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## The Asian Five Dragons: What's the Relationship of Confucianism and Gender Inequality?

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#### **Abstract**

Confucianism is not only a historically important belief system, but it also continues to be rooted in many societies today, particularly in East and Southeast Asia. The growing influence of some of these Confucian-ingrained societies on the international stage justifies expanding the limited literature present on Confucianism and its societal implications. Using a conceptualization of heavily influenced Confucian societies previously set out by earlier research, this paper evaluates the validity of the common age-old assumption that Confucianism is correlated with greater gender inequality, as determined by the World 2016 dataset. Specifically, research suggests that the opposite correlation might just as equally be present in Confucian influenced societies today. This study tests the hypothesis that Confucian influence leads to lower gender inequality today compared to other influence systems. While the results cannot fully support the proposed hypothesis, the findings contribute considerable value to the limited Confucian literature by presenting strong statistical reasoning to doubt the common assumption of Confucianism being correlated with greater gender inequality.

#### **Keywords**

Confucianism, gender inequality, Asian Five Dragons

#### **Disciplines**

East Asian Languages and Societies | Feminist, Gender, and Sexuality Studies | Philosophy | South and Southeast Asian Languages and Societies

#### Comments

Written for POL 215: Methods of Political Science.

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Confucianism, gender inequality, Asian Five Dragons

#### **Disciplines**

East Asian Studies | Models and Methods | Political Science | Philosophy

#### Comments

Written for POL 215: Political Science Research Methods.

**Authors Note:** The term Asian Five Dragons, utilized in this research paper, is appropriated from a previous research paper analyzing the effects of Confucianism by Chen et al., 1994. Explained further in depth in the resulting paper below.

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Dr. Douglas Page

POL 215: Political Science Research Methods

10 December 2022

The Asian Five Dragons: What's the Relationship of Confucianism and Gender Inequality?

Confucianism is historically one of the most important belief systems to have spread across Asia, beginning in about 500 BCE. "... Confucius schools were established to teach Confucian ethics. Confucianism existed alongside Buddhism and Taoism for several centuries as one of the most important Chinese religions" (Brown 2022). Then during Mao's Cultural Revolution (1966-1967), the CCP attempted to eradicate Confucianism: "During the Cultural Revolution, Confucianism was considered as one of the 'Four Olds' and 'the ideology of the feudal' that needed to be eliminated" (Lam 2008). In recent years, Confucianism has been undergoing a revival in China. "For most of those decades [since the revolution of 1946], the party sought to restrict or obliterate traditional religious practices... But since the late 1970s, the party has slowly permitted a... revival of religion in China to take place" (Poceski 2021). With this rise in the presence of Confucianism since the 1970s, it is valuable to assess the societal implications of this reemerging belief system. This might allow us to predict future trends in Confucian countries, due to the current re-emergence of this belief system.

Confucianism has conventionally been seen as supporting a male-dominated tradition.

For example, Confucianism advocates that people fulfill the roles that are given to them.

Historically, that involved women being mothers and housewives, and men being fathers, providers, and heads of the household. As the author Anna Sun points out, the only direct reference to women in the *Analects of Confucius* can be interpreted as very demeaning: "Women

and small [minded] people are hard to deal with..." (2013, p.137). Similarly, Mencius, the Confucian philosopher who expanded on Confucius's ideas, disregards directly addressing the status and position that women should hold in society (Eno 2016). Despite women not receiving much attention in the *Analects of Confucius* or later from Mencius, as the author Sun summarizes, "For two thousand years, Confucianism has been known to be a tradition of patriarchal domination" (2013, p.137). However, a recent phenomenon is the introduction of women into the study of Confucianism (Sun 2013, p.146). This introduction of women into the field of interpreting and studying Confucian philosophy is definitely a change that hasn't occurred in the past 2,000 years.

These changes in Confucian societies may indicate that Confucianism today isn't synonymous with gender inequality. Due to these drastic and recent changes in government support and the introduction of women into the field of Confucian scholarship in China, analyzing Confucianism's impact on societies today seems justified. Specifically, because Confucianism has a reputation for favoring male hierarchy, examining the belief system's impact on a society's gender inequality would seem to offer valuable insight. More specifically, while Asia still has many large issues when it comes to gender equality, how might we explain the lower (or equal) gender inequality rates observed in countries heavily influenced by Confucianism today, relative to countries with very different belief systems?

