate the three research questions explained previously. We particularly stress the association of the profiles of drug traffickers and their operational characteristics, examining the opposing views on drug traffickers' patterns of association with criminal groups. The study analyzes a large sample of drug trafficking cases from the court sentencing files and will provide independent information on the profiles of drug traffickers. The findings can then be considered together with the findings from Chin's (2007) qualitative study to reach a more complete and confident understanding of the reality. The present study is the first that compiles a large sample of quantitative data on drug smuggling and trafficking in China. Our Chinese collaborators were able to access court sentencing files restricted to general researchers. A relatively large sample was drawn from seven provincial jurisdictions that cover the China Route.

Data

Data consist of samples from sentencing files in the high courts that have jurisdiction over drug trafficking cases. Data were collected from Chinese court sentencing files

from the courts in Yunnan, Guangdong, Guangxi, Fujian, Hong Kong, and Macau—the major provinces and areas on the Chinese Route from the Golden Triangle to Hong Kong and Macau. The sentencing files were sampled from all cases judged in 2006 and 2007 in the above jurisdictions. Information from the files was coded and data entered into SPSS files. The total sample size is 856 cases. The unit of analysis is the court case.

Variables

The sentencing files include valuable data on the sources (location) of the drugs, the destination to which they were being transported, and the types of drugs in each case. The data also include information on offender profiles, such as the nature of the organization, major types of criminal behavior, and the sociodemographics of the offenders involved.

Analysis and Results

Analyses are conducted for these weighted data. We summarize the results of analyses in four sections: Source and Destination of Drug Trafficking, Types of Drugs, Offender Profile, and Predicting Type of Offense by Offender Characteristics.

Source and Destination of Drug Trafficking

Court data included records of the source location of the drugs being trafficked and the destination where the defendants were taking the drugs when arrested. The traffic pattern from location to destination is shown in Table 1.

All narcotics intercepted from Hong Kong and Laos were destined for Mainland China; 82.7% from Burma and 53.1% from other locations were also destined for Mainland China. One hundred percent of the drugs from the United States and Macau were headed to Taiwan, whereas 91.9% of narcotics trafficked from Mainland China were destined for Taiwan; 96.5% of drugs from Thailand were also destined for Taiwan. The source-destination results are summarized in Table 2.

One way to look at the data is to ask where the intercepted drugs were going and what proportion of those drugs from that source were destined to a particular destination (e.g., How many cases where the drugs that came from Hong Kong were destined for Mainland China? All five cases = 100%, as in Table 1). A second and important question is, of the drugs coming from a particular location, what proportion of all drugs destined for a particular area come from that location (e.g., Of all the drugs intercepted for Mainland China, what proportion come from Hong Kong? 0.9%, as shown in Table 3).

Table 3 shows that from the cases prosecuted in China and reviewed for both location (source) and destination, 84.1% of the narcotics destined for Taiwan and 83.3%

Table 1. Source Location and Destination of Drug-Related Cases (Weighted by Court)

| | Destination of drug smuggling | | | | | | | | | | |
| | Taiwan | | Hong Kong | | Mainland China | | Philippines | | Other (not given) | | Total | |
Source of drug	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Hong Kong	0	0	0	0	5	100	0	0	0	0	5	100
Macau	41	100	0	0	0	0	0	0	0	0	41	100
Mainland China	1,577	91.9	5	0.3	46	2.7	28	1.6	60	3.5	1,716	100
America	27	100	0	0	0	0	0	0	0	0	27	100
Thailand (Golden Triangle)	136	96.5	0	0	5	3.5	0	0	0	0	141	100
Myanmar (Golden Triangle)	41	8.5	0	0	401	82.7	0	0	43	8.9	485	100
Laos (Golden Triangle)	0	0	0	0	30	100	0	0	0	0	30	100
Philippines/others	54	30.2	1	0.6	95	53.1	0	0	29	16.2	179	100
Total	1,876	71.5	6	0.2	582	22.2	28	1.1	132	5.0	2,624	100

destined for Hong Kong came from Mainland China; 100% destined for the Philippines came from Mainland China as well. Although 100% of the cases in the Chinese courts with drugs originating from Hong Kong were destined for Mainland China, this represents only 0.9% of the drugs destined for the Mainland. More than two thirds (68.9%) of the cases with drugs destined for the mainland were coming from Myanmar.

