

A Review of Internet Use and Residents' Subjective Social Class Identification: A Systematic Comparison of Digital Dividend and Social Comparison Mechanisms

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Abstract

The popularization of the Internet is changing the way people perceive their own social position. Whether and how subjective class identification is shaped by Internet use has become an important issue in research on digital social stratification. Taking the two mechanisms of digital dividend and social comparison as the main line, this review sorts out twenty-six representative studies at home and abroad since 2005. It covers the measurement and formation mechanisms of subjective class identification, the theoretical basis and empirical evidence of the influence of the Internet on identification, the sources of divergence between the two schools, and group heterogeneity. The analysis shows that most studies confirm that Internet use significantly affects subjective class identification, but the direction of the findings is divided into two schools: the promotion thesis and the downward-bias thesis. The divergence mainly comes from the fact that each side tests only a single mechanism, uses different measurement calibers, and relies on incomparable samples, rather than from an irreconcilable effect of the Internet itself. The same mechanism varies in strength across groups. Older adults and farmers show patterns different from those of young people and highly educated groups. Existing studies still have gaps in the systematic comparison of mechanisms and the testing of comparison-sensitive groups. Future research may test the relative strength of the two paths within the same data and the same measurement framework, and conduct group-based analysis by combining use types and status positions.

Keywords

internet use, subjective class identification, digital dividend, social comparison, relative deprivation, digital divide

1. Introduction

Subjective class identification is a classic topic in social stratification research. An individual's judgment of which level he or she occupies on the social ladder is different from objective socioeconomic status, but it is closely related to political attitudes, consumption behavior, and life satisfaction. Chinese studies noticed quite early that Chinese residents' class identification is generally lower than their objective status. Li et al. [1] summarized this as the phenomenon of downward class identification; Fan and Chen [2] then used ten years of survey data to measure this deviation systematically. Meanwhile, the formation of identification does not depend only on income and occupation. Whom individuals compare themselves with and what expectations they hold about future mobility also affect their final self-positioning [2,3].

The digital age has added a new variable to this issue. After the Internet became deeply embedded in everyday life, the arenas in which people obtain information, build relationships, and make comparisons all shifted. The reference structure of “with whom to compare” and “what to compare” has been reconfigured. Qiu et al. [4] proposed the framework of Internet capital, arguing that, against the background of a gradually narrowing access divide, differences in use patterns and use benefits have become the main form of digital inequality. A debate thus emerges: Does the Internet “reshape” social stratification, or does it “reproduce” the existing class order? Around this debate, empirical studies have generally formed two positions: the digital dividend promotion thesis, which holds that the Internet raises identification by improving trust and increasing returns, and the social comparison downward-bias thesis, which holds that the Internet lowers identification by expanding comparison and strengthening relative deprivation. Both kinds of studies have data support, but their conclusions conflict with each other.

A review of this evidence shows that the divergence between the two schools does not lie in whether the Internet affects identification, but in the direction, mechanism, and conditions of the effect. The promotion thesis mostly tests only the path of social trust. The downward-bias thesis attributes the result to social comparison but seldom directly measures relative deprivation in the data. The two schools also differ in data years, measurement calibers, and identification strategies, making it difficult to compare mechanism coefficients directly across studies. The only study that identifies both mechanisms at the same time is still limited to older adults [5]. In other words, the systematic comparison of the relative strength of the two mechanisms and their group differences within the same framework remains a gap.

Based on the above judgment, this review takes mechanism comparison as the main line and focuses on the question of how Internet use affects subjective class identification. It completes four tasks: sorting out the measurement and formation mechanisms of subjective class identification; organizing the evidence of the digital dividend promotion thesis and the social comparison downward-bias thesis; evaluating the sources of divergence and research limitations of the two schools; and locating research gaps from four dimensions, namely scope, perspective, method, and conclusion, on which basis a future research agenda is proposed. It should be noted that this review is a thematic narrative review. Using “Internet use/new media use/network use” and “subjective class identification/class identification bias/class mobility” as subject terms, it searched CNKI, limited to CSSCI and Peking University core sources, as well as Web of Science and Scopus, and supplemented the search with citation tracing. Around the debate between the two schools and the main line of mechanism comparison, it selected twenty-six representative studies at home and abroad since 2005, including nineteen Chinese journal articles, four English journal articles, and three master’s theses. Although the samples, methods, and measurement calibers of these studies are not completely the same, they all focus on the core issue of Internet use and subjective class identification and can be compared in a unified thematic framework in terms of effect direction and mechanism.

