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# Identity, Policy Satisfaction, Perceived Character: What factors explain President Duterte's popularity?

BY

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## **Identity, Policy Satisfaction, Perceived Character: What factors explain President Duterte’s popularity?**

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### Abstract

The persistently high satisfaction ratings of President Duterte, despite various perceived policy missteps, and in stark deviation from the pattern for previous Presidents, have puzzled pundits and scholars alike. Using three waves of the Social Weather Stations’ Social Weather Survey, and utilizing ordered logit regression, this study examines the extent to which identity factors, policy satisfaction, and perceptions of the character of the President could explain this ‘puzzle’. The three survey waves correspond to the beginning of President Duterte’s term, the period when he obtained his lowest net satisfaction rating, and the most recent available data. The study finds that identity factors, policy satisfaction, and perception of the President’s character all contribute to explaining his high satisfaction rating. Perception of the President’s character appears to be the most important in terms of predictive power and distinguishing those who are satisfied from those who are dissatisfied with the President.

**Keywords:** presidential satisfaction, identity, policy satisfaction, presidential character,

Duterte

## 1. Introduction

The persistently high satisfaction ratings of President Rodrigo Duterte, despite various perceived policy missteps, and in stark deviation from the pattern for previous Presidents, have puzzled pundits and scholars alike. Mangahas (2016) described the beginning of the Duterte presidency as “a honeymoon with misgivings”, while Endo (2016) noted the robust pre-pandemic economy he was presiding over.

As early as two years into his six-year term, perplexity was expressed over the continued high popularity of President Duterte despite his “‘irreverence’ for institutions, pro-China stance, and violation of human rights” (Nonato and Yap 2018).<sup>1</sup> More than four years after his election to the presidency, journalists continue to ask why President Duterte continues to enjoy high levels of popularity (Palatino 2020). Indeed, early in his administration term, some analysts were anticipating Duterte’s approval ratings drop “faster than average” due to his so-called “anti-poor” policies (Heydarian 2017 and Gregorio 2018).

Some attribute Duterte’s high satisfaction ratings to fake news and herd behavior (Canare, Mendoza, Yap, Jaminola, & Mendoza 2021; Mendoza & Canare 2020). Other analysts attribute Duterte’s popularity to a divided opposition and even fear (Regencia 2021; Kenny 2020; and Oscar Lagman 2021). It has been said that Duterte’s style of speaking street language and a common man demeanor that casts him as a political outsider, makes him more publicly palatable (Jennings 2019).<sup>2</sup> Some have even expressed doubts on the authenticity and reliability of the surveys themselves (Lalu 2019).

Whatever the reason, President Duterte’s high satisfaction ratings are a departure from the previous patterns of declining approval of past presidents towards the end of their terms. Despite the bloodiness of his declared war on illegal drugs as well as his mishandling of the COVID-19 pandemic, President Duterte continues to enjoy a high satisfaction rating relative to his predecessors

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<sup>1</sup> Nonito and Yap (2018) was quoting Albay Representative Edcel Lagman.

<sup>2</sup> Jennings (2019) was quoting Univesity of the Philippines Professor Maria Ela Atienza.

Fluctuations in ratings of the chief executive in presidential systems are generally seen as central to politics and governance in separation-of-power systems. Perceptions of popularity allow the president to persuade and cajole other actors to cooperate with his or her initiatives. The *locus classicus* for this line of analysis in the United States is the work of Richard Neustadt (1960; 1991). The same framework is useful in the Philippines where the structures of government resemble those in the United States and where political parties are particularly weak and fragmentary vehicles for non-personalistic political influence.

