

Social network usage, Self-esteem, and Irrational consumption online among Chinese college Students: A mediation model

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ABSTRACT

With the development of e-commerce in recent years, online consumption and the resulting phenomenon of irrational consumption online have gradually attracted research attention. This paper explored to what extent self-esteem and social media usage influence Chinese young consumers' irrational consumption behavior. A total of 1,504 Chinese college students from over 30 provinces were recruited by convenience sampling and answered an online survey between August 2019 and May 2020. The Bootstrap method was used to examine the mediating effects of excessive use of social media on the relationship between self-esteem and irrational consumer behaviors. Results showed that both self-esteem and social media usage have a direct and significant relationship with irrational consumption; and the degree of social media overuse mediates the relationship between self-esteem and irrational consumption. Such results imply that an individual's self-esteem can influence his/her irrational consumption behavior by influencing the extent of his/her social media usage. The findings have significant implications for developing programs that aim to promote healthy financial behavior among young people in the digital age. At the same time, the study also makes theoretical contributions to the field of consumer behavior in the cyber era.

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1. Introduction

Irrational consumption behaviors such as compulsive buying, impulsive buying, and excessive buying cause negative outcomes to both the society and individuals [1, 2]. These irrational behaviors not only increase personal economic burden and financial risks, but also cause inefficient utilization of market resources and price fluctuations. Over the years, researchers have explored how factors, such as individual psychological characteristics, personality traits, and values contribute to irrational consumption. However, the COVID-19 pandemic made this phenomenon more complicated. People were forced to isolate themselves at home and engaged in various online consumption activities, such as stockpiling masks, groceries and household supplies [3]. Irrational consumption behaviors on the Internet seemed to take control over our daily lives[4],[5]. Thus, strategies to reduce and prevent irrational consumption seems to be of practical significance. Empirical evidence suggests that while many of the factors influencing offline irrational consumption still hold true in the online world, other factors specifically related to the cyberspace, such as social media usage, may also play a role[5],[6]. Researchers have attempted to explore how the traditional offline factors interact with online factors. However, empirical evidence in this field is still scarce.

China has the world's largest social media and e-commerce market, with 1092 million Internet users and 915 million Internet shoppers [7]. Thus, the country serves as good case for exploration. The current study focused on Chinese consumers, and recruited 1,504 Chinese college students by convenience sampling. They answered an online survey between August 2019 and May 2020. Using SPSS24.0 and PROCESS macros in SPSS, we tested a mediating model, exploring to what extent self-esteem and social media usage influence irrational online consumption. Studying Chinese youth not only helps scholars, practitioners, and policy makers to better understand the irrational consumption phenomenon, but also makes theoretical and practical contributions to the field of global consumer economics and financial education.

2. Theoretical Framework

2.1. Irrational Consumption, Financial Knowledge, Money Attitudes, and Self-Esteem

Irrational consumption behaviors refer to the unreasonable purchasing decisions made by consumers under the influence of various factors. In general, when we say a consumer is irrational, it means he/she is purchasing, but he/she is not pursuing the maximization of utility, or not considering the constraints of income, or not consuming according to the law of diminishing marginal utility, or not knowing enough about the product to be purchased [8].

Financial knowledge is an important factor influencing people's irrational consumption behavior. According to conventional wisdom, one needs to have a good grasp of financial concepts before he/she undertakes responsible financial actions, purchasing being one. Observations from the field seem to suggest that some people consume irrationally because they do not know the consequences of such behavior [9]. For instance, people who over spend by using credit cards may not be aware of the impacts of such behavior. They may not know the fee structures employed for credit card use or the penalties applied for failure to live up to terms of use. Neither do they know the long-term consequences surrounding the misuse of credit, including years of financial debt, low credit scores impeding future plans, and in extreme cases, personal bankruptcy [10]. This line of thinking gave rise to a range of financial education programs. Although knowing what to do does not ensure optimal behavior [11], empirical studies so far confirmed that to various extents, financial education programs equip individuals with better knowledge, change their financial habits, which lead to a reduction in risky financial behavior, including over purchasing [12],[14].

Money attitudes are found to be related to a range of financial behaviors including consumption [15],[16]. People consume not just to satisfy their physical needs, but also for social reasons [17]. For example, for some people, money stands for power and status [18],[19]. They may engage in status consumption and conspicuous consumption, so as to display their wealth and enhance their prestige in society [20],[22]. Others may regard money as a fundamental means to solve problems, achieve happiness and well-being [23]. Thus, they are more inclined to solve problems by using money, which sometimes leads to irrational consumption. Since empirical data showed that simply exposing people to financial knowledge cannot influence their financial attitudes, to change their behavior, more comprehensive programs which inculcate healthy financial attitudes are needed[24].