Theoretically, this review incorporates Internet use into the reference-comparison framework of social stratification and provides a systematic evidence map for the debate on whether the Internet reconstructs or reproduces social stratification. Practically, identifying which groups are more likely to experience downward identification due to online comparison can provide a reference for bridging the digital divide and improving residents’ sense of social fairness.

2. Measurement, Phenomenon, and Formation Mechanisms of Subjective Social CLASS Identification

2.1 Concept and Measurement

Subjective class identification refers to an individual’s self-evaluation of his or her relative position in the social structure and is a core component of subjective socioeconomic status. In measurement, the commonly used method in academia is the self-positioning method: respondents are asked to score themselves on a social ladder from low to high, or to choose among several levels, such as lower class, lower-middle class, middle class, upper-middle class, and upper class. The common feature of this type of measurement is that it depends on an individual’s overall perception of the social structure, rather than on a single objective indicator such as income or occupation. For this reason, people in the same objective position may give different self-positioning answers, and the deviation between subjective and objective status is itself an object worthy of study [2].

2.2 The Phenomenon of Downward Identification and Its Formation Mechanisms

Around this deviation, domestic studies have accumulated systematic evidence. Li et al. [1] pointed out early that Chinese residents generally have downward identification. Their subjective identification is generally lower than their objective economic status, and parental social status is regarded as an important source of identification. Fan and Chen [2] further quantified this deviation: urban residents mainly underestimate their own position, with the downward-bias type accounting for about one half, whereas rural residents mainly show upward bias. The higher the education, income, and occupational status, the smaller the degree of upward bias. The opposite urban-rural pattern shows that identification is not a simple mapping of objective status, but is constructed within a specific reference structure.

Research on how identification is formed generally follows two lines. The first is reference comparison. Individuals form self-positioning by comparing themselves with “people in similar situations” or “people stronger than themselves”. When the comparison object differs, the conclusion may also differ [2]. The second is mobility expectation. An individual’s judgment about whether he or she can continue to move upward in the future will enter present identification. The period effects and cohort differences in the low-position identification of middle-income groups confirm this point [3]. These mechanisms originally operated in a relatively closed information environment, while the Internet has precisely changed the information conditions of “with whom to compare” and “how to form expectations”. Understanding the general formation mechanisms of identification is the premise for examining the influence of the Internet.

3. Internet Use and Subjective Social Class Identification: Theory and Evidence

3.1 Theoretical Starting Point: Digital Inequality and Internet Capital

Research on how the Internet affects identification cannot avoid the theory of digital inequality. The Internet capital framework proposed by Qiu et al. [4] regards Internet use as a form of capital that can be accumulated and transformed. After the access divide narrows, differences in use patterns and use benefits replace the question of whether one can go online and become the main form of digital inequality. This judgment has two meanings. On the one hand, the Internet can act as a tool for upward climbing. Learning, job seeking, and the expansion of social networks may all be transformed into real benefits. On the other hand, the distribution of use benefits is not equal, and those in a disadvantaged position in terms of digital capability may not necessarily benefit from it. A study of rural residents confirms the latter judgment: digital divides at the levels of access, use, and utility all harm mental health by lowering individuals’ self-perceived class position [6]. Therefore, Internet capital itself does not predetermine a direction. It may enlarge advantages or strengthen disadvantages, and the direction depends on how individuals use it and what position they occupy. This is the theoretical root of the division between the two schools of evidence below.

3.2 Digital Dividend Promotion Thesis

Studies arguing that the Internet has a dividend effect generally emphasize the benefits of the Internet in information, trust, and capability. The most typical evidence comes from Fan Chen et al. [7], who analyzed 8,148 CGSS2021 samples and found that Internet use significantly improves residents’ subjective class identification, with about 11.5% of the effect transmitted through social trust. Men, older adults, married people, and highly educated groups benefit more obviously. The trust path is not isolated. Although Zhao and Wang [8] reached the opposite conclusion that Internet use reduces social trust, they also found that increases in labor income, years of education, and social class expectation can restrain this negative effect. Miao [9] further divided online social capital into bonding and bridging types and found that both can enhance generalized trust, whereas entertainment and leisure-oriented use weakens trust. Thus, whether the proposition that the Internet enhances trust can be established depends to a large extent on the type of use and the individual’s position.