#### **Existing Literature on Confucianism**

Whether Confucianism-influenced societies have been prone to gender inequality has long been questioned. For example, even in 1998 there were disputes over China's ability to promote equality among men and women, with the government citing its successes and Western

feminists citing its failures (Perry 1998, p.284). One must evaluate both discourses in determining expectations for the correlation between Confucianism and gender inequality. Confucianism was likely used as a source of gender inequality historically. Whether it continues to be a source of gender inequality today is not exactly clear. Confucianism has, in order to adjust to the new times, undergone reincarnation and reinterpretation (Jinxia 2002, p.4). As such, we can expect its effects on societies to have changed as well.

Confucianism has traditionally been noted in the literature as correlated with increased gender inequality. Although there hasn't been much statistical analysis on the exact correlation between general gender inequality and Confucianism, there are some studies that have looked at its partial effect on different parts of society. For example, it has been cited as a root cause of the unequal access to education in Korea, as seen via large male-favored enrollment rates in higher education (Chung 1994, p.504-505). Similarly, Confucianism's impact is negatively correlated with female economic participation in Chinese society (Xu 2022, p.10, Mun 2015, p.634, Du 2016, p.1). Less convincing evidence, such as the existence of female foot-binding in Asia, has also often been claimed to be caused by Confucianism; however, this qualitative claim has been discredited quantitatively (Fan 2016, p.23).

Despite statistically significant data indicating Confucianism is correlated with greater gender inequality in certain sectors, such as education and the workforce, this doesn't necessarily require Confucian countries to be correlated statistically with higher gender inequality overall. While Confucianism might be correlated to some inequality in a few parts of a society, it might also just as easily be correlated to a greater sum of equality in the society as a whole due to other effects of Confucianism.

For example, one interesting aspect of Confucianism that has received little statistical examination is its impact on education and education's salience. Generally, it is reasonable to expect a positive direct correlation between Confucianism and education because the value of education is inherent in the principles of Confucianism (Wu 2006, p.8, Ciarrochi 2007, p.1). This correlation is essential to understanding Confucianism's impact on gender inequality, as studies have found that higher education has led to greater egalitarian gender attitudes in countries such as the United States (Persily 2008, p.150). A similar correlation between egalitarianism and an individual's education level has been observed specifically in East Asian countries (Liao 2021, p.13, Shu 2004, p.328).

Confucianism goes beyond solely encouraging individual self-cultivation through education. As Simon Marginson pointed out in 2011, increased educational investment and unprecedented desire to participate in higher education in Southeast Asia are due to embedded Confucian values in those countries (p.595). Although social inequalities are noted as a potential limitation of the Confucian system, it's just as significant that there are no other ideological systems that are as strongly associated with higher education development progress (Marginson 2011, p.608). Additionally, increased investment in education alone can be a cause of greater gender equality (Balatchandirane 2003, p.378). The difference in family spending on education between Confucian countries and non-Confucian countries is massive: "Some East Asian families spend as much on education as many Western families spend on housing. In 2006 the proportion of tertiary education funded by households in Japan... was 51% and in Korea 53%. This compared to 3% in Norway, 10% France, 15% in the Netherlands, 34% in the USA..."

(Marginson 2011, p.596). This huge difference also represents the higher value that is often associated with education in Confucius-influenced societies.

Even if historically, Confucianism may have been the source of large gender inequality, its current influence today appears unknown. Confucianism, or more broadly, East Asia's cultural heritage, isn't necessarily required to be dismantled to eliminate the barriers preventing the realization of greater gender equality (Kim 1994, p.162). The question that has been untouched by the literature is: does the balance of Confucianism's gender-equality-promoting qualities outweigh its gender-discriminating attributes?

While Confucianism is often hard to measure, five countries stand out for their degree of Confucian influence based on their historical past and evidence of Confucianism in the countries today. Not all East and Southeast Asian countries are able to fully appreciate the educational progress that the Confucianist system has to offer. Specifically, the Asian Five Dragons (Hong Kong, South Korea, Japan, Taiwan, and Singapore), countries that are considered as having systems most affected by Confucianism, have all been able to experience this massive growth in educational development (and all, except Japan, are still experiencing it), as seen from 1991 to 2007 (Marginson 2011, p.607, Chen 1994, p.5-6).

