



The effect of perceived discrimination on future dangerousness of probationers in China: An empirical test of crime labeling theory

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ABSTRACT

Using a survey data of 508 probationers from the judicial bureaus of Jiangsu Province, Guangdong Province, Yunnan Province and Beijing City, this study examines how the general strain variables (i.e. negative coping style) and the action control variables (i.e. emotion regulation strategies) mediate and moderate the relationship between the perceived discrimination and future dangerousness of probationers. The findings suggest that perceived discrimination is positively correlated with future dangerousness, and negative coping style plays a partial positive mediating role in the relationship between perceived discrimination and future dangerousness. Additionally, emotion regulation strategies can moderate the direct effect of perceived discrimination on future dangerousness and the mediating effect of negative coping style in a negative way. The results of this study further enrich the integrated theory of crime labeling, and offer some guidance for the judicial management and correction strategy of probation correction officials.

1. Introduction

Future dangerousness refers to the risk that a perpetrator will commit a crime again if released and is used to determine whether the perpetrator will be sentenced to imprisonment or will be released on probation with community-based correction programs (Ryan, 1999). In the United States, the assessment of future dangerousness of offenders also plays a significant role in the management of correctional institutions. In order to effectively supervise inmates and allocate regulatory resources in correctional institutions, the institutions generally classify group criminals according to whether their dangerousness is deemed to be low, medium, or high (Austin and Hardyman, 2004). In addition, the assessment of future dangerousness can provide an important reference for judicial administrators to adopt appropriate correction methods (Brennan et al., 2009); that is, accurate assessment of the possibility of future

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violations or recidivism of criminals (Andrews and Bonta, 2010) is helpful to the formulation of social public policy designed to effectively control potential dangers in prison or the community on the one hand, and to suggest the use of various corrective measures to reduce or eliminate the future dangerousness of criminals on the other (Makarios and Latessa, 2013).

In China, the future dangerousness of criminals is the main factor that judges consider when deciding on probation.¹ Some scholars have pointed out that judges worry about releasing criminals on probation in community work programs. Because it is so unclear what influences the future dangerousness of offenders, judges often do not feel comfortable with the seemingly uncontrollable risk involved in granting probation. To avoid exposing the public to potentially dangerous perpetrators, judges generally prefer to impose imprisonment to avoid the risk of recidivism occurring during probation, resulting in a low percentage of applications for probation being granted in China (Zhao, 2017). According to a report in the China Law Yearbook, the rate of probation (the number of sentences in the form of probation/the total number of sentencing) in China for the years 2011 through 2017 was 29.4%, 30.2%, 30.8%, 31.1%, 29.5%, 30.0% and 27.4%, respectively. Therefore, it is necessary to accurately identify the key factors and mechanisms that influence the future dangerousness of offenders and how the dangerousness evaluated would affect the grant of probation and recidivist outcomes during probation.

In the criminal judicial practice of China, owing to the transparency of criminal records and community correction work, the criminal information and criminal identity of the probationers are publicized and disseminated, which often causes others to pay attention to the offences the probationers previously committed. Therefore, it is difficult for probationers to escape the non-normative evaluation from the public and the stigmatized evaluation positioned as “crime label” (Yu, 2010), which leads to certain prejudice and discrimination against the group of people on probation. The probationers themselves will also perceive the discrimination from others and the society, and think that they have been unfairly treated. When they view themselves as having been treated differently or unfairly because of their group membership, this is known as perceived discrimination (Pascoe and Richman, 2009). Some studies have found that when the society labels someone as a criminal, it will further deepen the societal exclusion and discrimination against them, and, in exchange, cause them to assume that they have been unfairly treated by the society, due to strengthened antisocial mentality, many who suffer from prejudice would have a much higher chance of recidivism (Hu, 2014). Studies have also shown that the perceived discrimination based on the crime labeling effect may make individuals withdraw from the interaction and communication with normal social groups, increase the possibility of their contact with deviant social groups, and therefore increase the risk of re-offending (Abrah, 2019). On this basis, other studies seek to incorporate the elements of other hypotheses in order to investigate how the perceived discrimination caused by the label effect affect individual future dangerousness through the effects of other theoretical factors, such as the mediating role of critical embeddedness variable (i.e. bad peer interaction), and the moderating role of reintegrative shading psychological variable (i.e. parental support, enthusiasm and participation in family attachment behavior) (Jackson and Hay, 2013).

However, while previous studies have made a significant effort, few studies have integrated the variables of general strain theory (i.e., negative coping style) and action control theory on emotion regulation (i.e., emotion regulation strategies) to examine how perceived discrimination caused by label effect influences future dangerousness separately and jointly. In addition, the past literature did not provide evidence in China about how perceived discrimination arising from the consequences of criminal labeling boosts future dangerousness. Evidence has found that when dealing with real pressure, individuals with more negative coping style may lack the coping skills to deal with high-risk circumstances, and are more likely to engage in drug taking behavior, deviant behavior, and reoffending behavior (McConnell et al., 2014; Scarpa et al., 2006). Furthermore, other evidence has indicated that emotion regulation strategies can effectively help action oriented individuals adjust their emotions in the pursuit of goals, resulting in faster recovery from negative emotions in stress situations (Koole et al., 2007), and play an important role in the control of individual recidivism (Moriarty et al., 2001).

In response, this study attempts to solve these problems through some new methods. Firstly, we clarified the correlation between the above factors by integrating the model of crime labeling theory, which combines elements of general strain theory and action control theory on emotion regulation to test our research hypothesis. Secondly, through the integrated model, we took Chinese probationers (criminals who serve their sentences in community) as samples and analyzed the general relationship between probationers’ perceived discrimination, negative coping style, emotion regulation strategies, and future dangerousness in the Chinese context. This research emphasizes the applicability of the integrated model of crime labeling theory under Chinese culture background and enriches and develops the application of crime labeling theory in non-Western countries. Finally, the findings of this study can provide some theoretical guidance for the judicial management and correction strategies of correction officers.

2. Literature review

2.1. The perceived discrimination and future dangerousness

Perceived discrimination refers to an individual’s perception that he or she and the group to which he or she belongs have been

¹ Article 72 of Criminal Law of China provides that probation may be granted to a criminal sentenced to criminal detention or fixed-term imprisonment of not more than three years if he concurrently satisfies the following conditions: A suspension of sentence shall be announced to those who have not reached the age of 18, who are pregnant, or who have reached the age of 75: (1) the circumstances of the crime are minor; (2) he or she shows repentance; (3) he or she is not likely to commit any crime again; and (4) announcing the probation will not have any major adverse impact on the community where he or she lives.

negatively evaluated or unfairly treated by the outside world (Pascoe and Richman, 2009). As an important factor of “psychological reality”, perceived discrimination can directly affect psychology and behavior of a person. It is found that people who have long suffered from perceived discrimination may internalize the negative evaluation from the outside world, leading to persistent deterioration of individual’s self-evaluation (Brownfield and Thompson, 2005), and occurrence of various social adaptation issue such as stress, anxiety, and depression (Brody et al., 2006).

A large number of studies on criminals have highlighted their experiences of shame or discrimination (Braman, 2004). Whether offenders who serve their sentences in community or released, the previous criminal behavior is a shame for them, and the stigmatization effect of this shame brings them a sense of discrimination. Anthropological studies have shown that individuals suffer from discrimination in a variety of social environments because of their status as criminals or ex-criminals (Braman, 2004), and such discrimination related to criminal records is often significantly associated with difficulties of finding jobs (Pager, 2003), low well-being (Sutin and Terracciano, 2013), mental health problems (such as anxiety and depression, Turney et al., 2012), illegal drug use (Young et al., 2005), and problematic behavior (Brody et al., 2006).