Self-esteem [25],[27] was one of the psychological traits found to be strongly associated with various financial behavior [28]. In addition to knowledge and attitudes, psychological factors should also be considered, as irrational consumption behavior could be seen as an addictive behavior to relieve psychological pain, obtain emotional compensation and construct an ideal self [25],[29]. Especially in terms of purchasing, it was found that the lower an individual self-esteem, the more likely he/she will consume irrationally [18],[30],[31]. Moreover, it was found that self-esteem could influence one's subjective evaluation of his/her objective financial knowledge [28]. In certain cases, subjective financial knowledge is more influential than objective financial knowledge in determining financial behavior[32],[33]. Thus, lower self-esteem may also reduce the effectiveness of financial education programs which aim to promote responsible financial behavior through provision of objective financial knowledge.

The current study explored to what extent financial knowledge, money attitudes and self-esteem influence irrational online consumption, but focused on the influence of self-esteem, as it is an element often neglected in financial education programs [28],[33].

2.2. E-commerce, social media and Irrational consumption online

With the development of Information Technology and e-commerce, online shopping has become an important if not the major way of consumption in modern society. Besides shopping on e-commerce websites (and their mobile platforms), more interactive forms of e-commerce, such as live-stream shopping, group-buying, and word-of-mouth marketing have also emerged, and are developing rapidly [34]. These new forms of e-commerce are closely associated with social media, the virtual network platforms, which have three major functions: information, community, and action [35],[36]. Owner of a particular social media account, be it the producer, the retailer, a Key Opinion Leader (KOL), an Internet celebrity, a random customer, or a friend/relative of your own, can share information, build a community, and call for action (to buy or not buy a product) in the community. On the one hand, social media has enabled potential customers to access a large volume of information from different sources, which could help solve the problem of incomplete information; on the other hand, it also develops a connection between people and exposes people to more social comparison and peer pressure[37],[39], which may lead to assimilation effects and imitative consumption behavior [40], such as buying products endorsed by celebrities to build an ideal self-image [41],[42].

The relationship between social media and irrational consumption is just starting to catch research attention. Empirical findings suggest that there is a positive relationship between the two, and social media's influence on irrational consumption seems to grow stronger with time. In a pioneer study, it was found that individuals with compulsive consumption behavior score higher in terms of excessive social media usage, but the association between the two is nonsignificant [43]. In recent years, with the rapid development of online shopping sites, as well as the encroachment of social media on modern human lifestyle, a series of studies confirmed the positive relationship between excessive use of social media and irrational consumption behaviors [5],[6],[44].

2.3. Excessive use of social media and self-esteem

Although existing studies suggest that social media usage can influence irrational online consumption, the mechanism of such influence has yet to be explored. In this study, we view this relationship through the lens of self-esteem. Previous studies have shown that individuals with low self-esteem have a higher degree of dependence on social media and the Internet in general [26] [45],[46]. In this virtual world, they could gain inner security and satisfaction [47],[48]. However, this virtual world is also full of social comparison, which may have a negative impact on individual self-esteem, and sometimes even lead to mental health problems, such as depression[38],[49]. This thus created a vicious circle, leading to social media addiction [50],[51].

Based on the discussion above, in this study we propose a mediation model (Figure 1) and hypothesize that:

H1: Self-esteem is directly linked with irrational consumption behavior online, conditional on financial knowledge, money attitudes, and other socio-economic factors.

H2: Self-esteem is indirectly linked with irrational consumption behavior online, through social media usage, conditional on financial knowledge, money attitudes, and other socio-economic factors.

