Authoritarianism and Human Population Living Standards:   
A Positive or Negative Relationship?

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The global political economy has seen much changes throughout the years – with various words being used to describe which countries are what and which countries are not. Democracy and freedom are such a popular pair of words that is used to describe countries that are conventionally seen as having such qualities, such as the United Kingdom, Canada, and the United States of America. A country exhibiting these two characteristics is perceived to have: high economic development/growth, high political participation, and a content and an engaged civil society. Conversely, authoritarianism and oppression are an infamous pair of words that is used to describe countries that are also conventionally seen as having as qualities, such as Russia, China, and Iran. A country exhibiting these two characteristics is perceived to have: low economic development/growth, low political participation, and a dissatisfied and rebellious civil society. In mainstream discourse, these two pairs of words have been used to describe what kind of regime type a country has – with the former and latter being seen as “positive” and “negative” sociopolitical phenomena, respectively. However, inside academia, through skepticism and research, a country characterized as a “democratic” or “authoritarian” regime is more than just “freedom” and “oppression”, respectively. It could also mean that country has superior living conditions, high economic prosperity, and/or no civil unrest just due to its regime type. The type of regime a country has, then, involves many connected social, economic, and political complexities.

**Objective and Research Question**

In this paper, I will investigate whether a country’s regime type lowers its human population living standards. This investigation can be outlined by the following procedure: I will first formulate and test two hypotheses describing the relationship between: regime type and the Human Development Index (HDI); and regime type and the Gender Inequality Index (GII). Then, using crosstabs and chi-squared tests based on a given dataset on SPSS, I will determine to what extent are my hypotheses supported based on said dataset. These two statistical tools will be used because they allow me to see if my hypotheses based on said dataset are supportable and should be accepted. Next, I will present and elucidate some existing academic literature on the topic, to contextualize, guide, and criticize the contents of my findings based on the related SPSS data. Finally, I will end with a recapitulation and deliberation of my SPSS data research and its accompanying academic criticisms/support. This process is entirely dedicated to analyzing and answering the following question: Does the type of political regime that a country has in the twenty-first century lower human population living standards?

**Elucidation**

It should be noted immediately, however, that I will not be attributing and generalizing the impact that the type of political regime has on human population living standards to all countries that have existed since any particular time period (e.g. from the 1700s to the present). I will, instead, be attributing and generalizing this political phenomenon to all countries since the near-beginning of the twenty-first century (from 2000 to the present), as the SPSS “World” dataset, that I will be conducting statistical analyses later in this paper, is based on the years 2008 and 2010. Otherwise, it would be a falsehood on my part to say that every country that has ever existed with a certain regime impacts living standards similarly, as my findings would only be based on recently released statistical data. Such a task would require a longitudinal, time-series study (which this paper does not; only a short-term one instead).

**Conceptualization and Operationalization**

The research question, it should be noted, posed earlier contains terms that are generally not clear to the average reader. As such, I will be providing conceptual definitions for these terms, to avoid any ambiguity or confusion.

The concept of a political regime is defined as the extent to which a country exhibits the characteristics of having a particular government structure, having one or more person in charge of that structure, and that one person(s) having jurisdiction over a particular region. In addition, the concept of human population living standards is defined as the extent to which a country exhibits the characteristics of a high HDI and low GII. These two conceptual definitions will further used in conjunction with the hypotheses and statistical analyses presented and conducted later on, respectively.

Along with the previously stated conceptual definitions, they must be operationalized, as well. Operationalizing for the upcoming hypotheses, a country’s political regime can be democratic, partly democratic, hybrid, or authoritarian, while a country’s population living standards can be measured in two ways: its HDI and GII. HDI, ranging from 0 to 1, includes life expectancy, education level, and GDP per capita (or, sometimes, GNI per capita). The higher a country’s HDI, the higher its human population’s life expectancy, education level, and income per capita has.[[1]](#footnote-1) GII, also ranging from 0 to 1, however, includes health (measured by maternal mortality ratio and adolescent fertility rate, empowerment (measured by share of parliamentary seats and education level held by each sex), and labor (measured by women’s labor participation). At 0, men and women fare equally; however, at 1, men and women fare as poor as possible in the three aforesaid dimensions. [[2]](#footnote-2)

**Hypothesis 1 (H1)**

Now that I have conceptualized and operationalized my terms, I will now state and explain my first hypothesis, basing my information on the “World” dataset on SPSS. My first hypothesis can be stated as the following:

H1: In a comparison of countries, those that are authoritarian are more likely have a lower Human Development Index (HDI) value than those that are democratic.

For the purposes of this paper, a “lower HDI value” is defined as a country having an HDI value lower than the total mean HDI value. Furthermore, only countries that are labeled as “authoritarian” and “fully democratic” will be considered (ignore “part-democratic” and “hybrid”, as my hypothesis is meant to include only fully democratic countries).

