The Impact of Income Inequality and the Use of Information Media on Happiness

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Abstract

Based on the 2015 China General Society Survey (CGSS 2015), the Order Logit model is used to study the impact of income inequality and the use of information media on the subjective well-being of Chinese residents. The study finds that income inequality significantly reduced residents' subjective well-being; the use of information media has a significant positive impact on residents' subjective well-being and cushions the negative impact of income inequality on happiness; compared with rural residents, income inequality has a greater impact on urban residents' happiness; the use of information media has a more significant impact on the well-being of rural residents, and its buffering effect is also more pronounced among rural residents.

Keywords

Income Inequality, Information Medium, Happiness

1. Introduction

In recent years, “happiness” has gradually entered people’s vision. Instead of GDP, it has become an important indicator of a country’s development. People realize that improving national happiness is the ultimate goal of economic development. The report of the 19th National Congress of the Communist Party of China pointed out that “improving people’s wellbeing is the fundamental purpose of development”. How to realize people’s yearning for a better life and promote people’s happiness has become a new direction. At first, scholars used absolute income to explain happiness. However, the emergence of “happiness paradox” made this view questioned. People began to study the causes of this phenomenon. The income gap caused by relative income, income inequality and income distribution inequality has become a new research hotspot. Li Lulu et al. (2012) believed that the widening gap between the rich and the poor, the aggra
yvation of class differentiation, the existence of unstable factors and social conflicts reduced the happiness brought by economic development. However, some studies have shown that the impact of income gap on happiness is uncertain. A lower income gap could make people have higher expectations for the future, thus creating a “tunnel effect”, and encouraged people to work harder to improve their happiness (Alesina et al., 2004). There were also studies that found that the happiness of those who thought the income distribution was unfair would be reduced (Bjørnskov et al., 2013). Individual’s cognition of income distribution inequality is an important medium for the relationship between income distribution inequality and happiness. Happiness decreases only when individuals think income distribution is unfair.

How to seek balance and consensus among people’s different values, narrow the gap between the rich and the poor, realize common prosperity, and build a well-off society as soon as possible is the important goals we need to strive for today. And with the development of information society, the rise of a variety of information media has a subtle impact on our lifestyle and social structure. People are more and more dependent on media technology. People’s cognition, emotion and behavior are also affected by the use of information media. However, whether the use of information media will affect people’s subjective well-being and what kind of impact will it cause? Based on the 2015 China General Society Survey (CGSS 2015), this paper analyzes the impact of income inequality and information media on residents’ subjective well-being. It is preliminarily assumed that the income inequality will reduce people’s well-being, and the use of information media can improve residents’ subjective well-being, and further test whether the use of information media can alleviate the negative impact of income inequality on well-being.

2. Literature Review

2.1. The Influence of Income on Happiness

With the continuous development of economic theory, happiness has become a hot research topic in economics (Yang & Zhang, 2016). Happiness is defined as utility in economics, and the increase of income can improve people’s utility, and then achieve a higher level of happiness. Many studies had found that there was a significant positive correlation between absolute income and subjective well-being even if the relative income effect was controlled (Ball & Chernova 2008); Mentzakis and Moro (2009) believed that higher absolute income would increase subjective well-being, but it was limited. Easterlin (1974) found that the increase of per capita income did not improve the happiness of the people, and there was a puzzling “income paradox”. Later, Based on the life cycle theory, Easterlin (2001) explained the reason for “income paradox” was that the desire would increase with the increase of people’s income. Although the increase of income can bring more happiness, the desire would also increase, which weaken the positive impact of income on happiness. The study of relative income was an important
turning point for “income paradox”. The study found that the effect of relative income on happiness was much greater than that of absolute income (Ball & Chernova 2008). So even if the absolute income had a significant increase, happiness would not necessarily rise. We can find that absolute income and relative income can affect happiness.

2.2. The Influence of Income Inequality on Happiness

Combined with previous research, we found that income can really affect happiness. What is the impact of fairness in income distribution on residents’ subjective well-being? Roemer (2009) pointed out that the fairness of social opportunities affected people’s efforts, and then affected the level of happiness. Brockmann et al. (2009) pointed out that income inequality led to excessive income gap, which led to “relative deprivation”, which was an important reason for the decline of Chinese happiness. Alesina et al. (2004) found that society with income inequality was less prevalent, pessimistic expectations of future would further reduce their happiness. However, some scholars had put forward different views. They believed that what really affected people’s happiness is their attitude towards income distribution. Wu (2009) pointed out that whether the income gap caused by income distribution is large or not depends on the value judgment of the public. Therefore, people’s subjective attitude was the main factor influencing their happiness. People were not happy because they felt the unfairness in the process of income distribution.