When considering the literature on Confucianism's impact on gender inequality and the heavily inter-related subject of education in deeply Confucian-influenced societies, it would seem to suggest that two effects are occurring:

 Confucianism historically has been noted as correlating with greater gender inequality in some parts of the Confucian-ingrained society, as seen from the 1994 Korean study. 2. Confucianism simultaneously has led to an increase in educational quality and/or educational aspirations, as seen today, which tends to produce lower gender inequality.

This dual nature of Confucianism's influence on society, it would seem, creates a counter-balance. No statistical analysis has been conducted examining the effect of Confucianism on a society's propensity to value and achieve greater educational goals. Yet the fact is, Confucianism creates a unique value system: "...Confucian gives rise to cultural zones with distinctive value systems that persist even when we control for the effects of economic development" (Inglehart 2003, p.169).

The question is: does Confucianism, as a value system, actually lead to lower gender inequality than other belief systems? If a strong influence of Confucianism is actually associated with lower gender inequality, one reason for this correlation would likely be due to Confucianism impacting countries' education systems and individuals' educational beliefs, leading to greater support in the country's progress against gender inequality. In other words, the effect of Confucianism on education today may be overpowering the traditional Confucian effect of correlating with greater gender inequality, as noted in the past. Whether the effect of Confucianism on education has increased over time, or if the effect of Confucianism on directly perpetuating gender inequality has decreased over time, is unclear and would require further investigation.

This analysis is not to be misconstrued as inferring Confucianism is synonymous with combating gender inequality. The lack of gender inequality present in these systems today is more likely a byproduct of a different Confucian virtue. Specifically, countering gender

inequality could reasonably be seen as a byproduct of the more general Confucian goal of self-improvement: "It is the Confucian idea of equality that members of the people are equal in their moral capacity to reach moral perfection" (Herr 2010, p.25). To come close to moral perfection today would require one to struggle for gender equality also (Ikeke 2021, p.137). In order to reach the greatest moral perfection in society, diminishing gender inequality and helping everyone develop their full potential would clearly seem to be a necessity. In essence, Confucianism likely doesn't weaken gender inequality in and of itself but does so for other reasons that are inherent to its ideological foundations.

While the *Analects of Confucius* doesn't state directly that gender equality should be an objective, it does make some comments that can be interpreted as promoting egalitarianism in certain areas of society today. For example, not only is education a source of decreased gender inequality in Confucian countries, but the *Analects of Confucius* indicates that this venture (education) ought to be egalitarian inherently: "The Master said, There is a teaching; there are no divisions" (Eno 2015, p.102). Whether equality actually occurs within education is a different matter, but this statement returns to the Confucian goal of achieving the greatest moral perfection in society. As discussed before, breaking down gender inequality would not be the goal; it would be the byproduct of a different Confucian objective—that regarding education. Again, this does not imply that the *Analects of Confucius* is the great equalizer of gender inequality. "Although early Confucianism reveals little or no active prejudice against women... it seems to tacitly assume that its readers, and the only people who matter in public society, are men. In this sense, it fails to escape the social norms of its time" (Eno 2015, p.21). These quotes simply highlight that while primary sources of Confucianism might suggest it justifies gender inequality

historically, primary sources of Confucianism might also just as equally provide pushback to gender inequality in the 21st century.

#### **Hypothesis Formation**

Examining a country influenced by Confucianism, such as China or Japan, without contextualizing how different belief systems influence gender inequality in other countries can result in skewed observations. For example, comparing Confucian countries to countries with the highest gender equality is vastly different from comparing Confucian countries to countries categorized by different strong belief systems. It is well-established that countries such as Japan are not as socially egalitarian as many Western countries such as the United States and Sweden (Bell 2008, p.52). But comparing groups of countries categorized by their belief system may result in Confucian-influenced societies reporting a gender inequality central tendency that is comparatively less than other belief system groups.

Such is this study's aim. Based on the evidence that Confucianism has gone through reincarnation and because it seemingly is correlated with a very high value placed on education, regardless of its historical past, and in order to test the traditional conception that Confucianism is linked with increased gender inequality, I hypothesize the following:

In a comparison of countries with different belief systems, those that are heavily influenced by Confucianism are more likely to have lower gender inequality than countries that are influenced by other belief systems.

Specifically, these other belief systems include Orthodox Christianity, Roman Catholicism, Protestantism, Islam, and others. As seen from past research, comparing these belief systems to one another, such as Confucianism and Protestantism, has been well-established as a valid method of analysis (Inglehart 2002, p.323).

