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SENTENCING DISPARITY IN CHINA: A DESCRIPTIVE RESEARCH ON AUXILIARY CYBERCRIME STIPULATED BY AMENDMENT IX OF CRIMINAL LAW*

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1.Background and Introduction

The sentencing disparity is a thesis that is not new but consistently researched with great academic passion in criminology, criminal justice, or even criminal law research. It comes from the concern with how the sentences are determined and whether perpetrators under relatively similar circumstances receive similar sentence outcomes.[1] Notably, there is an endogenous value conflict in the sentencing decisions from where the sentencing outcomes to individual perpetrators come between "goals of equal justice under the law and 'individualized justice with punishment tailored to the offender."[2] The latter value orientation is based on the theoretical paradigm of rehabilitation. The offenders could have the chance to return to society with some corrections, not just the penalties in prison. Judges were expected to mete out individualized sentencing to a particular offender according to their specific characteristics.[3] However, there was a reform movement of sentencing in the United States by criticizing rehabilitation, especially the failure to reduce recidivism.[4] The reform was intended to constrain the discretion, which is the direct causation

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1 Patricia L. Brantingham: Sentencing disparity: An analysis of judicial consistency. *Journal of Quantitative Criminology*, vol. 1. no. 3. (1985) 281–-305.

2 Barbara A. Koons-Witt: Equal justice versus individualized justice: Discretion and the current state of sentencing guidelines. *Criminology & Public Policy*, vol. 8. no. 2. (2009) 279–283.

3 Ronald S. Everett – Roger A. Wojtkiewicz: Difference, Disparity, and Race/Ethnic Bias in Federal Sentencing. *Journal of Quantitative Criminology*, vol. 18. no. 2. (2002) 189–211.

4 Robert Martinson: What works-questions and answers about prison reform. *Forensic Quarterly*, vol. 50. no. 2. (1976) 225–248.

of judges' disparity when sentencing the offenders. "It shifted the prime foci of corrections from rehabilitation to retributions and deterrence, which made responses to crime more severe and tangible." [5] Then, it seems that sentencing reform aims to get similar sentencing outcomes within similar cases under uniform sentencing guidelines, for instance, the Federal Organizational Sentencing Guidelines in the United States. Meanwhile, this kind of goal and practices leave room for the academic discussion of sentencing disparity.

When researching the sentencing disparity, there is a core question that could not be avoided: what factors should be considered in sentencing? Brantingham exemplified the questions about whether case facts, personal background, and the potential for recidivism should be considered in the process of sentencing.[6] On the premises of these questions, the later researchers, in general, classified the factors into two types: legal relevant factors, such as crime seriousness, criminal career status, acceptance of the guilty; and extralegal factors, such as age, gender, education, employed status, race/ethics, et cetera.[7] It is easy to understand the legally relevant factors that would impact the sentencing outcomes because, generally, most of the legally relevant factors have been ensured by or coded in the sentencing guidelines. However, the research mentioned above seems to pay more attention to the extralegal factors that could influence the sentencing. There is an inner logic presupposition that these researchers prefer to the

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5 Norval Morris – Michael Tonry: *Between prison and probation: Intermediate punishments in a rational sentencing system.* Oxford University Press, 1991.

6 Brantingham op. cit. 284–285.

7 E.g. ibid.; Everett–Wojtkiewicz op. cit. 196–197.; Marvin D. Free: Racial Bias and the American Criminal Justice System: Race and Presentencing Revisited. *Critical Criminology*, vol. 10. no. 3. (2001) 195–223.; Rebecca L. Loeffler – Timothy J. Lawson: Age and Occupational Status of Defendant in relation to Mock Juror Sentencing Recommendations. *Current Psychology*, vol. 21. no. 3. (2002) 289.; Darrell Steffensmeier – Stephen Demuth: Does Gender Modify the Effects of Race – ethnicity on Criminal Sanctioning? Sentences for Male and Female White, Black, and Hispanic Defendants. *Journal of Quantitative Criminology*, vol. 22. no. 3. (2006) 241–261.; Jeffery T. Ulmer – James Eisenstein – Brian D. Johnson: Trial Penalties in Federal Sentencing: Extra-Guidelines Factors and District Variation. *Justice Quarterly*, vol. 27. no. 4. (2009) 560–592.; Frank McIntyre – Shima Baradaran: Race, Prediction, and Pretrial Detention. *Journal of Empirical Legal Studies*, vol. 10. no. 4. (2013) 741–770.; Tara N. Richards – M. Dwayne Smith – Wesley G. Jennings – Beth Bjerregaard – Sondra J. Fogel: An Examination of Defendant Sex Disparity in Capital Sentencing: A Propensity Score Matching Approach. *American Journal of Criminal Justice*, vol. 39. no. 4. (2014) 681–697.; Traci Burch: Skin Color and the Criminal Justice System: Beyond Black-White Disparities in Sentencing. *Journal of Empirical Legal Studies*, vol. 12. no. 3. (2015) 395–420.; Rhys Hester – Todd K. Hartman: Conditional Race Disparities in Criminal Sentencing: A Test of the Liberation Hypothesis From a Non-Guidelines State. *Journal of Quantitative Criminology*, vol. 33. no. 1. (2017) 77–100.; John M. MacDonald – Ellen A. Donnelly: Evaluating the Role of Race in Sentencing: An Entropy Weighting Analysis. *Justice Quarterly*, vol. 36. no. 4. (2017) 656–681.; Byungbae Kim – Xia Wang – Hyunjung Cheon: Examining the Impact of Ecological Contexts on Gender Disparity in Federal Sentencing. *Justice Quarterly*, vol. 36. no. 3. (2018) 466–502.; Kelsey L. Kramer – Xia Wang: Assessing Cumulative Disadvantage against Minority Female Defendants in State Courts. *Justice Quarterly*, vol. 36. no. 7. (2019) 1284–1313.; Noah Painter-Davis – Jeffery T. Ulmer: Discretion and Disparity under Sentencing Guidelines Revisited: The Interrelationship between Structured Sentencing Alternatives and Guideline Decision-making. *Journal of Research in Crime and Delinquency*, Published online (2019).

sentencing uniformity. Under this premise, researchers expect to find the departure or failure of the sentencing guidelines in the process of sentencing by examining the significant impact of the extralegal factors in sentencing.

Coincidently, China also has a sentencing guideline for instructing the sentencing process during the trial. In the Sentencing Guideline for Common Crimes, which was promulgated by the Supreme People's Court of China, sentencing uniformity is basic.[8] With the principle in the Chinese judicial practice, the current study is endowed the research meaning to discuss the sentencing disparity in China's contextual environment. However, compared with the abundant research on the sentencing disparity in the United States and European countries, quantitatively, the relevant research or sentencing disparity studies are relatively less in Chinese scientific literature. On the other hand, due to the present researches as to sentencing disparity in China, they had different foci, for example, the disparity in the traffic crimes[9], the application of probation[10], the regional disparity of bribery crime[11], the sentencing outcomes of gender disparity in violent offenses[12], and general research of the disparity from a macro-level perspective[13]. However, the existing research on the sentencing disparity in China rarely considers the sentencing disparity in cybercrime, which is the most "prevalent" crime related to information technologies worldwide and attracts more attention in criminology criminal justice scholarship. On the premise, to fill the gap, the current research purports to explore the influence of both legally relevant factors and extralegal factors extract from the real cases have on the sentencing outcomes for auxiliary cybercrime according to Article 287(1) and Article 287(2) of Chinese Criminal Law which amended by the Amendment IX of Criminal Law.

Auxiliary cybercrime is not a criminological terminology but summarized by the current research. To identify the auxiliary cybercrime, it is worthy of figuring out the concept of cybercrime first. Cybercrime is not a concept of criminal law within legal dogmatic but a criminological terminology.[14] The current research applied the concept of cybercrime that cybercrime is conducted utilizing the Internet or ICTs to endanger society and jeopardize citizens' legal rights and interests or attack and destruct the

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8 Supreme People's Court: Sentencing Guideline for Common Crimes Supreme People's Court, 2014. July 31, http://www.court.gov.cn/shenpan-xiangqing-6622.html

9 E.g. Yanyu Xin – Tianji Cai: Paying money for freedom: Effects of monetary compensation on sentencing for criminal traffic offenses in China. *Journal of Quantitative Criminology*, Published online, (2019)

10 E.g. Xinghong Zhao: The Application of Probation in China: An Empirical Study using Chinese Judicial Documents. *Contemporary Law Review*, no. 2. (2016) 46–61.

11 E.g. Jianbo Wang: An Empirical Research on Regional Disparity of Bribery Crime Sentencing in China. *China Legal Science*, no. 4. (2016) 245–265.

12 Hong Lu – Bin Liang – Siyu Liu: Serious Violent Offenses and Sentencing Decisions in China – Are There Any Gender Disparities? *Asian Journal of Criminology*, vol. 8. no. 3. (2013) 159–177.

13 E.g. see Jianjun Bai: Empirical Criminal Law and Sentencing Practice: Big Sample Perspective on Criminal Law Phenomena. Beijing, Peking University Press, 2011.; John Zhuang Liu – Xueyao Li: Legal Techniques for Rationalizing Biased Judicial Decisions: Evidence from Experiments with Real Judges. *Journal of Empirical Legal Studies*, vol. 16. no. 3. (2019) 630–670.

14 Dawei Song: What is Cybercrime? A criminology Perspective. *Public Goods and Governance*, vol. 3. no. 2. (2018) 10–15.

computer system.[15] Cybercrime relies on an information network technology to gradually penetrate traditional crime and combine it to present new characteristics. Criminal lawmakers, criminal law practitioners, and criminal law researchers have reached a consensus that the current criminal legislation can no longer keep up with the pace of cybercrime mutation. Under the influence of the Risk Society Theory, to adequately cope with and control cybercrime development, full process monitoring, and early law enforcement intervention have become the preferred criminal legislation choices.[16] With this perspective, by the instruction of related criminal policy, Chinese criminal legislators labeled some preparatory and assistive behaviors in committing a cybercrime as independent crimes within the criminal law. In 2015, China enacted the Amendment IX of Criminal Law. Two types of cybercrime have been stipulated in the penal code, i.e., Article 287(1), which criminalizes the illegal utilization of information network technology, and Article 287(2), which criminalizes the provision of assistance to conduct the cyber-criminal activity. According to the traditional joint crime theory, the principals of these two clusters of conduct could not have been charged if the principals of the main crime had not been convicted, but, now, the accomplice conduct can be judged separately from the cybercrime. In other words, the offenders could be convicted regardless of whether the other perpetrators of the related main crime were charged. Furthermore, due to these conduct's endogenous assistive characteristics in the two articles, the current research summarizes them as auxiliary cybercrime.