2.3. The Influence of the Use of Information Media on Happiness

Today, human’s work, study and life are more and more dependent on information media, which also affected our spiritual world in various ways. The early information media mainly affected people’s quality of life. Mundorf et al. (1994) found that the German families used more information media technology, the higher people’s evaluation of quality of life. In addition to the impact on the quality of life, information media played a huge role in social interaction. According to the survey, if people transferred the online connection of social media to real life, it significantly improved their happiness (Suphan et al., 2012). Shaw, and Gant (2004) also pointed out that the Internet, as a medium of social interaction, helped to improve the level of social interaction, enhance personal self-efficacy, effectively promote interpersonal communication, improve social relations, and improve people’s perceived quality of life; however, some scholars put forward different views, and they found that if teenagers chatted with close friends on the Internet, the Internet would have a positive effect on happiness, and if chatted with strangers, the Internet will have a negative impact on happiness (Valkenburg & Peter 2007). Jin et al. (2005) found that leisure entertainment and information acquisition through the Internet have no significant impact on improving people’s life satisfaction, while learning and working through the Internet could significantly improve people’s life satisfaction. Yao (2006)
thought that the media would directly affect the public’s cognition of emotional balance and life cognition, and then affected people’s happiness. Some scholars also believed that media, as a cultural industry, could shape people’s cognition and emotion, thus indirectly influenced happiness (Wei, 2010). We can see that the influence of information media on happiness is complex.

Generally speaking, income and information media do have an impact on happiness. However, the conclusion of income inequality and the use of information media on happiness is complex. Therefore, this paper further studies the impact of income inequality and the use of information media on Residents’ subjective well-being, and what is the impact of the use of information media on the relationship between income inequality and well-being.

3. Methodology

3.1. Empirical Model

In order to test the impact of income inequality and the use of information media on happiness, and whether the use of information media can alleviate the impact of income inequality on happiness, the following regression model is constructed:

\[
\text{Happiness}_i = \beta_0 + \beta_1 \text{Unequal} + \beta_2 \text{XXPL} + \beta_3 \text{Unequal} \ast \text{XXPL} + \beta_4 X_i + \mu_i
\]  

(1)

Happiness represents subjective well-being, unequal represents subjective income inequality, XXPL is the frequency of information media use, \(X_i\) is the control variable, \(\mu_i\) is the random interference term, Unequal * XXPL is the interaction term between subjective income inequality and the frequency of information media use. If the coefficient of interaction term is negative in the regression model, it means that the use of information media can alleviate negative effect of income inequality on happiness.

Since the subjective well-being of explanatory variable is an ordered variable with a value of 1 - 5, we use order logit model to estimate it. In order to test the robustness of model regression results, we report the results of OLS regression at the end of the table.

3.2. Data Sources

The data selected in this paper is Chinese General Social Survey (CGSS). It contains systematic and comprehensive multi-level data of society, region, family and individual. This paper uses the data of CGSS survey in 2015, which covers 478 villages and neighborhood committees of 28 provinces/cities/autonomous regions in China. A total of 10,968 valid questionnaires have been completed. After eliminating the samples with missing values, we get 8187 observations.

3.3. Variable Design

1) Dependent variable

Dependent variable of the article is residents’ subjective well-being. The ques-
tion describing residents’ subjective well-being in CGSS 2015 is: “in general, do you think your life is happy?” Respondents should choose from five answers: 1 - 5 represents very unhappy, relatively unhappy, undeniable, relatively happy, very happy, and the larger the number is, the stronger the happiness is.