SPSS – H1 Crosstabs Analysis

After performing the required SPSS operations and receiving the tabular data (which are labeled as “Figure #” at the end of this paper), it is found that, according to Figure 1.2, the total HDI mean is 0.63253. Thus, authoritarian countries with an HDI value lower than 0.63253 are considered to have lower HDI values than those that are democratic, adding support for my hypothesis. After counting how many authoritarian and democratic countries each have an HDI value lower than 0.63253, it is found that 34 authoritarian countries meet this criterion, while no democratic countries meet said criterion. Instead, all the democratic countries tend to have much higher HDI values. Authoritarian countries, however, tend to have much lower HDI values. Since authoritarian countries tend to have lower HDI values than democratic countries (as per the SPSS data), the hypothesis seems to be supported.

It should be noted, however, that the cross-tabular data does not show the HDI values for all 167 countries; it only shows only 158 of them. An exclusion of 9 countries could have affected the total HDI mean and the number of countries being labeled as “fully democratic” or “authoritarian”, thereby affecting the numerical results. Furthermore, only the countries labeled as “fully democratic” and “authoritarian” were considered; the “part-democratic” and “hybrid” regimes were not considered. Excluding these types of regimes may not be capturing the entire contents of the hypothesis, since these regimes include some democracy and/or authoritarianism, as well, which may have varying levels of living standards. Thus, a more-inclusive study is required for measuring and describing these remaining two types of regimes.

SPSS – H1 Chi-Squared Analysis

The first hypothesis seems to be supported by the SPSS data; however, a chi-squared test may seem to undermine that support for the hypothesis. The alternative hypothesis is: authoritarian countries are more likely to have a lower HDI value than democratic countries. The null hypothesis, however, is: authoritarian countries are not more likely to have a lower HDI value than democratic countries. If the null hypothesis is correct that, in the population from which the sample was drawn, there is no relationship between political regime type and HDI value, then random sampling error will produce the observed data 29.3% of the time (according to Figure 1.4). In other words, the tabular data in Figure 1.3 and its observed differences between regime type and HDI value will yield a test statistic of approximately 432.27 about 29.3% of the time. Since the p-value is 0.293, and is certainly more than the significance level of 0.05 (derived from the 95% confidence interval standard), it can be asserted that the null hypothesis should be accepted. The alternative hypothesis, then, should be rejected and is not supported by the chi-squared test. Thus, there is no relationship between regime type and HDI value, discrediting the first hypothesis.

**Hypothesis 2 (H2)**

Now that I have tested my first hypothesis, I will now state and explain my second hypothesis, still basing my information on the “World” dataset on SPSS. My second hypothesis can be stated as the following:

H2: In a comparison of countries, those that are authoritarian are more likely have a higher Gender Inequality Index (GII) value than those that are democratic.

For the purposes of this paper, a “higher GII value” is defined as a country having an GII value higher than the total mean GII value. Furthermore, only countries that are labeled as “authoritarian” and “fully democratic” will be considered (ignore “part-democratic” and “hybrid”, as my hypothesis is meant to include only fully democratic countries).

SPSS – H2 Crosstabs Analysis

After performing the required SPSS operations and receiving the tabular data (which are labeled as “Figure #” at the end of this paper), it is found that, according to Figure 2.2, the total GII mean is 0.54663. Thus, authoritarian countries with an GII value higher than 0.54663 are considered to have higher GII values than those that are democratic, adding support for my hypothesis. After counting how many authoritarian and democratic countries each have an GII value higher than 0.54663, it is found that 28 authoritarian countries meet this criterion, while no democratic countries meet said criterion. Instead, all the democratic countries tend to have much lower GII values. Authoritarian countries, however, tend to have much higher GII values. Since authoritarian countries tend to have higher GII values than democratic countries (as per the SPSS data), the hypothesis seems to be supported.

It should be noted, however, that the cross-tabular data does not show the GII values for all 167 countries; it only shows only 135 of them. An exclusion of 22 countries could have affected the total GII mean and the number of countries being labeled as “fully democratic” or “authoritarian”, thereby affecting the numerical results. Furthermore, only the countries labeled as “fully democratic” and “authoritarian” were considered; the “part-democratic” and “hybrid” regimes were ignored. Excluding these types of regimes may not be capturing the entire contents of the hypothesis, since these regimes include some democracy and/or authoritarianism, as well, which may have varying levels of living standards. Thus, a more-inclusive study is required for measuring and describing these remaining two types of regimes.

SPSS – H2 Chi-Squared Analysis

The first hypothesis seems to be supported by the SPSS data; however, a chi-squared test may seem to undermine that support for the hypothesis. The alternative hypothesis is: authoritarian countries are more likely to have a higher GII value than democratic countries. The null hypothesis, however, is: authoritarian countries are not more likely to have a higher GII value than democratic countries. If the null hypothesis is correct that, in the population from which the sample was drawn, there is no relationship between political regime type and GII value, then random sampling error will produce the observed data 41.8% of the time (according to Figure 2.4). In other words, the tabular data in Figure 2.3 and its observed differences between regime type and GII value will yield a test statistic of approximately 386.06 about 41.8% of the time. Since the p-value is 0.418, and is certainly more than the significance level of 0.05 (derived from the 95% confidence interval standard), it can be asserted that the null hypothesis should be accepted. The alternative hypothesis, then, should be rejected and is not supported by the chi-squared test. Thus, there is no relationship between regime type and GII value, discrediting the second hypothesis.