This study aims to untangle why the sentencing disparity should be researched with sampling from the auxiliary cybercrime. The reasons for or meaning of the current research could attribute to the following aspects. First, the amount of sentencing disparity results of Chinese research is rarely compared with the US or European research results. The current research will fill the gap to some extent. Second, the current research aims to discover cybercrime's sentencing situation in China, which would arguably enrich cybercrime research. Third, because of the features of auxiliary cybercrime, including that the relatively new stipulations in the Chinese Criminal Law have just been four years implementations, from 2015 to 2019, the caseload is not very large, and the sampling could cover most of the real cases which is beneficial to find the analytical results. As an official of the Supreme People's Court reported, from 2015 to September 2019, the aggregated number of both cases was 260 and covered 473 offenders.[17] Lastly, the Supreme People's Court and Supreme People's Procuratorate have enacted a new judicial interpretation of auxiliary cybercrime. This judicial interpretation could be the sentencing guideline of auxiliary cybercrime in the future.

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[15] China Justice Big Data Academy: Features and Trends of Cybercrime (2016.1–2018.12) China Justice Big Data Service Platform, 2019. November 19, https://pdfs.semanticscholar.org/ee29/6776064640534a9041f5856051b15fd6ef76.pdf

[16] Jianping Lu: Criminal Policy and Criminal Law in the Risky Society. *Legal Forum*, vol. 26. no. 4. (2011) 21–25.; Supreme People's Court: Press conference on the 'Interpretations of the supreme people's court and supreme people's procuratorate on the application of laws in handling criminal cases of illegal utilizing information network technology and assisting cyber-criminal activities', 2019. October 25, http://www.court.gov.cn/zixun-xiangqing-193671.html

[17] Supreme People's Court (2019) op. cit.

However, all the cases sampled in the current are those judgments before it. So, on the one hand, the current research aims to discover the sentencing disparity of auxiliary cybercrime and find the salient factors that could influence the sentencing outcomes; on the other hand, the current research could be treated as preliminary research for future research on the sentencing disparity of auxiliary cybercrime, especially on the comparison of the sentencing disparity before and after the judicial interpretation.

As mentioned above, the number of researches on the sentencing disparity in China is relatively rare compared with other countries' academy. When combining the sentencing disparity with cybercrime, the number of researches is less. The current research inclines to learn more from the relevant research in the United States, Canada, and European Countries. As a research model, the current research applies the research paradigm from Brantingham's work that classified the factors into four categories: case facts, offender characteristics, system operational factors, and judge characteristics.[18] As for the offender characteristics, scholars, especially in the United States, generally examined the race/ethnics influence on the sentencing outcomes.[19] However, the contextual environment is radically different between China and the United States. In China, race discrimination is not very significant. Instead, regional discrimination seems to have arguably much more influence in all processes of social operation.[20] The objectives, but not the whole, of the current study are trying to answer and give preliminary explanations to the following questions:

1) Does disparity exist in the auxiliary cybercrime sentencing outcomes in China?
2) How much of these disparities depend on the legally relevant factors, such as types of conduct, the seriousness of the crime, status in the crime, the convergence of other crimes, and joint/ unit crime?
3) Do these disparities depend on the offender's characteristics while controlling the legally relevant factors, such as age, gender, residence, educational level, and court location?

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18 Brantingham op. cit. 285.

19 E.g. Everett–Wojtkiewicz op. cit. 194–195.; Free op. cit. 199–219.; Steffensmeier–Demuth op. cit. 247.; McIntyre–Baradaran op. cit. 743–747.; Ed A. Munoz – Adrienne B. Freng: Age, Racial/Ethnic Minority Status, Gender and Misdemeanor Sentencing. *Journal of Ethnicity in Criminal Justice*, vol. 5. no. 4. (2008) 29–57.; Jill K. Doerner – Stephen Demuth: The Independent and Joint Effects of Race/ Ethnicity, Gender, and Age on Sentencing Outcomes in U.S. Federal Courts. *Justice Quarterly*, vol. 27. no. 1. (2010) 1–27.; Eric P. Baumer: Reassessing and Redirecting Research on Race and Sentencing. *Justice Quarterly*, vol. 30. no. 2. (2013) 231–261.; Xia Wang – Daniel P. Mears: Sentencing and State-Level Racial and Ethnic Contexts. *Law & Society Review*, vol. 49. no. 4. (2015) 883–915.

20 E.g. see Guoping Huang – Benxian Yao: Regional Discrimination and the Construction of a Harmonious Society. *Science of Social Psychology*, vol. 21. no. 4. (2006) 50–52.; Shun Yi Liu – Zheng Chun Li: The Concentration Effect of Chinese Territory Discrimination and Anti-discrimination System Structure. On the Phenomenon Uglifying and Discriminating against the Persons of Henan Province. *The Journal of Harbin Committee School of the CCP*, vol. no. 4. (2010) 87–89.

2. Literature Review

2.1. Prior Researches

There are two kinds of factors that could influence sentencing outcomes. The first is legally relevant factors that drew on the sentencing guidelines, and the second is extralegal factors, which are generally unmodified by the sentencing guidelines, including the offender's age, gender, race or ethnics, socioeconomic status. The research as to sentencing disparity could not steer clear of these two typical factors in their studies. The sentencing guidelines' function is to reduce the unwarranted disparity in sentencing; thus, it is understandable in most of the sentencing realities that the legally relevant factors have a significant impact on the sentencing outcomes. In other words, according to the Formal Legal Theory, the legally relevant factors should effectively predict the sentencing outcomes and could interpret "a greater magnitude of the variance than extralegal factors."[21] The research using the drug trafficking case data from the US Sentencing Commission from 1999 to 2002 of Kautt has proven this perspective.[22] However, in Kautt's research, the extralegal factors, age, gender, and race have explanatory effects. It is also the case with the bulk of sentencing disparity research that endeavors to describe, exploit, and explain the impact of extralegal factors on sentencing outcomes.

First of all, age influences shaping the sentencing outcomes. It arguably comes to a commonsense that there is more probability of younger offenders receiving harsher sentencing outcomes while, compared with older ones, sentencing is more lenient.[23] Steffensmeier, Kramer, and Ulmer detailed the distinction among the different ranks of ages that young offenders, especially offenders within their 20s and early 30s, are more likely to get harsher sentences than those between 18-20, in their late 30s, and 40s or older.[24] Munoz and Freng found that, in misdemeanor sentencing, "young and young adults had a higher likelihood of receiving other punitive sentences, in addition to, or rather than just a fine."[25] When considering the interaction between age and other extralegal factors, Steffensmeier, Ulmer, and Kramer demonstrated that "age is

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21 Paula M. Kautt: Is the Offense Serious Axis Free of Extralegal Influence?: Assessing the Predictors of a 'Legally Relevant' Guideline Criterion. *American Journal of Criminal Justice*, vol. 34. no. 3. (2008) 253-–273.

22 Ibid.

23 E.g. Munoz–Freng op. cit. 48–49.; Darrell Steffensmeier – John Kramer – Jeffery Ulmer: Age Differences in Sentencing. *Justice Quarterly*, no. 3. (1995) 583–602.; Darrell Steffensmeier – Jeffery Ulmer – John Kramer: The Interaction of Race, Gender, and Age in Criminal Sentencing: The Punishment Cost of Being Young, Black, and Male. *Criminology*, vol. 36. no. 4. (1998) 763–798.; Barbara A. Koons-Witt – Eric L. Sevigny – John D. Burrow – Rhys Hester: Gender and Sentencing Outcomes in South Carolina:Examining the Interactions With Race, Age, and Offense Type. *Criminal Justice Policy Review*, vol. 25. no. 3. (2014) 299–324.; Darrell Steffensmeier – Noah Painter-Davis – Jeffery Ulmer: Intersectionality of Race, Ethnicity, Gender, and Age on Criminal Punishment. *Sociological Perspectives*, vol. 60. no. 4. (2017) 810–833.

24 Steffensmeier–Kramer–Ulmer op. cit. 599–600.

25 Munoz–Freng op. cit. 46–50.

more influential in male offenders' sentencing than female offenders."[26] Steffensmeier, Painter-Davis, and Ulmer combined gender and race with age and concluded that young black males received harsher punishment than those old defendants.[27] However, some researchers disagree with the proposition above and reach opposing results. For instance, in their studies on defendants' age and attractiveness, Smith, and Hed deduced those young or attractive offenders could get the sentencing outcomes with more leniency;[28] however, the old or unattractive offenders might get harsher sentences than therebefore.[29] Whether positive or negative impacts of age on sentencing, the reality is that age, as an extralegal factor, in most times, could influence the sentencing outcomes and cause the disparity.

The second extralegal factor with a heated discussion in the sentencing disparity research is gender. Due to this study's limited research resource, the research on gender disparity and sentencing results did not involve sexual minorities. Generally, researchers deploy a dichotomous classification of gender, that is, male and female. Most present studies show that female ones have a higher likelihood of receiving lenient sentencing outcomes compared with male offenders.[30] Some works did not show the inclination of favoring either male or female rather than the differentials of sentencing outcomes. For instance, Richards, Smith, Jennings, Bjerregaard, and Fogel, in their project to examine the 'sex matters' in capital sentencing, demonstrated the probability of the death penalty's imposition is significantly varying between male and female in the involved cases.[31]

The third extralegal factor, which is always with more interactive research, under the United States' contextual environment, is race/ethnics. As aforementioned, China's race/ethnics discrimination problem is not on a relatively problematic level, like in the United States. However, the race/ethnics discriminative problem, to some extent, represents the attitude of the mainstream majority against the minority. The current research or further researches on the sentencing disparity in China's legal practice could also learn a lesson from the research pattern of the race/ethnics minority research in the United States. To summarize the existed findings of correlated researches, the central idea is that minorities, represented by Blacks and Hispanics, are generally

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[26] Steffensmeier–Kramer–Ulmer op. cit. 599.