This hypothesis is not to be misunderstood as to suggest that there are no gender inequality issues in Confucian-influenced countries. It merely argues that compared to other belief systems, Confucianism may be the lesser of other evils, so to speak. As one author directly explains: "Gender discrimination has been a remarkably consistent feature of most cultures" (Htun 2000, p.225). The unparalleled emphasis Confucianism has on education and self-improvement would possibly give an edge to Confucianism compared to these other belief systems in diminishing gender inequality. As explained earlier, this emphasis would make people more egalitarian and supportive in the fight against gender inequality, compared to other belief systems. It is quite possible that this education emphasis and self-improvement value would cause Confucian countries to have comparatively lower gender inequality rates.

This study is not designed to give a definite answer to the question of whether Confucianism is correlated to lower gender inequality. It is intended to statistically support or question the traditionally common assumption that Confucianism is synonymous with greater gender inequality. As with any study of this type, it is important to remember, when reading the findings of this study, that: "The universality of sex-based inequality and the diversity of national cultures make any simple connection between sex discrimination and cultural attitudes dubious" (Htun 2000, p.225).

Adding to this dubiousness is the fact that Confucianism's influence differs from country to country. For example, Confucianism appears more prominent in Korea than in Japan (Levi 2013, p.15). This, however, introduces another issue. Measuring Confucianism from one country to another is well-established as being difficult (Viengkham 2018, p.341). That is why Confucianism appears, rather than is known, to be more prominent in Korea than in Japan. Essentially, it comes down to how you define Confucianism. Due to the complexity of this issue, while a nominal-level independent measure might be suitable for this analysis, an ordinal or interval measure, although preferred, would not be suitable. In other words, the Asian Five Dragons (Hong Kong, South Korea, Japan, Taiwan, and Singapore) will be defined as having heavy Confucianism influence, but the degree of this influence between them will not be differentiated in this analysis.

#### Methodology

In order to test the hypotheses, I examined data from the World 2016 dataset. The database provides an observational dataset, also considered a census, from 196 countries around the globe for 2016.

I selected this dataset because I am analyzing the effect of Confucianism on a country's gender inequality, relative to different countries influenced by other belief systems.

Conveniently, this observational dataset both measures a country's level of gender inequality and categorizes countries by their predominant religion. While there is often debate over whether Confucianism is truly a religion, that doesn't affect this analysis, since comparing Confucianism (regardless of its nature) with other religions has been established as a valid method of analysis, as explained previously. Additionally, the dataset from 2016 provides relatively recent statistics,

which are helpful in explaining how Confucianism impacts societies today. This contrasts with older statistics, which might reveal different but intriguing information about how Confucianism impacted societies in the past. For example, less recent data might examine Confucianism before it had undergone its revival in China.

One constraint with this observational dataset is that it doesn't provide a measurement of the degree of Confucian influence in each country. As explained previously, such a measure is complex and difficult. Hence, the dataset restricts the analysis to defining Confucianism as a nominal variable and eliminates the possibility of examining the impact of increasing increments of Confucianism correlating with possible changes in gender inequality. Additionally, the original dataset doesn't label any countries as being Confucian. Those countries heavily influenced by Confucian thinking, sometimes called Confucian zone countries or the Asian Five Dragons in the literature, include Hong Kong, Korea, Japan, Taiwan, and Singapore (Marginson 2011, p.588). As a result, the World 2016 dataset requires a classification of Confucianism to be placed upon those countries by the researcher. The dominant religion in each of the Asian Five Dragons was originally defined as either "eastern" or "missing" in the observational dataset.

Because China was the birthplace and an epicenter of Confucianism, and due to it retaining a city that is part of one of the Asian Five Dragons (Hong Kong), China is considered a Confucian country. Thus, the operationalization of a Confucian country consists of: China, Korea, Japan, Taiwan, and Singapore. This is based upon historical precedent and previous research identifying strongly influenced Confucian countries, as explained previously.

As with any study of this type, isolating the compositional differences across various

Confucian-influenced countries is extremely difficult. This issue is also problematic considering

the small sample size of Confucius-influenced countries. While this study is unable to parse out every alternative explanation for gender inequality levels, such as additional influence systems affecting the Confucian zone countries simultaneously, it can at least examine the correlation between these Confucius-defined countries and gender inequality. Such an analysis can help point the way to evaluate the common assumption of Confucianism causing gender inequality.