**Retrospection**

The purpose of this paper is to analyze and answer the question of whether the type of political regime in a country is related to lower human population standards. While the first and second hypotheses may seem to be supported by the SPSS data, and thus, initially answering the research question affirmatively, they both ended up being discredited, as their respective chi-squared tests suggest rejecting them rather than accepting them. This leads to answering the research question negatively instead – that the type of political regime that a country has in the twenty-first century is not related to lower human population living standards. Such a conclusion, interestingly enough, is also substantially supported by some scholars who study the relationship between authoritarianism and democracy.

**Literature Review**

Remember that HDI consists of three main components: life expectancy, education level, and GDP per capita (or, sometimes, GNI per capita). As Figures 1.3 shows (and considering the numerical cutoffs set earlier), authoritarian countries tend to have lower HDI values; however, some tend to have higher HDI values, as well. Also, remember that GII consists of three main components: health, empowerment, and labor. As Figure 2.3 shows (and considering the numerical cutoffs set earlier), authoritarian countries tend to have higher GII values; however, some tend to have lower GII values, as well. Considering the multiplicity of components of both HDI and GII, and that authoritarian countries don’t allow follow the same trend in HDI and GII values – that is all having only small HDI and high GII values, it can be said that the political regime type of a country does not always necessarily directly correlate with its associated population living standards. One should, therefore, consider other factors affecting a country’s population living standards, as its political regime type is not only the sole factor. Sometimes, even the opposite can be true (e.g. an authoritarian country having a high HDI and low GII value), and even the definitions of an “authoritarian” or “democratic” country and their measurements of human population living standards must be adjusted according to where that country is located and how that country has changed over the years.

First Factor

The popular consensus that higher levels of economic development/growth leads to lower risks of civil unrest (Korotayev, Bilyuga, and Shishkina 2017, 407) is not completely true. There have been many countries demonstrating the exact opposite (e.g. Thailand, Ukraine, Venezuela, Cuba, etc.). Because of this, it has been proposed that the relationship between political regime type and population living standards is not just a direct positive or negative correlation, but rather it has an “inverse U-shaped” relationship (Korotayev, Bilyuga, and Shishkina 2017, 409). In other – more non-technical - words, as GDP per capita increases, for example, sociopolitical instability decreases. However, at a certain point, any more increases in GDP per capita increases sociopolitical instability. This is primarily because any growth in GDP per capita leads to growth in population education. The more educated a human population becomes, the more political awareness and critical thinking skills that same population acquires – that includes the population becoming more critical of its government’s actions and policies imposed upon them. Leaders of authoritarian countries that recognize this social phenomenon usually approach and resolve it in two ways: limit education spending insofar as their regime stability is maintained (López-Cariboni and Cao 2018, 31) or accept/resist the social reforms demanded by the educated people, ultimately resulting in democratization of the country (López-Cariboni and Cao 2018, 4). Such a sociopolitical phenomenon could explain why some developing countries may have, compared to other developing countries, high HDI and low GII values, such as, such as Argentina with HDI and GII values of 0.775 and 0.534, and Brazil with HDI and GII values of 0.699 and 0.631, respectively. Their previous military developments, while brutally politically repressive to their populations, are known to have been successful in economically developing their respective countries. More specifically, they are credited with increasing GPA per capita, decreasing unemployment rates, lowering inflation rates, and, in particular, education levels for their countries. As their countries and population became more developed, however, they increased their chances of being overthrown, which did eventually happen. This left their countries being democratized, but high HDI and GII values, as well. A regime’s civil society and democratization, then, can impact the overall development of a country.

Second Factor

The relationship between political regime type and economic growth/development (encompassing GPD per capita and labor productivity, however, has never been fixed; it has always been flexible – ever changing according to other factors that may rise or may have arisen to assist or harm it. Cases that illustrate this are: The United Arab Emirates (UAE) and Qatar usually have high HDI values, but also have a huge supply of crude oil and natural gases (Sáez and Gallagher 2009, 91). North and South Korea have historically had similar levels of authoritarianism, but both countries have ended up in opposite development outcomes, (Sáez and Gallagher 2009, 92) (dataset does not any HDI or GII values for them). Sierra Leone and Ghana have ended up being democratized and have been trying to improve economically; however, Nigeria and Kenya have not followed a similar path (Sáez and Gallagher 2009, 90), despite both countries being in the same continent as the other two previously mentioned. All of these countries have had different paths toward authoritarianism and democracy, as well as having varying degrees of economic growth/development and political freedom. However, this is not because one country has a certain regime type and the other does not, but rather because of other underlying social, political, and/or economic phenomena that underlie their circumstances. Such phenomena, then, contradicts the conventional assumptions that authoritarian regimes lead to poor economic growth/development, low social progress, and total political suppression, and that democratic regimes lead to superior economic growth/development, high social progress, and complete political freedom. If these assumptions were true, then every authoritarian country should have low HDI and high GII values, and every democratic country should have high HDI and low GII values, respectively. However, such is not the case, and further consideration of each country’s background is required when making comparative analyses and conclusions.