[27] Steffensmeier–Painter-Davis–Ulmer op. cit. 822.

[28] Edward D. Smith – Anita Hed: Effects of offenders' age and attractiveness on sentencing by mock juries. *Psychological Reports*, vol. 44. no. 3. (1979) 691–694.

[29] Loeffler – Lawson op. cit. 291–292.

[30] E.g. see Steffensmeier–Demuth op. cit. 256–258.; Kim–Wang–Cheon op. cit. 489–495.; Kramer–Wang op. cit. 1303–1307; Steffensmeier–Kramer–Ulmer op. cit. 600.; Koons-Witt–Sevigny–Burrow–Hester op. cit. 299–324.; Steffensmeier–Painter-Davis–Ulmer op. cit. 821–828.; Jeffrey S. Nowacki: An intersectional approach to race/ethnicity, sex, and age disparity in federal sentencing outcomes: An examination of policy across time periods. *Criminology & Criminal Justice*, vol. 17. no. 1. (2017) 97–116.; Kathleen Daly – Rebecca L. Bordt: Sex Effects and Sentencing: An Analysis of the Statistical Literature. *Justice Quarterly*, no. 1. (1995) 141–176.; Grant A. Brown: Gender as a factor in the response of the law-enforcement system to violence against partners. *Sexuality and Culture*, vol. 8. no. 3. (2004) 3–139.

[31] Richards–Smith–Jennings–Bjerregaard–Fogel op. cit. 681–697.

disadvantaged in sentencing outcomes compared with mainstream Whites. Although the studies' results are roughly the same, there are some differences in research ideas among different studies. For example, beyond the Black-White classification, Burch launched research based on the skin color to focus on more details in the sentencing disparity;[32] Franklin turned research foci from traditional Whites, Blacks, and Hispanics to the native Americans and paid more attention to the small minority.[33] Furthermore, in comparison with the research that focuses only on the impact of racial/ethical situations, such as Lynch and Haney[34], Free[35], and Bales and Piquero[36], from a purely quantitative point of view, the interactive study of race and other extralegal factors occupies a considerable proportion in the study of this factor.[37]

The other extralegal factors impacting sentencing outcomes, such as education, socioeconomic status, occupation status, and marital status, have also been discussed in different literature. For example, Franklin, Dittmann, and Henry examined the disparities of defendants' educational background as a contributing factor to the probability of getting an intermediate sanction.[38] They found that the educational background could play a measurable role in the application of intermediate sanctions. As for the socioeconomic status, Benson and Walke[39] "found no significant relationship between the defendant's socioeconomic status and sentence severity."[40] However, whether a specific factor could influence the sentencing or not while putting all factors above together and treating them as a whole, it could infer that the extralegal factors

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32 Burch op. cit. 402–404.

33 Travis W. Franklin: Sentencing Native Americans in US Federal Courts: An Examination of Disparity. *Justice Quarterly*, vol. 30. no. 2. (2013) 310–339.

34 Mona Lynch – Craig Haney: Discrimination and Instructional Comprehension: Guided Discretion, Racial Bias, and the Death Penalty. *Law and Human Behavior*, vol. 24. no. 3. (2000) 337–358.

35 Free op. cit. 199–219.

36 William D. Bales – Alex R. Piquero: Racial/Ethnic Differentials in Sentencing to Incarceration. *Justice Quarterly*, vol. 29. no. 5. (2012) 742–773.

37 E.g. see Steffensmeier–Demuth op. cit. 256–258.; Ulmer–Eisenstein–Johnson op. cit. 569–573.; McIntyre–Baradaran op. cit. 743–747.; Painter-Davis–Ulmer op. cit. 13–15.; Munoz–Freng op. cit. 38–45.; Doerner–Demuth op. cit. 7–11.; Baumer op. cit. 255–256.; Steffensmeier–Kramer–Ulmer op. cit. 588–591.; Koons-Witt–Sevigny–Burrow–Hester op. cit. 299–324.; Steffensmeier–Painter-Davis–Ulmer op. cit. 818–819.; Nowacki op. cit. 97–116.; Ojmarrh Mitchell: A Meta-Analysis of Race and Sentencing Research: Explaining the Inconsistencies. *Journal of Quantitative Criminology*, vol. 21. no. 4. (2005) 439–466.; Brett C. Burkhardt: Criminal Punishment, Labor Market Outcomes, and Economic Inequality: Devah Pager's Marked: Race, Crime, and Finding Work in an Era of Mass Incarceration. *Law & Social Inquiry*, vol. 34. no. 4. (2009) 1039–1060.; Mona Lynch – Marisa Omori: Crack as Proxy: Aggressive Federal Drug Prosecutions and the Production of Black–White Racial Inequality. *Law & Society Review*, vol. 52. no. 3. (2018) 773–809.

38 Travis W. Franklin – Layne Dittmann – Tri Keah S. Henry: Extralegal disparity in the application of intermediate sanctions: An analysis of US district courts. *Crime & Delinquency*, vol. 63. no. 7. (2017) 839–874.

39 Michael L. Benson – Esteban Walker: Sentencing the White-Collar Offender. *American Sociological Review*, vol. 53. no. 2. (1988) 294–302.

40 Celesta A. Albonetti: Judicial Discretion in Federal Sentencing: An Intersection of Policy priorities and Law. *Criminology & Public Policy*, vol. 10. no. 4. (2011) 1151–1155.

test on the functioning of intrusion of sentencing has been proven by many quantitative or qualitative types of research which are valuable and inspired.

2.2. Theoretical Frameworks

When initiating empirical researches, scholars invariably seek specific theoretical frameworks to explain or legitimate their findings in the study. The research of sentencing disparity is no exception. Researchers in this arena had deployed many theoretical frameworks to understand the sentencing disparity, such as Uncertainty Avoidance Theory, Causal Attribution Theory, Focal Concerns Theory, the Chivalry, the Evil Women Perspectives, Social Worlds Framework, and Organizational Contexts Perspective.

Albonetti tried to incorporate the Uncertainty Avoidance Theory and the Causal Attribution Theory to explain judicial discretion.[41] On the one hand, the Structural Organizational Theorists believe that complete knowledge could eliminate the uncertainty in decision-making.[42] On the other hand, the reality is that the judges are generally unable to get all the offenders' useful information, especially unable to predict future criminal behaviors accurately. The judges in the sentencing process have to rely on some pattern responses, stereotypes, which are usually linked to the offenders' characteristics, such as age, gender, and race, to manage the uncertainty.[43] Casual Attribution theory could play a significant role in sentencing. When applying factors such as the offenders' characteristics, crime scenarios, and pre-trial process results to assess the offenders' future conducts, "attributions of a stable and enduring disposition are expected to increase sentence severity, or of a temporary or situational involvement in crime are expected to decrease sentence severity."[44]

Another prevalent theory to understand the sentencing disparity in the legal practice is the Focal Concerns Theory. This theory has been described as the "hegemonic" theoretical framework to interpret demographic and other sentencing disparities with the bulk of criminological research.[45] Focal concerns first appeared in the social science literature, which researched the gang delinquency with the lower-class culture.[46] The first application of this framework in criminological research was about parole release decision-making.[47] Then, in 1998, this theory was first fully elaborated in the research

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41 Celesta A. Albonetti: An Integration of Theories to Explain Judicial Discretion. *Social Problems*, vol. 38. no. 2. (1991) 247–266.

42 Herbert A. Simon: *Administrative behavior: A study of decision making processes in administrative organizations.* New York, Macmillian, 1957.

43 Albonetti (1991) op. cit. 248–250.

44 Ibid.

45 Mona Lynch: Focally Concerned About Focal Concerns: A Conceptual and Methodological Critique of Sentencing Disparities Research. *Justice Quarterly*, vol. 36. no. 7. (2019) 1148–1175.

46 Walter B. Miller: Lower class culture as a generating milieu of gang delinquency. *Journal of Social Issues*, vol. 14. no. 3. (1958) 5–19.

47 Lynch op. cit. 1149–1153.; Peter B. Hoffman: Paroling policy feedback. *Journal of Research in Crime and Delinquency*, vol. 9. no. 2. (1972) 117–131.

of sentencing disparity.[48] Two prongs are constructed in this research: one is about the particular concerns in sentencing decision-making; the other is about the cognition and context which could generate the disparities. Under these two prongs of the focal concern theory, three concerns were built, i.e., blameworthiness, protection of community safety, and Practicality / Organizational Implications.

Blameworthiness roots in the defendants' culpability and looks forward to making the punishment fitting the crime. Protection of community safety emphasizes the incapacitation and general deterrence, and meanwhile, considers the offenders' future behaviors, like recidivism. Practicality / Organizational Implications pay much attention to the constraints of the offenders or organizational problems.[49] The significance of extracting these three focus concerns from sentencing practice is that, on the one hand, they imply a dichotomy of the influencing factors of legally-relevant and extralegal factors. On the other hand, these three focus concerns implicitly involve individual subjective evaluations. Though some evaluations could arguably be constrained by sentencing guidelines, with combining the theories of uncertainty avoidance and casual attribution above, there is still much room left for stereotypes and heuristic cognitive models.

For this reason, many pieces of research applied this model to conceptualize and operationalize the variables.[50] However, there are still some challenges to the focal concerns theory's aptness to explain the sentencing complexity. From the operationalized viewpoint, the legally-relevant factors, such as criminal history, are generated by inequality; the value of distinction is undermined.[51] Furthermore, the initial focal concerns theory aims at explaining the group-level phenomena. However, the recent research deploys and develops this theory to an individualistic approach, which pays more attention to its characteristics. Murakawa and Beckett[52] criticized that "[T]he individualistic approach to the social scientific study of racial inequality in the criminal justice study rests on an incorrect assumption that the system itself is racially innocent and that only individual bad acts produce the problem of biased outcomes."[53] As for explaining the function of race biases to sentencing outcomes,

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48 Steffensmeier–Ulmer–Kramer op. cit. 766–769.

49 Darrell Steffensmeier – Noah Painter-Davis: Focal Concerns Theory as Conceptual Tool for Studying Intersectionality in Sentencing Disparities: Focus on Gender and Race along with Age. In: Jeffery T. Ulmer and Mindy S. Bradley (eds.): *Handbook on Punishment Decisions: Locations of Disparity.* New York, Routledge, 2017. 189–210.

