

SOCIAL CREDIT SYSTEM IN CHINA: THROUGH THE LENS OF PRIVACY AND MORALITY

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Privacy issue is a highlight of China's social credit system (SCS). As a punishment and reward mechanism based on the credit score is applied to different individual behaviors, the public acceptance in terms of privacy and morality varied. The current study aims to provide a comprehensive introduction to SCS through the lens of privacy and morality, functioning as a baseline for further empirical researches. Four behaviors (1) criminal records (2) payment of fees (3) internet use (4) littering of garbage, are taken as representatives of variation on both individuality and morality, thus a behavioral-based comparison is conducted to verify SCS endorsement structure. The semi-structured interview and online survey with residents in Rongcheng, Shandong province, an active pilot city in China was performed for data collection.

Key Words : *social credit system, public acceptance, privacy, morality*

1. INTRODUCTION

Social credit system (SCS) is one of the most typical smart city policies that epitomizes Chinese smart city in acquiring large amount of personal data for promoting the construction of government, business, and social integrity. As the extension of the credit scoring system applied in commercial world but essentially rooted in Chinese social management culture, SCS is a pioneering and novel idea, but with uncertain future considering the multistakeholders involved in its implementation. Increasingly academic efforts have been witnessed since 2014 when its born was formally claimed. Among them the theoretical studies dominate while experimental researches are plagued by inconsistency and self-controversy. Under such circumstance, it is pivotal to have an overall glimpse at SCS, which can provide some special insights and serve as a baseline for future SCS studies.

With the purpose of raising honest mentality and credit level of the entire society, SCS is facilitated by a striking incentive mechanism, in which encouragement to keep trust and constraints against breaking trust are applied. For materializing and digitalizing behaviors on the one hand, manipulating and judging moral performance on the other, SCS has drawn concerns and controversies surrounding pri-

vacancy and morality. This paper aims to provide a systematic introduction and analysis to SCS, by which we argue that privacy and morality are two central issues in SCS.

2. SOCIAL CREDIT SYSTEM IN CHINA

In 2014, the State Council of the People's Republic of China issued a blueprint, the "Planning Outline for the Construction of a Social Credit System (2014-2020)"¹⁾. It has been regarded as the most authoritative and overarching policy for SCS implementation in China, with clarification on both the inherent ideologies and broad areas it intends to cover. This section provides a comprehensive introduction by combing SCS's history, current status, characteristics, and underlying mechanisms.

(1) Historical review of SCS

In a sense, SCS can be explained as an upgraded tool for Chinese social management. Several evidences can be found if we take a closer inspection in a historical view. Firstly, a traditional governmental documenting practice named as "*renshi dang'an*" had served as the personal file system for citizens' management for several years. With personal information collected and stored, this system is similar to SCS in the surveillance ability. Another two systems

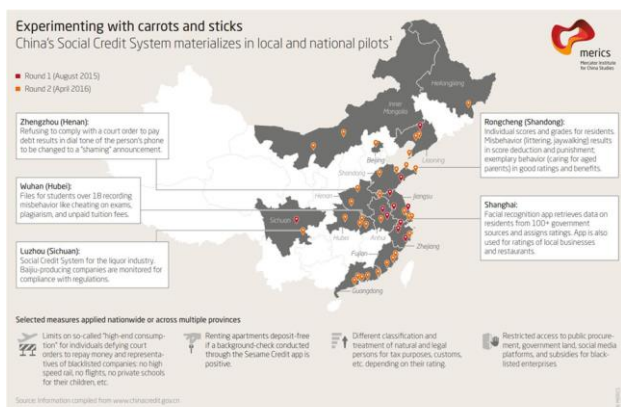


Fig.1 Local pilots by 2017
(Ohlberg, Ahmed and Lang, 2017)

are the class of origin status (*jieji chengfen*), and household registration (*hukou*). They are both the products of specific historical periods for civil management. Although such systems have been fading as time goes by, their impacts on Chinese social life still persist²⁾.

(2) Implementation status of SCS

The status quo of SCS in China can be described from the two aspects: national plans and local government pilots³⁾. At the national level, improvement and perfection of both the ideology and implementation strategies for SCS have been being conducted. Meanwhile, pilot projects are initiated by local governments (see Fig.1).

Among the most active SCS pilot cities, Rongcheng (Shandong) was the first city to launch its own quantified SCS since 2014 when the Planning Outline was issued, and with far less media exposure and controversy than Suining, another typical SCS pilot city²⁾. A relatively mature implementation of the social credit score system has been developed in Rongcheng, with various individual behaviors involved and evaluated. It is noticeable that the discredited judgment debtor list, which targets on the behavior of nonpayment debts, has been regarded as the first and most mature and widely used blacklist system²⁾.