Under the crime labeling theory, state intervention and the application of labels will result in “dramatization of evil” (Tannenbaum, 1938), that is, the process of labeling deviant or criminal acts by the judicial system appears to increase the likelihood of future criminal acts (Widdowson et al., 2016). According to the crime labeling theory, the labeling effect is the deliberate differentiation of the criminals and ordinary people by the society, which could lead to self-stereotyping of offenders. When the criminal law places labels on criminals, their perceived discrimination and negative evaluation are generated (Paternoster and Lovani, 2014). After that, individuals will suffer from varying degrees of shame and frustration that come out from the experience of being discriminated against, which may then trigger provocation, rage, and hostility that will be released through violating the relevant supervision and management rules or committing illegal and criminal acts. This was partly supported by relevant studies (Bernburg, 2019). Contemporary crime labeling theory established that the emergence of offenders’ future criminal acts was largely attributed to the self-shaping process of accepting crime labels through two mechanisms. One is the structural obstacles in normal life. In other words, once an individual was convicted and his criminal record was disclosed, it was difficult for the released offender (or probationer) to find a job or find a house, and even his access to education was limited. This unfavorable situation aggravated the possibility of ex-criminals to engage in criminal activities after their release (or probationers) (Denver et al., 2017; Stewart and Uggen, 2020; Widdowson et al., 2016). Second, the labeling effect will cause individuals to accept the “new” identities after being labeled. To put it simply, when an individual received a criminal label, the influence of that label increases his/her risk of recidivism (Matsueda, 1992). However, some studies have found that spending time in jail or prison, or having an official crime record will decrease later delinquency (Cullen et al., 2018). Some evidence has suggested that personal contact with the criminal justice system can cause physical pain or other significant losses. When the criminal justice system imposes swift, definite and severe punishment on an individual, the person would be deterred from committing illegal or criminal acts in the future as the loss on expected utility exceeds the gain on expected utility (Matsueda et al., 2006; Nedelec and Silver, 2018). In other words, there is no correlation between various types of exposure of individuals to the judicial system and subsequent crimes.

In fact, these conflicting findings have inspired us to examine the relationship between probationers’ perceived discrimination and future dangerousness due to the labeling effect and its underlying mechanisms. This helps to advance our understanding of the crime labeling theory (how formal punishment in criminal justice affected an individual’s subsequent delinquency—whether that prevented or promoted subsequent delinquency) (Motz et al., 2020).

2.2. The mediating role of negative coping style

Negative coping style involves the use of negative attitudes, such as avoidance or denial, to cope with discrimination or stress environments (Goodvin and Romdall, 2013). Generally speaking, individuals who adopted negative coping style will experience more negative emotions when facing unfavorable situations. In order to restore the internal balance, they will adopt negative coping strategies such as escape, fantasy, and venting (Gaylord-Harden et al., 2011). Previous studies have found that individuals tend to adopt a negative coping style when their psychological needs are not met or there is a high-stress or discriminatory environment (Son et al., 2013). Some evidence have shown that the more disadvantaged an individual is, the less resources he has, and the more negative coping style he will adopt (Li et al., 2009). Meanwhile, other evidence have shown that a negative coping style has a significantly positive correlation with high levels of tobacco and alcohol abuse (Bartone et al., 2012; Hasking et al., 2011), drug use (McConnell et al., 2014), assault, aggressive behavior (Scarpa et al., 2006), and criminal behavior (Aebi et al., 2014).

In the previous empirical studies, researchers have provided evidence of the mediating role of general strain variables between stressors and deviant and criminal behaviors. Agnew (2001) has pointed out that the tension caused by pressure or discrimination will cause individuals to adopt negative coping style to regulate their own stress, which increases the probability of deviant or criminal behavior. Several studies have showed that negative coping style is an important mediator between stressors (such as negative or stressful life events caused by perceived discrimination) to adaptation outcomes (such as smart phone addiction, drug addiction, problem behavior, aggressive behavior or criminal behavior) (Lacourse et al., 2019; Liu et al., 2020; Scarpa and Haden, 2006). Therefore, we can infer that under the stressful or discriminatory environment, individuals with high perceived discrimination would more likely to experience negative emotions, and adopt more negative coping style to deal with these situations under the influence of negative emotions, including resorting to criminal or illegal behaviors, thus increasing the risk of recidivism and seriously threatening the safety of the community (Huck et al., 2012).

2.3. The moderating role of emotion regulation strategies

Although the effect of perceived discrimination on future dangerousness of offenders who are on probation can be mediated by negative coping style, this mediating effect may work (at least in part) through other variables. In fact, not all probationers who have perceived discrimination will adopt negative coping style, which could potentially strengthen their risk of recidivism. Therefore, it is necessary to examine whether there are other variables that play a moderating role in this mediating process. Past studies have shown that emotion regulation strategies, as one important type of cognitive strategy, play a key role in the control and prevention of individual criminal behavior (Moriarty et al., 2001). Emotion regulation strategies, which include cognitive reappraisal strategy and expression inhibition strategy (Gross and John, 2003; Gratz and Roemer, 2004), refers to an individual's ability to regulate the valence, duration, and intensity of emotional experience (Gratz and Roemer, 2004). As a cognitive process in which individuals regulate the generation, experience, and expression of emotion, it involves the processing and adjustment of the causes of emotion, and includes such processes as situation selection, situation modification, attention allocation, and cognitive change (Seib and Vodanovich, 1998).

From the perspective of the emotion regulation model proposed by Gross and John (2003), emotion regulation strategies may serve as an important regulatory variable between perceived discrimination and future dangerousness. According to the action control theory of emotion regulation, the process of individual emotion regulation is very complex, and effective emotion regulation would require performance of at least three tasks: the first is to identify which emotional information needs to be regulated; the second is to choose appropriate regulation strategies; the third is to gather optimal strategies to maximize the effectiveness of emotion regulation. According to this theory, perceived discrimination is a significant negative stimulus that will cause an individual to experience negative emotions, while cognitive reappraisal is a highly effective means to regulate emotion by changing the interpretation of the underlying emotion-inducing situation. In the comprehensive context, it deals with the phenomenon of modifying the perception of emotional experiences and helping to grasp the events that lead individuals to have negative feelings such as frustration, shame, and disgust in a more constructive light, with the intention of rationalizing the emotional events. Expression suppression strategy, on the other hand, regulates emotions by prohibiting the continuing action of emotional expression. It refers to the action of individuals to suppress an imminent or ongoing emotional expression, and to initiate the process of self-control to suppress their own emotional behaviors (Gross, 2001). In other words, individuals who are good at using emotion regulation strategies can play their emotion regulation strategies to the optimal state, thus decreasing the probability of individuals returning to a delinquent, deviant, or violent lifestyle (Garofalo et al., 2020; Robertson et al., 2014). That is to say, emotion regulation strategies may have a protective moderating effect on the future dangerousness of individuals with perceived discrimination. As a consequence, emotion regulation strategies may play a negative moderating role between perceived discrimination and future dangerousness.

Second, studies have shown that individuals who use cognitive reappraisal strategies may have higher self-esteem and better psychological adjustment (Nezlek and Kuppens, 2008). Even when they are discriminated against by the society and others, they will not adopt a negative coping style to deal with the difficulties they face. Instead, they will adopt a forgiving attitude and a positive coping style to deal with discrimination or stressful situations after a cognitive reevaluation of the consequences of negative behaviors, so as to maintain an amicable relationship with the social group (Ho and Fung, 2011). Some evidence has demonstrated that individuals who prefer to embrace cognitive reappraisal have a more positive attitude towards emotional events such as stigma or stress, which can effectively shift their understanding of emotional events and adopt positive coping style to help them counteract the effects of negative emotional events, so as to improve their mental wellbeing (Aldao et al., 2010; Kobayashi et al., 2020; Hu et al., 2014). In addition, studies have shown that, individuals who regularly employ expression inhibition strategies can reduce their direct perception of stressful or negative emotional events, so they are more likely to adopt positive coping style rather than negative coping style to assist in balanced inner growth and avoid negative effects on themselves (Coifman et al., 2007). Therefore, we believe that emotion regulation strategies may also play a negative moderating role in the relationship between perceived discrimination and negative coping style.