In addition to trust, the promotion thesis has other supporting paths. As early as 2010, Zhou [10] found, based on a survey of urban residents in Shanghai, that new media use has a significant positive effect on subjective class identification. Huang’s [11] analysis of the youth sample from CGSS2013 reached a similar conclusion: Internet use positively affects young people’s class identification and alleviates the lack of middle-class identification. Using pooled cross-sectional CGSS data from 2010 to 2021 (N = 18,516), Wang, Guo,

and Hou [12] applied an ordered Logit model and the CMP method to handle endogeneity and found that Internet use significantly promotes upward class mobility and expected identification. For each unit increase in use intensity, the probability of upward mobility rises by about 3.45 percentage points. In rural samples, Internet use significantly improves rural residents' happiness through class identification [13]. Ma and Tian [14] further divided this effect into two micro mechanisms: resource strengthening formed through an increase in per capita household income, and symbolic empowerment formed through the enhancement of self-efficacy. From a constructivist perspective, another study found that digital self-presentation can serve as digital cultural capital to improve young people's subjective social status, and that the effect is more obvious among groups with poorer family background and a lower sense of fairness [15]. In addition, Internet learning has been shown to have an anti-poverty effect: it helps individuals leave the lower class and enter the middle class, but has limited help for entering the upper-middle class [16]. A thesis based on CGSS2015 also reported the mediating role of class identification between Internet use and happiness [17].

3.3 Social Comparison Downward-Bias Thesis

Another school of research reaches an almost opposite direction. Fang and Ma [18] used pooled data from CGSS2015, 2017, and 2018 ($N = 31,521$), divided objective classes through latent class analysis, and then compared identification deviations. They found that residents who frequently use the Internet are more likely to have downward-shifted identification, and that the downward bias is more obvious when age, income, and education are higher. Li and Yu [19], using pooled CGSS2015-2021 cross-sectional data ($N = 15,733$), applied binary Logit and instrumental-variable estimation and found that each unit increase in new media use frequency raises the probability of downward-shifted identification by about 1.08 times. The effect is stronger in eastern regions, while college education and above significantly slows this shift.

The common logic of the two studies is social comparison. The Internet expands the reference group from people nearby to people online, while what is presented online is often a screened superior life. The result of comparison can easily produce a sense of relative deprivation. This logic has also been confirmed in other data. Causal inference based on CSS2021 shows that the higher the frequency of Internet use, the more likely individuals are to underestimate their own status. However, capital-appreciation use, such as obtaining government affairs, occupational, and financial information, can significantly reduce this status deflation [20]. An analysis based on CFPS found that digital participation significantly increases residents' perception of opportunity inequality by lowering self-evaluation of social status and raising perceived livelihood risk. Social and entertainment use has a stronger effect, while learning use plays a moderating role [21]. Yang and Guan [22] found from another perspective that Internet use can restrain the distortion of subjective social status caused by psychological factors such as authoritarianism and subjective well-being, thereby reducing cognitive bias between subjective and objective status. This indicates that comparison itself does not necessarily only lower identification; exposure to diversified information may also bring people closer to objectivity.

3.4 Group Heterogeneity and Mechanism Refinement

When the evidence of the two schools is placed back into different groups, it becomes clear that the direction of the effect is often determined by the population. Among older adults, Internet use generally improves subjective class identification, but the internal mechanism is a double-edged sword: it raises identification by providing support through social networks, and lowers identification through relative deprivation generated by reference comparison [5]. Among young people, most studies show that the Internet improves identification [11,15], and Wang's [23] analysis of young people's self-presentation on social media also points to a positive association. However, tests on farmer samples show that the Internet has no significant effect on young farmers but has a significant effect on middle-aged and older farmers [14]. The same variable, even within the same group, may differ in direction because of age stage. The results for migrant workers are also inconsistent. One study found that Internet use improves the present subjective class positioning of the new generation of migrant workers but has no significant effect on their expected positioning ten years later [24]. A qualitative study of rural-urban migrants in Picun also showed that, although social media expanded migrants' social networks, it did not bring changes in identity identification because of restrictions from the household registration system [25]. This kind of pattern, sometimes effective and sometimes ineffective, suggests that the effect of the Internet is highly dependent on group position and reference environment.

4. Review: Consensus, Divergence, and Sources of Divergence

Putting the above evidence together, three points of consensus can be summarized. First, whether the effect is promotion or downward bias, both schools confirm that Internet use changes residents' subjective class identification. The divergence does not lie in whether there is an effect. Second, the mechanisms can generally be classified into two paths: benefit-trust and comparison-deprivation. Most studies only test one of these paths. Third, group heterogeneity is widespread, and gender, age, urban-rural status, education, and income all moderate the direction or size of the effect.