Third Factor

The term “political regime type” – more specifically, its value labels that are of focus here being “authoritarian” and “democratic”, have always been of much debate in terms of their conceptual definitions, how they are measured, and even modern classification. An authoritarian regime is usually characterized as a regime with the chief and legislative executives never being elected, having only one party to elect, and incumbents are often elected for more than 2 terms (Brown and Hunter 1999, 784). However, others may add more qualities to an authoritarian regime, defining it as a regime with limited political pluralism, a basis for legitimacy based on emotion (rather than reason) (e.g. blaming problems on a particular group of people), and minimal social mobilization (Shorten 2012, 256). While some persons like to characterize a regime as authoritarian or democratic, some like to characterize as a totalitarian regime instead – distinguishing it from other kinds of regimes (Ezrow 2018, 83). Adding this type of regime to regime classification complicates what kind of country has which kind of regime and would require further rigorous research regarding the distinction between an authoritarian and totalitarian regime. After all, some regimes that are labeled as “authoritarian” in the “World” dataset could, indeed, be a totalitarian one. Such a characterization would also require relabeling and recoding the HDI and GII values to avoid undermining the purpose of this paper. In contrast, a democratic regime is usually characterized as a regime with political inclusiveness and public contestation (Brown and Hunter 1999, 784) – in other words, free and inclusive political participation and free elections of and debates between public officials. However, some are skeptical of democratic regimes. These kinds of regimes are easy to masquerade, as they can, through media, show and conduct political elections, but still have leaders covertly elected by an oligarchy of public officials. Furthermore, some consider democratic regimes as a suboptimal regime, as they impede the speed and timing of economic development due to their “inherent argumentative nature” (Sáez and Gallaghera 2009, 87). If this is true, then this could explain as to why some democratic regimes today have low HDI and high GII values (e.g. Ghana with 0.467 and 0.729, respectively. Considering how others define, introduce, and classify political regime types in modern times: it is important to consider that, even though there are other factors at play in a country’s development and living standards, there is still the debate of what is an authoritarian or democratic regime (or even a totalitarian one), and how to attribute events and results to each one. Such ideas, no matter how radical they may be, could further undermine our pre-conceived notions of authoritarian and democratic regimes as “bad” and “good” things, and would involve a complete rehashing of what would mean by them, and what they truly entail for their respective human populations living standards.

**Summary and Reflection**

There will always be much debate between authoritarian and democratic regimes. While authoritarian and democratic regimes are generally considered “bad” and “good” things because they make their populations worse off, respectively, there is more than just observe them from the surface. This finding is clearly demonstrated by testing the first and second hypotheses formulated previously. As Figures 1.3 and 2.3 show (and parameterized by the total mean HDI and GII values), authoritarian countries do, indeed, tend to have lower HDI and higher GII values. However, by performing a chi-squared test for each hypothesis, it is found that they should be discredited and rejected since there is a very high probability that the observed data distribution for each one is due to randomness. Perhaps the results would be different, however, if more data was collected and gathered for every other country not included in the dataset (e.g. Cuba, North Korea, Taiwan), as a larger sample size would decrease variance in the data. Such inclusion would also lower the likelihood of committing type II error. But, even if such statistical matters were dealt with, previous literature about authoritarianism and living standards/development must still be reviewed. Given the literature review earlier, it should be said that the relationship between political regime type and living standards must be reconsidered and re-analyzed from all possible empirical angles and technical dimensions – all other possible factors, which may include but are not limited to: technological advancement, human capital, natural resources, industrialization levels, trade partners and trade barriers, colonial heritage, geographical advantage, time period political ideology, etc. (Sáez and Gallaghera 2009, 92). These may serve as other independent variables alongside political regime type, and altogether, may ultimately affect HDI and GII values. Another study of this, therefore, would require different statistical tests – those being multivariate linear regression and an adjusted R-squared test - and more relevant literature review, and, just as important, starting with a tabula rasa and progressively learn about the subject at hand.

**Figures for H1:**

Figure 1.1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Case Processing Summary** | | | | | | |
|  | Cases | | | | | |
| Valid | | Missing | | Total | |
| N | Percent | N | Percent | N | Percent |
| Human Development Index (HDI) value, 2010 (UN) \* Regime type (Economist 2014) | 158 | 94.6% | 9 | 5.4% | 167 | 100.0% |

Figure 1.2

|  |  |  |  |
| --- | --- | --- | --- |
| **Report** | | | |
| Human Development Index (HDI) value, 2010 (UN) | | | |
| Regime type (Economist 2014) | Mean | N | Std. Deviation |
| Full Democ | .86088 | 24 | .057635 |
| Part Democ | .69731 | 51 | .129536 |
| Hybrid | .53051 | 35 | .153537 |
| Authoritarian | .52392 | 48 | .174521 |
| Total | .63253 | 158 | .187921 |

