

A Basic Quantitative Study of the Relationship between the Physical Trait, Skin Color or Tone on the Likelihood of Civil War

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Abstract. This paper was motivated by the seriousness of ethno-religious civil conflicts, especially ethnic civil conflicts like the ones currently occurring in Afghanistan, Mauritania, and Tajikistan, and previous conflicts like the ones in Rwanda, South Africa, Malaysia, and Sri Lanka. Every year, thousands of lives, on average are lost in conflicts such as those mentioned. A great number of articles and books have been published pertaining to the topic, yet there appears to be little consensus on what causes such conflicts. The reducing trend of international conflict replaced by the increasing numbers of civil conflicts shifted attention to this area of conflict study. There were 36 armed conflicts in 2009. All were civil conflicts and none were interstate (Harbom and Wallensteen 2010). Equally disturbing news is that, between 1989 and 2009, there were 128 armed conflicts; all but 8 were internal (Harbom and Wallensteen 2009). The study attempts to investigate the relationship of human skin color to the onset (outbreak) of civil conflict. Because skin color is usually associated with an individual's or group's ethnicity/race, onsets of conflicts that have an ethno-religious flavor may in fact be indirectly related to skin color. This empirical study should provide useful insights into the field of armed conflicts, within which civil war is a burgeoning area. This study's implications stretch far as to perhaps provide probable answers and solutions to the prevention and control of ethnic internal armed conflicts. The paper begins with a dissection of the literature review of civil conflict in general followed by a review of literature on important aspects of human skin color in both political science as well as anthropology.

Keywords: Conflict, Trait, Empirical Study, Post-War.

1. Introduction

Taking from a large empirical N-study of 156 countries for the period 1946-2004, the author found that the most common form of conflict is purely ethnic conflict, not purely religious or combination conflicts. This gave rise to this paper's quest for a study of traits or characteristics that may induce conflict. Among all physically noticeable traits, skin color is the most glaring or obvious. In a room of 50 people, to discern an individual's skull size and structure, or to observe the shape and size of the nose is much more complex than noticing the skin color. Hair is easily noticeable however hair texture and color may easily be modified making hair an unreliable measure. This leaves us with skin color. If as this paper hypothesizes, and based on the literature, if skin color is a concrete manner of how an individual or group sees another individual or group, then, it must have a reasonable, if not strong link with the onset of civil conflict. A person may change religions without being physically noticed. Likewise an individual may be able to speak more than one language, probably even numerous. He or she may even be able to fake belonging to a certain community group by mastering that particular group's language or dialect. Such an individual has no way of faking his race/ethnicity (the case of singer/celebrity Michael Jackson is a very remote outlier) unless he shares the same skin color with the other. As skin color is readily associated with race/ethnicity, internal conflicts must in one way or another is associated with skin color.

2. The Literature

2.1. Literature review of civil conflict

Three major models explain civil conflicts.

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The greed idea was popularized by Collier and Hoeffler (2001) who argue that that greed, the desire for private gain, increases the likelihood of civil war. Grievance may arise out of dissatisfaction over allocation of resources, or over repressive regime/political rights, territorial struggles, the injection of members of an alien ethnic group into one's territory, or even through mere envy over the success of rival groups. The idea was supported by Elbadawi and Sambanis (2002), Williams (1994), Gurr (1993), and Horowitz (1985). Could this ethnic spirit or zeal be due to skin color differences instead? The opportunity model according to Fearon and Laitin (2003), a better equipped and stronger government can control the onset of conflict (the state capacity variable).

2.2. Defining ethnicity and race

There are many definitions of ethnicity, ranging from shared language, religion, national or racial origin, common cultural practices, and attachment to a particular territory, history or myths of shared experience that often includes victimization by others. Whether it is a myth or not, the group believes it is different, and this difference is what sets it apart from other groups and this difference is why it has been treated differently (Marshall and Gurr 2005), or ascriptive differences like color, appearance, language, religion, or some other indicator of common origin, or some combination of these (Horowitz 1985). Other definitions have been proposed by (Thambiah 1989). Using an anthropological definition of race, ethnicity is described as a social identification based on shared history and a common cultural inheritance. In anthropology, the isolationist/primordial approach portrays ethnic groups as distinct cultures and distinct customs. The instrumental/interaction approach stresses on ethnic affiliation—loyalties that develop among a group of people based upon the presumption of shared history and common cultural inheritance. In the power/domination approach, the dominant group's portrayal of some of its superior qualities and the portrayal of "the other" group's inferior traits legitimize its own privileges as the higher ethnic group (Comaroff 1987). Brumfiel (2003) mentioned that anthropologist John Comaroff (mentioned above) argued that once ethnic-based inequality is established, prejudice, rather than inequality, seems to cause all of the problems between groups, and it does lead to a barrage of insults and assaults on personal self-respect that is a second burden borne by members of subordinate groups.

2.3. Ethnic civil conflict

The primordial view argues that long-term ethnic antagonisms spark violence (Van den Berghe 1981; Vanhanen (1999). The instrumental view ethnicity becomes important when elites use it to mobilize ethnic groups for self gain or group gain (Banton 1983). Elites mobilize ethnic groups for personal gains. Huntington's (1993) "clash of civilization" theory argues that violence effective at the end of the cold war will not arise out of ideological or economic struggle will occur along civilizational lines. Differences in civilizations are either by history, language, culture, tradition, or religion. Taras and Ganguly (2008) argue that modernization can cause erosion of traditional values.