Finally, some empirical studies have found that even if individuals who are good at emotion regulation strategies suffer from the increase of negative coping style due to perceived discrimination, their tolerance in pursuit of goals, the capacity to adjust the perception of emotion-inducing conditions, and the ability to suppress impulsive behavior in pain and other emotion regulation strategies can help them cope with negative emotion in a positive coping style, thus reducing their rage, hostility, and aggressive tendencies (Garofalo et al., 2020; Gratz and Roemer, 2004). In addition, although research has found that individuals who use negative coping style have an elevated risk of recidivism, individuals who regularly use cognitive reappraisal strategies and expression inhibition strategies appear to handle emotion-inducing information through active and cognitive processes, thereby encouraging optimistic thought and increasing positive coping style and avoiding risk of aggression and criminal behavior (Cohn et al., 2010; Robertson et al., 2012). Therefore, we believe that emotion regulation strategies may also play a role in negatively moderating the relationship between negative coping style and future dangerousness.

3. This study

While much work has been done to validate the crime labeling theory and to understand the relationship between perceived discrimination and future dangerousness by combining the elements of other mainstream criminological theories, there are still some gaps that need further study. First, the crime labeling theory is often used to explain how crime labels affect future dangerousness, but few studies have examined whether the theory can explain the relationship between criminal labels and recidivism in the context of Chinese society (Fan and Liu, 2019). Secondly, the mainstream criminology theories used in previous studies were mainly limited to the comparison of different independent variables, and did not incorporate other theoretical elements to investigate the potential

mechanism of variables. By integrating different factors into the crime labeling theory, this study, instead, constructed a moderated mediation model, which can be used to evaluate the independent contribution of each theoretical perspective to future dangerousness. Thirdly, probationers, as a group being discriminated against, face considerable risks and challenges while serving sentences in the community (Yukhnenko et al., 2020). However, little research has been done on the potential mechanism of how the theory of crime label can induce reoffending behavior among probation personnel, that is, the universal applicability of crime labeling effect on probationers. In response to these questions, this study examined the mechanism of discrimination induced by label effect on the risk of recidivism of probation personnel with reference to an integrated crime label theory, which incorporated key elements of mainstream criminology theories.

Based on the integrated crime labeling theory and with Chinese probationers (prisoners serving sentences in community) as samples, this study reveals the mechanism and limits of perceived discrimination positively affecting probationers' future dangerousness and verifies the applicability of the integrated model of crime labeling theory in the Chinese criminal justice context by exploring the positive mediating role of negative coping styles between probationers' perceived discrimination and future dangerousness and the negative moderating role of emotion regulation strategies in the above relationship. Therefore, this study proposes the following research hypotheses:

Hypothesis 1. The perceived discrimination of probationers has a significant positive predictive effect on their future dangerousness.

Hypothesis 2. The negative coping style of probationers plays a positive mediating role between perceived discrimination and future dangerousness.

Hypothesis 3. Emotion regulation strategies play a negative moderating role in the relationship between the perceived discrimination and future dangerousness of probationers, and weakens the positive effect of perceived discrimination on future dangerousness.

Hypothesis 4. Emotion regulation strategies play a negative moderating role in the relationship between the perceived discrimination and negative coping style of probationers, and weakens the positive effect of perceived discrimination on negative coping style.

Hypothesis 5. Emotion regulation strategies play a negative moderating role in the relationship between the negative coping style and future dangerousness of probationers, and weakens the positive effect of negative coping style on future dangerousness.

According to the above analysis, the relationship revealed by hypotheses 1–5 can be further expressed as a moderated mediation model (Edwards and Lambert, 2007). In conclusion, when the level of emotion regulation strategies is low, the perceived discrimination of probationers will have a more indirect positive impact on their future dangerousness through the mediating role of negative coping style; when the level of emotion regulation strategies is high, the perceived discrimination of probationers will have a less indirect positive impact on their future dangerousness through the mediating role of negative coping style.

As a result, this study further proposed **Hypothesis 6.** Emotion regulation strategies can negatively moderate the mediating effect of negative coping style between perceived discrimination and future dangerousness, which is shown as a moderated mediation model. That is to say, the mediating effect of negative coping styles on perceived discrimination and future dangerousness decreases with the enhancement of emotion regulation strategies, and vice versa.

The theoretical framework of this study is shown in Fig. 1.

4. Research methods

4.1. Data and sample

The data was collected in 2019 using a multi-stage stratified random sampling method from the bureaus of justice. Respondents were probationers from the bureaus of justice in the eastern (Jiangsu), southern (Guangdong), western (Yunnan), and northern (Beijing) part of China. First, we selected 2–3 municipal judicial bureaus in each province to conduct the survey, a total of 12 cities. Secondly, we obtained a list from the municipal bureau of justice, which listed the judicial offices in all counties (districts) of the city. Then, we selected two urban and two suburban judicial offices from each city as the survey locations, a total of 48 judicial offices. Third, in each judicial office, the method of random sampling is used to select probationers serving sentences in the area for the survey. Through this procedure, we selected 600 probationers from 48 judicial offices in 12 cities as samples, and they completed a structured questionnaire in the training classroom of the judicial bureaus under the guidance of professionally trained survey supervisors, and recovered 520 questionnaires in total. After deleting some survey samples with incomplete demographic variables, 508 effective

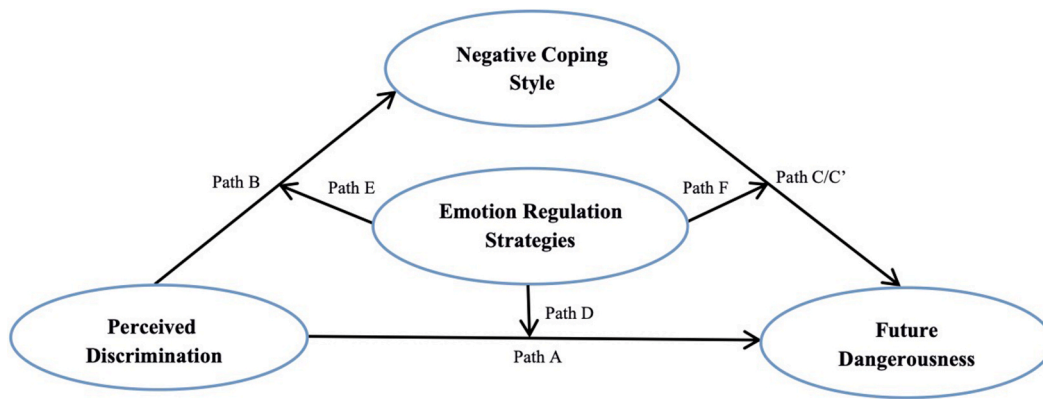


Fig. 1. Conceptual model of the current study. Note: Perceived discrimination is hypothesized to be indirectly and positively related to future dangerousness through its effect on negative coping style. This effect is expected to be negatively moderated by emotion regulation strategies.

samples were finally obtained, with an effective recovery rate of 84.7%.

The age distribution of all probationers in the survey was 20–71 years old, with an average age of 38.77 ± 10.17 years old. The main age was 26–55 years old ($n = 437$, 86%), including 353 men (69.5%) and 155 women (30.5%). In terms of education, more than 60% of the samples were junior high school or senior high school graduates ($n = 347$, 68.3%). In terms of crime type, more than 70% of the samples committed non-violent public rights offences or non-violent private rights offences ($n = 372$, 73.2%, Bai, 2010).² In terms of the distribution of sentencing term, more than 80% of the probationers served sentences of 2 years or less ($n = 426$, 83.8%). With respect to residency status, about 60% of the probationers have local residency ($n = 307$, 60.4%). The sample composition is shown in Table 1.