2) Independent variable

The core independent variables include income inequality and the use of information media. The question that measures income inequality is “Considering your ability and working conditions, is your current income reasonable?” In order to facilitate the interpretation of the results after regression, the answer is reassigned, which was “very unreasonable = 1, unreasonable = 2, reasonable = 3, very reasonable = 4”. The larger the value is, the weaker the perception of unfair income distribution is. The frequency of information media use is the respondents’ use of information media, including newspapers, magazines, radio, television, Internet and mobile phone customized messages. In CGSS, the corresponding questions in the questionnaire is “For the past year, The situation of your use of the following media, including newspapers, magazines, radio, TV, Internet and customized messages on mobile phones”. The answers is “never = 1, rarely = 2, sometimes = 3, often = 4, very frequently = 5”. In order to reflect the comprehensive use of information media, this paper uses the practices of He Lixin et al., (2011) for reference, and generates the comprehensive index of information media use frequency by weighting these six media use frequencies [19]. In order to test the robustness of the model, the paper needs to use the perception index of opportunity inequality (He & Pan, 2011) to replace the sense of income inequality. In order to facilitate the interpretation of the regression results, the answer is also reassigned, the value was between 0 - 1. The larger the value is, the lower the degree of opportunity inequality is perceived by residents.

3) Control variables

From the literature of happiness research, there were many factors that affected happiness. Income, age, gender, marital status, health level, religious belief, political status, insurance participation, education level, household registration, and so on, all have different degrees of influence on happiness. Among them, gender, marital status, religious belief, political status are reset as virtual variables, gender is “male = 1, female = 0”; marital status is “married = 1, unmarried = 0”; religious belief is “Religious belief = 1, no religious belief = 0”; political appearance is “Chinese communist party members = 1, others = 0”; because according to the results of relevant literature, age generally presents a U-shaped relationship with happiness, so the square of age is added; According to the question “what do you think of your current physical health?”, 1 - 5 represents that the respondents are very unhealthy, relatively unhealthy, general, relatively healthy and very healthy; The insurance is the participation of four insurances: urban basic medical insurance/new rural cooperative medical insurance/public medical insurance, urban/rural basic endowment insurance, commercial medical insurance and commercial endowment insurance, the value is 1
- 4; Income in this paper is set as category variable, less than 10,000 is set as 1, more than 10,000 and less than 20,000 is set as 2, and so on; Education level according to the education background of the respondents, they are divided into several levels: without any education, private school or literacy class, primary school, junior high school, vocational high school, general high school, secondary school, technical school, university junior college (adult higher education), university junior college (formal higher education), university undergraduate (Adult Higher Education), university undergraduate (formal higher education), and postgraduate, the above values are assigned 1 - 13; The household registration is set as 1 in rural area, 2 in non-agricultural area and 3 in resident area.

3.4. Descriptive Statistics

In Table 1, the average well-being of the respondents is 3.884, it can be seen that the national happiness of our country is between “undeniable” and “relatively”. Generally speaking, it is relatively high, but there is still room for improvement. The mean value of income inequality is slightly close to reasonable between unreasonable and reasonable, but nearly one-third of people think that income distribution is very unreasonable and unreasonable, but there are many people in this group with high happiness, so it may be due to some factors that make the happiness of those who feel that income distribution is unfair not very low. The average use of information media shows that the frequency of people’s use of information media is in the lower middle level. It shows that the average frequency of people’s use of the six information media is relatively low. Maybe people are more inclined to use one kind of information medium, and the use

| Variable  | Observations | Average | Std  | Min | Max |
|-----------|--------------|---------|------|-----|-----|
| Happiness | 8187         | 3.884   | 0.808| 1   | 5   |
| Unequal   | 8187         | 2.662   | 0.565| 1   | 4   |
| XXPL      | 8187         | 0.310   | 0.173| 0   | 1   |
| Age       | 8187         | 50.363  | 16.106| 18 | 94  |
| Gender    | 8187         | 0.493   | 0.500| 0   | 1   |
| Religious | 8187         | 0.113   | 0.316| 0   | 1   |
| Edu       | 8187         | 4.911   | 3.078| 1   | 13  |
| Dangyuan  | 8187         | 0.109   | 0.311| 0   | 1   |
| Health    | 8187         | 3.643   | 1.060| 1   | 5   |
| Huji      | 8187         | 1.612   | 0.760| 1   | 3   |
| Inczs     | 8187         | 2.981   | 2.439| 1   | 10  |
| Married   | 8187         | 0.800   | 0.400| 0   | 1   |
| Shebao    | 8187         | 1.786   | 0.784| 0   | 4   |
| OIPI      | 8187         | 0.650   | 0.194| 0   | 1   |
level of other information mediums is lower, so that the overall level of information medium use is at a moderately low level. The average age of the respondents was 50.363, and the maximum and minimum values were 18 and 94, respectively, indicating that the respondents included a larger range of ages. According to the average values of gender, religious beliefs, and political status, it can be seen that the distribution of men and women is relatively even among the interviewees. Residents with religious beliefs account for a relatively small number, and there are fewer residents who are Chinese communist party members. In addition, the average education level of respondents is close to vocational high school. The average health status was 3.663, which was between “general” and “relatively healthy”. The average of household registration type indicates that there are more rural household registrations among respondents. The average absolute income is 2.981, indicating that the absolute income level is between 20,000 and 30,000. The average marital status indicates that the proportion of married respondents is relatively large. Insurance average is 1.786, indicating that the number of respondents participating in insurance is at a moderately low level. The average of the Opportunity Inequality Perception Index indicates that people believe that the degree of opportunity inequality is at a moderately low level, which is close to the medium level, indicating that some respondents think that the opportunity is unequal.