Types of Drugs: Dominance of Heroin in Charges

The results show that heroin is the dominant drug charged in the Chinese courts. Of the cases for which there were data, weighted by court, the significant majority of first charges were for heroin. About 79% of first drug charges involved heroin followed in rank order by methamphetamine (5.4%) and ecstasy (4.7%). The dominance of heroin as the primary drug in these cases is reflected in Table 4 and Figure 1.

When second charges are included, ketamine is the most frequent, representing 19.3% of the cases, followed in rank order by amphetamine (17%) and methamphetamine (15.9%). (See Table 5). The types of drugs were collapsed into five types: heroin, methamphetamine, ecstasy, amphetamine, and ketermine 2—the predominant drugs charged. The proportion of the types of primary drug charges varies by where the court is located (Table 6).

Table 2. Destination of Drugs by Source Location

Primary source location	Primary destination (%)
Hong Kong	Mainland China (100)
Laos	Mainland China (100)
Myanmar	Mainland China (82.7)
Other (includes Philippines)	Mainland China (53.1)
America	Taiwan (100)
Macau	Taiwan (100)
Mainland China	Taiwan (91.9)
Thailand	Taiwan (96.5)
Others	Taiwan (30.2)

Table 3. Source of Drug for Each Destination (Weighted by Court)

	Destination of drug smuggling										
	Taiwan		Hong Kong		Mainland China		Philippines		Other (not given)		Total	
Source of drug	n	%	n	%	n	%	n	%	n	%	n	%
Hong Kong	0	0	0	0	5	0.9	0	0	0	0	5	0.2
Macau	41	2.2	0	0	0	0	0	0	0	0	41	1.6
Mainland China	1,577	84.1	5	83.3	46	7.9	28	100	60	45.5	1,716	65.4
America	27	1.4	0	0	0	0	0	0	0	0	27	1.0
Thailand (Golden Triangle)	136	7.2	0	0	5	0.9	0	0	0	0	141	5.4
Myanmar (Golden Triangle)	41	2.2	0	0	401	68.9	0	0	43	32.6	485	18.5
Laos (Golden Triangle)	0	0	0	0	30	5.2	0	0	0	0	30	1.1
Other	54	2.9	1	16.7	95	16.3	0	0	29	22	179	6.8
Total	1,876	100.0	6	100.0	582	100.0	28	100.0	132	100.0	2,624	100.0

- More than 90% of the cases in Yunnan and Guangxi and more than three fourths of the charges in Taiwan and Guangdong are for heroin.
- Taiwan's second primary drug is amphetamine (13.7%) and, with the exception of one case in Hong Kong, represents all of the amphetamine cases.
- Macau has the lowest proportion of heroin charges (28.6%) but has the highest proportion of ecstasy (33.3%) and methamphetamine (19.0%) charges.