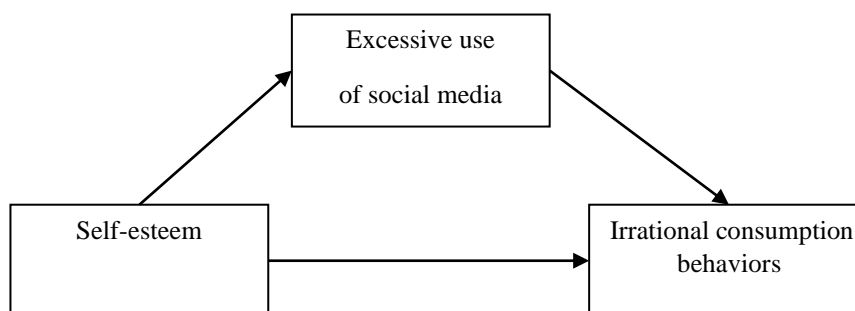


Fig. 1. Research Model: Mediating effects of excessive use of social media

In addition, our research model is consistent with existing research about the relationship between financial knowledge and responsible financial behavior. Specifically, higher level of financial knowledge is expected to predict lower level of irrational consumption.

3. Method

The current study was a cross-sectional study with a combination of convenience and snowball sample. We used a Chinese professional survey website, the Questionnaire Star, which allowed us to send the link of the questionnaire via popular social media applications, such as WeChat (China's largest social networking APP), QQ (the most popular Instant Messaging Software in China), and Weibo (the largest microblog in China). After publishing the link on various platforms, we asked students, teachers, and KOLs to forward the link and encouraged students to complete the questionnaire. A total of 1504 responses from Chinese college students over 30 provinces were received between August 2019 and May 2020. It should be noted that our data collection period covered the Coronavirus-19 lockdown period, when off-line shopping became virtually impossible. During this time, students were also forced to spend more time online due to the distance education arrangement of almost all universities. The reason for choosing college students as our sample is that they belong to the younger generation, and they are more open and inclusive. Most importantly, they accept emerging lifestyles and social media faster and more widely. This is very consistent with our research theme.

To control the quality of the responses, a question not related to the study was added in the middle part of the questionnaire: "For quality control purposes, please select strongly disagree for this question." Questionnaires with wrong answer to this question were deemed invalid. After screening out invalid questionnaires, 1285 undergraduates remained in the sample.

Dependent variable: In this study, irrational consumption behavior (ICB) was measured by the 11-item Compulsive Buying Scale [52], which is widely used by researchers of consumer behavior (Biolcati, 2017; Dittmar, 2005; Donnelly, Ksendzova, & Howell, 2013; Islam, Wei, Sheikh, Hameed, & Azam, 2017). The response was scored on a five-point Likert scale ranging from 1 (never) to 5 (very often). A higher score indicates a higher level of irrational consumption behavior. The scale was translated by the authors, who are native Chinese speakers. Cronbach α in the present study was 0.938.

Independent Variable: Self-esteem (SE) was measured using the Chinese version of the Rosenberg Self-Esteem Scale (SES) [53], which has been proved to have good reliability and validity with the Chinese college student population. The scale consists of 10 items, of which four items (No.3, 5, 9, 10) are scored in reverse. The answer was scored from 1 (strongly disagree) to 4 (strongly agree). A lower score indicates a higher tendency of inferiority. Cronbach α in the present study was 0.870. **Mediator:** Excessive use of social media (EUS) was measured by the Internet Use Measurement [54], translated into Chinese by the authors. It contains 8 items, and some of them were slightly modified to make them suitable for the current study (e.g. we replaced "Internet" with "social media applications"). Each item was recorded on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate higher dependence on social media. Cronbach α in the present study was 0.844.

Control Variables: Socio-demographic characteristics in the study included age, gender, year and major in college, geographic location of the university, employment experience, loan experience, monthly income and expenses, money attitudes, and financial knowledge. Money attitudes was measured by the Money Attitude Scale (MAS) [55]. The present study adopted three dimensions and 22 items which were appropriate for young adults [5],[10]. They included money power-prestige (e.g., "I behave as if money were the ultimate symbol of success"), money distrust (e.g., "I hesitate to spend money, even on necessities") and money anxiety (e.g., "I am bothered when I have to pass up a sale"). The response was recorded on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate stronger agreement with a certain attitude dimension. The scale was translated by the authors, and Cronbach α in the present study was 0.932. Financial knowledge was measured by 6 items taken from OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion [56]. We selected some financial concepts to assess young consumers' level of financial knowledge (such as calculation of simple interest, the meaning and impacts of inflation, the benefits of compounding, the typical relationship between risk and

return, and diversification). The answers were scored as correct (1) and incorrect (0). Cronbach α in the present study was 0.684. Higher scores imply better financial knowledge.