4. Results

4.1. Basic Model

Table 2 shows the overall regression results of the model. In order to test the impact of interaction on happiness, both income inequality and information media use are centralized variables. After using the order logit model, in order to facilitate comparison, OLS is also used for regression.

1) The negative effects of income inequality

According to the regression results of Table 2 model (1), there is a negative correlation between income inequality and subjective well-being (The smaller the value of income inequality is, the more unreasonable the income distribution is, the stronger the sense of inequality is). Even if other variables are controlled, the results are still significant. The regression coefficient of model (1) is 0.610. According to the conversion rules of logit regression coefficient and linear regression coefficient, it can be found that for every unit of decrease in income inequality, the subjective well-being of the respondents will increase by an average of 15.25%. According to the model (2) in Table 2, the coefficient of income inequality is still very significant after the interaction between income inequality and information media use is added. Therefore, it can be seen that the impact of income inequality on happiness is indeed quite significant. There are many reasons for the negative impact of income inequality on Residents’ subjective well-being. Most studies believe that it is due to the relative income. People do not like that their income is lower than other people’s, and they are more disgusted.
Table 2. Regression results of income inequality, information media use and happiness.

| Happiness | (1) Order Logit | (2) Order Logit | (3) OLS |
|-----------|----------------|----------------|--------|
| Unequal   | 0.610***        | 0.610***       | 0.241*** |
|           | (0.0448)        | (0.0448)       | (0.0174) | |
| XXPL      | 0.919***        | 0.898***       | 0.342*** |
|           | (0.175)         | (0.175)        | (0.0641) | |
| Jiaohu    | −0.544**        | −0.269***      |        |
|           | (0.256)         | (0.0998)       |        | |
| Age       | −0.0576***      | −0.0582***     | −0.0217*** |
|           | (0.00909)       | (0.00910)      | (0.00330) | |
| Age2      | 0.000725***     | 0.000728***    | 0.000270*** |
|           | (8.69e−05)      | (8.69e−05)     | (3.15e−05) | |
| Gender    | −0.252***       | −0.252***      | −0.0855*** |
|           | (0.0460)        | (0.0460)       | (0.0172) | |
| Religious | 0.296***        | 0.294***       | 0.0978*** |
|           | (0.0737)        | (0.0736)       | (0.0269) | |
| Edu       | 0.0237**        | 0.0232**       | 0.00962** |
|           | (0.0105)        | (0.0105)       | (0.00383) | |
| Dangyuan  | 0.220***        | 0.222***       | 0.0759*** |
|           | (0.0722)        | (0.0722)       | (0.0261) | |
| Health    | 0.482***        | 0.481***       | 0.184*** |
|           | (0.0266)        | (0.0266)       | (0.00993) | |
| Huji      | 0.000104        | −0.000172      | 0.00103 |
|           | (0.0342)        | (0.0342)       | (0.0125) | |
| Inczs     | 0.00216         | 0.00406        | 0.00344 |
|           | (0.0110)        | (0.0110)       | (0.00389) | |
| Married   | 0.635***        | 0.640***       | 0.253*** |
|           | (0.0640)        | (0.0641)       | (0.0250) | |
| Shebao    | 0.121***        | 0.121***       | 0.0439*** |
|           | (0.0320)        | (0.0320)       | (0.0118) | |
| Constant cut1 | −3.029*** | −3.052*** |
|           | (0.271)         | (0.271) | |
| Constant cut2 | −1.147*** | −1.167*** |
|           | (0.256)         | (0.256) | |
| Constant cut3 | 0.235        | 0.218 |
|           | (0.255)         | (0.256) | |
| Constant cut4 | 3.365*** | 3.348*** |
|           | (0.260)         | (0.260) | |
with the situation that their relative income is lower due to the unfair income distribution. Moreover, people are born to yearn for fairness and hate unfairness, that is to say, “Inequality rather than want is the cause of trouble”. The relative deprivation caused by unfair income distribution is the biggest reason for the decline of people’s happiness. Therefore, the sense of income inequality has a significant negative impact on Residents’ subjective well-being.