Figure 1.3

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Count | | | | | | |
|  | | Regime type (Economist 2014) | | | | Total |
| Full Democ | Part Democ | Hybrid | Authoritarian |
| Human Development Index (HDI) value, 2010 (UN) | .140 | 0 | 0 | 0 | 1 | 1 |
| .239 | 0 | 0 | 0 | 1 | 1 |
| .261 | 0 | 0 | 1 | 0 | 1 |
| .282 | 0 | 0 | 0 | 1 | 1 |
| .284 | 0 | 0 | 1 | 0 | 1 |
| .289 | 0 | 0 | 0 | 1 | 1 |
| .295 | 0 | 0 | 0 | 1 | 1 |
| .300 | 0 | 0 | 1 | 0 | 1 |
| .305 | 0 | 0 | 1 | 0 | 1 |
| .309 | 0 | 0 | 1 | 0 | 1 |
| .315 | 0 | 0 | 0 | 1 | 1 |
| .317 | 0 | 0 | 1 | 0 | 1 |
| .328 | 0 | 0 | 0 | 1 | 1 |
| .340 | 0 | 0 | 0 | 1 | 1 |
| .349 | 0 | 0 | 0 | 1 | 1 |
| .379 | 0 | 0 | 0 | 1 | 1 |
| .385 | 0 | 0 | 1 | 1 | 2 |
| .390 | 0 | 0 | 0 | 1 | 1 |
| .395 | 0 | 1 | 0 | 0 | 1 |
| .397 | 0 | 0 | 0 | 1 | 1 |
| .398 | 0 | 0 | 1 | 0 | 1 |
| .402 | 0 | 0 | 0 | 1 | 1 |
| .403 | 0 | 0 | 0 | 1 | 1 |
| .404 | 0 | 0 | 0 | 1 | 1 |
| .411 | 0 | 1 | 0 | 0 | 1 |
| .422 | 0 | 0 | 1 | 0 | 1 |
| .423 | 0 | 0 | 0 | 1 | 1 |
| .427 | 0 | 1 | 0 | 0 | 1 |
| .428 | 0 | 0 | 1 | 2 | 3 |
| .431 | 0 | 1 | 0 | 0 | 1 |
| .433 | 0 | 0 | 1 | 0 | 1 |
| .435 | 0 | 0 | 2 | 0 | 2 |
| .439 | 0 | 0 | 0 | 1 | 1 |
| .451 | 0 | 0 | 0 | 1 | 1 |
| .460 | 0 | 0 | 0 | 1 | 1 |
| .467 | 0 | 1 | 0 | 0 | 1 |
| .469 | 0 | 0 | 1 | 0 | 1 |
| .470 | 0 | 0 | 1 | 0 | 1 |
| .489 | 0 | 0 | 0 | 1 | 1 |
| .490 | 0 | 0 | 1 | 0 | 1 |
| .494 | 0 | 0 | 1 | 0 | 1 |
| .497 | 0 | 0 | 0 | 1 | 1 |
| .498 | 0 | 0 | 0 | 1 | 1 |
| .502 | 0 | 1 | 0 | 0 | 1 |
| .519 | 0 | 1 | 0 | 0 | 1 |
| .534 | 0 | 1 | 0 | 0 | 1 |
| .538 | 0 | 0 | 0 | 1 | 1 |
| .560 | 0 | 0 | 1 | 0 | 1 |
| .565 | 0 | 0 | 1 | 0 | 1 |
| .567 | 0 | 0 | 0 | 1 | 1 |
| .572 | 0 | 0 | 0 | 1 | 1 |
| .580 | 0 | 0 | 0 | 1 | 1 |
| .589 | 0 | 0 | 0 | 1 | 1 |
| .597 | 0 | 1 | 0 | 0 | 1 |
| .598 | 0 | 0 | 1 | 0 | 1 |
| .600 | 0 | 1 | 0 | 0 | 1 |
| .604 | 0 | 0 | 1 | 0 | 1 |
| .606 | 0 | 1 | 0 | 0 | 1 |
| .611 | 0 | 0 | 1 | 0 | 1 |
| .617 | 0 | 0 | 0 | 1 | 1 |
| .620 | 0 | 0 | 0 | 1 | 1 |
| .622 | 0 | 1 | 0 | 0 | 1 |
| .623 | 0 | 1 | 0 | 0 | 1 |
| .633 | 0 | 1 | 0 | 0 | 1 |
| .638 | 0 | 1 | 0 | 0 | 1 |
| .640 | 0 | 1 | 0 | 0 | 1 |
| .643 | 0 | 0 | 1 | 0 | 1 |