(3) What distinguish Chinese SCS?

As a commonly used tool originally applied to regulate market participants behavior and reduce transaction cost in the financial sector in western world, the credit scoring system is by no means unique to China. While commercial credit score and rating systems developed by private corporations for commercial use (e.g., the Sesame score) is part of SCS, our study will focus SCS on its social governance role, whose operation is based on the blacklists/redlists developed by different central government agencies and municipalities.



Fig.2 Key mechanisms of SCS

Expansion from the solely financial sector to a broad societal scope distinguishes Chinese SCS as a privacy as well as morality issue. For one thing, a wide range of social conducts become quantifiable and measurable by scoring and rating. Large amounts of personal data, collected from extant archives (such as financial, criminal and government records) and using novel technologies (such as AI cameras, the IoT and ICT), are subject to analysis. As a consequence, monitoring and datafication of almost all aspects of daily life induce lurking threats on privacy, especially when the legal system for privacy protection is still incomplete⁴⁾. For another, the idea of differentiation and classification embedded in SCS is essentially prerequisites by evaluation and judgement of morality, for which controversies on the ethical justification are remarkable⁵⁾.

(4) Mechanisms underlying SCS

This subsection explains several key mechanisms based on which SCS operates (see Fig.2), and again, through which the characteristics demonstrated as surveillance and trust evaluation prove that SCS is a matter of privacy and morality.

a) Data gathering

Individual data gathering founds SCS accessibility to every citizen. The inherent principle is to connect the collected data to its subjects. For that purpose, “social credit unified code” (SC Unicode) similar to the traditional ID number was announced to be assigned (State Council, 2013). For the transparency of online activities, real-name registration is required for people using internet and social medias, in this way, the digital identity can be linked to the physical identity⁶⁾. Moreover, as the novel technologies come to be used pervasively, biometric techniques such as facial recognition, iris recognition, etc. are being introduced to improve the individual identification. Combining existing information records with ongoing personal data collection, identifying technologies further realize data ownership confirmation.

b) Data integration and sharing

The second core mechanism for transforming data into information is data integration and sharing. Central data platforms are established to facilitate

this process, the main ones are National Credit Information Sharing Platform (NCISP), Credit China, Credit Reference Center, etc. It is required to integrate the heterogeneous data coming from these separate data platforms to support the SCS. Data with regard to a person's general information, criminal records, compliance with government regulations, and daily trust-related behaviors forms the basis for credit score calculation.

c) Blacklists/redlists, social credit score

Striking a chord with the objective of SCS as formulating the public opinion environment where the sincerity culture is cherished and advocated, subjects conducting serious trust breaking behaviors will be placed on the blacklist and confronted with penalties. Following the signing of Memorandum of Understanding (MOU) by various Chinese authoritative agencies in 2016, a joint punishment system sprouted. Thus, violation of trustworthiness in one area can result in punishments from several other irrelevant domains. For example, failure to comply with court decisions may cause sanctions related to economic opportunities, government services or support, personal employment, participation in specific sectors, receiving honorary titles, consumption choices, and even the children education⁷⁾. Conversely, subjects comply with social regulations and behave well will be included in the Redlist and receive rewards, such as preferred access to public services (hospitals, universities, etc.), administrative services (expedited application for visas, housings, etc.) and reduced transaction costs for deposits and guarantees. But considering the blacklists/redlists are executed by different entities, there is no unified or standardized punishing or rewarding criteria⁴⁾.

In addition to the interpretable behaviors, various morally ambiguous and controversial behaviors that are not recognized as illegal (such as over consumption of alcohol, gambling habits, extensive internet use, etc.) are also subjects to the listing system⁸⁾. Besides the strict classification into redlists and blacklists, citizens conducting less serious trust breaking behaviors may be categorized into the Focus Group List where they will be monitored more closely⁹⁾. However, the specific measures may vary with agencies.

Not only does SCS roughly divide subjects into the lists, it also seeks to precisely indicate citizen's trustworthiness and creditability using social credit score. While the inclusion criteria and scoring measures may vary with locals and agencies, most of typical individual behaviors are rated and quantified. Such behaviors includes but not limited to driving under the influence, caring for family elders, failure to repay loans, garbage littering, etc.

3. PUBLIC ACCEPTANCE

Chinese SCS is unique as its application in scoring social conducts, which induces challenges surrounding privacy and morality. For a closer investigation and prediction on SCS resilience, the public acceptance situation needs to be explored.