50 E.g. see Steffensmeier–Demuth op. cit. 245–247.; Kramer–Wang op. cit. 1286–1290.; Painter-Davis–Ulmer op. cit. 13–15.; Doerner–Demuth op. cit. 8–11.; Steffensmeier–Painter-Davis–Ulmer op. cit. 818–819.; Nowacki op. cit. 97–116.; Geoff Ward – Amy Farrell – Danielle Rousseau: Does Racial Balance in Workforce Representation Yield Equal Justice? Race Relations of Sentencing in Federal Court Organizations. *Law & Society Review*, vol. 43. no. 4. (2009) 757–806.; Xia Wang – Daniel P. Mears – Cassia Spohn – Lisa Dario: Assessing the Differential Effects of Race and Ethnicity on Sentence Outcomes Under Different Sentencing Systems. *Crime*, vol. 59. no. 1. (2013) 87–114.

51 Lynch op. cit. 1157.

52 Naomi Murakawa – Katherine Beckett: The Penology of Racial Innocence: The Erasure of Racism in the Study and Practice of Punishment. *Law & Society Review*, vol. 44. no. 3–4. (2010) 695–730.

53 Lynch op. cit. 1157.

Lynch asserted that implicit bias would be better to have an impact than explicit biases, which measured under the Steffensmeier's focal concerns theory translation, on the sentencing outcomes. The theory of "aversive racism"[54] could be applied to better understand the racial impacts, as promoted by Lynch. The critique seems to sway the foundation of the three focal concerns. Nonetheless, the focal concerns theory still could have a good fitting with some adjustments in explaining the demographic characteristics' disparities.

The Chivalry and the Evil Women Perspectives were usually taken for explaining the gender-based disparities.[55] The chivalry emphasized the paternalistic demand in male court actors to protect the female. Under this perspective, female offenders have a high likelihood of getting lenient outcomes compared with male ones.[56] Kramer and Wang[57] elucidate that, as for the perspective of Evil Women, "female offenders who fail to meet traditional gender expectations or/and commit more masculine, violent crimes are treated either no different or more harshly than males who commit the same crimes."[58]

The Social Worlds Framework and Organizational Context Perspective do a relatively rare appearance in the research of sentencing disparities. Social Worlds Framework contends that every social world has at least one primary activity, unique sites, and a technology that is either inherited or innovative to carry out its activities.[59] The group members of one social world will share the resources of many kinds to achieve their goals. If one treats the criminal court as one social world, this social world's goal would be to reach sentencing outcomes. The judges would share the sentencing guidelines as technology. However, both the meaning and utilization of a sentencing guideline would alter saliently between different criminal courts within any given jurisdiction.[60] It could be sentencing disparity caused by the factor of the locale, which is an extralegal factor.

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54 John F. Dovidio – Samuel L. Gaertner: The aversive form of racism. In: John F. Dovidio – Samuel L. Gaertner (eds.): *Prejudice, discrimination, and racism.* Orlando, FL, Academic Press, 1986.

55 E.g. see Ilene H. Nagel – John Hagan: Gender and crime: Offense patterns and criminal court sanctions. *Crime and Justice*, vol. 4. no. (1983) 91–144.; Timothy Griffin – John Wooldredge: Sex-Based Disparities in Felony Dispositions Before Versus After Sentencing Reform in Ohio. *Criminology*, vol. 44. no. 4. (2006) 893–923.; Natalie Goulette – John Wooldredge – James Frank – Lawrence Travis: From Initial Appearance to Sentencing: Do Female Defendants Experience Disparate Treatment? *Journal of Criminal Justice*, vol. 43. no. 5. (2015) 406–417.

56 Griffin–Wooldredge op. cit. 893–923.; Goulette–Wooldredge–Frank–Travis op. cit. 406–417.; Margaret Farnworth – Jr. Raymond H. C. Teske: Gender Differences in Felony Court Processing. *Women & Criminal Justice*, vol. 6. no. 2. (1995) 23–44.

57 Kramer–Wang op. cit. 1287.

58 E.g. see Koons-Witt–Sevigny–Burrow–Hester op. cit. 299–324.; Nagel–Hagan op. cit. 91–144.; Cortney A. Franklin – Noelle E. Fearn: Gender, race, and formal court decision-making outcomes: Chivalry/paternalism, conflict theory or gender conflict? *Journal of Criminal Justice*, vol. 36. no. 3. (2008) 279–290.

59 Adele Clarke – Susan Star: The Social Worlds Framework: A Theory/Methods Package. In: Edward J. Hackett – Olga Amsterdamska – Michael Lynch – Judy Wajcman (eds.): *The Handbook of Science and Technology Studies.* Cambridge, M.I.T. Press, 2008. 113–137.

60 Kautt op. cit. 267–270.

The organizational context perspective concludes in a similar way that individual sentencing outcomes adjudicated by any criminal court are influenced by the political, social, and organizational context of that court.[61]

The current research expects to find the results to support the reviewed theories above. According to the research questions, this study will pay more attention to the Focal Concerns Theory, the Chivalry perspective, and Uncertainty Avoidance Theory, but with cautions on the other theories.

3. Methodology

3.1. Data and Sampling

The current study's objective is to find whether the sentencing disparities exist in the sentencing outcomes of the auxiliary cybercrime in China. According to this objective, this study's data was drawn from the real cases that appeared in the form of judgment on the China Judgements Online (CJO) website. In 2016, the Supreme People's Court of China enacted a judicial interpretation that stipulated that courts on every hierarchy level should publicize and upload all the adjudicated judgments to the CJO[62], which provides an opportunity to research real cases. On the one hand, judgments generally contain much information, such as the offender's name, gender, residence, nationality, educational level, occupational status, and ID number. Despite this, the Supreme People's Court stipulated that personal information, ID number, and some law information should be deleted when publishing and uploading judgments to the CJO. Nevertheless, there is still much information about the characteristics of the offenses and information related to offenders classified into offenders' characteristics.

On the other hand, because auxiliary cybercrimes are codified by criminal law since September 2015, the current study's data collection covers September 2015 to September 2019. The current study could collect 168 pieces of judgment covering 273 defendants and sentencing outcomes by filtering those uploaded judgments. The defendants' information is not integrated, and those without sentencing outcomes (this could be a technical problem that part of the judgment with unexpected uploading failure). As aforementioned, the official statistics showed that, in the same period, there were 260 cases and 473 defendants involved. The current study extracted nearly 57.7% effective sentencing outcomes.

Though the sampling occupied a large proportion of the sentencing outcomes, the sample size is still small, limiting by research object, auxiliary cybercrime, compared with other researches of sentencing disparity. In mathematical operation, the small sample will decrease the statistical power, making some crucial variables lack

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61 Ibid.

62 Supreme People's Court: Provisions on People's Courts Publishing Judgment Documents on the Internet, 2016. August 31, http://www.court.gov.cn/zixun-xiangqing-25321.html

significance in the results and further mislead the conclusions.[63] However, confined by reality, the current study has to bear these limitations and tries to overcome them by variables' setting.

3.2. Variables

In the current research, variables are classified into factors and sentencing outcomes from a macro-level. This study divided factors into two sub-categories: legally-relevant factors stipulated in the Criminal Law Code and Sentencing Guidelines as legal sentencing scenarios and extralegal factors that are not legitimated in those two documents.

The current study's dependent variable is the offenders' sentencing outcome, consisting of incarceration length, amounts of fines, and probation application. According to the Criminal Law Code of China, there are two types of criminal punishments: principal punishments and supplementary punishments.[64] The types of principal punishments are (1) public surveillance, (2) criminal detention, (3) fixed-term imprisonment, (4) life imprisonment, and (5) the death penalty.[65] The types of supplementary punishments are (1) fines, (2) deprivation of political rights, and (3) confiscation of property.[66] As for the current research object, the auxiliary cybercrime, which consists of two articles in China's Criminal Law, both articles have the same sentencing range or statutory sentencing results. As written in the Criminal Law, whoever commits an auxiliary cybercrime should be sentenced to imprisonment of not more than three years, or criminal detention, in addition to a fine, or should be sentenced to a fine only.

Given that the imprisonment and the criminal detention are both considered incarcerations applied to offenders – with different units of measurement as the former is measured by the year and the latter by the month – the current research unified these two types of sentences into a new dependent variable, Incarceration Length, measured by the unit of the month, for the convenience of measurement. The minimum one represents the offenders sentenced only to *Fines*. The maximum one is "36," according to the law. Then, the incarceration length ranges from 0 to 36-month. After data collection, the current study found that every sentencing resulted in a fine. Another dependent variable, the Amounts of Fines, directly extracts from the judgments and sets as a scale variable. As for probation, some scholars treat it as an independent sentencing outcome.[67] The current study followed this idea and set the Application of Probation as a dependent variable, coded as a dummy variable with "0" (Not applied) and "1" (Applied).

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63 Chris Deziel: The Effects of a Small Sample Size Limitation, 2018. March 13, https://sciencing.com/effects-small-sample-size-limitation-8545371.html

64 See Criminal Law of China: Article 32.

65 Ibid. Article 33.

66 Ibid. Article 34.

67 E.g. see Morris–Tonry op. cit.; Zhao op. cit. 46–61.

The independent variables in the current research are those factors that could have an impact on the sentencing outcomes. As discussed above, all these factors are divided into legally relevant factors and extralegal factors. In this study, the legally relevant factors include two types of variables: Case Facts and Crime Seriousness; the extralegal factors also include Systematic Features and Offenders' Characteristics.