| .646 | 0 | 1 | 0 | 0 | 1 |
| .648 | 0 | 0 | 0 | 1 | 1 |
| .654 | 0 | 0 | 1 | 0 | 1 |
| .658 | 0 | 0 | 1 | 0 | 1 |
| .659 | 0 | 1 | 0 | 0 | 1 |
| .663 | 0 | 1 | 0 | 1 | 2 |
| .669 | 0 | 0 | 1 | 1 | 2 |
| .677 | 0 | 0 | 0 | 1 | 1 |
| .679 | 0 | 0 | 1 | 0 | 1 |
| .681 | 0 | 0 | 0 | 1 | 1 |
| .683 | 0 | 1 | 0 | 0 | 1 |
| .688 | 0 | 1 | 0 | 0 | 1 |
| .689 | 0 | 1 | 0 | 0 | 1 |
| .695 | 0 | 0 | 2 | 0 | 2 |
| .696 | 0 | 0 | 1 | 0 | 1 |
| .698 | 0 | 0 | 1 | 0 | 1 |
| .699 | 0 | 1 | 0 | 0 | 1 |
| .701 | 1 | 1 | 0 | 0 | 2 |
| .702 | 0 | 0 | 0 | 1 | 1 |
| .710 | 0 | 0 | 2 | 0 | 2 |
| .713 | 0 | 0 | 0 | 1 | 1 |
| .714 | 0 | 0 | 0 | 1 | 1 |
| .719 | 0 | 0 | 1 | 1 | 2 |
| .723 | 0 | 1 | 0 | 0 | 1 |
| .725 | 1 | 0 | 0 | 0 | 1 |
| .732 | 0 | 0 | 0 | 1 | 1 |
| .735 | 0 | 1 | 0 | 0 | 1 |
| .736 | 0 | 1 | 0 | 0 | 1 |
| .743 | 0 | 1 | 0 | 0 | 1 |
| .744 | 0 | 1 | 0 | 0 | 1 |
| .750 | 0 | 1 | 0 | 0 | 1 |
| .752 | 0 | 0 | 0 | 1 | 1 |
| .755 | 0 | 1 | 0 | 1 | 2 |
| .765 | 1 | 0 | 0 | 0 | 1 |
| .767 | 0 | 2 | 0 | 0 | 2 |
| .769 | 0 | 1 | 1 | 0 | 2 |
| .771 | 0 | 0 | 0 | 1 | 1 |
| .775 | 0 | 1 | 0 | 0 | 1 |
| .783 | 0 | 2 | 0 | 0 | 2 |
| .795 | 0 | 2 | 0 | 0 | 2 |
| .801 | 0 | 0 | 0 | 1 | 1 |
| .803 | 0 | 0 | 0 | 1 | 1 |
| .805 | 0 | 1 | 0 | 0 | 1 |
| .810 | 0 | 1 | 0 | 0 | 1 |
| .812 | 0 | 1 | 0 | 0 | 1 |
| .815 | 1 | 0 | 0 | 1 | 2 |
| .818 | 0 | 1 | 0 | 0 | 1 |
| .828 | 0 | 1 | 0 | 0 | 1 |
| .841 | 0 | 1 | 0 | 0 | 1 |
| .846 | 0 | 1 | 0 | 0 | 1 |
| .849 | 1 | 0 | 0 | 0 | 1 |
| .851 | 1 | 0 | 0 | 0 | 1 |
| .852 | 1 | 0 | 0 | 0 | 1 |
| .854 | 0 | 1 | 0 | 0 | 1 |
| .855 | 0 | 1 | 0 | 0 | 1 |
| .862 | 0 | 1 | 0 | 0 | 1 |
| .863 | 1 | 0 | 0 | 0 | 1 |
| .866 | 1 | 0 | 0 | 0 | 1 |
| .867 | 0 | 1 | 0 | 0 | 1 |
| .869 | 1 | 0 | 0 | 0 | 1 |
| .871 | 1 | 0 | 0 | 0 | 1 |
| .872 | 1 | 1 | 0 | 0 | 2 |
| .874 | 1 | 0 | 0 | 0 | 1 |
| .877 | 1 | 0 | 0 | 0 | 1 |
| .884 | 1 | 0 | 0 | 0 | 1 |
| .885 | 2 | 0 | 0 | 0 | 2 |
| .888 | 1 | 0 | 0 | 0 | 1 |
| .890 | 1 | 0 | 0 | 0 | 1 |
| .895 | 1 | 0 | 0 | 0 | 1 |
| .902 | 1 | 0 | 0 | 0 | 1 |
| .907 | 1 | 0 | 0 | 0 | 1 |
| .937 | 1 | 0 | 0 | 0 | 1 |
| .938 | 1 | 0 | 0 | 0 | 1 |
| Total | | 24 | 51 | 35 | 48 | 158 |