Table 4. Type of Drug Cases—First Charge

Type of drugs	n	%
Heroin	648	78.7
Methamphetamine	44	5.4
Ecstasy	39	4.7
Amphetamine	23	2.8
Ketamine 2	20	2.4
Other	49	6.0
Total	823	100.0
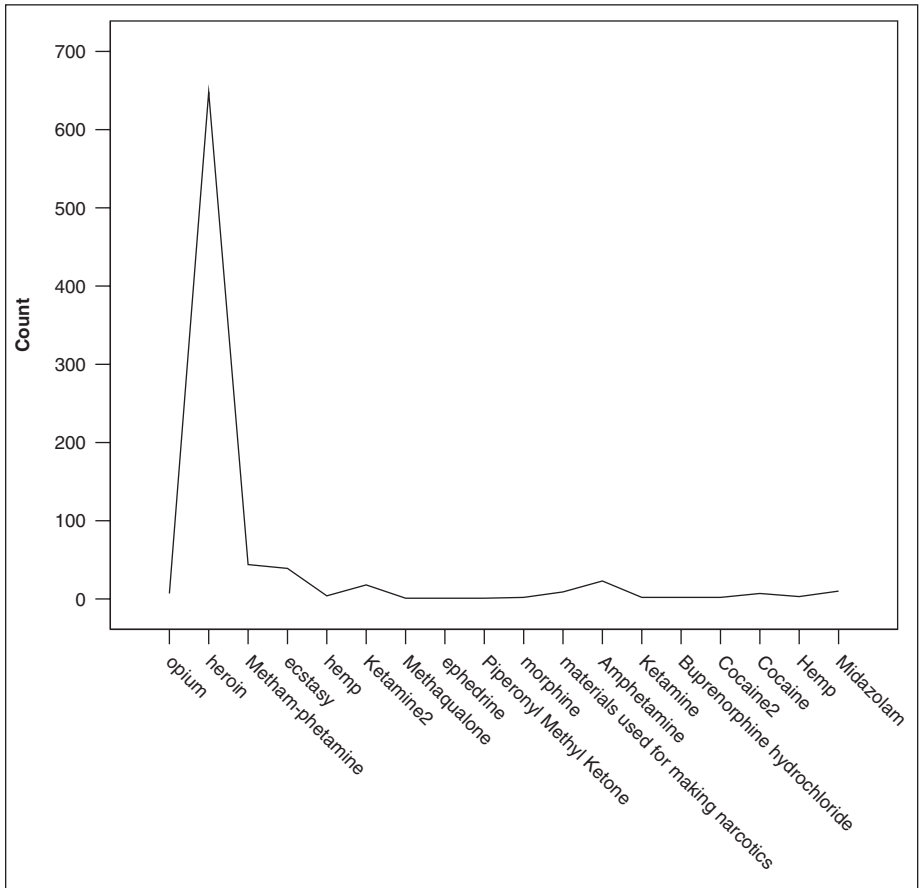
Figure 1. The drugs in trafficking cases (not weighted)

Table 5. Type of Drug Cases—Second Charge

	n	%
Ketamine	17	19.3
Amphetamine	15	17.0
Methamphetamine	14	15.9
Ecstasy	12	13.6
Hemp	9	10.2
Materials used for making narcotics	6	6.8
Caffeine	5	5.7
Ephedrine	3	3.4
Cocaine	2	2.3
Midazolam	2	2.3
Other	3	3.4
Total	88	100.0

Note: Because most cases have only a single charge, which is shown in Table 4, there were only 88 cases with a second charge.

Table 6. Primary Drug Charges by Place of the Court (Weighted)

Drug	Taiwan		Hong Kong		Macau		Yunnan		Guangxi		Guangdong		Fujian	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Heroin	128	79.5	58	49.2	18	28.6	892	93.3	345	94.5	522	83.7	742	63.9
Methamphetamine	0	0	14	11.9	12	19.0	40	4.2	0	0	54	8.7	98	8.4
Ecstasy	5	3.1	0	0	21	33.3	0	0	15	4.1	12	1.9	154	13.3
Ketermine 2	0	0	4	3.4	0	0	0	0	0	0	12	1.9	98	8.4
Amphetamine	22	13.7	1	1.7	0	0	0	0	0	0	0	0	0	0
Other	6	3.7	40	33.9	12	19.0	24	2.5	5	1.4	24	3.8	70	6.0
Total	161	100.0	118	100.0	63	100.0	956	100.0	365	100.0	624	100.0	1,162	100.0

Drug Trafficker Profiles

This section reviews drug trafficker profiles. The first issue to be addressed is whether the trafficking is organized crime or group crime not characteristic of organized criminal organizations. The trial courts define organized crime as deliberately committed by organized groups that consist of three or more people and have relatively stable organizational structure characterized by regular members and primary leaders. We are especially interested in two types of organized crimes. One is committed by traditional organized criminal syndicates, which are defined as underground criminal organizations with well-known names and historical tradition, such as the Triads. The other is

Table 7. Jurisdictions by Group or Nongroup Activity (Weighted)

| Jurisdictions | Group crime | | | | | |
| | Yes | | No | | Total | |
	n	%	n	%	n	%
Taiwan	96	58.5	68	41.5	164	100.0
Hong Kong	6	4.5	126	95.5	132	100.0
Macau	27	42.9	36	57.1	63	100.0
Yunnan	416	43.2	548	56.8	964	100.0
Guangxi	190	51.4	180	48.6	370	100.0
Guangdong	444	67.9	210	32.1	654	100.0
Fujian	1,008	79.6	259	20.4	1,267	100.0

committed by business-like criminal organizations whose crimes are covered by a form of regular business group and activities. Group crimes are different from the aforementioned organized crimes in that although they involve two or more individuals, they do not have a stable organizational structure. Instead, the groups tend to be temporarily formed for particular crimes; they may not have regular members.