3. Research Design/Methodology

The focus of this paper is on the skin color variables as the main explanatory factors. Many studies have not analyzed indirect effects or hidden factors that may be causing conflict. As far as the hidden or indirect factor of skin color is concerned, this study attempts to address it. Would it be really ethno-religious factors (such as ethnic /cultural/linguistic differences) that is causing conflicts or could it be the mere "us" versus "them" factor following clear physical differences that provide the basis of ethnic/cultural/linguistic differences? Even economic or political envy between different ethnic groups espoused by Taras and Ganguly (2008) could be due to differences in physical traits. The paper follows the definition of armed conflicts as defined by UCDP/PRIO (Gleditsch and Urdal 2002). The unit of analysis is the country-year, coded "1" for all country-years with outbreaks that has a minimum of 25 casualties and "0" otherwise.

3.1. Dependent variables

The variable, *onset*, which is the base dependent variable, covers all types of conflicts. The idea of the tests is to discover countries with majority population of which skin color or tone has higher likelihoods of experiencing internal armed conflicts.

3.2. Independent variables

The skin color variables are as follows:

white—state's majority population is white; *black*—state's majority population is black; *allbrown*—state's majority population is brown; *allyellow*—state's majority population is yellow; *brown*—a subset within the brown category: state's majority population is neither light nor dark brown but somewhere in between (a regular tone of brown); *lightbrown*—a subset within the brown category: state's majority population is a lighter tone of brown; *darkbrown*—a subset within the brown category: state's majority population is of the darker brown tone; *yellow*—a subset within the yellow category: state's majority population is of the yellow tone; *yellowbrown*—a subset within the yellow category: state's majority population is of the yellow-brown combination tone

One clear method was applied to derive at these various skin colors. The study analyzed thousands of photographs. For each country, photographs of the country's executive, legislators, and cabinet members were analyzed. These photographs were then compared to photographs of that country's people across various communities, photographs of people during or after a natural disaster, protests, school children and university students, soccer fans, United Nations' photographs of that country, and the list goes on. Photographs were compared to descriptions of people of a country by various websites depicting the people, including the official websites of the countries themselves. Photographs were matched with a color scale to determine the skin color of individuals in the photographs. The same projector screen was used to watch photographs of different countries to maintain consistency. The original idea of matching a picture to a scale was derived by intuition as well as Dimasi *et al.* (2011).

At this stage of this research, only the skin color or tone of the majority population of a country is coded. Research is being undertaken to code the colors of minority groups as well.

The variables other than the skin color factor are as follows:

Variables such as *priorwar*, *officialreligion*, *restrictionsdummy*, *ethfrac*, *relfrac*, *laglogpop*, *democracy*, *lagdemornot*, *laggdp*, and *lagoil* are the control variables used in the study.

If in fact skin color differences create the perception of strong ethnic differences, the results for civil conflict onset should vary between countries with a certain skin color and another.

4. Results

The results without the inclusion of the skin color variables revealed a pattern similar to many other findings in the literature except for one—the prior war variable.

Countries imposing ethno-religious or cultural barriers on citizens will have a bigger likelihood of conflict. Ethnic fractionalization increases the likelihood of conflict. However when the variable's square term is included in the equation, an inverted U-shaped relationship emerges. As expected, an inverted U-shaped relationship also emerged with the democracy variable, further reinforcing Hegre *et al.* (2001). Consistently, in all results, larger population size and being an oil exporting country contribute to increased expectation of conflict. It is interesting to note that the only factor that reduces the likelihood of armed internal conflict is GDP per capita. The higher a country's per capita income, the lower the likelihood of a conflict outbreak. This confirms probably the most robust finding in the civil war literature—population size and GDP per capita have consistently been cited to affect civil war (Ward, Greenhill, and Bakke 2010). Surprisingly, the *prior war* variable could not predict future conflicts. The variable is in the “correct” direction but lacks significance. The effect of the *official religion* variable cannot be confirmed because it is not statistically significant although is in the predicted direction.

Moving on to the crux of the study, the skin color variables revealed some interesting results. Consistently, time and again, when a country has majority white population, the likelihood of conflict is greatly reduced. The result is robust with statistical significance and consistent direction in every test. All the other three skin colors increase the likelihood of civil conflict especially black and yellow. These results remained fairly stable with or without the square terms for ethnic fractionalization and polity score, as well as with or without the inclusion of the “usual suspects” which were not statistically significant. Because skin color is closely related to ethnic factors, the variable ethnic fractionalization may cause multicollinearity. To

reduce this effect, in one of the models, the variable ethnic fractionalization was dropped. Results changed very little.

Brown produced mixed results and it seems the conflictual side of brown may be contributed by the light brown subset (see next paragraph). The results for these three skin colors are mostly consistent but not as consistent as the “white” results. This could be due to the fact that the different tones of “brown” and “yellow” have been combined into “all brown” and “all yellow.” To obtain a clearer picture of these two combined variables, additional tests were carried out. They portrayed a very clear picture:

Within the combined brown category, the only brown subset that increased the likelihood of conflict is the light brown skin tone. In all tests, the brown subset of the combined brown category displayed a negative sign but was significant in only one test. In all tests, the subset yellow of the combined yellow category displayed a negative sign but was only significant in two of the tests. On the other hand, the yellow-brown subset was positive throughout and significant in about 40% of the tests and close to reaching significance in remaining tests. This shows that within the brown combined category, the subset brown is the mitigating tone whereas the subset light brown is the conflictual tone. In the combined yellow category, the subset yellow is the mitigating tone while the subset yellow brown is the conflictual one.

5. Conclusion

The results indicate that there exists a correlation between the physical trait, skin color and conflict. The fact that the empirical analysis portrays the different explanatory variables (the different skin colors) having different effects on conflict proves the abovementioned correlation.

Future research in this subject should combine the researches by political scientists with researches in related fields such as anthropology, photography, psychology, anatomy, and the like.

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