As with any study that examines the areas of religion, influence systems, gender inequality, Confucianism, and previously unexamined areas of inquiry, the assumptions the study makes might be highly questionable. Regardless, these research ventures can provide a starting point for further possible research. As such, the assumption will be made that there isn't a statistically significant influence system operating simultaneously that correlates to a change in gender inequality among the Confucian-influenced countries. For example, the assumption will be made that gender-inequality rates among Confucian-influenced countries (compared to countries influenced by other belief systems) are attributed to Confucianism's influence, and not, for instance, due to a compositional difference in Buddhism (relative to other non-Confucian-defined countries).

Additionally, one might question the use of confidence intervals for a census, as this dataset is also called. The practice of treating a census as a sample is not unprecedented. For example, one reason to introduce confidence intervals for a census of countries is that: "Perhaps we think that many countries could exist... and we are observing a sample of them" (Pollock 2019, p.158). Therefore, moving forward, confidence intervals will be considered in order to attempt to visualize and analyze a more general hypothetical relationship between gender inequality and influence systems.

With this in mind, in order to operationalize the dependent variable: gender inequality, I use the "gender\_unequal" variable from the World 2016 dataset. This interval variable measures the degree of gender inequality a country has, based on a Gender Inequality Index. The index's mean from 169 countries is approximately 0.55, and is measured on a scale from zero to 1.00. The higher the index score, the greater the gender inequality a country is measured to have. A score of 1.00 would indicate an overwhelming presence of gender inequality, while a score of zero would indicate a complete absence of gender inequality in a country. From a qualitative perspective, the measure also seems to be accurately evaluating what it is intended to be measuring. For example, in 2016, the Netherlands was measured as having the lowest gender inequality score, while Yemen was rated as having one of the highest gender inequality index scores. For comparison, the U.S. scored 0.4 on the index.

In order to operationalize the independent variable: systems of influence, I use the "typerel" variable. This nominal variable labeled all 169 countries based on their predominant religion, assigned values, and determined frequencies. By default, the variable includes "Hindu," "Jewish," "Muslim," "Orthodox," "Protestant," "Roman Catholic," "eastern," "other," and "missing." The most frequent religions are Roman Catholic and Muslim. This variable is modified by the researcher, classifying the Asian Five Dragons as "Confucist." Additionally, there is a merging of "eastern," "missing values," "Jewish," and "Hindu" into the "other" category. This is done for visual/statistical simplicity and because some of these categories' frequencies are too low.

It is important to note that including other Asian countries in the same category as the Asian Five Dragons would not be useful for several reasons in this particular analysis. Countries

like Cambodia and Vietnam, due to their proximity to the epicenter of Confucianism in China, are likely to have some degree of Confucian influence. But, as explained before, the degree of this influence is not strong enough to be comparable to the point that the Asian Five Dragons have reached. Additionally, testing the validity of the assumption that Confucianism leads to higher gender inequality requires the researcher to compare extremes when an incremental scale of Confucianism is absent. If the common assumption of Confucianism leading to higher gender inequality rates were supported statistically, these more heavily influenced Asian Five Dragons would be expected to have statistically significant higher gender inequality rates compared to other belief systems. But if Confucianism leads to lower gender inequality, due to an educational-egalitarian effect, we would observe the Asian Five Dragons probably experiencing comparatively lower rates of gender inequality, compared to countries with lesser Confucian influence.

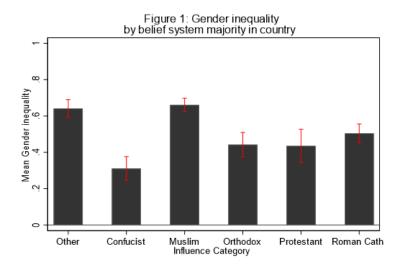
Consequently, countries with an unclear but likely lesser degree of Confucian influence are put into the "other" category, since they are unable to be accurately weighted based on their degree of Confucianism, due to the difficulty in measuring Confucianism levels. This setting aside allows the more clearly defined Confucianism-influenced countries to be compared with the means of gender inequality corresponding to countries with different influence systems. As usual, this is suboptimal, like many constraints that revolve around measuring Confucianism, because of the very limited sample size of the Asian Five Dragons. This approach, however, is required due to the inability to weigh countries' gender inequality results based on the country's ordinal/interval levels of Confucianism.