A primary question of profiling is whether the offenders commit drug crimes as organized crimes. It was found that only two cases (0.2%) involved criminal organizations, one of which was a traditional organized criminal syndicate. Both cases were in Taiwan. No business-like criminal organization cases were found in the sample. On the other hand, 54.7% (468/856) were group crimes. Of group crimes, the number of members charged ranged from 1 to 13, with the average number of members being 2.9. Less than half, 45.3% (388/856), were nongroup crimes (see Table 9). Of the cases reviewed, the largest proportion of group offenders were processed in the courts of Fujian (79.6%) followed by Guangdong (67.9%). The difference between jurisdictions is significant ($p < .000$). Hong Kong is least likely to have group crime cases (4.5%; Table 7).

Type of Offense and Group Crime

There is a significant difference between group and nongroup offense cases for each of the defined offense categories except "other" charges. Group cases are more likely to involve smuggling and trafficking whereas nongroup cases are more likely to be transporting, possession, and other. Although heroin was found to be the primary drug involved (any of three charges) in all cases, it along with ecstasy are *significantly more likely* to be group offense cases. Other drugs are more likely to be nongroup in nature ($p < .000$). Around 76.2% of group related drug crimes involve heroin and 7% involve ecstasy (Table 8). More details on drug offender characteristics are presented in Table 9.

Table 8. Type of Drug by Group or Nongroup Activity

	Group crime					
	Yes		No		Total	
Type of drug	*n*	%	*n*	%	*n*	%
Heroin	340	76.2	308	81.7	648	78.7
Ecstasy	31	7.0	8	2.1	39	4.7
Methamphetamine	23	5.2	21	5.6	44	5.3
Amphetamine	15	3.4	8	2.1	23	2.8
Ketamine 2	15	3.4	5	1.3	20	2.4
Midazolam	0	0.0	10	2.7	10	1.2
Materials used for making narcotics	8	1.8	1	0.3	9	1.1
Opium	6	1.3	1	0.3	7	0.9
Cocaine	2	0.4	7	1.9	9	1.1
Other	6	1.3	8	2.12	14	1.7
Total	446	100.0	377	100.0	823	100.0

Predicting Offense Type

There are four primary drug charges in the Chinese court data: smuggling, trafficking, transporting, and possession. Previous literature has suggested that large-scale drug trafficking is typically well planned and coordinated among multiple offenders across national borders. However, because of the small number of cases of offenders who are accessories to drug trafficking in the present data set, the following logistic regression analysis uses the primary offender (who may be assisted by one or many other people) profiles to predict their patterns of association with offenders' types of offenses: smuggling, trafficking, possession, and transporting.

Table 9 presents the descriptive statistics of the variables included in the logistic regression models predicting offenders' types of offenses. Several predictor variables are recoded before running the binary logistic regression. Among these variables, age is recoded into two groups: younger than or equal to 35 and older than 35. The reason for this recoding is the fact that most offenses (72.2%) were committed by those who were 35 or younger. The proportion of drug offenses drops for offenders who are older than 35. The logistic regression models examine the difference between these two age groups in predicting drug offenders' types of offenses. Second, educational level is recoded into two groups, "junior middle school or lower" and "senior middle school or higher," for a similar reason: Slightly more than 93% of drug offenders received only junior middle school or lower level of education. Third, occupation is categorized consisting of three groups: farmer, jobless, and other. Farmers made up 46.4% of offenses, and those who were jobless committed 32.8% of offenses. The "other" group includes the offenders who were employed as worker, businessman, fisherman, medical worker, engineer, teacher, scientific researcher, driver, etc. They made up 20.8% of total drug offenses.