2) The positive impact of the use of information media.

The results of Table 2 model (1) show that there is a significant positive correlation between information media use and subjective well-being at the statistical level of 1%. For every 0.1 increase in the use of information media, the subjective well-being of residents will increase by 2.3%. After income inequality and the interaction are added, the coefficient symbol of use of information media is unchanged and still very significant. Therefore, it can be seen that the use of information media is very important to residents’ subjective well-being. On the one hand, the use of information media provides many conveniences for our life. People can use information media for leisure and entertainment activities. People can use information media for leisure and entertainment activities and learn more information. In addition, Internet, telephone and other media make us better communicate with family and friends. It improves the level of social interaction and self-efficacy and reduces the degree of depression. On the other hand, People can use information media to learn, work and share their experiences with others. In addition, through the information media, people can enhance their political participation, contact with the society more closely and learn more knowledge to enrich themselves and improve their sense of self satisfaction. Besides, through information media to enhance the objective understanding and grasp of social development, the public can objectively evaluate various situations of the country and reduce some dissatisfaction caused by subjective factors. These meet different needs of people and improve their utility, So the use of information media has a significant positive impact on happiness.

3) Buffer effect of information media use.

Although one-third of people think that income distribution is unreasonable, However, people’s subjective well-being is still not very low. Is it because some factors buffer the negative impact of income inequality? The results of model (2)
and model (3) in Table 2 confirm that the use of information media has a buffering effect on the sense of income inequality, and the increase of the use frequency of information media can reduce the negative impact of income inequality on happiness. In model (2), the interaction between the use of information media and the sense of income inequality is significantly positive, indicating that the use of information media can reduce the negative impact of income inequality on happiness. That is to say, People who use information media more frequently are more likely to improve their happiness. The regression results of model (3) OLS are highly consistent with the regression results of order logit, indicating that the buffering effect of information media use is significant. The reason why information media use can buffer the negative impact of income inequality on well-being may be that people get more information through information media, and compared themselves with other people's situations to form a higher life expectation. Because of the existence of the "tunnel effect", they feel that they can also live a better life in the future, thus improving people's subjective well-being. Moreover, Although people through the information media will see that many people live better than themselves, they can also learn about that someone’s situation is not as good as themselves, thus, it produces sympathy, feels that its situation is not so intolerable, and then alleviates the negative impact. And people can vent their dissatisfaction through social entertainment and other activities through information media, alleviate the dissatisfaction in their hearts caused by unfair income, and then alleviate the feeling of unhappiness.

4) The influence of control variables on happiness

According to the regression results of control variables, we also found some research conclusions consistent with the previous literature. From the perspective of age, age and well-being show a U-shaped relationship; In terms of gender, women are happier than men on average, which is consistent with most literature research results. In terms of religious belief, people with religious belief are happier than people without religious belief. From the perspective of education level, improving education level helps to improve residents' subjective well-being, which may be because higher education often means better income, opportunity, social status and social resources, which is conducive to people's satisfaction and happiness. From the perspective of political status, Chinese Communist Party member are happier than not. From the perspective of health level, The improvement of health level can significantly improve residents' happiness. From the perspective of household registration type, residents' household registration is happier than rural household registration and non-agricultural household registration. Here, although the result of absolute income is not significant, the sign is positive, indicating that absolute income has a positive impact on happiness. From the perspective of marital status, married status can significantly improve people's subjective well-being, while unmarried status such as divorce has a negative impact on happiness. From the perspective of insurance, increasing the number of insurance can significantly improve happiness, which may be due
to people feel that life is more secure after they take part in the insurance, and they are free from many worries. It makes them happier.