Table 1 indicates the corresponding results between gender inequality and influence systems. As seen from the results, Confucian influence systems, on average, have a gender inequality rating of 0.31. This score is lower than the means of the other influence systems. However, it is important to note that this is an extremely conservative estimation of Confucian countries' corresponding average of gender inequality. Note there are only four observations in the Confucian category. This occurs due to Taiwan (one of the Asian Five Dragons) having a missing gender inequality value in this dataset. If anything, the Confucian average gender\_unequal rating for the Asian Five Dragons including Taiwan should be lower than the average of the group excluding Taiwan. This is because "Global gender equality indices show Taiwan ranking high and topping East Asian states. For instance, the Gender Inequality Index shows Taiwan (9th) to be more friendly to women than Korea (11th), Singapore (12th), Japan (22nd), and China [which includes Hong Kong] (38th)" (Chang 2019).

Table 1: Gender Inequality by Influence System					
Influence system	Mean gender_unequal	Standard deviation	Observation number	Upper boundary	Lower boundary
Other	.6409231	.1241621	26	.6886495	.5931967
Confucist	.31075	.0668749	4	.3762874	.2452126
Muslim	.6606875	.1077618	32	.698025	.62335
Orthodox	.4421111	.1029277	9	.5093572	.374865
Protestant	.4352727	.2209021	22	.5275818	.3429636
Roman Catholic	.5045476	.1685494	42	.5555227	.4535725

Figure 1 provides a better visual analysis for analyzing the 95% confidence interval upper and lower boundaries of the dependent variable. It highlights that, based on an extremely

conservative estimation of Confucianism's gender inequality average, the difference between Confucian, Other, Muslim, and Roman Catholic is clearly statistically significant. Yet, the difference between Confucian, Orthodox, and Protestant is not statistically significant, as the 95% confidence intervals overlap. Consequently, the simple comparison would seem to challenge the commonly held belief that Confucianism correlates with gender inequality. However, the null hypothesis cannot be fully rejected.



An alternative explanation that might explain the gender inequality differences seen across belief systems is regime type: compositional regime differences across influence systems. For example, Confucian countries might typically have a higher percentage of democracies than other belief systems. This would make sense statistically because, "democracy makes a significant contribution to increasing gender equality" (Beer 2009, p.226).

In order to operationalize the second independent variable, regime type, I use the variable democ\_regime. The variable assigns values to countries with either a 1, indicating the regime isn't a democracy, or 2, indicating the regime is a democracy. While there are 62 countries that

are labeled as non-democracies, there are 91 labeled as democracies, and 16 countries assigned missing values. This dichotomous variable is used to help control the effect of regime type while analyzing the relationship between influence systems and gender inequality. Figure 2 highlights this relationship.

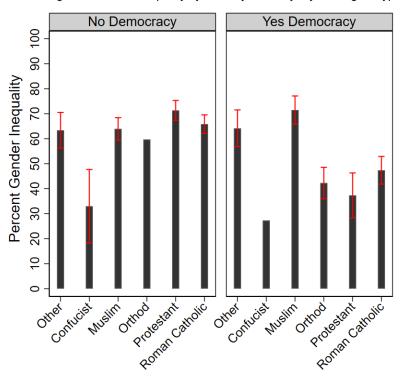


Figure 2: Gender inequality by belief system majority and regime type

Interestingly, an uncontrolled comparison between gender inequality and belief system doesn't allow the researcher to reject the null hypothesis, but when controlling for whether a country has a democratic regime, the null hypothesis can be rejected. In other words, the difference between Confucianism gender inequality ratings, compared to other influence

systems' corresponding gender inequality ratings, is statistically significant when controlling for whether the regime is a democracy or not. That being said, the null hypothesis might have had a role if Confucian democracies had more than one country fall into the Confucian democracy category.