(1) Endorsement for SCS

It is noteworthy that a growing number of studies started to investigate the public opinion toward SCS in China by looking at citizens' attitudes and concerns¹⁰⁻¹¹⁾. But the findings so far are based on very limited data, such as interviews with Sesame Credit users and media analyses. Among the existing empirical analyses, controversy still exists. Kostka (2019) studies factors influence citizens' opinions of SCS and finds that older "elites" (better-educated and wealthier) are overwhelmingly positive about SCS. The result deviates from findings of Pan and Xu (2018), who suggest that younger, well-off, better-educated respondents are less likely to support SCS due to concerns of infringement on privacy and political freedom. Differences can also be seen in later studies. A student survey at three Chinese universities conducted by Rieger et al. (2020) show that the approval rates for four policies of SCS were lower than the rates Kostka (2019) obtained. They suggest that no easy conclusions about the broad-based approval of SCS policies should be drawn.

(2) Attitudes toward policies (behaviors)

The endorsement for SCS should not be regarded as a one-size-fits-all matter. Considering the application of SCS to various social conducts and behaviors, the public attitudes will also vary. But existing studies that evaluate people's attitudes by behaviors and analyze the differences are rare. In the survey conducted by Rieger et al. (2020), comparison of attitudes regarding four SCS policies can provide some inspirations. Results show that on average, Chinese people hold the most positive attitude on "AI-supported fines for traffic violations", then "comprehensive score determining privileges and restrictions", followed by "comprehensive score determining eligibility for loans", and finally "sanctions for non-compliance with court orders". But facts constitute such differences was not investigated. Invariably, behavioral distinctions and their meanings are ignored in current studies that examine public acceptance of SCS.

(3) Discredited judgement debtor list

To regulate nonpayment of debts can be regarded as the most mature SCS practice so far²⁾. First, it is

the most widely used and uppermost constituent of discredited lists. In January 2019, of the 215582 people on the national discredited lists, 214142 were from the discredited debtor list²⁾. Similarities of such overwhelming domination can also be seen in companies side¹³⁾. Secondly, it has the most successful implementation of the joint sanction. Initially there had been severe joint punishments for subjects on this list, such as consumption restrictions related to purchasing first-class train or flight tickets, real estates, and vocational products. Meanwhile, their children are banned from attending private schools. But even worse sanctions can be witnessed in the later launched plans, for instance, the rights to work in government agencies or promotion in public institutions are deprived, and they will be called differently as “*laolai*”, a pejorative name specifically used to describe super dishonest people who refuse to pay debts. Despite such pervasiveness, empirical studies exploring its public acceptance are lacking.

4. DISCUSSION

In the first part, we argued that SCS is a matter of privacy and morality, which is controversially discussed by worldwide academics. However, the existing investigations on public acceptance demonstrate high approval rates. Based on explanations in the second part, we suppose several reasons behind such paradox. Firstly, SCS implementation is still in the initial stage, with limited behaviors involved and relatively mild measures. Despite of several years' of SCS evolvement in China, its implementation is still in the early stage except for a few experienced pilot cities, Rongcheng, for instance. Since it is predominantly applied to a few uncontroversial behaviors, for example, the nonpayment of debts, which is unequivocally agreed as deserving punishments, people are likely to reach a consensus that such application brings benefits such as social stability, cost reduction of social interactions, etc. instead of risks.

Secondly, it can be proved that historically, Chinese people are brought up in a cultural environment where “good behaviors” should be rewarded and “bad behaviors” be punished, the reputation atmosphere works and the public shaming can be effective. People get used to the governmental systems for social management, which have been taken for granted as an inherent culture and belief. Under such circumstance, SCS is not taken as risky or perilous, especially in the mask of civil protection purpose.

Finally, it is suggested that the respondents in SCS survey may disguise their true attitudes when they perceived the topic as sensitive¹⁴⁾. And since the target groups vary in exiting studies, further in-

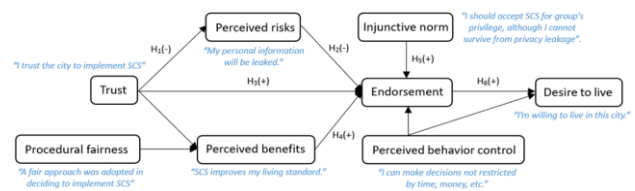


Fig.3 Theoretical model

vestigations are still in need. Specifically, empirical researches with frameworks involving typical variables such as perceived benefits, risks, trust, etc. are necessary for exploring SCS endorsement structure and testing its public acceptance. By comparing structural similarities and differences in behaviors that SCS is applied to, insights into the value of privacy and morality can be obtained. Meanwhile, representative pilot cities like Rongcheng and Suining can serve as effective targets to acquire more convincing analysis results. Given such considerations, a theoretical model open to discussion is provided here (see Fig.3).

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