4.2. Procedure

Before the survey officially begins, all respondents who are included in the study have provided their written consent. In addition, questionnaire distribution and data acquisition were collected by well-trained survey supervisors with psychological and sociological background. All probationers involved in the study were told that the study was entirely voluntary, they could withdraw and terminate the investigation at any time. At the same time, the questionnaire does not require real names nor need to be reviewed by the prisons, community correction offices and other judicial departments. Therefore, the strict confidentiality requirements of the probationers are guaranteed, and the data collected is used for academic research purpose only.

4.3. Measures

4.3.1. Perceived discrimination questionnaire (PDQ)

The PDQ (Li, 2013) was designed to measure the perceived discrimination level of the subjects in social life and work. The questionnaire consisted of 10 questions in total, with each scored on a 5-point scale, ranging from 1 (Never) to 5 (Frequently). The higher the total score, the higher the level of perceived discrimination. In this study, the Cronbach's alpha value of the questionnaire was 0.98.

4.3.2. Coping style questionnaire (CSQ)

The CSQ (Fu et al., 2014) used a 5-point scale to measure how the respondent copes with stressful events, and consisted of two questionnaires: Positive Coping Style and Negative Coping Style. In this study, we used the Negative Coping Style Questionnaire (NCSQ), which is one of the sub-questionnaires. The higher the total score on the 10-item NCSQ, the more likely the subjects were to use a negative coping style. In this study, Cronbach's alpha of the questionnaire was 0.98.

² First of all, we divided the crimes in the sample into violent crimes and non-violent crimes. Then, according to the object of the infringement, the crimes can be divided into the public right crimes which disrupt public order and the private right crimes which infringe upon the interests of individuals. Finally, by combining the two classification standards, four types of crimes, namely violent public right crimes, violent private right crimes, non-violent public right crimes, and non-violent private right crimes, are formed. As for the division of public rights crimes and private rights crimes, in the context of China's criminal law, we have classified crimes such as endangerment of national security and public security, impairment of social management order, endangerment of national defense interests, corruption and bribery, dereliction of duty, and violation of duties by military personnel as public rights crimes, and infringement of citizens' personal rights, democratic rights and property as private rights crimes. Most of the offences in Chapter 3 of the specific provisions of the criminal law of China are classified as private right crimes due to the nature of transactions, while currency crimes, tax related crimes and smuggling are classified as public right crimes.

Table 1
Sample description.

Individual characteristics	Category	Quantity	Percentage
Age	≤25	60	11.8%
	26–35	155	30.5%
	36–45	143	28.1%
	46–55	139	27.4%
	≥56	11	2.2%
Gender	Male	353	69.5%
	Female	155	30.5%
Education	Primary school and below	85	16.7%
	Secondary school	244	48.0%
	High school	103	20.3%
	College and above	76	15.0%
Crime Type	Violent public right crime	64	12.6%
	Violent private right crime	72	14.2%
	Non-violent public right crime	200	39.4%
	Non-violent private right crime	172	33.8%
Sentencing Term	≤12 months	216	42.5%
	13–24 months	210	41.3%
	25–36 months	82	16.2%
Residency Status	local status	307	60.4%
	migration status	201	39.6%

Note: The tail difference of percentages is adjusted at the end of each item; N = 508.

4.3.3. Emotion regulation questionnaire (ERQ)

The ERQ was developed by Wang et al. (2007) according to Gross's (2003) theory of emotion regulation and measurement tools. There were 10 items in the scale, including two dimensions: expressive suppression and cognitive reappraisal. Each dimension included the regulation of five basic emotions: disgust, anger, sadness, fear, and happiness. All the items were scored on a 7-point scale, ranging from 1 (totally disagree) to 7 (totally agree). The higher the score, the more frequently the subject used emotion regulation strategies. In this study, Cronbach's alpha value of the questionnaire is 0.97.

4.3.4. Future dangerousness questionnaire (FDQ)

The FDQ (Yu et al., 2004) mainly assesses the risk of the subjects committing a crime punishable by imprisonment or community correction during the probation period or after release from probation. There are 25 items in the questionnaire, such as "interpersonal relationship before the crime", "drug use or drug trafficking experience before the crime". The higher the total score, the higher the future dangerousness of the probationer. The Cronbach's alpha value of the questionnaire in this study is 0.97.

4.3.5. Control variables

Six additional control variables were measured in this study. Previous studies have shown that age, gender, education, crime type, sentencing term, and residency status are associated with future dangerousness. Therefore, the selection of respondents should strictly follow the control of the above factors. First of all, we controlled the age of respondents because studies have shown that differences in future dangerousness can be partially explained by age (Uggen, 2000). Second, the gender of the respondents is controlled, because studies have shown that future dangerousness differs between men and women (Benda, 2005). Thirdly, education is considered as a variable that affects the individual's cognitive ability and knowledge stock, which is significantly correlated with future dangerousness (Stevens and Ward, 1997). Fourthly, we also controlled for the variables of crime type and sentencing term, because studies have found that crime type (Nally et al., 2014) and sentencing term (Mears et al., 2016) can effectively influence the future dangerousness of individuals. Finally, we controlled for the variable of residency status, because individuals with migration status are more likely to suffer from social discrimination to a certain extent than those with local residency status, which further increases the risk of their reoffending (Hu, 2014).

4.4. Statistical analysis methodology

In this study, SPSS 25.0 and Mplus 7.0 were used to analyze the data, and the analysis was divided into four steps: first, confirmatory factors were used to analyze the validity of potential variables; second, descriptive statistics were used to analyze those variables; Thirdly, the mediating model is tested by referring to the four-step procedure of MacKinnon(2008), and the moderating model is tested by following the principles of Muller et al. (2005). Finally, the moderated mediation model is validated according to the path analysis techniques of Edwards and Lambert (2007).

5. Research results

5.1. Confirmatory factor analysis

To examine and confirm the validity of each variable, we conducted confirmatory factor analysis of data for four variables: perceived discrimination, negative coping style, emotion regulation strategies, and future dangerousness. The results showed that, compared with other models, the fit index of a four factor model was the best, $\chi^2/df = 5.28$, RMSEA = 0.08, CFI = 0.90, TLI = 0.89, SRMR = 0.05, showing a strong degree of differentiation among the several concepts involved in this study.

Furthermore, to avoid any common method bias resulting from the use of self-reports, this study ensured respondent anonymity, rephrased instructions, changed item order, and used other procedural control methods as well as using the unmeasured latent method factor technique to check for the existence of common variance (Podsakoff et al., 2003). As shown in Table 2, after controlling for common variance, the five-factor model fit well, $\chi^2/df = 3.43$, RMSEA = 0.07, CFI = 0.91, TLI = 0.90, SRMR = 0.05, and the variation range of each fit index was less than 0.02. The control model showed no significant improvement over the four-factor model, indicating that there was no significant common method bias in this study (Anderson and Williams, 1992).

5.2. Descriptive statistics

Pearson correlation analysis was conducted on variables including age, gender, education, crime type, sentencing term, residency status, perceived discrimination, negative coping style, emotion regulation strategies, and future dangerousness (see Table 3). The results showed that perceived discrimination, negative coping style, emotion regulation strategies, and future dangerousness were significantly correlated pairwise.

5.3. The influence of perceived discrimination on the future dangerousness of probationers

According to the four-step procedure recommended by MacKinnon (2008), if the following conditions are simultaneously met, it indicates that the impact of perceived discrimination on the future dangerousness of probationers is mediated by negative coping styles: Firstly, In Model 1 (path A), the positive effect of perceived discrimination on future dangerousness is significant; Secondly, in Model 2 (path B), the positive effect of perceived discrimination on negative coping style is significant; Thirdly, in Model 3 (path C), the positive effect of negative coping style on future dangerousness is significant; Finally, the indirect path coefficient (path C') between perceived discrimination and future dangerousness through negative coping style is significant. To avoid multicollinearity, all variables in this study were standardized, and the z-scores of negative coping style and emotion regulation strategies were multiplied as the score of the interaction term. The variance inflation factors of all variables in this paper are not higher than 1.10, so there is no multicollinearity problem in this study.