Figure 1.4

|  |  |  |  |
| --- | --- | --- | --- |
| **Chi-Square Tests** | | | |
|  | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 432.272a | 417 | .293 |
| Likelihood Ratio | 396.905 | 417 | .753 |
| Linear-by-Linear Association | 60.173 | 1 | .000 |
| N of Valid Cases | 158 |  |  |
| a. 560 cells (100.0%) have expected count less than 5. The minimum expected count is .15. | | | |

**Figures for H2:**

Figure 2.1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Case Processing Summary** | | | | | | |
|  | Cases | | | | | |
| Valid | | Missing | | Total | |
| N | Percent | N | Percent | N | Percent |
| Gender Inequality Index value, 2008 (UN) \* Regime type (Economist 2014) | 135 | 80.8% | 32 | 19.2% | 167 | 100.0% |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Figure 2.2   |  |  |  |  | | --- | --- | --- | --- | | **Report** | | | | | Gender Inequality Index value, 2008 (UN) | | | | | Regime type (Economist 2014) | Mean | N | Std. Deviation | | Full Democ | .30996 | 24 | .089613 | | Part Democ | .50620 | 45 | .164429 | | Hybrid | .67670 | 30 | .085133 | | Authoritarian | .64656 | 36 | .117012 | | Total | .54663 | 135 | .180145 |   Figure 2.3 | | | | | | |
| Count | | | | | | |
|  | | Regime type (Economist 2014) | | | | Total |
| Full Democ | Part Democ | Hybrid | Authoritarian |
| Gender Inequality Index value, 2008 (UN) | .174 | 1 | 0 | 0 | 0 | 1 |
| .209 | 1 | 0 | 0 | 0 | 1 |
| .212 | 1 | 0 | 0 | 0 | 1 |
| .228 | 1 | 0 | 0 | 0 | 1 |
| .234 | 1 | 0 | 0 | 0 | 1 |
| .236 | 0 | 1 | 0 | 0 | 1 |
| .240 | 1 | 0 | 0 | 0 | 1 |
| .248 | 1 | 0 | 0 | 0 | 1 |
| .251 | 0 | 1 | 0 | 0 | 1 |
| .255 | 0 | 1 | 0 | 0 | 1 |
| .260 | 1 | 0 | 0 | 0 | 1 |
| .273 | 1 | 0 | 0 | 0 | 1 |
| .279 | 1 | 0 | 0 | 0 | 1 |
| .280 | 1 | 0 | 0 | 0 | 1 |
| .284 | 0 | 1 | 0 | 0 | 1 |
| .289 | 1 | 0 | 0 | 0 | 1 |
| .293 | 0 | 1 | 0 | 0 | 1 |
| .296 | 1 | 0 | 0 | 0 | 1 |
| .300 | 1 | 0 | 0 | 0 | 1 |
| .310 | 1 | 1 | 0 | 0 | 2 |
| .316 | 0 | 1 | 0 | 0 | 1 |
| .317 | 0 | 1 | 0 | 0 | 1 |
| .318 | 1 | 0 | 0 | 0 | 1 |
| .320 | 1 | 0 | 0 | 0 | 1 |
| .325 | 0 | 1 | 0 | 0 | 1 |
| .330 | 0 | 1 | 0 | 0 | 1 |
| .332 | 0 | 1 | 0 | 0 | 1 |
| .344 | 1 | 0 | 0 | 0 | 1 |
| .345 | 0 | 1 | 0 | 0 | 1 |
| .352 | 0 | 1 | 0 | 0 | 1 |
| .355 | 1 | 0 | 0 | 0 | 1 |
| .359 | 0 | 1 | 0 | 0 | 1 |
| .382 | 0 | 1 | 0 | 0 | 1 |
| .395 | 1 | 0 | 0 | 0 | 1 |
| .399 | 0 | 1 | 0 | 0 | 1 |
| .400 | 1 | 0 | 0 | 0 | 1 |
| .405 | 0 | 0 | 0 | 1 | 1 |
| .409 | 0 | 1 | 0 | 0 | 1 |
| .429 | 0 | 1 | 0 | 0 | 1 |
| .442 | 0 | 0 | 0 | 1 | 1 |
| .451 | 0 | 0 | 0 | 1 | 1 |
| .463 | 0 | 0 | 1 | 0 | 1 |
| .464 | 0 | 0 | 0 | 1 | 1 |
| .466 | 1 | 0 | 0 | 0 | 1 |
| .473 | 0 | 1 | 0 | 1 | 2 |
| .478 | 0 | 1 | 0 | 0 | 1 |
| .493 | 0 | 1 | 0 | 0 | 1 |
| .501 | 1 | 0 | 0 | 0 | 1 |
| .504 | 0 | 0 | 0 | 1 | 1 |
| .505 | 0 | 1 | 0 | 0 | 1 |
| .508 | 1 | 0 | 0 | 0 | 1 |
| .512 | 0 | 0 | 0 | 1 | 1 |