Statistical analyses, to assess the quality of the measurements and test the mediating model, we employed SPSS24.0 and PROCESS macros in SPSS. The relationships between irrational consumer behaviors (ICB), excessive use of social media (EUS) and the level of self-esteem (SE) were first explored by using Pearson correlation and simple Ordinary Least Squares (OLS) regression. Then, to examine the mediating effects of EUS on the relationship between SE and ICB among Chinese college students, we conducted a series of nonparametric conditional bootstrap analyses by using PROCESS macros in SPSS [57]. Ethics, The current study was approved by the Institutional Review Board of XXX University, China.

4. Results and Discussion

As shown in Table 1, the majority of the respondents were female, and were studying in a university located in Eastern China. Two thirds of the sample engaged in part-time jobs, internships and other income-generating activities; a quarter of the sample were spending more than what they earned every month; one fifth of the sample said they currently have loans; the great majority of the sample gained financial support from their family.

Table 1. Descriptive statistics of the sample (N=1285)

Variables	Frequency	Percentages
Sex		
male	368	28.64
female	917	71.36
Age		
Under 18	2	0.16
18~22	1192	92.76
Over 23	79	6.15
Year		
First-year	182	14.16
Second-year	414	32.22
Third-year	362	28.17
Fourth-year	287	22.33
Fifth-year	40	3.11
Major		
Philosophy	22	1.71
Economics	113	8.79
Law	208	16.19
Management	275	21.40
Pedagogy	72	5.60
Literature	106	8.25
History	16	1.25
Science	147	11.44
Engineering	142	11.05
Agriculture	10	0.78
Medicine	44	3.42
Else	130	10.12

Location		
East China	1037	80.70
North China	51	3.97
South China	65	5.06
Central China	53	4.12
Northeast China	19	1.48
Southwest China	46	3.58
Northwest China	14	1.09
Work experience (part-time job, internship etc.)		
Yes	867	67.47
No	418	32.53
Loan experience		
No	1026	79.84
Mortgage loan	1	0.08
Consumption loan	165	12.84
Other loans	93	7.24
Source of income		
Family support	1251	97.35
Part-time job	403	31.36
Scholarships and grants	389	30.27
Social welfare	27	2.10
Student loan	55	4.28
Else	11	0.86
Income status		
income > spending	572	44.51
income < spending	320	24.90
income = spending	393	30.58
Monthly income (RMB)		
< 500	49	3.81
501-1000	128	9.96
1001-1500	447	34.79
1501-2000	383	29.81
2001-3000	211	16.42
3001-4000	38	2.96
4001-5000	18	1.40
> 5001	11	0.86
Money attitude-distrust Mean (SD)	3.16 (1.39)	
Money attitude-anxiety Mean (SD)	3.14 (1.40)	
Money attitude-power and authority Mean (SD)	2.75 (1.24)	
Financial Knowledge Mean (SD)	3.74 (1.73)	
Self-esteem Mean (SD)	29.61 (4.88)	
Excessive use of social media Mean (SD)	33.31 (9.92)	
Irrational consumption behaviors Mean (SD)	35.42 (15.44)	

Table 2. reports mean scores, standard deviations and Pearson correlation coefficients among the key variables. Self-esteem (SE) is negatively correlated with both excessive use of social media (EUS) and irrational consumption behavior (ICB). Lower levels of SE correlated with higher levels of EUS and ICB. In addition, ICB was positively correlated with EUS.

Table 2. Pearson correlations between ICB, EUS, and SE

Variables	Mean	SD	SE	EUS	ICB
SE	29.61	4.88	—		
EUS	33.31	9.92	-.21**	—	
ICB	35.42	15.44	-.17**	.47**	—

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

SE is directly related to one's EUS and ICB. As shown in column one of Table 3, controlling for money attitudes, financial knowledge and other control variables, the results indicated a negative effect between SE and EUS ($P < 0.001$). When an individual's self-esteem level is lower, his/her dependence on social media is higher. Also, as shown in column two Table 3, there is a negative association between SE and ICB ($P < 0.001$), which suggests people with lower self-esteem are more likely to spend irrationally online.

SE is indirectly associated with ICB. As shown in column three of Table 3, EUS is positively correlated with ICB ($P < 0.001$), which decreases the negative effect of SE. Table 4 reports that a significant mediating effect. Bootstrapping results indicate that SE can not only directly predict ICB, but also indirectly predict ICB through the mediating effect of EUS. Among them, the direct effect accounts for 57.58%, and the mediating effect accounts for 42.38%.