The roots of the divergence are not limited to different positions and can be restored from at least three aspects. The first is measurement caliber. For the same concept of Internet use, some studies use daily duration, some use use frequency, and some distinguish use types. Different types may have opposite effect directions: entertainment use increases the perception of inequality, while learning use moderates it [21]; capital-appreciation use corrects status deflation, whereas general use does not [20]. The second is data and samples. Evidence for the promotion thesis and the downward-bias thesis comes respectively from different years of CGSS, CSS, CFPS, and other surveys. Sample composition and survey years differ, so coefficients cannot naturally be compared directly. The third is the definition of the dependent variable. Some studies measure present identification level, some measure the deviation between identification and objective status, and some measure expected identification. Li's [24] results show that the conclusions of the same group can differ on the present and expected dimensions. Taken together, the simple question of promotion or downward bias may itself be too rough. It should also be noted that there may be a reverse association between identification and use. Subjective class identification can affect online behavior. For example, netizens' reposting and expression on issues such as rich-poor and urban-rural relations are significantly related to subjective class identification [26], which raises higher requirements for identifying causal direction.

5. Research Gaps

Based on the above review, the limitations of existing research can be located from four dimensions.

In terms of scope, there is almost no direct evidence of systematic mechanism comparison among so-called comparison-sensitive groups, including highly educated, urban, and high-income groups. Yet these groups are exactly those most often identified by social comparison studies as high-incidence groups for downward bias [18]. Migrant populations and different occupational groups also lack tests within the same framework.

In terms of perspective, most studies assume that the influence of the Internet is homogeneous and seldom incorporate the digital divide and status position into the analysis, that is, whether the use benefits and use risks of the Internet differ according to an individual's status level [6]. The constructivist perspective, in which individuals actively use rather than passively receive, has also only just begun [15].

In terms of method, the most prominent gap is that studies that test the two mechanisms at the same time within the same data and the same measurement framework are still lacking. The promotion school mostly tests only social trust. The downward-bias school attributes the result to social comparison but seldom directly measures relative deprivation. The only study that identifies both mechanisms at the same time is limited to the older adult sample from CGSS2017 [5]. This means that the mechanism coefficients of the two schools cannot be compared across studies, and there is no basis for discussing which is stronger or weaker.

In terms of conclusion, the divergence between promotion and downward bias has not yet been unified, and there is also a lack of systematic testing of the possibility that the relative strength of mechanisms varies across groups. Existing evidence only supports the two schools separately. No study has yet examined, within the same framework, in which groups the two paths respectively dominate.

6. Future Research Prospects

In response to the above gaps, future research can be advanced in four directions.

First, the two mechanisms should be tested at the same time within the same data and the same measurement framework, and their relative strength should be compared. Specifically, national microdata such as CGSS or CFPS can be selected. Ordered Logit or ordered Probit can be used as the main model, and the Bootstrap

method can be used to estimate the effect sizes and confidence intervals of the two mediating paths, social trust and relative deprivation, at the same time. Instrumental-variable methods, such as provincial Internet penetration rates, can then be used as robustness tests to alleviate endogeneity.

Second, the types of use and the dimensions of identification should be distinguished. Internet use can be divided into capital-appreciation use and entertainment use, and identification can be divided into present identification, expected identification, and identification deviation. They should be estimated separately to avoid covering heterogeneity with a single indicator.

Third, group heterogeneity should be treated as a core object of analysis rather than as an attached part of robustness testing. Special attention should be paid to comparison-sensitive groups such as highly educated, urban, and high-income groups, and the moderating roles of the digital divide and status position should be incorporated into the model.

Fourth, specific falsifiable expectations should be proposed. One judgment can be tested: the social trust path dominates in most groups and identification tends to move upward, while the relative deprivation path dominates among comparison-sensitive groups and identification is more likely to move downward. If group-based tests show that the two mechanisms do not produce this differentiation of one rising while the other falls, then this expectation is overturned.

7. Conclusion

Taking mechanism comparison as the main line and focusing on the question of how Internet use affects residents' subjective social class identification, this review sorted out twenty-six representative studies at home and abroad since 2005. The main conclusion is that the Internet does shape residents' subjective class identification, but the direction of the effect is not single. It is determined by the relative strength of the two mechanisms of benefit-trust and comparison-deprivation. The divergence in existing studies comes more from measurement caliber, data sources, and asymmetry in mechanism testing than from an irreconcilable effect of the Internet itself. Group position plays a key role in this process. On this basis, this review located research gaps from four dimensions, namely scope, perspective, method, and conclusion, and proposed a testable future research agenda. With the continuous updating of public microdata such as CGSS and CFPS, comparing the relative strength of the two mechanisms within the same framework will be a feasible path for testing the debate between digital dividend and social comparison.

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Funding

This research received no external funding.

Conflicts of Interest

The authors declare no conflict of interest.

Acknowledgment

This paper is an output of the science project.

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