As shown in Table 4, after controlling for variables such as age, sex, education, crime type, sentencing term, and residency status, Equation 1 shows that perceived discrimination had a positive predictive effect on the future dangerousness of probationers ($\beta = 0.90$, $t = 46.87$, $p < 0.001$), indicating that perceived discrimination promotes the future dangerousness of probationers. Thus, Hypothesis 1 is supported. Equation 2 shows that perceived discrimination had a positive predictive effect on negative coping style ($\beta = 0.29$, $t = 5.59$, $p < 0.001$), indicating that perceived discrimination promotes negative coping style. Equation 3 shows that negative coping style had a positive predictive effect on the future dangerousness of probationers ($\beta = 0.05$, $t = 2.57$, $p < 0.05$), indicating that negative coping style promotes the future dangerousness of probationers; the positive effect of perceived discrimination on the future dangerousness of probationers was still significant ($\beta = 0.68$, $t = 27.31$, $p < 0.001$), indicating that negative coping style plays a partial positive mediating role between perceived perception and future dangerousness of probationers (Baron and Kenny, 1986). Finally, we used the bootstrap percentile method of bias correction to test the mediating model. Using random sampling, 5000 bootstrap samples were created from the original database. The results showed that the indirect effect of negative coping style was 0.06 ($P < 0.001$), 95% CI was [0.04, 0.09], and the mediating effect accounted for 6.67% [$0.06/(0.06 + 0.84)$] of the total effect in the relationship between perceived discrimination and future dangerousness. Thus, Hypothesis 2 is supported.

To further test the moderating effect of emotion regulation strategies, we used the method proposed by Muller et al. (2005) to test Hypotheses 3, 4 and 5 (see Table 5). In model 4 (path D), we assessed the negative moderating role of emotion regulation strategies in

Table 2
Confirmatory factor analysis.

Model	χ^2	df	χ^2/df	RMSEA	CFI	TLI	SRMR
Five factor model: PD;NC;ER;FD;CMV	4711.25	1375	3.43	0.07	0.91	0.90	0.05
Four factor model: PD;NC;ER;FD	7511.70	1424	5.28	0.08	0.90	0.89	0.05
Three factor model: PD + FD;NC;ER	8562.63	1427	6.00	0.10	0.82	0.81	0.06
Three factor model: PD + ER;NC;FD	11046.62	1427	7.74	0.12	0.76	0.75	0.07
Three factor model: PD + NC;ER;FD	12421.52	1427	8.70	0.12	0.72	0.71	0.09
Three factor model: PD;NC + ER;FD	12885.86	1427	9.03	0.13	0.71	0.70	0.10
Two factor model: PD + NC + ER;FD	15697.17	1429	10.98	0.14	0.64	0.62	0.10
One factor model: PD + NC + ER + FD	16522.20	1430	11.55	0.14	0.62	0.60	0.10

Note: DP = Perceived Discrimination; NC = Negative Coping; ER = Emotion Regulation;FD = Future Dangerousness; CMV = common method biases.

Table 3

Pearson correlations and descriptive statistics.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1.Age	2.78	1.04	–									
2.Gender	1.31	0.46	–0.001	–								
3.Education	2.33	0.93	0.02	0.29***	–							
4.Crime Type	2.94	0.99	0.28***	0.05	0.13**	–						
5.Sentencing Term	1.74	0.72	0.01	0.01	0.04	0.07	–					
6.Residency Status	1.40	0.49	0.02	0.03	–0.06	0.05	0.05	–				
7.Perceived Discrimination	27.38	15.02	0.02	0.08	0.08	0.03	–0.09	–0.002	–			
8.Negative Coping	32.95	13.35	0.001	0.11*	0.03	0.05	–0.15**	–0.01	0.53***	–		
9.Emotion Regulation	39.58	17.77	–0.01	–0.07	–0.10*	–0.09*	0.06	–0.001	–0.72***	–0.54***	–	
10.Future Dangerousness	56.01	40.39	0.05	0.10*	0.06	0.05	–0.08	0.01	0.90***	0.57***	–0.79***	–

Note: N = 508; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 4
Mediating effect of perceived discrimination on future dangerousness.

Variable	Model 1		Model 2		Model 3	
	Future Dangerousness		Negative Coping Style		Future Dangerousness	
	<i>B</i>	<i>t</i>	<i>β</i>	<i>t</i>	<i>β</i>	<i>t</i>
Age	0.02	0.96	−0.02	−0.42	0.03	1.55
Gender	0.03	1.56	0.08	2.03*	0.03	1.63
Education	−0.03	−1.57	−0.05	−1.27	−0.04	−2.22*
Crime Type	0.02	1.12	0.03	0.67	0.001	0.04
Sentencing Term	−0.004	−0.20	−0.10	−2.88**	0.002	0.11
Residency Status	0.004	0.23	−0.01	−0.37	0.01	0.27
Perceived Discrimination (PD)	0.90	46.87***	0.29	5.59***	0.68	27.31***
Emotion Regulation (ER)			−0.32	−6.22***	−0.28	−11.18***
Negative Coping (NC)					0.05	2.57*
R ²	0.82		0.35		0.86	
F	321.87***		34.03***		346.24***	

Note: PD = Perceived Discrimination; NC = Negative Coping; ER = Emotion Regulation; All variables was mean-centered; N = 508; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 5
Moderating effect of perceived discrimination on future dangerousness.

Variable	Model 4		Model 5		Model 6	
	Future Dangerousness		Negative Coping Style		Future Dangerousness	
	<i>β</i>	<i>t</i>	<i>β</i>	<i>t</i>	<i>β</i>	<i>t</i>
Age	0.03	2.04*	−0.01	−0.26	0.03	1.54
Gender	0.04	2.24*	0.08	2.14*	0.03	1.81
Education	−0.04	−2.15*	−0.04	−1.17	−0.04	−2.38*
Crime Type	−0.01	−0.53	0.02	0.45	0.01	0.30
Sentencing Term	0.01	0.33	−0.10	−2.69**	0.002	0.14
Residency Status	0.002	0.09	−0.02	−0.41	0.01	0.50
Perceived Discrimination (PD)	0.65	27.11***	0.26	4.85***	0.66	27.32***
Emotion Regulation (ER)	−0.31	−13.38***	−0.34	−6.44***	−0.24	−9.30***
Negative Coping (NC)					0.10	4.33***
PD × ER	−0.13	−6.56***	−0.10	−2.19*		
NC × ER					−0.10	−4.80***
R ²	0.87		0.36		0.87	
F	375.23***		31.00***		327.71***	

Note: PD = Perceived Discrimination; NC = Negative Coping; ER = Emotion Regulation; All variables was mean-centered; N = 508; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

the relationship between perceived discrimination and future dangerousness; in model 5 (path E), we assessed the negative moderating role of emotion regulation strategies in the relationship between perceived discrimination and negative coping style; in model 6 (path F), we evaluated the negative moderating role of emotion regulation strategies in the relationship between negative coping style and future dangerousness. The results showed that after controlling variables such as age, gender, education, crime type, sentencing term and residency status, the interaction between perceived discrimination and emotion regulation strategies had a negative predictive effect on the future dangerousness of probationers ($\beta = -0.13$, $t = -6.56$, $p < 0.001$), indicating that emotion regulation strategies played a negative role in the relationship between perceived discrimination perception and future dangerousness, and [Hypothesis 3](#) is supported; at the same time, the interaction between perceived discrimination and emotion regulation strategies had a negative predictive effect on the negative coping style ($\beta = -0.10$, $t = -2.19$, $p < 0.05$), indicating that emotion regulation strategies played a negative role in the relationship between perceived discrimination and negative coping style, and [Hypothesis 4](#) is supported; as well as the interaction between negative coping style and emotion regulation strategies had a negative predictive effect on the future dangerousness of probationers ($\beta = -0.10$, $t = -4.80$, $p < 0.001$), indicating that emotion regulation strategies played a negative role in the relationship between negative coping style and future dangerousness, and [Hypothesis 5](#) is supported. In summary, emotion regulation strategies can negatively moderate not only the direct predictive effect of perceived discrimination on future dangerousness but also the relationship between perceived discrimination and negative coping style, negative coping style and future dangerousness.