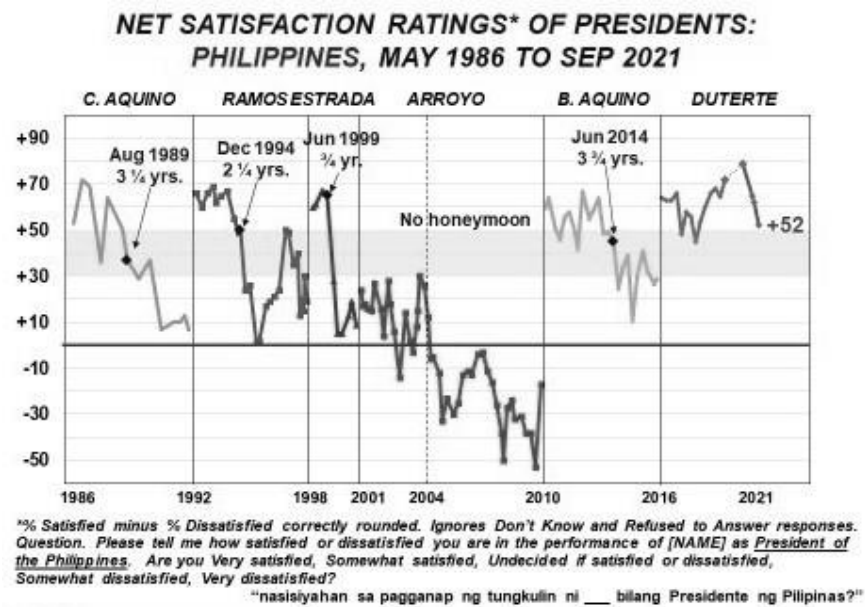
There is a large body of quantitative literature probing the determinants of presidential popularity over the decades. Mueller (1970) detected in the United States a pattern of high ratings immediately upon election followed by a decline over time. This analysis has been generalized to include Latin American countries (Carlin, Hartlyn, & Hellwig 2018), where there is a tendency for some recovery as a president's term comes to its end.

Aside from the perhaps inevitable wearing off of "honeymoons" there are a number of factors that have been investigated to account for the patterns. Economic data such as growth, unemployment, or inflation product mixed results in this literature, sometimes being correlated and sometimes not. (Jung & Oh 2020). In the Philippines, it has been similarly noted that economic data and evaluations are at best weakly related to satisfaction with the president. (Canare et al. 2021)

Other variables have been investigated over the years. One category might be "rally events" – where a crisis in the country causes the citizenry to rally around the current administration. The Covid-19 pandemic might be a candidate for such an effect, but in general the only difference between "rally events" and other crises that don't cause an upsurge in satisfaction is that when such an upsurge occurs the event is labeled a "rally event." Other analyses investigate the effects of aspects of respondents' identities – race, gender, education, economic standing and the like – since these would affect how politics affects individuals and their perception of events. Of course, as the analysis shifts to such "micro" concerns it is hard to generalize across administrations, much less countries (Newport & Saad 2021).

Focusing on the Philippines we can see signs of the general pattern being discussed in the post-1986 time period. President C. Aquino and President Ramos both began with high ratings but suffered overall general declines in their presidential terms (Figure 1). The next two presidents present unusual patterns, with President Estrada's term being cut short, and President Arroyo never enjoying a honeymoon after her extra-constitutional assumption of office in 2001. However they both experienced declines. The pattern reverted to type with President Benigno Aquino III having a honeymoon and then general decline. The pattern reverted to type with President Benigno Aquino III having a honeymoon and then general decline.

Figure 1. Net Satisfaction Ratings of Presidents: Philippines, May 1986 to September 2021



What is different is the pattern under the administration of President Duterte – a honeymoon level at the beginning, but his ratings have remained at or above honeymoon levels throughout his term thus far. Note, however, that net satisfaction with the performance of President Duterte has not been static. While it has remained high it has changed over the period and the pattern of satisfaction has also changed through time.

In what follows, we discuss the political context of ratings over the years, and then engage in statistical analysis of President Duterte's ratings.

## 2. Historical context

In his initial rating since assuming office, President Duterte had a net satisfaction rating of +64; about three in four Filipinos surveyed (76%) were satisfied with him, while only 12% were dissatisfied.

President Duterte's initial satisfaction rating can be considered "normal" relative to initial satisfaction ratings obtained by previous presidents, except President Macapagal-Arroyo.

In May 1986, President C. Aquino had +53 (60% satisfied); in September 1992, President Ramos had +66 (70% satisfied); in September 1998, President Estrada had +60 (69% satisfied); and President B. Aquino III, in September 2010, had +60 (71% satisfied). President Macapagal-Arroyo, in March 2001 right after Edsa Dos, had a satisfaction rating of +24 (42% satisfied), and when she was elected president her first satisfaction rating was +26 in June 2004.

In June 2018, President Duterte's net satisfaction rating went down to its "lowest" point at +45 (65% satisfied). A couple of qualifiers deserve mention here in looking at this lowest net satisfaction rating. President Duterte's lowest net satisfaction rating should be seen relative to the lowest net satisfaction ratings of past presidents although these low points occurred at different time points.