Case Facts mainly depend on the criminal conduct of the auxiliary cybercrime. The current study focuses on the criminal conduct stipulated in the Criminal Law Code for the statutory sentencing range, and results are the same in both types of auxiliary cybercrime. The variable of criminal conduct is coded as a nominal variable. The value in this variable respectively represents the different criminal conducts: setting website or communication group for crimes (coded as 1), sending illegal information in the cyberspace (coded as 2), sending messages for fraud and other crimes (coded as 3),[68] providing technical support for crimes in the cyberspace (coded as 4), and assisting the cyber-criminals by offering advertisement, payment method, or other assistance (coded as 5).[69]

Crime Seriousness in the current study contains unit crime, joint crime, identity in the crime, and convergence of other crimes. The unit crime could be simply understood as corporate crime. Generally, the unit crime involves multi-offenders, so according to the sentencing guideline, the punishment for the unit crime perpetrators would arguably be harsher than single offenders'. In this study, the unit crime is coded as a dummy variable with "0" (No) and "1" (Yes). The joint crime in the Criminal Law of China refers to the circumstance that two (or more) offenders intentionally commit a crime. As the unit crime, the joint crime would arguably be sentenced harsher. The joint crime is coded as a dummy variable with "0" (No) and "1" (Yes). The crime's identity is based on the concept of complicity, which consists of principals and accomplices. Accomplices could get more lenient sentencing outcomes than principals.[70] For those cases that could not be considered a joint crime, this study applied the following strategy: if a case only involved one offender, then that offender was considered the principal of the crime. The joint crime is coded as a dummy variable as the previous two. The last variable of Crime Seriousness is the convergence of other crimes. As discussed before, the auxiliary cybercrime has an independent criminal law status as it is separated from a previously committed crime. In other words, whether the supportive conduct promotes another crime or not, the supportive conduct itself is convictable. In turn, if the offender of the auxiliary cybercrime facilitates the commission of other crimes, the crime is more severe than in the case of those crimes that do not. The convergence of other crimes is coded as a dummy variable, as well. These four variables are also aggravating circumstances in the sentencing; the current study summed the value of them as a comprehensive ordinal variable to evaluate the aggregating crime seriousness, named Crime Seriousness. As for the mitigating circumstances, because all the offenders involved in this study accepted guilty and performed remorse, the function thereof was

68 See. Criminal Law of China: Article 287(1).

69 Ibid. Article 287(2).

70 Ibid. Article 27.

not considered. The Crime Serious range is from 1(only one offender committed the crime without the convergence of other crimes) to 4 (the maximum involved all four previous variables).

Systematic Features in this research predominantly consider the location of the court. In general, the court in a specific locale has jurisdiction over the crimes in this area. During the same examined period, if one kind of crime was judged more often in place A than in place B, then it could be the case that the crime density is more significant in place A than in place B. So, the location of the court is an indicator of the crime rate to some extent. As mentioned before, one of the research questions is about the regional disparities in the sentencing outcomes of auxiliary cybercrime. The current research collected the court location's regional information and coded them as the nominal variable in China's provinces. After data collection and variables codification, the current research found that the auxiliary cybercrime's provincial distribution is significantly discrete. Second, the research question's underlying expectation is to find whether the regional disparities or discrimination would influence the sentencing outcomes. Third, because of the regional disparities or discrimination might be the connotation of the economic disparities. Then, for better revealing the regional disparities and moderating the discrete distribution, the current study classified the 31 provinces in the China mainland into five regions based on the provincial per capita GDP in the fiscal year of 2018. According to the statistical numbers given by the National Bureau of Statistics of China[71], the current study coded the rank 1-7 of per capita GDP province as "5" (Regions: high per capita GDP), the rank 8-13 as "4" (Regions: fairly high per capita GDP), the rank 14-19 as "3" (Regions: high per capita GDP), the rank 20-25 as "2" (Regions: fairly low per capita GDP), and the rank 26-31 as "1" (Regions: low per capita GDP).

Offenders' Characteristics in this research consist of the following factors: gender, age, residence, and educational level. Gender in this study is coded as a dummy variable with "0" (female) and "1" (Male). The age in this study represents the offenders' age when they were sentenced. It is calculated by the date of the trial and the birthday of the offenders. In the preliminary disposition, the minimum value is 18, while the maximal value is 56. Considering the findings in the research of Steffensmeier, Kramer, and Ulmer[36] that Age has a curvilinear relationship to sentencing with offenders in their 20s and early 30s sentenced most harshly, while offenders in their 50s or older received extraordinarily lenient sentences. Falling between these two extremes were teen-adults (18-20) and offenders in their late 30s and 40s. The current study categorized age into four ranks. Age within 18-24 is coded as 1, 25-29 is coded as 2, 30-35 is coded as 3, and age at/above 36 is coded as 4. The variable of residence has the same codification as the Court Location above. As for the level of education, though much research has proven its impact on the sentencing outcome, it still needs to test in China's content.

[71] National Bureau of Statistics of China: Gross Regional Product (2018). In: Shengyong Mao – Zhicai Ye (eds.): *China Statistical Yearbook – 2019.* Beijing, China Statistics Press, 2019.

Furthermore, as this study's object is the auxiliary cybercrime, which has been treated as a high-technology crime[72], it is reasonable to link the level of education to the capacity to commit a cybercrime. On the other hand, there is a traditional cultural perspective with significant influence in Chinese society: "for those who know the law and violate the law, they should be punished harsher." People with high educational levels are inferred to know the law better than those with low educational levels and should be punished harsher when committing a crime. With these considerations, the Educational Level is coded as an ordinal variable with "1" (Primary School), "2" (Middle School), "3" (High School), and "4" (College and above).

3.3. Analytical Strategy

The current research has been launched in two steps. First, to check the effects on the sentencing outcomes, this study put all the independent variables into the analysis with the Multivariate Analysis method. The dependent variables are sentencing outcomes of probation, incarceration length, and the amounts of fines. Second, this study applied the Binary Logistic Regression and Hierarchical Linear Regression Analysis methods to test the variables' far-reaching influence on sentencing outcomes. The strategy here is to add the extralegal factors into the regression model and check the significance, then put the legally relevant factors into the model and check how much of variance has been explained and which extralegal factor is still with statistical significance. Then, the disparities within these factors might be the causes of the sentencing disparities.

4. Findings

4.1. Descriptive Analyses

Table 1 provides descriptive statistics for all the variables contained in the current study. According to the trial's variable statistics, the sentencing outcomes of offenders distributed discretely within this sample. More than half (50.5%) of the sentencing outcomes were given in 2018. The count of sentencing outcomes has a significant increasing trend by year in this sample. However, this study's data only counted to September 2019, so the number of sentencing outcomes in 2019 did not maintain this trend. The criminal conducts of the auxiliary cybercrime are of homogenous distribution in this sample. In this sample, 20.1% of cases are a unit crime, while 79.9% are not. 45.8% of cases are a joint crime. Compared with the findings in the official report on general cybercrime, the rate of a joint crime is 43.22%[73], the rate of a joint crime in this sample is consistent with that finding by T-test (t=.850, p=.396, α=.05). The crime seriousness score calculated by the unit crime variables, the joint crime, the

[72] E.g. Gerald L. Kovacich – William C. Boni: *High-technology crime investigator's handbook: establishing and managing a high-technology crime prevention program.* Elsevier, 2011.

[73] China Justice Big Data Academy (2019) op. cit.

identity in crime, and convergence, ranged from 1 to 3; and 80.4% of cases were at the interval of 1-2.

As for the extralegal factor of the court's location showed that over half (52.0%) of the cases were sentenced in region 5 (a region with high per capita GDP)[74], and 18.7% of the cases were sentenced in region 3 (a region with average per capita GDP)[75]. Gender distribution in this study is that 83.9% of the offenders are male, while 16.1% are female. However, combined with the integral female criminal rate of 9.3% of all kinds of crimes [76], the current study found that the female criminal rate of auxiliary cybercrime is not consistent with, or higher than, the integral female criminal rate through T-test (t=3.058, p=.002, α=.05). In the current study, Age∈[18,56] (Mean=28.85, σ=5.6, Mode=29) has no significant difference with 28, offered by the official statistics of all the general cybercrime.[77] In terms of education level and offender's region, the offenders in this study were mainly those with a middle school diploma (34.8%) and a college degree or above (35.2%); and most (43.6%) of them come from the high per capita GDP region.

As for the variables of sentencing outcomes in this study, 27.1% of offenders involved got probation. The probation rate in the auxiliary cybercrime sentencing is consistent with the integral probation application rate (27.4%) offered by China's legal yearbook through the T-test (t=-.109, p=.913, α=.05). In terms of the incarceration length and the amounts of fines, the incarceration length ∈[0,30] (Mean=11.25, σ=6.22); and the amount of fines∈[1,000, 400,000] (Mean= 23611.35, σ=42318.03).

To sum, from several critical indicators, this study's sample can arguably well reflect the trend of cybercrime and the current situation of penalty application in China.

Table 1: Descriptive Statistics of Variables

Variables		Count	Valid N %	Median	Mean	SD
Trial Year	2015	2	0.7%			
	2016	11	4.0%			
	2017	44	16.1%			
	2018	138	50.5%			
	2019	78	28.6%			
Crime Conduct	1	54	19.8%			
	2	50	18.3%			
	3	20	7.3%			
	4	53	19.4%			
	5	96	35.2%			

[74] Region 5 (a region with high per capita GDP) includes 7 regions in China: Beijing, Shanghai, Tianjin, Jiangsu, Zhejiang, Fujian, and Guangdon

[75] Region 3 (a region with average capita GDP) includes 6 regions in China: Jilin, Ningxia, Hunan, Hainan, Henan, and Xinjiang.

[76] Xiaomei Wu: *Law Yearbook of China – 2018.* Beijing, Press of Law Yearbook of China, 2018.

[77] China Justice Big Data Academy (2019) op. cit.

Variables		Count	Valid N %	Median	Mean	SD
Unit Crime	No	218	79.9%			
	Yes	55	20.1%			
Joint Crime	No	148	54.2%			
	Yes	125	45.8%			
Identity in Crime	Compliance	59	21.6%			
	Principal	214	78.4%			
Convergence	No	184	67.4%			
	Yes	89	32.6%			
Crime Seriousness	1	114	41.8%			
	2	108	39.6%			
	3	51	18.7%			
Court Location	1	18	6.6%			
	2	22	8.1%			
	3	65	23.8%			
	4	26	9.5%			
	5	142	52.0%			
Gender	Female	44	16.1%*			
	Male	229	83.9%			
Age	18-24	57	20.9%			
	25-29	106	38.8%			
	30-35	83	30.4%			
	36-	27	9.9%			
Age of Perpetrators				28.00	28.85	5.60
Educational Level	Primary	16	5.9%			
	Middle	95	34.8%			
	High	66	24.2%			
	College	96	35.2%			
Offender's Region	1	34	12.5%			
	2	41	15.0%			
	3	50	18.3%			
	4	29	10.6%			
	5	119	43.6%			
Probation Application	Not Applied	199	72.9%			
	Applied	74	27.1%			
Incarceration Length				10.00	11.25	6.22
Amounts of Fine				10000.00	23611.36	42318.03

4.2. Results of Multivariate Tests

According to the analytic strategy, the current study first put all the independent variables into the multivariate tests model for checking the subject effects of them on the sentencing outcomes, the probation application, the incarceration length, and the amounts of fines.