Table 9. Drug Offender Profile and Their Types of Charges (First Offender)

Variable characteristics	n	%
Gender		
Female	67	10.9
Male	548	89.1
Total	615	100.0
Age		
≤35	618	72.2
>35	238	27.8
Total	856	100.0
Education		
Junior middle school or lower	797	93.1
Senior middle school or higher	59	6.9
Total	856	100.0
Occupation		
Jobless	206	32.8
Farmer	292	46.4
Other	131	20.8
Total	629	100.0
Residency		
Mainland and other	549	71.6
Taiwan	184	24.0
Other	34	4.4
Total	767	100.0
Ethnicity		
Minority	100	16.8
Han	494	83.2
Total	594	100.0
Group member		
No	388	45.3
Yes	468	54.7
Total	856	100.0
Smuggling		
No	797	93.1
Yes	59	6.9
Total	856	100.0
Trafficking		
No	551	64.4
Yes	305	35.6
Total	856	100.0
Possession		
No	822	96.0
Yes	34	4.0
Total	856	100.0
Transporting		
No	593	69.3
Yes	263	30.7
Total	856	100.0

Note: Total numbers are different because of missing data. In some of the cases, information for one or more variables was missing, and the table reflects known information only.

Fourth, offenders' place of residency is also categorized into three groups: Taiwan, Mainland China, and other (regions or countries). A large percentage of offenders were from Mainland China (71.6%), followed by Taiwan (24.0%). Fifth, ethnicity is coded into Han ethnicity and minority. About 83.2% of offenses were committed by those of Han ethnicity. Finally, group membership is a binary variable. About 54.7% of offenders are group members.

Overall, many drug offenders are male (89.1%), younger than age 35 (72.2%), and Han ethnicity (83.2%); their educational levels are quite low; many of them are farmers and jobless; and many are from Mainland China and are group members. There were four dependent variables: smuggling, trafficking, possession, and transporting. Among all the offenses, more than one third (35.6%) are trafficking cases, slightly lower than one third (30.3%) are transporting cases, 6.9% are smuggling cases, and less than 4.0% are possession cases.

Table 10 presents the results of three binary logistic regression models. Because of the small number of possession cases (less than 4%), only three models are created to examine the patterns of association between drug traffickers' profiles and their types of offenses: smuggling, trafficking, and transporting. Drug possession cases are excluded for this analysis. The table provides the logistic regression coefficients, standard errors, and the odds ratios. The Nagelkerke R^2 estimates suggest that the three models predicting patterns of offenses account for 26.2%, 30.2%, and 38.7% of the explained variation, respectively. However, it should be noted that the R^2 measure from logistic regression analysis is only a pseudo-R^2 measure, which makes use of the maximum likelihood regression technique with no estimation of values across Cartesian space. Therefore, it is not strictly comparable to the R^2 found in ordinary least squares regression. The hit ratio, that is, the prediction success rates, of the three models are 91.41% for smuggling cases, 71.21% for trafficking cases, and 75.93% for transporting cases.

The results of Model 1 suggest that smuggling is significantly related to offender's occupation, place of residency, and group membership. Specifically, farmers have 3.4 times higher odds of conducting smuggling than those with other occupation (worker, businessman, public employee, fisherman, medical worker, engineer, teacher, etc.). The odds for offenders from Mainland China decreased by 95% compared with offenders from other areas. Group members are 3.25 times more likely than the nongroup members to conduct smuggling. Other variables are not significant predictors of drug smuggling.

The results of Model 2 suggest that drug trafficking is also significantly related to offender's occupation, place of residency, and group membership. Different from drug smuggling, being a farmer decreases the odds of trafficking by 74% compared with those with other occupations (worker, businessman, public employee, fisherman, medical worker, engineer, and teacher, etc.). Individuals from Mainland China have 8.9 times higher odds of conducting drug trafficking. Group members are 4.76 times more likely than nongroup members to conduct drug trafficking.