### 4.2. Urban and Rural Stratification Model

**Table 3** shows the order logit regression results that distinguish urban and rural areas, and the OLS regression results are added after the urban and rural regression results respectively. It can be found that for each unit decrease in income inequality, the subjective well-being of urban respondents will increase by an average of 13.88%. For every 0.1 increase in the use of information media, the subjective well-being of urban residents will increase by 2%. After the model adds the interaction between the use of information media and the sense of income inequality, their regression coefficients are still significant. The sign of the regression coefficient for the interaction term is positive, but not significant. In addition, it also can be found that for each unit decrease in income inequality, the subjective well-being of urban respondents will increase by an average of 15.58%. For every 0.1 increase in the use of information media, the subjective

| Table 3. Regression results of urban and rural stratification. |
|---------------------------------------------------------------|
| Happiness          | (4) Urban Order Logit | (5) Urban Order Logit | (6) Urban OLS | (7) Rural Order Logit | (8) Rural Order Logit | (9) Rural OLS |
| Unequal            | 0.623*** (0.0562)     | 0.648*** (0.0595)     | 0.251*** (0.0228) | 0.555*** (0.0760) | 0.456*** (0.0862) | 0.186*** (0.0334) |
| XXPL               | 0.804*** (0.215)      | 0.770*** (0.215)      | 0.267*** (0.0767) | 1.568*** (0.326) | 1.619*** (0.331) | 0.675*** (0.125) |
| Jiaohu             | -0.483 (0.311)        | -0.246*** (0.120)     | -1.132* (0.589)  | -0.514** (0.225) |
| Constant cut1      | -3.290*** (0.358)     | -3.303*** (0.358)     | -2.448*** (0.436) | -2.453*** (0.435) |
| Constant cut2      | -1.341*** (0.333)     | -1.351*** (0.334)     | -0.624 (0.420)   | -0.622 (0.419)   |
| Constant cut3      | 0.159 (0.332)         | 0.152 (0.332)         | 0.629 (0.419)    | 0.633 (0.418)    |
| Constant cut4      | 3.353*** (0.338)      | 3.346*** (0.338)      | 3.694*** (0.426) | 3.700*** (0.425) |
| Constant           | 3.301*** (0.118)      | 3.025*** (0.156)      |
| Observations       | 4809                 | 4809                 | 4809            | 3378            | 3378            | 3378            |
| R-squared          | 0.142                | 0.139                |
| ll                 | -4878.0472           | -4876.6487           | -3628.0877      | -3625.3865      |
| R^2 p              | 0.0667               | 0.0670               | 0.0574          | 0.0581          |

Robust standard errors in parentheses, ***p < 0.01, **p < 0.05, *p < 0.1.
The well-being of urban residents will increase by 0.6%. After adding the interaction between the use of information media and the sense of income inequality, their regression coefficients are also still significant. The sign of the interaction term is positive and significantly, indicating that for rural residents, the use of information media can alleviate the negative impact of income inequality on their subjective well-being. According to the results of regression in urban and rural areas, it can be found that the regression results are basically consistent with the basic model (2), income inequality has a significant negative impact on the well-being of urban and rural residents, and has a greater negative impact on urban residents. The use of information media also has a positive impact on happiness, and has a more significant impact on the well-being of rural residents. The interaction between the use of information media and the sense of income inequality has no significant effect on the urban residents. The reason may be that the use of urban information media started earlier and people have been used to it for a long time. For them, although the use of information media still has a significant impact on their well-being, the alleviation effect on the sense of income inequality is not so obvious. However, its symbol has not changed, indicating that the buffer effect of information media use still exists. In rural areas, the popularization of information media is relatively late and the impact on people is still grated, so the regression results of interaction terms are still significant. So the buffer effect of information media still exists. There is almost no difference between the regression results of control variables and the basic model, and the regression results of control variables are omitted.