As suggested by [Edwards and Lambert \(2007\)](#), we further tested the moderated mediation model. As shown in [Table 6](#), under a low level of emotion regulation (−1 SD from the mean) and a high level of emotion regulation (+1 SD from the mean), the difference between the two indirect paths was significant ($\beta = -1.28$, $p < 0.001$), and the 95% confidence interval of bootstrap = 5000 was [−2.16, −0.69], excluding 0. At the same time, negative coping style was shown to play a positive mediating role in the relationship between perceived discrimination and future dangerousness of probationers (the value of indirect path effect $\beta = 3.85$, $p < 0.05$) when the level of emotion regulation was low; and when the level of emotion regulation was high, negative coping style demonstrated no

Table 6
Analysis of moderated mediation model.

Grouping statistics	Perceived Discrimination(X)→ Negative Coping(M)→ Future Dangerousness(Y)				95%CI
	Different Stages		Different Effects		
	First Stage(P_{MX})	Second Stage(P_{YM})	Direct Effect(P_{YX})	Indirect Effect($P_{MX}P_{YM}$)	
Low Emotion Regulation(-1 SD)	2.17** (0.81)	1.77*** (0.41)	0.67*** (0.04)	3.85* (1.81)	[0.91, 7.88]
High Emotion Regulation(+1 SD)	-1.63 (0.84)	-1.58*** (0.37)	0.67*** (0.04)	2.57 (1.54)	[-0.95, 7.24]
Differences Between Groups	-3.80* (1.65)	-3.35*** (0.78)	0.67*** (0.04)	-1.28*** (0.38)	[-2.16, -0.69]

Note: P_{MX} indicates the non-standardized path of Perceived Discrimination to Negative Coping; P_{YM} indicates the non-standardized path from Negative Coping to Future Dangerousness; P_{YX} indicates the non-standardized path of Perceived Discrimination to Future Dangerousness. N = 508; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

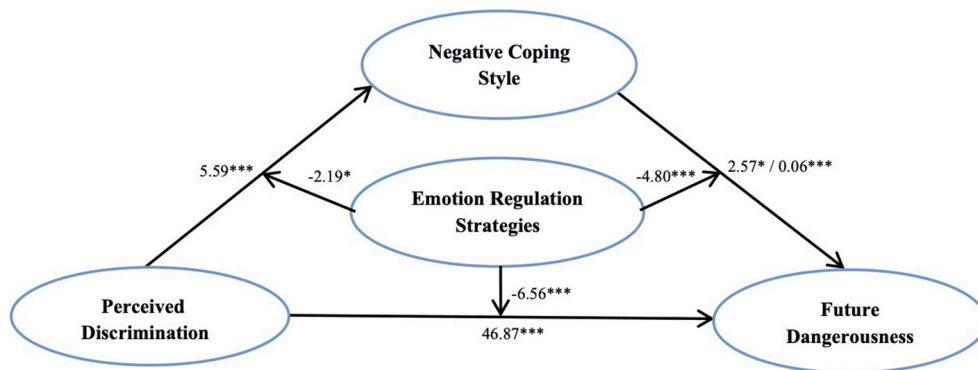


Fig. 2. The tested moderated mediation model with standardized beta weights. Note: The presented model examined the relationship between perceived discrimination and future dangerousness in 508 probationers. Negative coping style was tested as positive mediators of the relationship between perceived discrimination and future dangerousness, while emotion regulation strategies could negatively moderate the direct effect of perceived discrimination on future dangerousness, as well as the mediating effect of negative coping style. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

positive mediating effect on the relationship between perceived discrimination and future dangerousness of probationers (value of indirect path effect $\beta = 2.57$, $p > 0.05$). This indicated that emotion regulation strategies can negatively moderate the mediating effect of negative coping style between perceived discrimination and future dangerousness, which is shown as a moderated mediation model, and Hypothesis 6 is supported.

Fig. 2 further demonstrates the estimated path coefficient of the moderated mediation model, that is, the relationship between

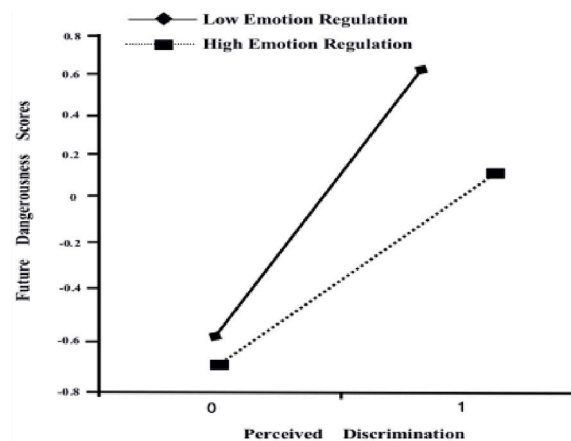


Fig. 3. Simple slopes of the relation between perceived discrimination and future dangerousness scores at low (-1SD) and high (+1SD) emotion regulation. Note: Perceived discrimination was dummy coded (0 = low perceived discrimination, 1 = high perceived discrimination).

perceived discrimination and future dangerousness is positive mediated by the negative coping style of probationers. In addition, it is suggested that the relationship between perceived discrimination and future dangerousness, perceived discrimination and negative coping style, negative coping style and future dangerousness, as well as the mediating effect of negative coping style, are all negatively moderated by emotion regulation strategies, which appears as a moderated mediation model. This means that the stronger the individual's ability to regulate emotions, the weaker the mediating effect of negative coping style on the relationship between perceived discrimination and future dangerousness; on the contrary, the weaker the individual's ability to regulate emotions, the stronger the mediating effect of negative coping style on the relationship between perceived discrimination and future dangerousness.

To sum up, the moderated mediation model proposed in this study is supported, that is, perceived discrimination can not only positively predicts the future dangerousness of probationers directly, but also predicts the future dangerousness of probationers through the positive mediating effect of negative coping style. In addition, the direct predictive effect of perceived discrimination on future dangerousness and the mediating effect of negative coping style are both negatively moderated by emotion regulation strategies.

In order to show the moderating effect of emotion regulation strategies more clearly, we then split the emotion regulation strategies into high and low groups according to the average plus or minus one standard deviation, and drew an interaction diagram (Preacher et al., 2006). Fig. 3 showed that as emotion regulation strategies improve, the positive predictive effect of perceived discrimination on future dangerousness is weakened (from $\beta = 0.78$, $t = 28.87$, $p < 0.001$ to $\beta = 0.52$, $t = 14.69$, $p < 0.001$). That is, enhancing emotion regulation strategies can lower the direct positive predictive effect of perceived discrimination on future dangerousness. Fig. 4 showed the moderating effect of emotion regulation strategies on perceived discrimination and negative coping style. The positive predictive impact of perceived discrimination on negative coping style declines with an increase in the individual emotion regulation strategies level (from $\beta = 0.36$, $t = 5.92$, $p < 0.001$ to $\beta = 0.16$, $t = 2.05$, $p < 0.05$). Fig. 5 showed the moderating effect of emotion regulation strategies on the relationship between negative coping style and future dangerousness. Under the condition of low emotion regulation strategies level, negative coping style can positively predict future dangerousness ($\beta = 0.19$, $t = 5.44$, $p < 0.001$); However, with high level of emotion regulation strategies, the positive predictive effect of negative coping style on the future dangerousness was not significant ($\beta = -0.002$, $t = -0.10$, $p > 0.05$). Therefore, higher emotion regulation strategies weakened the mediating effect of negative coping style.