Table 10. Logistic Regression Predicting Three Types of Drug-Related Offenses

Independent variables	Model 1: What predicts smuggling? (n = 594)				Model 2: What predicts trafficking? (n = 594)				Model 3: What predicts transporting? (n = 594)			
	b	SE	Wald	Odds ratio	b	SE	Wald	Odds ratio	b	SE	Wald	Odds ratio
Constant	−1.25**	0.45	7.86	0.29	−2.50**	0.41	36.99	0.08	0.25**	0.18	0.02	1.03
Gender = male	—	—	—	—	—	—	—	—	—	—	—	—
Age ≥ 35	—	—	—	—	—	—	—	—	—	—	—	—
Education = Junior middle school or lower	—	—	—	—	—	—	—	—	—	—	—	—
Occupation 1 = Farmer	1.22**	0.38	10.53	3.40	−1.34**	0.19	47.97	0.26	1.38**	0.20	45.27	3.96
Occupation 2 = Jobless	—	—	—	—	—	—	—	—	—	—	—	—
Resident 1 = Taiwan	—	—	—	—	—	—	—	—	—	—	—	—
Resident 2 = Mainland	−3.11**	0.40	59.31	0.05	2.19**	0.40	30.66	8.90	−2.13**	0.20	110.39	0.12
Group member = Yes	1.18**	0.39	9.28	3.25	1.56**	0.20	61.78	4.76	—	—	—	—
Ethnicity	—	—	—	—	—	—	—	—	—	—	—	—
Hit ratio (prediction success rates)	91.41				71.21				75.93			
R² (Nagelkerke)	26.20				30.20				38.70			

Note: Those marked "—" are greater than the .05 cut-off for inclusion in the model. Odds ratios and confidence intervals are rounded to two decimal places. Significance of each variable improving the model fit was measured using −2 log likelihood. The reference group for Occupation is Other, which includes worker, businessman, public employee, fisherman, medical worker, engineer, teacher, scientific researcher, driver, doctor and guarder. The reference group for Resident is Other, which includes Hong Kong, Macau, Japan, America, Burma, Vietnam, India, Malaysia, and Nigeria. Because of missing data, the number of cases involved in the logistic regression analyses is 594. The R^2 in the table is pseudo-R^2 for logistic regression and it is usually smaller than the R^2 obtained from ordinary least squares regression. Therefore, it needs to be interpreted with caution.
**$p < .01$.

15

Table 11. Probit Analysis Predicting Three Types of Drug-Related Offenses

Independent variables	Model 1: What predicts smuggling? (n = 594)			Model 2: What predicts trafficking? (n = 594)			Model 3: What predicts transporting? (n = 594)		
	b	SE	Wald	b	SE	Wald	b	SE	Wald
Constant	−0.65**	0.25	7.09	−1.47***	0.24	38.02	0.03***	0.11	0.06
Gender = male	–	–	–	–	–	–	–	–	–
Age ≥ 35	–	–	–	–	–	–	–	–	–
Education = Junior middle school or lower	–	–	–	–	–	–	–	–	–
Occupation 1 = Farmer	0.59**	0.18	10.30	−0.80***	0.11	48.27	0.81***	0.12	47.03
Occupation 2 = Jobless	–	–	–	–	–	–	–	–	–
Resident 1 = Taiwan	–	–	–	–	–	–	–	–	–
Resident 2 = Mainland	−1.71***	0.22	60.10	1.28***	0.23	31.68	–	–	–
Group member = Yes	0.63***	0.19	10.82	0.93***	0.12	63.31	−1.28***	0.12	118.03
Ethnicity	–	–	–	–	–	–	–	–	–
Hit ratio (prediction success rates, %)			74.3			68.8			73.1
−2 log likelihood			285.27			668.59			597.28
Wald's χ²			68.92***			129.34***			170.98***

Note: Those marked "−" are greater than the .05 cut-off for inclusion in the model.
**$p < .01$. ***$p < .001$.

The result of Model 3 indicates that transporting drugs is only related to occupation and group membership. Farmers have 3.96 times greater odds of transporting drugs than those with other occupations. Being a group member reduces the odds by 88%. The remaining variables, gender, age, education, and ethnicity, are not significantly associated with transporting drugs.