Table 2: Multivariate Tests of Between-Subjects Effects

Factors	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	p.
Corrected Model	Probation Application	7.607[a]	21	.362	1.962	.008*
	Imprisonment Length	2793.350[b]	21	133.017	4.316	.000*
	Amount of Fine	60829844208.717[c]	21	2896659248.034	1.706	.030*
Intercept	Probation Application	3.122	1	3.122	16.912	.000*
	Imprisonment Length	5523.914	1	5523.914	179.222	.000*
	Amount of Fine	18541926289.039	1	18541926289.039	10.918	.001*
Conduct	Probation Application	1.220	4	.305	1.653	.162
	Imprisonment Length	153.425	4	38.356	1.244	.293
	Amount of Fine	1719635365.323	4	429908841.331	.253	.908
Seriousness	Probation Application	.241	2	.121	.653	.521
	Imprisonment Length	551.337	2	275.668	8.944	.000*
	Amount of Fine	6512025705.109	2	3256012852.555	1.917	.149
Court Location	Probation Application	2.050	4	.513	2.777	.028*
	Imprisonment Length	585.733	4	146.433	4.751	.001*
	Amount of Fine	14846179200.095	4	3711544800.024	2.185	.071
Gender	Probation Application	.000	1	.000	.001	.981
	Imprisonment Length	286.976	1	286.976	9.311	.003*
	Amount of Fine	59747547.998	1	59747547.998	.035	.851
Age1	Probation Application	.540	3	.180	.975	.405
	Imprisonment Length	137.109	3	45.703	1.483	.220
	Amount of Fine	9184013726.548	3	3061337908.849	1.803	.147
Education	Probation Application	.247	3	.082	.446	.721
	Imprisonment Length	84.010	3	28.003	.909	.437
	Amount of Fine	3904036725.012	3	1301345575.004	.766	.514
Region	Probation Application	1.852	4	.463	2.509	.043*
	Imprisonment Length	381.760	4	95.440	3.097	.016*
	Amount of Fine	6836184819.601	4	1709046204.900	1.006	.405

a. R^2= .141; b. R^2= .265; c. R^2 = .125; *. p<0.05

As reported in Table 2, the current study got some findings: first, as for the subject effect of independent variables on the probation application, the general linear model of the probation application has statistical meaning (R^2=.141, F=1.962, p=.008, α=.05). As the legally relevant variables, the criminal conduct and the crime seriousness had no statistically significant influence on the probation application. Regarding the extralegal factors, gender, age, and educational level had no statistically significant effects on the sentencing's probation application. However, the court location (F=2.777, p=.028, α=.05) and the offender's region (F=2.509, p=.043, α=.05), the other two extralegal factors, were with significant effects on the probation application. Second, in the general linear model of incarceration length, which as well had the statistical meaning (R^2=.265, F=4.316, p=.000, α=.05), the crime seriousness (F=8.944, p=.000, α=.05) had very significant effects on the incarceration length, whereas the criminal conduct had no significant ones. The age and educational level of extralegal factors still had no significant effects on the incarceration length. However, the other extralegal factors, the gender (F=9.311, p=.003, α=.05), the court location (F=4.751, p=.001, α=.05), and the offender's region (F=3.097, p=.016, α=.05) revealed a significant correlation with the incarceration length. The last, in the general linear model of amounts of fines, though also was with the statistical significance (R^2=.125, F=1.706, p=.030, α=.05), all the independent variables from either legally relevant factors or extralegal factors had no statistically significant correlations with the amounts of fines.

In the first stage of the multivariate tests, the current study found some independent variables that could arguably affect the sentencing outcomes. This study then expects to test the coefficients between sentencing outcomes and differentials within a particular independent variable, under the presumption that all the variables might affect the sentencing outcomes, some findings in Table 3.

Table 3: Multivariate Test of Parameters Estimation within Variables

	Probation Application			**Incarceration Length**			**Amounts of Fines**		
Factors	B	*t*	*p*	B	*t*	*p*	B	*t*	*p*
Intercept	.629	5.609	.000*	15.908	10.985	.000*	37984.377	3.534	.000*
[Conduct=1]	-.207	-2.518	.012*	1.124	1.057	.292	-2356.605	-.299	.766
[Conduct=2]	-.112	-1.311	.191	-.525	-.475	.635	-6195.369	-.757	.450
[Conduct=3]	-.065	-.559	.577	2.362	1.571	.117	-2344.185	-.210	.834
[Conduct=4]	-.100	-1.268	.206	1.009	.988	.324	-6300.599	-.831	.407
[Conduct=5]	0[a]	.	.	0[a]	.	.	0[a]	.	.
[Seriousness=1]	-.075	-.932	.352	-4.350	-4.180	.000*	-13688.308	-1.772	.078
[Seriousness=2]	-.087	-1.105	.270	-2.209	-2.177	.030*	-3712.647	-.493	.622
[Seriousness=3]	0[a]	.	.	0[a]	.	.	0[a]	.	.
[Court Location=1]	-.258	-2.125	.035*	-6.045	-3.847	.000*	-16167.694	-1.386	.167
[Court Location=2]	.066	.636	.526	.938	.698	.486	615.430	.062	.951
[Court Location=3]	-.109	-1.533	.126	-1.661	-1.811	.071	14779.715	2.171	.031*
[Court Location=4]	-.233	-2.381	.018*	-2.017	-1.593	.112	12212.080	1.300	.195

[Court Location=5]	0[a]	.	.	0[a]	.	.	0[a]	.	.
[Gender=0]	-.002	-.023	.981	-3.048	-3.051	.003*	1390.968	.188	.851
[Gender=1]	0[a]	.	.	0[a]	.	.	0[a]	.	.
[Age1=1]	-.181	-1.699	.090	-1.109	-.807	.421	-8490.689	-.832	.406
[Age1=2]	-.119	-1.249	.213	-.175	-.142	.888	2225.208	.243	.808
[Age1=3]	-.103	-1.051	.294	1.053	.828	.409	9497.819	1.006	.315
[Age1=4]	0[a]	.	.	0[a]	.	.	0[a]	.	.
[Education=1]	-.083	-.691	.490	-.740	-.476	.634	-15956.207	-1.383	.168
[Education=2]	-.069	-.939	.349	-.321	-.338	.735	-5619.491	-.799	.425
[Education=3]	-.073	-.979	.328	-1.497	-1.562	.120	-6909.322	-.971	.333
[Education=4]	0[a]	.	.	0[a]	.	.	0[a]	.	.
[Region=1]	-.177	-1.901	.059	1.781	1.476	.141	-5008.939	-.559	.577
[Region=2]	.141	1.646	.101	-2.701	-2.438	.015*	-7748.458	-.942	.347
[Region=3]	.028	.352	.725	-1.167	-1.133	.258	-14503.991	-1.896	.059
[Region=4]	.110	1.164	.246	-1.546	-1.268	.206	-9942.956	-1.099	.273
[Region=5]	0[a]	.	.	0[a]	.	.	0[a]	.	.
a. This parameter is set to zero because it is redundant; *. $p<0.05$									

First, in terms of the probation application and the differentials within the variable value, as reported in Table 3, the current study had two findings. The offender who committed criminal conduct 1[78] has less likelihood to be put on probation (B=-.207, t=-2.518, p=.012, α=.05) than those who committed criminal conduct 5. The other one is that the offender sentenced in a low per capita GDP region court(B=-.258, t=-2.125, p=.035, α=.05) or a fairly high per capita GDP region (B=-.233, t=-2.381, p=.018, α=.05) had less chance to be put on probation than those who sentenced in a high per capita GDP region. Combined with the results in Table 2, the criminal conduct had no statistically significant effects on the probation application. However, according to the current study's hypothesis, the result of the limitation resulting from a small-sized sample of this study made the differentials between criminal conduct 1 and 5 not insignificant in the overall evaluation of the effects of criminal conduct on the probation applications. However, the disparities of probation application by the court location were further proved in the estimation of the parameters.

Second, regarding the incarceration length and the differentials within the variable value, the current study discovered that (1) in contrast with crime seriousness score 3, offenders whose crime seriousness at 1 (B=-4.350, t=-4.180, p=.000, α=.05) or 2 (B=-2.209, t=-2.177, p=.030, α=.05) were more likely to be sentenced less incarceration length, on average, 4.35 months less with former and 2.209 months less with latter; (2) in contrast with the court of location 5, offenders who were sentenced in the

[78] Coduct 1: Setting website or communication group for crimes.

court of location 1 (B=-6.045, t=-3.847, p=.000, α=.05) were sentenced averagely 6.045 months less incarceration length; (3) in contrast with male offenders, female offenders (B=-3.048, t=-3.051, p=.003, α=.05) were sentenced averagely 3.048 months less incarceration length; and (5) in contrast with offenders from region 5, those who from the fairly low per capita GDP region-2 (B=-2.701, t=-2.438, p=.015, α=.05)- were sentenced averagely 2.701 months less incarceration length. The findings here comply with the results in Table 2. At this point, it could be preliminarily identified that these four factors will cause sentencing disparities.

Third, concerning the amounts of fines and the differentials within the variable value, the current study observed that, by contrast, offenders who were sentenced in a court of average per capita GDP region (B=14779.715, t=2.171, p=.031, α=.05) could be fined averagely 14,770 yuan more than those in a court of location 5. Regarding the results in Table 2, no variables in this study could affect the amounts of fines. However, here, the court location, to some extent, could influence the fines outcomes. The probable reason to explain this might be the same as the reason discussed above; the limitation is from the sample's small size.

4.3. Results of Regression Analysis

During the first step of the multivariate analyses, the current study preliminarily tested and checked the effects of this study's variables on the sentencing outcomes. For further ascertaining the findings in the multivariate analyses and responding to the research questions or objectives, the second round of tests was conducted on the variables by applying the models of binary logistic regression and hierarchical linear regression. The ordinal logistic regression was applied for exploring the correlation among ordinal and nominal variables. Because the probation application was coded as a binary variable with "Yes" (1) and "No" (0), the binary logistic regression could be a suitable choice. Meanwhile, as sentencing length and amounts of fines are continuous variables, this study applied the hierarchical linear regression. However, whether the binary logistic regression or the hierarchical linear regression is applied here, the strategy is similar, letting the offender's characteristics enter the model. The court location, the last ones are legally relevant factors, the criminal conduct, and crime seriousness, thereby understanding the effects of both extralegal and legally relevant factors on the sentencing outcomes.