6. Discussion and conclusion

Crime labeling theory states that when a person receives a label for committing a crime or breaking the law, the influence of the label increases his/her risk of becoming a career criminal (Tannenbaum, 1938). Nevertheless, few scholars have used the integrated crime labeling theory to explain the influencing mechanism of perceived discrimination caused by crime label on future dangerousness, especially not to explain the relationship between perceived discrimination and future dangerousness in the context of Chinese society. This study collected the data of probationers from 48 judicial institutions in 12 cities of 4 provinces, and investigated how the variables of general strain theory (i.e. negative coping style) and the action control theory of emotion regulation (i.e. emotion regulation strategies) mediate and moderate the relationship between perceived discrimination and future dangerousness among probationers. It is found that the negative coping style of probationers played a partial positive mediating role in the relationship between perceived discrimination and future dangerousness, and emotion regulation strategies can negatively moderate the direct effect of perceived discrimination on future dangerousness, as well as the mediating effect of negative coping style.

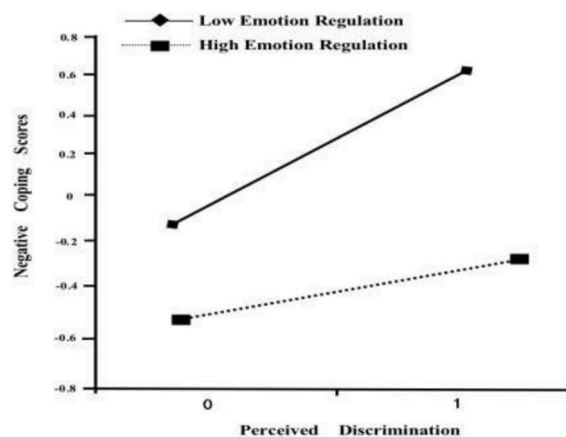


Fig. 4. Simple slopes of the relation between perceived discrimination and negative coping scores at low (-1SD) and high (+1SD) emotion regulation. Note: Perceived discrimination was dummy coded (0 = low perceived discrimination, 1 = high perceived discrimination).

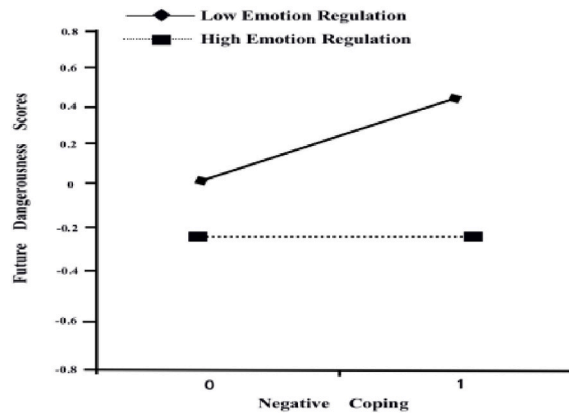


Fig. 5. Simple slopes of the relation between negative coping and future dangerousness scores at low (-1SD) and high (+1SD) emotion regulation. Note: Negative coping was dummy coded (0 = low negative coping, 1 = high negative coping).

6.1. Discussion of research findings

Firstly, the results of Model 1 show that perceived discrimination of offenders on probation can positively predict their future dangerousness, which has verified the [Hypothesis 1](#) of this study. These findings support the idea that an individual's exposure to the criminal label effect will increase his/her risk of becoming a habitual offender ([Motz et al., 2020](#)), and provided empirical evidence for the theoretical part of crime labeling effect ([Bernburg, 2019](#)). Some studies have shown that labeling an individual as a criminal will cause him/her to be stigmatized and discriminated against and therefore excluded from the society and community, prompting him/her to join the criminal groups and move forward along the track of continuing to commit crimes ([Bernburg, 2019](#); [Denver et al., 2017](#)). Other studies have demonstrated that fear of punishment is a major deterrent of crimes, and the pain experienced by the perpetrator would prevent that particular individual from engaging in criminal activities in the future ([Lee, 2017](#); [Nedelec and Silver, 2018](#)). Taking China as a sample, this study has verified the conflicting views in the model and suggested that the perceived discrimination induced by crime labels has a positive predictive effect on the future dangerousness of probationers, thus providing an empirical response to these contradictory findings. To be specific, when probationers live and work in the community, they can not get rid of the negative evaluation of "criminal identity", which often led to the criminal behavior of offenders once again being concerned by the people surrounding them. Even though the actors have turned over a new leaf, it is still difficult for them to escape the non-official evaluation from the public and the negative evaluation of being labeled as "criminals," which would trigger their perceived discrimination, thus inducing a series of negative feelings and nervous behavioral reactions, resulting in deviant behavior or repeated illegal and criminal behavior ([Bernburg et al., 2006](#); [Chiricos et al., 2007](#); [Morrison, 2009](#)). Hence, this study is helpful in providing empirical support for the crime labeling theory.

Secondly, the results of Model 2 and Model 3 show that perceived discrimination can positively predict a negative coping style of probationers and indirectly affect future dangerousness through negative coping style. In other words, this study confirms that negative coping style plays a partial positive mediating role in the influence of perceived discrimination on future dangerousness, and verifies [Hypothesis 2](#) of the study ([LaCourse et al., 2019](#); [Huck et al., 2012](#); [Liu et al., 2020](#)). The results show that a general strain variable that has not been fully explored can be used to explain the crime labeling theory, which provides empirical evidence for the viewpoint of crime labeling theory. That is, perceived discrimination can indirectly affects future dangerousness in a positive manner through negative coping styles. Although previous studies have indicated that an individual's perceived discrimination is positively related to his negative coping style ([Noh and Kaspar, 2003](#)), and an individual's negative coping style has a positive predictive effect on his future dangerousness ([LaCourse et al., 2019](#)), this study further demonstrates the strong positive mediating role of negative coping styles in the relationship between perceived discrimination and future dangerousness, namely, probationers' negative coping style is a powerful mediator between perceived discrimination and future dangerousness. Specifically, influenced by the subjective negative emotions engendered by perceived discrimination, probationers are more likely to experience negative emotions under the pressure of perceived discrimination, and then choose negative coping style to deal with the difficulties they encounter, thereby further triggering individual deviant, illegal, or criminal behavior. Therefore, the results of this study not only support the adaptability of crime labeling theory in Chinese context, but also further enrich and improve the integrated crime labeling theory empirically by incorporating general strain variables.

Finally, the results of model 4, model 5, Model 6, and the moderated mediation model showed that as a means of emotion regulation, emotion regulation strategies can negatively moderate not only the direct predictive effect of perceived discrimination on future dangerousness, but also the relationship between perceived discrimination and negative coping style, negative coping style and future dangerousness, and the mediating role of negative coping style between perceived discrimination and future dangerousness, which supports [Hypotheses 3, 4, 5, and 6](#) of the study ([Garofalo et al., 2020](#); [Hu et al., 2014](#); [Nezlek and Kuppens, 2008](#)). It suggests that the action control variables of emotion regulation can also be used to explain the crime labeling theory, specifically, emotion regulation strategies can negatively moderate both the direct effect of perceived discrimination on future dangerousness and the