Table 3. Results of Three hypotheses

	EUS		ICB		ICB	
	B	SE	B	SE	B	SE
SE	-0.125	0.053***	-0.073	0.073**	-0.042	0.070*
EUS					0.251	0.037***
Control variables						
Gender (ref. male)	0.083	0.592**	0.108	0.809***	0.088	0.778***
Age	0.011	0.250	-0.013	0.340	-0.015	0.326
Year (ref. sophomore year)						
First-year	0.006	0.847	-0.035	1.151	-0.037	1.103
Third-year	-0.027	0.723	-0.038	0.983	-0.031	0.942
Fourth-year	-0.010	0.882	-0.035	1.198	-0.033	1.148
Fifth-year	-0.047	1.869	0.016	2.541	0.028	2.437
Major (ref. economics)						
Philosophy	-0.006	2.158	-0.018	2.933	-0.017	2.810
Law	0.007	1.069	-0.043	1.453	-0.045	1.392
Management	-0.024	1.009	-0.008	1.372	-0.001	1.315
Pedagogy	0.050	1.383	0.007	1.880	-0.006	1.803
Literature	0.038	1.229	0.018	1.671	0.008	1.602
History	-0.031	2.362	-0.013	3.211	-0.005	3.078
Science	0.026	1.153	-0.031	1.567	-0.038	1.501
Engineering	0.052	1.173	-0.013	1.595	-0.026	1.530
Agriculture	0.025	2.946	0.016	4.005	0.010	3.838
Medicine	-0.053	1.583	-0.028	2.152	-0.014	2.065
Else	0.011	1.195	-0.016	1.625	-0.019	1.557
Location (ref. East China)						
North China	0.029	1.308	0.012	1.778	0.005	1.704
South China	-0.073	2.073**	-0.042	2.818	-0.023	2.709*
Central China	-0.054	1.298*	-0.062	1.764*	-0.048	1.693

Northeast China	-0.006	1.162	-0.019	1.580	-0.017	1.514
Southwest China	-0.003	1.361	-0.022	1.850	-0.021	1.772
Northwest China	0.005	2.383	-0.016	3.240	-0.017	3.104
Work experience	0.014	0.628	0.057	0.853*	0.053	0.818*
Loan experience	-0.041	0.666	0.040	0.905	0.051	0.868*
Source of income (ref. family support)						
Part-time job	-0.047	0.614	-0.043	0.835	-0.031	0.801
Scholarships and grants	-0.010	0.580	-0.041	0.788	-0.039	0.755
Social Welfare	-0.025	1.811	0.018	2.462	0.024	2.360
Student loan	0.027	1.324	-0.010	1.800	-0.017	1.726
Else	-0.025	2.848	-0.060	3.872**	-0.054	3.711*
Income status (ref. ends meet)						
Income>outcome	-0.030	0.588	-0.079	0.799**	-0.072	0.766**
Income<outcome	0.021	0.685	0.048	0.931	0.043	0.892
Monthly income (ref. less than 500 RMB)						
501-1000 RMB	0.034	1.527	-0.024	2.076	-0.032	1.989
1001-1500 RMB	0.091	1.383	-0.032	1.880	-0.055	1.802
1501-2000 RMB	0.116	1.390	0.017	1.890	-0.012	1.813
2001-3000 RMB	0.051	1.453	0.035	1.975	0.022	1.893
3001-4000 RMB	0.020	1.972	0.001	2.681	-0.004	2.569
4001-5000 RMB	0.000	2.479	0.019	3.370	0.020	3.229
Over 5000 RMB	0.034	3.003	-0.014	4.082	-0.022	3.913
Money attitudes						
Power and authority	0.212	0.282***	0.257	0.383***	0.203	0.373***
Anxiety	0.030	0.263	0.303	0.357***	0.296	0.342***
Distrust	0.244	0.2583***	0.096	0.351**	0.035	0.343
Financial Knowledge	0.037	0.129	-0.089	0.176***	-0.098	0.169***
F		9.487		21.268		25.132
R		0.503		0.656		0.691
R ²		0.253		0.431		0.478

Note: *p < 0.05; **p < 0.01; ***p < 0.001.

Table 4. The total, direct, and indirect effects

	Effect	BootSE	BootLLCI	BootULCI	Effect Accounting
Indirect effect	-0.100	0.026	-0.154	-0.055	42.894%
Direct effect	-0.133	0.070	-0.270	0.005	57.106%
Total effect	-0.232	0.073	-0.375	-0.090	1.000

Note: Boot standard error refers to the standard error of indirect effect estimated by percentile Bootstrap method with deviation correction; Boot CI lower limit and Boot CI upper limit are the lower limit and upper limit of 95% confidence intervals, respectively; All values are rounded to retain three decimal points.