Table 4 provides the results of binary logistic regression, which dependent variable is probation application. First, in model 1, let the offender's characteristics, including gender, age, educational level, and offender's region, enter the model. The results of the model's omnibus tests (χ^2=8.168, p=.086, α=.05) expressed that there was no at least one variable in model 1 that could explain the dependent variable. Then, this study added the court location into the model, i.e., model 2, and found that, on the one hand, model 2 had statistical meaning (χ^2=12.448, p=.029, α=.05); on the other hand, only the court location had the statistically significant effects on the probation application (Exp(B)=1.271, p=.046).

Table 4: Binary Logistic Regression of Probation Application

		Omnibus Tests of Model Coefficients			**Variables in the Equation**			
		Chi-Square	df	p.	Variables	B	Exp(B)	*p.*
model 1[a]	Step	8.168	4	.086	Gender	.424	1.529	.295
	Block	8.168	4	.086	Age	.277	1.320	.072
	Model	8.168	4	.086	Education Level	.178	1.195	.243
					Offender's Region	.082	1.086	.416
					Constant	-2.827	.059	.000*
model 2[b]	Step	4.280	1	.039*	Gender	.283	1.328	.496
	Block	4.280	1	.039*	Age	.286	1.332	.068
	Model	12.448	5	.029*	Education Level	.190	1.209	.213
					Offender's Region	.071	1.073	.486
					Court Location	.240	1.271	.046*
					Constant	-3.685	.025	.000*
model 3[c]	Step	4.277	2	.118	Gender	.269	1.309	.522
	Block	4.277	2	.118	Age	.322	1.379	.043*
	Model	16.725	7	.019*	Education Level	.102	1.107	.520
					Offender's Region	.026	1.026	.801
					Court Location	.247	1.280	.040*
					Crime Conduct	.160	1.174	.099
					Crime Seriousness	.203	1.226	.297
					Constant	-4.277	.014	.000*
a. variable (s) entered in model 1: Gender, Age, Educational Level, Offender's Region.								
b. variable (s) entered in model 2: Court Location.								
c. variable (s) entered in model 3: Crime Conduct, Crime Seriousness.								
*. $p.<0.05$								

Finally, this study added another two legally relevant factors, the criminal conduct and the crime seriousness, into the model, i.e., model 3, and found that: (1) model 3 had the statistical meaning (χ^2=16.725, p=.019, α=.05); and (2) there were two variables, the Age (Exp(B)=1.379, p=.043) and the court location (Exp(B)=1.280, p=.040), in the model 3 could predict the probation application. The value Exp(B) of both Age and court location is more than 1. It means that by the offender's age growing and court location increasing from low per capita GDP region to high per capita GDP region, the offenders were not likely to get the probation. In other words, the younger offenders were with a higher likelihood of getting probation than the old ones; and the offenders who were

sentenced in a court of the low per capita GDP region were with more probability of probation application than those in a court of the high per capita GDP region. Though the variable of age in model 1 had no effects on probation application, by considering the results of models 2 and 3, and Table 2, the current study found that court location, as an extralegal factor, had a statistically significant effect on the probation application. Neither of the legally relevant factors could predict the probation application.

Table 5: Hierarchy Linear Regression of Incarceration Length [d]

	Model Summary				**Regression ANOVA**			**Coefficients**		
Model	R^2	$R^2\uparrow$	F ↑	p.$R^2\uparrow$	F	P.	Factors	B	*t*	*p.*
1[a]	.074	.074	5.340	.000*	5.340	.000*	(Constants)	4.455	2.604	.010*
							Gender	3.698	3.721	.000*
							Age	.625	1.540	.125
							Education	.733	1.815	.071
							Offender's Region	.041	.156	.876
2[b]	.094	.020	5.804	.017*	5.510	.000*	(Constants)	2.251	1.168	.244
							Gender	3.240	3.321	.001*
							Age	.618	1.534	.126
							Education	.744	1.859	.064
							Offender's Region	.005	.020	.984
							Court Location	.689	2.409	.017*
3[c]	.169	.075	11.983	.000*	7.683	.000*	(Constants)	.007	.004	.997
							Gender	2.918	3.020	.003*
							Age	.727	1.864	.063
							Education	.327	.813	.417
							Offender's Region	-.105	-.412	.680
							Court Location	.677	2.462	.014*
							Crime Conduct	-.115	-.484	.629
							Crime Seriousness	2.423	4.895	.000*
a. Predictors: (Constant), Offender's Region, Gender, Age, Educational Level										
b. Predictors: (Constant), Offender's Region, Gender, Age, Educational Level, Court Location										
c. Predictors: (Constant), Offender's Region, Gender, Age, Educational Level, Court Location, Crime Seriousness, Crime Conduct										
d. Dependent Variable: Incarceration Length										
*. $p<0.05$										

Table 5 provides the results of the hierarchical linear regression of incarceration length. The analytic strategy applied here was the same as in the binary logistic regression. First, in model 1, when putting the offender's characteristics into the model, this study found that: the offender's gender had a significant effect on predicting the sentencing outcome of incarceration length (B=3.698, t=3.721, p=.000). Second, this study added the court location into the model and got model 2. In model 2, this study found that: (1) by adding court location into the model, the change of R^2 was .020, and this change had statistical significance. It means that the new variable in the model, the court location, could explain more variances; (2) the court location had a significant effect on the prediction of incarceration length (B=.689, t=2.409, p=.017); and (3) though the court location added into the model and had a significant effect, the effect of the gender had not been dispelled.

Finally, this study added another two variables, the criminal conduct, and the crime seriousness, into the model, i.e., model 3. In model 3, this study found that: (1) by adding two legally relevant factors into the model, the R^2 change was .075 with statistical significance; (2) the crime seriousness had a salient effect on the incarceration length (B=2.423, t=4.895, p=.000); and (3) the effects of gender and court location had not been dispelled.

To sum together, there were four findings in the hierarchical regression of incarceration length: (1) comparing with female offenders, male offenders were sentenced averagely 2.9 months more incarceration. In other words, female offenders would get more lenient treatment in the sentencing outcomes of incarceration length; (2) the court location played a critical role again in the sentencing outcomes. Offenders who were sentenced in the court of high per capita GDP region were with a higher probability of being sentenced .67 month more incarceration than those in the court of relatively low per capita GDP region; (3) the offenders with high crime seriousness scores were averagely sentenced 2.4 months more than those with low scores; and (4) although the crime seriousness, as a legally relevant factor, had a significant effect on the incarceration length, it could not offset the other two extralegal factors' effects on the sentencing length. The disparities of incarceration length still existed based on extralegal factors.

Table 6: Hierarchy Linear Regression of Amounts of Fines [d]

	Model Summary				Regression ANOVA			Coefficients		
Model	R^2	$R^2\uparrow$	F ↑	p.$R^2\uparrow$	F	P.	Factors	B	*t*	*p.*
1[a]	.056	.056	3.964	.004*	3.964	.004*	(Constants)	-.728	-2.624	.009*
							Gender	-.204	-1.267	.206
							Age	.116	1.759	.080
							Education	.149	2.280	.023*
							Region	.057	1.335	.183
2[b]	.056	.000	.070	.791	3.175	.008*	(Constants)	-.768	-2.431	.016*
							Gender	-.212	-1.292	.198
							Age	.116	1.753	.081
							Education	.150	2.279	.023
							Region	.056	1.315	.190
							Court Location	.012	.265	.791
3[c]	.072	.016	.016	.109	2.927	.006*	(Constants)	-.993	-2.967	.003*
							Gender	-.235	-1.430	.154
							Age	.130	1.960	.051
							Education	.110	1.604	.110
							Region	.041	.939	.349
							Court Location	.013	.280	.780
							Crime Conduct	.029	.716	.474
							Crime Seriousness	.160	1.902	.058
a. Predictors: (Constant), Offender's Region, Gender, Age, Educational Level										
b. Predictors: (Constant), Offender's Region, Gender, Age, Educational Level, Court Location										
c. Predictors: (Constant), Offender's Region, Gender, Age, Educational Level, Court Location, Crime Seriousness, Crime Conduct										
d. Dependent Variable: Z-Amounts of Fines										
*. $p<0.05$										

Table 6 provides the results of the hierarchical linear regression of amounts of fines. Compared with the other two regression results, Table 6 does not too many materials to explain. It is because that, although the three models constructed in the regression of amounts of fines were with statistical significance and the variable of education which had a significant effect on the amounts of fines in model 1, its effects were offset in model 2 and model 3, then made that there were no variables in this study could predict the amounts of fines. The reasons for these results could be: (1) the variables in this study did not correlate with amounts of fines; and (2) the variables in this study might have a correlation with amounts of fines, but because of the small-sized sample, the effects were not significant enough. However, combining with China's judicial practices, a

judge could not arbitrarily sentence the offenders' fines; at least the crime seriousness could affect the sentencing outcomes. Then, this result could arguably attribute to the small-sized sample.

5. Discussion and Conclusion

The objective of the current research is to contribute to the sentencing research within the scope of cybercrime. Cybercrime has been a global issue in the recent decade. It is crucial for the general deterrence and prevention of cybercrime whether the sentencing could function well within sentencing guidelines. Because legality is an underlying principle of the sentencing guideline, it is the most important from the perspective of criminal law that the better courts follow the sentencing guideline, the better the fulfillment of the principle of legality is. Though for the consideration of preventing the risks of criminal offenses in modern society, the legislators in China had separated the supportive conducts that aid the commission of a crime from traditional cybercrime and set them as independent auxiliary cybercrimes. If the legal practitioners, especially the judges, could not sentence the auxiliary cybercriminals closely depend on the sentencing guidelines and criminal law, in other words, depending on the legally relevant factors, then, the function of deterring and preventing related cybercrimes through sentencing and punishments would deviate its original intention or lead to retroactions. In terms of these considerations, the core research questions aimed to explore whether the sentencing disparities within the field of auxiliary cybercrime exist in China, describe whether the extralegal factors cause these disparities, and give an explanation of them, thus offering valuable information for possible sentencing reform.