mediating effect of negative coping style, which provides empirical evidence for integrated crime labeling theory. In particular, probationers who often use techniques to regulate their emotions are more inclined to pursue positive emotion management and conduct cognitive reappraisal and expressive suppression to cope with traumatic experiences or discrimination situations, thereby reducing the risk of assault or reoffending (Garofalo et al., 2020). At the same time, even though the probationers face social discrimination and stigmatized evaluation when serving their sentences and living in the community, individuals who are skilled at using emotion regulation strategies can lift their negative emotions and activate their positive emotions, and then use different positive coping styles to address the problems and dilemmas they face (Coifman et al., 2007; Kobayashi et al., 2020). Furthermore, even though probationers are more likely to have a negative coping style of reacting to the dilemma due to the negative evaluation, those who tend to use cognitive reappraisal may adopt a more positive coping style towards discrimination or stressful events, which will alter their mental perceptions and their manner of responding to the dilemma; similarly, individuals who have a propensity to use expression inhibition can also reduce their direct perception of negative emotions, which alleviates the influence of negative emotions on individuals in the face of discrimination or pressure and lessens the use of negative coping style, and thereby decreases the likelihood of recidivism (Gratz and Roemer, 2004; Tian et al., 2016). By contrast, when faced with the same negative events or degree of stress, probationers who are not good at using emotion regulation strategies may intensify the inherently subjective negative experience of perceived discrimination, and may further strengthen their perception of negative emotions. They may feel powerless to correctly resolve the crisis and eliminate the source of pressure, so they will choose negative coping style, such as seeking deviant or criminal companions to obtain a sense of belonging, which further increases the probability of illegal and criminal acts (Coifman et al., 2007; Goldenberg et al., 2014; Robertson et al., 2014).

In conclusion, this study not only reveals the mechanism of general strain variables (i.e. negative coping style) and action control variables on emotion regulation (i.e. emotion regulation strategies) in the integrated model of crime labeling theory, but also expands and enriches the integrated model of crime labeling theory by integrating elements of general strain theory and action control theory on emotion regulation and studies the applicability of the integrated model of crime labeling theory under the background of Chinese culture by constructing a moderated mediation model. The findings of this study are of great value and significance to develop the application of crime labeling theory in non-Western context.

6.2. Implications for judicial policy

This study focuses on the mechanism underlying the influence of perceived discrimination on the future dangerousness of offenders who are on probation, which is of great reference value for the improvement of the probation system and the optimization of the education and rehabilitation mode of judicial officials.

First, this study suggests that when investigating the future dangerousness of offenders on probation, criminal justice agencies should not only pay attention to the damage caused by a crime, but also to the education, assistance, and correction resources made available in the community to probationers. For example, the findings of the study indicate that the perceived discrimination of probationers has a positive effect on their future dangerousness, which means that the perceived discrimination triggered by being labeled a criminal may impose a second punishment on probationers who have already received the punishment prescribed by law, and this public and endless moral trial is very different from the “theatrical” trial in court of more limited time frame.³ Such non-official negative judgement from the public is likely to immerse probationers in a sense of inferiority, suffering, loneliness, and anxiety, hindering the development of normal interpersonal relationships, and easily triggering a series of negative and hostile emotions, thus enhancing the probability that they will engage in subsequent illegal and/or criminal acts (Bernburg et al., 2006). Accordingly, the findings of this study suggest that judicial authorities should establish judicial “de-labeling” of criminals by establishing a privacy protection system for criminal records (Melilli, 2014) in order to better protect sensitive information, work, and living conditions, and other interests of offenders on probation when carrying out education and correction work. In fact, social evaluation should be the main driver of labeling without the criminal law intervening to hijack that role. The criminal law should play a modest role in this process, allowing social evaluation to remain center stage. Court evaluations should be able to affirm the positive value of individuals while being able to close the door on an offender’s criminal status so as to guarantee justice and fairness in the criminal law evaluation system. Only in this way can the proper dynamic balance be struck between crime control and human rights protection in the criminal justice context.

Secondly, the positive mediating mechanism of general strain variables (i.e., negative coping style) gives a strong explanation of the relationship between perceived discrimination and the future dangerousness, which can provide the judiciary with a clear direction for effective intervention and correction of probationers in the future. Applying this framework means that for probationers who perceive a high level of discrimination, judicial correction officials should intervene early and encourage them to adopt more constructive forms of coping style (such as solving problems and seeking help) through training programs to solve the difficulties in life so as to mitigate the future dangerous they present to society and achieve the purpose of effective education and correction (Huck et al., 2012). Beyond

³ Generally speaking, in order to get rid of the negative social evaluation brought by his identity as a “criminal” after receiving punishment, the actor may go to a remote location to live unrecognized, hoping to reintegrate into society as a normal person. However, due to the exclusion of criminal records from the scope of privacy, the criminal records of probationers may be widely spread and made public without restriction, resulting in their past criminal acts being continually rebrought to the attention of people around them; that is, the unrestricted disclosure of criminal records will lead to the re-emergence of otherwise inapplicable non-normative evaluations, placing probationers once again in a position to be publicly condemned, to be “shunned” by those in their work and social surroundings.

that, future work can further explore the role of social conflict, cultural conflict, and other factors that may influence the relationship between perceived discrimination and future dangerousness (Chan, 2000) in order to broaden the range of programs for the education and correction of probationers, optimize the methods used for that education and correction, and intervene in a prompt and efficient manner to minimize the future dangerousness of probationers and to contribute to their mental health and subjective well-being.

Lastly, this study also discovered that the action control variable of emotion regulation (i.e., emotion regulation strategies) can negatively moderate the direct effect of perceived discrimination on future dangerousness as well as the mediating effect of negative coping style between perceived discrimination and future dangerousness. Hence, the judiciary is urged to fully respect the inner needs of probationers and improve the collective involvement in helping and educating probationers when carrying out community correction work. Particularly for probationers who are not good at emotion regulation strategies, we should provide adequate guidance and training on how they can utilize emotion regulation strategies and enhance their efficacy in using cognitive reappraisal and expressive suppression strategies to manage their emotions so as to better motivate them and enhance their sense of value. Specifically, a number of community correction methods can be explored, such as cognitive training, mindfulness therapy, Naikan therapy, emotion regulation training and other measures to cultivate probationers' repertoire of emotion regulation strategies, including cognitive reappraisal and expressive suppression (Davis and Kurzban, 2012). By developing emotion regulation strategies, probationers will be able to change their attitudes and responses to adversity, have more confidence in their abilities and future life, and better integrate into and adapt to society.

6.3. Shortcomings in research

Despite its contributions, this research still has some limitations, leaving room for follow-up studies. First of all, the scope of the theoretical foundations of this study needs to be further expanded. Since this study is based on the crime labeling theory and incorporates elements of general strain theory and action control theory of emotion regulation to expand and enrich the integrated model of crime labeling theory, there are limitations in the scope of the theories used to explain the mechanism underlying the influence of perceived discrimination on the future dangerousness of probationers. Future research can be conducted by integrating other elements of criminal law and criminology theory into the integrated crime labeling model, such as the cultural conflict theory and the aged-graded and different circumstances encountered in life crime theory (Pogrebin and Poole, 1990; Robert and John, 1995), in order to further explore the mechanism to reduce the risk of recidivism of probationers and enrich the integrated model of crime labeling theory. Secondly, the data collected in this study comes from a single source (self-reports of probationers), which can impact the accuracy of the data. Future research needs to gather evidence from different sources, including community correction officials, judicial social workers, and other groups. Finally, the mechanism underlying the influence on future dangerousness of probationers who commit different crimes may differ. Future studies should refine the classification of different types of criminals, and combine the theory of legal interests protected by criminal law to carry out a more in-depth and comprehensive interdisciplinary discussion and analysis.⁴

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Declaration of competing interest

Not applicable.

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⁴ Legal interest is a basic concept in the theory of criminal law. With the help of the theory of legal interest in criminal law, we can differentiate one crime from other related offences and other kinds of crimes, both logically and scientifically. For example, the legal interest infringed by robbery involves property rights, and the legal interest infringed by the crime of provocation is social order. Although they have similarities in the constitution of crime, they are obviously different in the types of legal interests. Therefore, the analysis of the nature of legal interests infringed by different criminal conducts and the future dangerousness of the perpetrator is more conducive to in-depth analysis of the mechanism affecting future dangerousness.

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