The reason for these gender inequality ratings is that Japan is assigned to the democracy category, but interestingly South Korea is assigned a missing value (the only Confucian country missing a value for the democ\_regime variable). These results indicate that a different variable, measuring dichotomously if a country is a democracy or not, would likely prevent the researcher from rejecting the null hypothesis (if South Korea was assigned to the democracy category). As Japan's gender inequality score is .273 and South Korea's is .31, combining the two would lead to the creation of a confidence interval and consequently lead to the overlapping confidence intervals for the Democracy category. This indicates further just how complicated it is to assess Confucianism and its impact on gender inequality. While the null hypothesis can be rejected technically, the null hypothesis has an over-looming presence while controlling whether a country is a democratic regime or not. The lack of confidence intervals on two of the bars is evidence of a lack of multiple observations within the subcategories.

Another alternative hypothesis that could explain differences in gender inequality observed across different belief systems is the sex majority of a country. Because males are traditionally conceived as holding the power in society, one could reasonably suspect that women would typically be more sympathetic towards issues of gender inequality. This trend of women being more sympathetic towards gender inequality issues is additionally supported when

considering women have been observed to be statistically more liberal than men even when they hold high political positions, such as in the U.S. Congress (Welch 1985, p.131-132).

In order to operationalize the third independent variable, a sex\_ratio variable was created. The variable is a dichotomous variable that sorts countries into one of two categories ("Female majority" or "Male majority") depending on the gender ratio of the country. The gender ratio of each country is assigned based on estimates produced by the *Central Intelligence Agency* in 2017, measuring countries' sex ratios. Countries assigned sex ratios of 1.0 or higher indicate that the sex ratio is equal or favors the male majority, and those countries are assigned to the male majority category. The reason that countries with even sex ratios are placed into the male majority category is that traditionally males are placed at the top of the social hierarchy. Therefore, an even sex-ratio society would likely still favor the opinions of the males, but this might not be exactly the case if women are the majority of a country's population. Hence, countries that have a female majority, and are assigned 0.99 or lower, are placed into the female category. For example, Qatar (3.41) is placed into the male majority category. Similarly, Estonia (0.88) is placed into the female majority category.

The results, shown in figure 3, indicate that the difference in gender inequality between belief systems while controlling for the sex ratio is statistically insignificant.

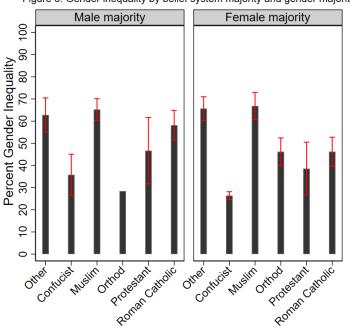


Figure 3: Gender inequality by belief system majority and gender majority

The Confucian male-majority countries and the one Orthodox male-majority country (Cyprus) have overlapping 95% confidence intervals. Additionally, Confucian female-majority countries and Protestant female-majority countries have overlapping 95% confidence intervals. These results indicate the null hypothesis cannot be rejected as an explanation for the differences observed between belief systems and gender inequality while controlling for country sex ratio.

#### **Model Estimation**

Due to the dependent variable being an interval level of measurement, OLS regression is the method of analysis used in this study. This regression predicts expected values of gender inequality, across varying systems of influence, while holding regime type and sex ratio of a country constant at their modal values. How these variables are coded has already been described in depth above.

While the independent variable (system of influence) changes from Confucian all the way to Roman Catholic, regime type and sex ratio (the other two independents) are controlled. This requires holding both sex ratio and regime type at a modal variable, as explained before, due to those two variables' status as binary nominal independents. Consequently, sex ratio is held at majority female, and regime type is held at democracy.

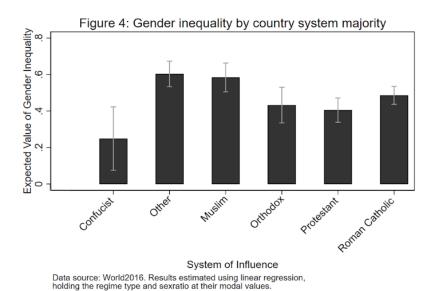
Similar to the past figures, the results are on the border between being statistically significant and falling prey to having possibly occurred due to random chance. This is evident in Figure 4, where the confidence interval bars for the Confucian influence system and other influence systems are a mix between overlapping and separate.

Table 2 highlights this scenario statistically. The constant of the OLS regression equation represents the predicted effect of Confucian influence systems. Democracy regime highlights that when a country's regime is Democratic there is typically a statistically significant negative effect on the country's gender inequality value, meaning the society has less gender inequality. Sexratiovar2 similarly highlights that when there is a sex ratio favoring women in a country, the variable has a statistically insignificant effect on the country's gender inequality.