Comparing the three models, the results show that offender's occupation is significantly associated with all three types of criminal behaviors. Being a farmer decreases the odds for drug trafficking, but increases both odds for smuggling and transporting. The effects of offender's place of residency are mixed as well. Being resident in Mainland China reduces the odds of smuggling, but increases the odds for drug trafficking. In addition, group membership increases the odds of both smuggling and trafficking, but decreases the odds of transporting.

To ensure that the coefficients from the above logistic regression do not depend on the choice of the probability density function, probit analysis is conducted to examine

the robustness of the results from the above logistic regression. Although the coefficients are generally smaller in probit analysis, general patterns of results are the same as the logistic regression and are all in the predicted direction. The results, therefore, confirm the robustness of logistic analysis (see Table 11).

Discussion

Questions regarding the existence of a China Route are very important in understanding drug trafficking in the world. However, little quantitative data have ever been collected from China. Quantitative evidence is seriously needed to form a better picture of drug trafficking over China Route. Drug trafficking research is extremely difficult in China because of the country's size and the elusiveness of the activity. We successfully collected new data that have provided informative results. Although these data are limited by the "dark number" or knowledge of the total number of trafficking cases in China, we have used the cases that have been processed to extrapolate at least a pattern of cases. Although it is difficult to have direct quantitative proof of the China Route, the court data offer new evidence consistent with the qualitative evidence in the literature.

Our study addressed the hotly debated issue of profiles of drug traffickers quantitatively for the first time. No sufficient evidence in the current study supports the general conception that drug smuggling, trafficking, and transportation are typically organized crime. The results may suggest that most drug trafficking may be committed by opportunistic offenders than career, organized crime figures. To be cautious, we must stress that the finding may well be a reflection of the limitation of the court files, which can only reflect information obtained from offenders who have been caught. It is possible that opportunistic offenders may be more likely to be apprehended than organized criminals. If this is the case, our data may be biased toward opportunistic conclusion.

Our study found that offender's occupation is significantly associated with all three types of criminal behaviors. Being a farmer decreases the odds for drug trafficking, but increases both odds for smuggling and transporting. We provide the following possible explanations for the differential effects. On one hand, farmers' revenue from the land is quite low in China. A large number of farmers are cheap laborers available for hire by smugglers to smuggle and transport drugs. On the other hand, drug trafficking involves skills of selling and familiarity with the markets. Farmers, however, do not possess these skills or knowledge about the market. They are, therefore, less likely to engage in drug trafficking.

The effects of offender's place of residency are mixed as well. Being a resident of Mainland China reduces the odds for smuggling but increases the odds for drug trafficking. This result seems quite natural given that the Chinese government implements strict control on issuing cross-border permissions to its citizens. It is thus difficult for Mainland Chinese to smuggle drugs across borders. Comparatively, Chinese residents are more familiar with the local conditions and therefore are apt to drug trafficking.

Our study also found that group membership increases the odds for both smuggling and trafficking but decreases the odds for transporting. This may be explained by the

more complex nature of drug smuggling and trafficking, which usually involves cross-border collaboration or local "protection" among group members. In comparison, drug transporting tends to be largely done by nongroup members. This may be explained by the fact that a large number of individuals who transport drugs from one place to another are individual farmers.

Although the analyses and the information are valuable, we must caution our readers that the study is limited in a number of ways. Cases that come to the attention and under control of Chinese courts are only a portion of the total offenses. Court cases do not include information about undetected and untried cases. Variables are limited by the interest of the courts. Limited data do not allow for more rigorous and sophisticated statistical analyses either. For example, data are based exclusively on the offender's most recent arrest and conviction, which do not allow examination of patterns of offenses across time. Given these limitations, we must interpret our findings with caution. When the findings do not confirm the existing hypotheses, we do not view it as indisputable evidence. The nature of the data does not allow for a definitive conclusion when the results are inconsistent with existent conclusions. Further studies expanding the scope and depth of the present study would be mostly useful in addressing questions of drug trafficking in China.