| .515 | 0 | 1 | 0 | 0 | 1 |
| .523 | 0 | 1 | 0 | 0 | 1 |
| .530 | 0 | 0 | 0 | 1 | 1 |
| .534 | 0 | 1 | 0 | 0 | 1 |
| .545 | 0 | 0 | 1 | 0 | 1 |
| .553 | 0 | 0 | 0 | 1 | 1 |
| .560 | 0 | 0 | 1 | 0 | 1 |
| .561 | 0 | 0 | 1 | 0 | 1 |
| .568 | 0 | 0 | 0 | 1 | 1 |
| .570 | 0 | 0 | 1 | 0 | 1 |
| .575 | 0 | 0 | 0 | 1 | 1 |
| .576 | 0 | 1 | 0 | 0 | 1 |
| .586 | 0 | 0 | 1 | 0 | 1 |
| .594 | 0 | 0 | 0 | 1 | 1 |
| .597 | 0 | 0 | 1 | 0 | 1 |
| .599 | 0 | 0 | 1 | 0 | 1 |
| .614 | 0 | 1 | 0 | 0 | 1 |
| .615 | 0 | 1 | 0 | 0 | 1 |
| .616 | 0 | 0 | 0 | 1 | 1 |
| .621 | 0 | 0 | 1 | 0 | 1 |
| .623 | 0 | 1 | 0 | 0 | 1 |
| .627 | 0 | 0 | 0 | 1 | 1 |
| .631 | 0 | 1 | 0 | 0 | 1 |
| .634 | 0 | 1 | 0 | 0 | 1 |
| .635 | 0 | 1 | 0 | 0 | 1 |
| .638 | 0 | 1 | 0 | 1 | 2 |
| .643 | 0 | 1 | 0 | 0 | 1 |
| .645 | 0 | 0 | 1 | 0 | 1 |
| .646 | 0 | 1 | 0 | 0 | 1 |
| .650 | 0 | 0 | 0 | 1 | 1 |
| .653 | 0 | 1 | 0 | 0 | 1 |
| .658 | 0 | 1 | 0 | 0 | 1 |
| .663 | 0 | 1 | 0 | 0 | 1 |
| .667 | 0 | 0 | 1 | 0 | 1 |
| .668 | 0 | 0 | 0 | 1 | 1 |
| .671 | 0 | 0 | 0 | 1 | 1 |
| .672 | 0 | 0 | 2 | 0 | 2 |
| .674 | 0 | 0 | 1 | 1 | 2 |
| .678 | 0 | 0 | 0 | 1 | 1 |
| .680 | 0 | 1 | 1 | 0 | 2 |
| .685 | 0 | 1 | 0 | 0 | 1 |
| .687 | 0 | 0 | 0 | 1 | 1 |
| .693 | 0 | 0 | 0 | 1 | 1 |
| .705 | 0 | 0 | 0 | 1 | 1 |
| .708 | 0 | 0 | 0 | 1 | 1 |
| .713 | 0 | 0 | 1 | 0 | 1 |
| .714 | 0 | 0 | 0 | 1 | 1 |
| .715 | 0 | 0 | 1 | 0 | 1 |
| .716 | 0 | 0 | 1 | 0 | 1 |
| .718 | 0 | 0 | 1 | 0 | 1 |
| .721 | 0 | 0 | 1 | 0 | 1 |
| .727 | 0 | 1 | 0 | 0 | 1 |
| .729 | 0 | 1 | 0 | 0 | 1 |
| .731 | 0 | 0 | 0 | 1 | 1 |
| .734 | 0 | 0 | 1 | 0 | 1 |
| .738 | 0 | 0 | 2 | 0 | 2 |
| .739 | 0 | 0 | 0 | 1 | 1 |
| .742 | 0 | 0 | 0 | 1 | 1 |
| .744 | 0 | 0 | 0 | 1 | 1 |
| .748 | 0 | 1 | 0 | 0 | 1 |
| .751 | 0 | 0 | 1 | 0 | 1 |
| .752 | 0 | 1 | 0 | 0 | 1 |
| .756 | 0 | 0 | 1 | 0 | 1 |
| .758 | 0 | 0 | 1 | 0 | 1 |
| .759 | 0 | 0 | 1 | 0 | 1 |
| .760 | 0 | 0 | 0 | 1 | 1 |
| .763 | 0 | 0 | 0 | 1 | 1 |
| .765 | 0 | 0 | 0 | 1 | 1 |
| .766 | 0 | 0 | 1 | 0 | 1 |
| .768 | 0 | 0 | 0 | 1 | 1 |
| .784 | 0 | 1 | 0 | 0 | 1 |
| .797 | 0 | 0 | 0 | 1 | 1 |
| .799 | 0 | 0 | 1 | 0 | 1 |
| .807 | 0 | 0 | 1 | 0 | 1 |
| .814 | 0 | 0 | 0 | 1 | 1 |
| .853 | 0 | 0 | 0 | 1 | 1 |
| Total | | 24 | 45 | 30 | 36 | 135 |

Figure 2.4

|  |  |  |  |
| --- | --- | --- | --- |
| **Chi-Square Tests** | | | |
|  | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 386.062a | 381 | .418 |
| Likelihood Ratio | 353.330 | 381 | .842 |
| Linear-by-Linear Association | 56.712 | 1 | .000 |
| N of Valid Cases | 135 |  |  |
| a. 512 cells (100.0%) have expected count less than 5. The minimum expected count is .18. | | | |

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1. http://hdr.undp.org/en/content/human-development-index-hdi [↑](#footnote-ref-1)
2. https://www.wikigender.org/wiki/gender-inequality-index/ [↑](#footnote-ref-2)