The main findings could be summarized as follows: incorporating the statistical results of multivariate analyses and regression analyses. First, on the whole, after excluding the effects of crime seriousness as an element of the legally relevant factors of sentencing, the offender's gender and the venue of the case (court location) as the extralegal factors of sentencing could cause the sentencing bias/disparities with statistical significance. The sentencing bias/disparities do exist in sentencing auxiliary cybercriminals in China mainland.

Second, as far as the offender's gender is concerned, its effects on the sentencing outcomes significantly reflected in the incarceration length. Compared with male perpetrators of auxiliary cybercrime, female offenders have a high likelihood of shorter incarceration length. As reported in Table 5, the female would get three months less incarceration length on average than male offenders. This finding is consistent with many valuable pieces of research before.[79] Meanwhile, based on this finding, some critical theoretical articulations could be proven and enriched from there. First, the chivalry

[79] E.g. see Brantingham op. cit. 302–303.; Kramer –Wang op. cit. 1303–1307.; Koons-Witt–Sevigny–Burrow–Hester op. cit. 299–324.; Steffensmeier–Painter-Davis–Ulmer op. cit. 830.; Nowacki op. cit. 97–116.; Daly–Bordt op. cit. 141–176.; Brown op. cit. 106–108.; Nagel–Hagan op. cit. 91–144.; Griffin–Wooldredge op. cit. 893–923.; Franklin–Fearn op. cit. 279–290.; Donna M. Bishop – Charles E. Frazier: The effects of gender on charge reduction. *The Sociological Quarterly*, vol. 25. no. 3. (1984) 385–396.; Cassia C. Spohn – Jeffrey W. Spears: Gender and Case Processing Decisions: A

perspective contends that the judges in the court, generally, have a paternalistic need to protect female. Thus, female offenders are generally treated more leniently compared to male ones.[80] The thesis of the chivalry complies with the findings in this study. Second, this finding suggests that the focal concerns could be applied as a meaningful framework for explaining the gender bias between male and female offenders. Further, female offenders might be treated as less dangerous, risky, and unstable offenders and consequentially less blameworthy for their criminal conduct. Thus, female offenders in the sentencing process are profitably influenced on the individual level, which further causes the sentencing disparities against male ones in the sentencing outcomes.

Third, the court location's effects on the sentencing outcomes are reflected in the incarceration length and probation application. As the regional per capita GDP increases by location, so is the likelihood of probation and shorter incarceration length for auxiliary cybercrime perpetrators decreasing. In other words, looking at the probation application, offenders sentenced in a court located in a higher per capita GDP region are less likely to be put on probation than those sentenced in a court located in a relatively low per capita GDP region. Regarding the incarceration length, offenders who were sentenced in a court located in a higher per capita GDP region were incarcerated for a more extended period than those sentenced in a court located in a relatively low per capita GDP region. This finding was unexpected and surprising. Regional differences in sentencing often occur in connection with crimes where geographic location is the main element of the perpetration, such as human trafficking, drug trafficking[81], and terrorist crimes, yet this is rarely the case with crimes that do not rely heavily on geographic location, such as cybercrime.

Nevertheless, this study attempts to explain this finding with the social world theory and the organizational contexts perspective. First, regarding the social world theory, as mentioned above, criminal courts in different regions could be treated as different social worlds. There is a fundamental activity in each social world, a unique site, and a "technology."[82] Utilizing and explaining the technology (sentencing guideline or criminal law) varies in the different social worlds. In other words, judges in the different regions have a different understanding of the criminal law and the sentencing guideline, thus creating regional disparities within sentencing outcomes. It is reasonable to assume that different regions' higher courts could draft different regional sentencing guidelines based on unique circumstances to the regional socio-environment. Second, concerning the organizational context perspective, which contends that individual sentencing outcomes adjudicated by any criminal court are influenced by the political, social, and organizational context of that court, the judges in the different regions would be influenced by the local politics, socio- and organizational context. Combined with the other findings in this study, courts in more developed regions usually make

Comparison of Case Outcomes for Male and Female Defendants Charged with Violent Felonies. *Women & Criminal Justice*, vol. 8. no. 3. (1997) 29–59.

80 Griffin–Wooldredge op. cit. 893–923.; Goulette–Wooldredge–Frank–Travis op. cit. 406–417.

81 Kautt op. cit. 262.

82 Clarke –Star op. cit. 118.

harsher decisions, such as fewer probation sentences and more extended incarceration, than those in less developed regions. It is because the socio- and organizational context varied in different regions. Compared with the low developed region, the more developed region in China has a developed economy and scientific technology, large residents, and large fluid populations. These characteristics create considerable uncertainty for the offenders to re-offend. Therefore, instead of lenient benevolent punishment to bring offenders back to society with the risk of recidivism, the judge might sentence offenders harsher to avoid these uncertainties. It is also in line with the theories of focal concerns and uncertainty avoidance. However, judges' focal concern shifted from the individual level's characteristics to the consideration of the region's socio- and organizational context.

The sentencing disparity is not a new issue, nor is it just a problem with cybercrime sentencing. The legislative and judicial departments of many countries worldwide are reducing unwarranted disparities in sentencing outcomes as much as possible. However, this study believes that reducing the unwarranted disparities in the sentencing outcomes of cybercrime should go faster and further. In this regard, this study attempts to use the rational choice perspective to give reasons.

The rational choice perspective assumes that "decisions about whether (or not) to offend are based on a more or less deliberate calculation on the potential offender's part of the 'risk, rewards and efforts of alternative courses of action.'" "While this does not assume that all such choices are fully rational given constraints of time, ability, and knowledge about the circumstances, it does suggest that offenders are, in effect, constantly ready to take advantage of crime opportunities when they are confronted with them if rational calculation suggests this will be to their advantage."[83]

Cybercrime is not limited by geographic location and has a wide range of impacts and immediacy (short intervals between behavior and benefits, and between behaviors and results). Simultaneously, with the increasing development of information network technology and people's easier and broader access to the Internet, the threshold for cybercrime has gradually decreased, which is saliently reflected in auxiliary cybercrime. Considering the rational choice perspective, these cybercrime features have already reduced the constraints of time and ability and, to some degree, improved the rewards for the potential offenders. The only factor the potential offenders need to consider is the risk or, better, the expense. However, the unwarranted disparities of the sentencing outcomes caused by extralegal factors would reduce offenders' expense. In this study, they are gender and court location.

First, as for the unwarranted disparities caused by gender, female offenders had a high likelihood of getting more lenient punishments than male ones. It could encourage potential female offenders to commit auxiliary cybercrime more and more. As reported in Table 7, the count of female offenders in this sample revealed an increasing trend by year. Second, in terms of the unwarranted disparities brought with court location, it could have two aspects of effects: (1) it will promote more potential offenders in the less

[83] Steve Case – Phil Johnson – David Manlow – Roger Smith – Kate Williams: *Criminology*. New York, Oxford University Press, 2017.

developed region to offend. The count of the auxiliary cybercrime in the less developed region would significantly increase as reported in Table 8 based on the current study's sample; (2) the potential offenders would transfer from the more developed region to less for getting lenient punishment. The remoteness of information technology provides the probability for this approach. To sum, in China's context, the unwarranted disparities in sentencing outcomes of auxiliary cybercrime caused by gender and court location would eliminate the function of crime prevention and deterrence. They could be the perverse incentives to stimulate more potential offenders to offend.

Table 7: Gender Distribution by Year

Count				
		Gender		
Female		Male		Total
Trial Year	2015	0	2	2
	2016	2	9	11
	2017	2	42	44
	2018	24	114	138
	2019	16	62	78
Total		44	229	273

*Table 8: Offenders Distribution by Court Location*Year*

		Court Location				
1		2	3	4	5	
Count		Count	Count	Count	Count	
Trial Year	2015	0	0	2	0	0
	2016	0	0	0	2	9
	2017	0	4	4	3	33
	2018	8	11	40	14	65
	2019	10	7	19	7	35

There are also some limitations in the current study: (1) the sample size is relatively small, which could make some variables had no significance in the analysis. However, in the future, the sample size would be more prosperous than it is nowadays, and the later research on the same topic could use the result of the current study as a contrast sample; (2) as for the sentencing outcomes of fines, the current did not construct a statistically significant model to predict and explain the amounts of fines. The reasons might be the small-sized sample, or there should be some other variables not included in this study, such as the judge's characteristics, the illegal profits involved in the cases. However, to get this information needs more field surveys. With the limited resource of this study, the current research could not obtain these pieces of information.

Further research could pay more attention to these variables' effects on predicting and explaining the amounts of fines in the scope of the auxiliary cybercrime; (3) the data in the current study is collected from the significant judgments on CJO, the prosecutorial documents, for example, are not incorporated. Further research could collect the prosecutorial documents and use them as the contrast group to compare the

judgments with; (5) the current study just considers each variable's independent effects. There could be some interactions between variables that have effects on the sentencing outcomes. It needs to be explored and tested in further research; (6) the effect of age is not salient in the auxiliary cybercrime's sentencing outcomes. The reason might be most of the offenders included in the sample are between 20-35, which belongs to young people in other studies, so the effects of age are not the prominent factor to predict the sentencing outcomes. However, this also reflects the group of cybercriminals is of a young feature.

The current study's implication could be, but not limited to: (1) this study enriches the research on sentencing disparities focusing on China's legal practices and extends the research on sentencing perpetrators of cybercrime. The current study speculates that for researching the sentencing disparities among cybercrime, the features of the cybercrime should be taken into consideration too, instead of merely focusing on the outcomes; (2) this study further inspects and proves the effectiveness of the focal concerns theory, the chivalry perspective, the uncertainty avoidance, the theory of the social world, and the organizational context theory on explaining and understanding the sentencing disparities; (3) the current study attempts to apply the rational choice perspective to the crime prevention theory to explain and understand the shortcomings of unwarranted disparities of sentencing outcomes caused by the extralegal factors; (4) the current study is launched on the basis of the new sentencing guidelines on the auxiliary cybercrime that has been enacted in September 2019, this study could be a staged research before that guidelines and offer a contrast sample for the further research on the comparison of the function of that guidelines.