Declaration of Conflicting Interests

Funding

Note

1. Tongs formed in the second half of the 19th century among the earliest immigrant Chinese American communities. Many were outcasts or lacked the clan or family ties to join more prestigious Chinese associations, business guilds, or legitimate enterprises. They banded together to form their own secret societies for protection. Tongs followed the same patterns as the Triad societies, which were underground organizations in British-controlled Hong Kong. The term *Triad* was first used "by British authorities as a reference to the triangular shape of the Chinese character for 'secret society.'"

References

Black, D. (1991). *Triad takeover: A terrifying account of the spread of Triad crime in the West*. London, UK: Sidgwick and Jackson.

Bryant, R. (1990). *The Triads: The Chinese criminal fraternity*. London, UK: Grafton.

Chen, Z., & Huang, K. (2007). Trends, countermeasures, and challenges of drug crime in China. *International Journal of Offender Therapy and Comparative Criminology, 51*, 98-109.

Chin, K.-l., & Zhang, X. S (2007). The Chinese connection: Cross border drug trafficking between Myanmar and China, final report to Justice Department, National Institute of Justice, USA. Retrieved from http://www.ncjrs.gov/pdffiles1/nij/grants/218254.pdf

Deng, Z. (2001). Drug trafficking and consumption in China: Two case studies. *International Social Science Journal, 53*(169), 415-420.

Dobinson, I. (1993). Pinning a tail on the dragon: The Chinese and international heroin trade. *Crime & Delinquency, 39*, 373-384.

Drug Enforcement Administration. (2004). *Drug intelligence brief*. Washington, DC: US Department of Justice.

Dubro, J. (1992). *Dragons of crime: Insider the Asian underworld*. Markham, Ontario, Canada: Octopus.

Hong Kong Phoenix TV. (2006). Colombian Drug Cartel Turns Attention to China. Retrieved from http://chinanews.sina.com/34/2006/0515/0339356668.html

Li, Y., & Gao, H. (2004). Trans-border drug crime, causes and punishing measures. *Journal of Henan Judicial Police Vocational College, 2*, 62-64.

Liang, D., Ning, J., Lu, L., & Wang, Z. (2000). Yunnan cross Boarder Crime Study. *Journal of Hubei Police Academy* (Second issue of 2000), 11-14.

Lyman, M., & Potter, G. (2003). *Drugs in society: Causes, concepts and control*. Cincinnati, OH: Anderson.

Office of National Drug Control Policy. (1998). *The National Drug Control Strategy*. Washington, DC: U.S. Government Printing Office.

Penn, S. (1990, 22 March). Asian connection: Chinese gangsters fill a narcotics gap left by US drive on mafia. *Wall Street Journal*, p. A1.

Powell, M. (1989, 27 February). Tong influence in Chinatown turns to drugs. *New York Newsday*, p. 7.

President's Commission on Organized Crime. (1984). Organized crime of Asian Origin, Record of Hearing III—October 23-25, New York, NY. Washington, DC: Government Printing Office.

Schalks, T. (1991). *Chinese organized crime in the Netherlands*. The Hague, Netherlands: National Criminal Intelligence Service, NCB Interpol.

Seper, J. (1986, 28 January). Chinese gangs and heroin cast lawless shadow. *Washington Times*, p. A1.

Thompson, R. (2000, November). *Fukienese alien smuggling*. Paper presented at the Second Annual Southeast Regional Asian Crime Symposium, Clearwater, Florida.

U.S. Department of State. (1997). *International narcotics control strategy report (1996)*. Washington, DC: Author.

U.S. Senate. (1978). *Report of the Joint Special Committee to Investigate Chinese Immigration*. New York, NY: Arno Press.

U.S. Senate. (1992). *Asian organized crime. Hearing before the Permanent Subcommittee on Investigations of the Committee on Governmental Affairs, October 3, November 5-6, 1991*. Washington, DC: U.S. Government Printing Office.

Zhang, S., & Chin, K.-l. (2003). The declining significance of Triad societies in transnational illegal activities. *British Journal of Criminology, 43*, 463-482.

Zhang, Z. (2006). *Harrison Drug Narcotics Act, Description in drugs and society*. New York, NY: Marshall Cavendish Reference Publisher.

Zhu, F., & Wang, K. (2005). The state of cross national drug trafficking and strategy for dealing with it. *Journal of Yunnan Police Officer Academy, 56*, 23-27.