This study showed that self-esteem is a significant predictor of irrational consumption behavior online, while excessive use of social media mediates the relationship between the two. In other words, individuals with low self-esteem are more likely to overuse social media, which leads to a higher degree of irrational consumption behavior online; individuals with high self-esteem, on the other hand, are less likely to become over-dependent on social media, and their possibility of

irrational consumption is also lower. Our results confirmed the previous view that self-esteem can indeed predict an individual's irrational consumption behavior [18],[30],[31], and their use of social media [26],[45],[46]. Our finding that excessive use of social media is related to irrational consumption is also in line with previous studies [54]. However, this is the first time the mediating role of social media was tested via empirical data. This gave possible explanations for the mechanism through which self-esteem influences irrational consumption in the cyber era.

As expected, financial knowledge and money attitudes are strong predictors for irrational online consumption. Individuals with higher financial literacy are more likely to displace responsible financial behaviors [28], and thus less likely to spend irrationally. Individuals who perceive money as a symbol of power and authority, as well as individuals who are anxious about money (and therefore cannot pass up a bargain), are more likely to spend irrationally. Such findings again confirm the importance of financial education, which should include not only objective knowledge, but also correct financial attitudes [58].

Among the other control variables, gender seems to be a strong predictor. Women are more likely to use social media excessively and spend irrationally than men. This is also in line with existing studies [1],[59],[60]. However, it should be noted that researchers found that in terms of Internet addiction, although women are more likely to be addicted to social media, men are more likely to be addicted to online games[61]. In online games, players could engage in "charging", i.e., spending real money to purchase in-game property. Since our study focused on purchasing real goods rather than in-game goods, it is possible that men's online spending has been underestimated.

Irrational consumption is not a new social phenomenon. The development of Information Technology has made our lives easier, but at the same time created new traps for irrational consumption. Spending irrationally is certainly not a healthy financial practice. To help young people build healthy financial habits may prevent financial problems later in their lives. Although on a macro level, rising consumerism is certainly a strong factor behind irrational spending, on the individual level, our study found that the influence of self-esteem on irrational spending holds true in the cyber era, and it works partially through the usage of social media. This implies that if we want to prevent irrational consumption among young people, or help those that already display such behavior, there are at least two points of intervention. One is to work on their self-esteem, and the other is to intervene through social media.

Thus, aside from objective financial knowledge and correct financial attitudes, we recommend incorporating elements which enhance individuals' self-esteem into financial education programs. While it is impossible to regulate social media platforms to reduce consumerism in our culture or to prevent peer comparison among young people, we could certainly work with young people so that they can take a critical view of the messages they receive via social media. Excessive use of social media is certainly not a healthy practice. However, in the cyber era, it is unrealistic to simply ask people to reduce their social media time, particularly, when circumstances prevent us to communicate in other ways (e.g., when lockdown happens for public health reasons). Rather, educators, social workers, and other professionals can use social media to reach out to our target population, and send out messages to them via social media. After all, social media has such a strong influence on people, instead of fighting with it, we can use it to our advantage.

5. Conclusion

For feasibility purposes, our study used convenience sampling combined with snowball sampling. As a result, our sample could not represent the general college student population in China. In fact, the majority of the sample came from universities located in Eastern China, which is relatively wealthy, although the students' hometown might be in a different place. Furthermore, some provinces in Eastern China (e.g., Jiangsu, Zhejiang, and Shanghai) are considered "the great free shipping zone (Da Baoyou Diqu)", which means as long as your shipping address falls within this zone, e-commerce platforms will ship to you for free, sometimes without even a minimum spending requirement. This may encourage people residing in this region to spend more, regardless of their hometown. In our model, there seems to be a general trend that students from universities in Eastern China are more likely to spend irrationally online, although the difference is only significant when compared with Central China. This lack of strong statistical evidence might be due to our sample, since an overwhelming 80% came from Eastern China. To conclude, this study found that

among Chinese youth, self-esteem is a significant predictor of irrational consumption behavior online, while use of social media mediates the relationship between the two. Future researchers could replicate the study in other countries to explore whether different culture and different levels of development of e-commerce would influence people's behavior.

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