Table 2: Effects on Gender Inequality (Country Level of Analysis)

	gender_unequal
Democracy reg	-0.0813**
	(0.0337)
sexratiovar2	-0.0230
	(0.0303)
Other	0.353***
	(0.0942)
Muslim	0.334***
	(0.0918)
Orthodox	0.181*
	(0.103)
Protestant	0.157
	(0.0949)
Roman Catholic	0.236**
	(0.0918)
Constant	0.435***
	(0.0990)
	( /
Observations	126
R-squared	0.336
	126

Standard errors in parenth eses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Using Confucianism as a base category, the effects of Protestant and Orthodox influence systems are not statistically significant on gender inequality, but the effects of Other, Muslim, and Roman Catholic are statistically significant (based on 95% confidence intervals). Compared to Confucian influence systems, Roman Catholic, Other, and Muslim influence systems have statistically higher expected values of gender inequality. This is also represented in Figure 4 visually, albeit less distinctly.



The R-squared value of 0.336 indicates that the model can explain 33.6% of the variation in gender inequality scores of countries, which is seemingly substantial but still leaves much to be desired. The value of R-square additionally suggests the need for further research, as the leftover variation might be explained by other variables that are not considered in this study's regression equation (Pollock 2019, p.159).

#### **Discussion and Conclusion**

Conservatively speaking, the null hypothesis cannot be rejected. As seen from the trend of controlled comparisons and OLS regression conducted in this study, when examining Protestant and Orthodox influence systems' effect on gender inequality (compared to Confucianism's effect on gender inequality) there are often statistically insignificant differences. Even while the confidence intervals of Muslim, Roman Catholic, and Other often highlight statistical significance, due to the overlapping of confidence intervals elsewhere, the null hypothesis cannot be rejected. Therefore, the hypothesis that Confucian influence systems likely will have lower gender inequality compared to other influence systems cannot be supported.

While this study's hypothesis cannot be supported, the study more importantly contributes evidence that suggests the common assumption in most academic literature, presently and historically, of Confucianism being correlated with higher gender inequality, is merely an assumption. Specifically, it would seem that Confucianism is not correlated with higher gender inequality today. As seen in the OLS regression and controlled comparisons, gender inequality in Confucian influence systems is either statistically lower or has an insignificant difference compared to other influence systems. Both scenarios (indifference and lower) challenge the common assumption of gender inequality associated with Confucianism.

That being said, further research is required in order to fully understand the effects of Confucianism on gender inequality. For example, this study omits controlling many hypothetical independent variables that might be causing changes observed in the dependent. However, even if these rival explanations (for example, country GDP and sexism) were the source of a spurious relationship, this study would still challenge the common assumption of Confucianism leading to greater gender inequality.

Where further research truly ought to be focused is on the development of more encompassing measurements. For example, rather than using a nominal Confucian measure, an ordinal ranking of Confucian countries would be useful. This type of measurement would allow researchers to compare Confucian countries to one another and support or disprove the findings that countries that are more Confucian correlate with lower levels of gender inequality compared to the average of other influence systems. This approach contrasts with comparing the averages of influence systems' expected gender inequality values. The suggested new measure would diminish the damage of potentially excluding a country that is Confucian, but is not included in this study (due to the difficulty of distinguishing between Confucian-influenced systems and other influence systems).

One important question that this study completely ignores is: How are Confucian influence systems of different countries distinctly different from each other? For example, the effect of Confucianism in China is likely different from the effect of Confucianism in Japan. Not only does the prominence of the belief system among citizens need to be considered, but the belief system's material and practical effect on a citizen's life also needs to be taken into account. After this is determined, the salience/power of Confucianism in a country can help the formation of a more encompassing operationalization of Confucianism as the causal variable.

Ultimately, this study highlights that the common assumption of Confucianism's effect on gender inequality should be examined further and not taken for granted. While this assumption may have been true historically, it's not clear if this relationship continues today. Although the cause for the formation of this assumption might be able to fill up its own paper, the common

assumption is likely based on scholars comparing Confucian societies to uniquely extreme egalitarian societies (such as Sweden), rather than other average egalitarian countries.

As the study stands, it would seem citing Confucianism as a unique cause of greater gender inequality is unjustified, as Confucianism (conservatively speaking) appears to be no different than other influence systems when it comes to gender inequality effects.

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