### 4.3. Robustness Check

The above series of regression may have endogenous problems. However, there are many factors that affect subjective well-being. It is difficult to find instrumental variables that are directly related to income inequality and not related to happiness. This paper tests the robustness of the model by replacing the independent variables. Although the sense of income inequality is a subjective judgment, people are affected by the same external factors. Using another subjective indicator of inequality instead of income inequality to test whether inequality does have a negative impact on happiness, and whether the use of information media can still buffer the negative effect of unfairness on happiness. Therefore, this paper uses the perception index of inequality of opportunity to replace the sense of income inequality. The perception index of opportunity inequality and the use of information media are also central variables. The regression results are shown in Table 4. Inequality of opportunity does have a negative impact on well-being (The greater the perception index of inequality of opportunity, the less the perceived inequality). The use of information media still has a significant positive impact on happiness. The results of the interaction between the use of information media and the perception index of inequality of opportunity also show that the use of information media does have a buffer effect on the negative
impact of opportunity inequality, so the model is relatively stable. The regression results of control variables are also omitted.

5. Conclusion and Prospect

This paper analyzes the relationship between income inequality, information media use and well-being by using the 2015 Chinese General Social Survey (CGSS 2015) and using order logit model and OLS, and the conclusion is as follows: first, income inequality has a significant negative impact on the well-being of residents, whether it is on the whole or in urban or rural areas. However, it has a greater impact on the happiness of urban residents. Second, the use of information media has a significant positive impact on residents’ subjective well-being. Increasing the use frequency of information media can significantly improve residents’ well-being. This positive impact exists in the overall residents, urban and rural residents, but the impact on urban and rural residents is different. Compared with urban residents, the positive impact of information media use on rural residents is more obvious. Third, the results of the interac-

### Table 4. Robustness regression results.

|                | (10) Order Logit | (11) Order Logit | (12) OLS |
|----------------|------------------|------------------|----------|
| **Happiness** |                  |                  |          |
| OIP1           | 1.465***         | 1.482***         | 0.512*** |
|                | (0.122)          | (0.123)          | (0.0472) |
| XXPL           | 0.961***         | 0.946***         | 0.367*** |
|                | (0.174)          | (0.174)          | (0.0647) |
| Jiaohu1        | −1.335*          | −0.522*          |          |
|                | (0.702)          | (0.269)          |          |
| Constant cut1  | −2.978***        | −2.983***        |          |
|                | (0.271)          | (0.271)          |          |
| Constant cut2  | −1.110***        | −1.114***        |          |
|                | (0.256)          | (0.256)          |          |
| Constant cut3  | 0.259            | 0.256            |          |
|                | (0.255)          | (0.255)          |          |
| Constant cut4  | 3.376***         | 3.374***         |          |
|                | (0.260)          | (0.260)          |          |
| Constant       |                  |                  | 3.223*** |
|                |                  |                  | (0.0935) |
| Observations   | 8187             | 8187             | 8187     |
| R-squared      |                  |                  | 0.125    |
| ll             | −8561.9242       | −8559.8492       |          |
| $R^2_p$        | 0.0576           | 0.0578           |          |

Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. 
tion between information media use and income inequality show that the use of information media can buffer the negative impact of income inequality on happiness. It explains why residents feel that income distribution is unfair, but happiness is not significantly reduced.

Unfair income distribution is still a major problem in China’s construction of a harmonious society. In recent years, China’s economy is growing rapidly, but the contradiction in the field of income distribution is increasingly prominent. According to the literature review of this article, it can be seen that not only the objective income inequality existing in previous studies has a negative impact on residents’ subjective happiness. The empirical research in this article shows that people’s subjective income inequality also has a great negative impact on citizens’ subjective happiness. That is, people’s subjective perception of the unfairness of income distribution also has a significant negative impact on happiness of national. Therefore, to fundamentally improve the happiness of national, we must not only change the income distribution policies from reality, reduce the degree of objective income inequality, but also reduce the national subjective income inequality in order to truly improve national happiness. In addition, according to the empirical results, we put forward several suggestions: first, we should improve the income distribution system, ensure that labor, capital, technology and management and other elements get fair and reasonable returns; second, promote the reasonable growth of the income of the rural residents and the urban low-income class, narrow the income gap as much as possible; third, promote the wide use of information media, accelerate the construction of information media and the popularization of information services. Although the Internet and other information media are widely used now, some remote villages have not been popularized. Therefore, it is necessary to increase the scope of the use of information media, so that more people can use information media to meet their personal needs, and more comprehensively improve the subjective well-being of the public.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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