President C. Aquino's lowest net satisfaction is +7 (November 1990 and April 1992); President Ramos' lowest is +1 (October 1995 – Flor Contemplacion and rice price increase); President Estrada's is +5 (for two successive quarters, December 1999 and March 2000); President B. Aquino's is +11 (March 2015 coinciding with the Mamasapano incident and a Supreme Court decision on the unconstitutionality of the Disbursement Acceleration Program or DAP during the first quarter of that year); of course, the "outlier" among them is President Macapagal-Arroyo whose lowest net satisfaction rating is -64. Indeed President Macapagal-Arroyo's satisfaction ratings never recovered from the -5 that she had in December 2004, just months or almost immediately after her election as president.

Another qualifier is that President Duterte's lowest net satisfaction rating in June 2018 was preceded two quarter earlier by his biggest rating "dip". In September 2017, President Duterte's net satisfaction fell 18 points from +66 during the previous quarter to +48 (67% satisfied). This can be attributed to the public backlash in response to the brutal killing of 17-year-old Kian Loyd delos Santos during an

anti-drug police operation in August 2017.

At the time (third quarter of 2017), even Malacanang was quick to say that this big decline signaled an end to the so-called “honeymoon period” and that the people at the Palace at the time expected this to happen: “This is traditionally happening after a year, a year and a half, and you know, the love is still there,” according to the Presidential Spokesperson at the time, Ernesto Abella (Placido 2017).

The low but still good +48 rating during the third quarter of 2017 recovered over the next two quarters (+58 and +56 which are considered “very good”) but then dipped significantly again by 11 points to +45 in June 2018. Although still considered “good”, this +45 net satisfaction rating in the second quarter of 2018 would be the lowest for Duterte’s entire term.

Several events at the time coincide with this low net satisfaction rating (June 2018). One is Duterte’s polarizing attitude towards the Church in particular and the Christian faith in general. In an off-the-cuff statement he made on 22 June, Duterte said God is “stupid” and lambasted the concept of “original sin” believed by many Filipino Christians (Ranada 2018). A consistently high number of Filipinos consider religion very important (SWS 2020).

Another event is Duterte’s decision to close down Boracay beginning April to around October 2018. Boracay is a premier resort for both foreign and local tourists and the closure not only affected tourist arrivals but also led to the loss of livelihood of many Filipinos. Then in May 2018 there is the removal of Maria Lourdes Sereno as Supreme Court Chief Justice by virtue of a quo warranto petition filed by Solicitor General Jose Calida, a close friend of Duterte.

Nevertheless, one can say that satisfaction is still high (“good” in SWS terminology of net satisfaction ratings) even though it was the president’s lowest net rating.

Finally, in June 2021 or about one year before his term ends, President Duterte’s net satisfaction rating was +62 (with 75% satisfied). Obviously, the biggest issue during this time (and up to now) is the pandemic and the quarantine lockdowns going on in varying degrees throughout the Philippines for more than a year already. By June 2021, the number of COVID-19 cases in the country had risen to over 1.4 million with total deaths at 24,662. This was the time when the daily infection rate had “stabilized” in the thousand-figure range.

If we look at the beginning of the final year of past presidents, we see lower net satisfaction ratings

compared to their ratings when they first assumed office. In April 1991, President C. Aquino's net satisfaction rating was +24 (from +53 first rating); President Ramos' was +49 in June 1997 (versus his first net satisfaction of +66); and President B. Aquino's was +30 in June 2015 (+60).

The outliers here are President Macapagal-Arroyo and President Estrada. President Estrada never finished his term but one year before the abrupt end of his term, he had his lowest net satisfaction rating (+5 in December 1999). President Macapagal-Arroyo's net satisfaction rating one year before her term ended was -31 in June 2009.

Looking at the comparable data points across all the presidents beginning with Corazon Aquino, the noticeable difference with Duterte's net satisfaction rating is that it ends roughly at the same level as when he began his term back in September 2016.

### 3. Analytical Framework

We classify the various hypothesized reasons for President Duterte's consistently high satisfaction ratings into different sets of factors.

One set of factors has to do with the respondent's *identity*, such as the respondent's region of residence or origin, sex, age, educational level, and socioeconomic status. There is a natural tendency for people to judge more favorably those with whom they identify. This can be considered a form or manifestation of confirmation bias.<sup>3</sup> When identity is based on shared place of residence or origin, it can also be called the hometown effect. As the first President to come from Mindanao, from the beginning, President Duterte has enjoyed very high satisfaction among Mindanao respondents.<sup>4</sup>

The second set of factors have to do with policy satisfaction, whether on specific policies or the President's (or national government's) overall policy. This is probably the kind of satisfaction Presidential satisfaction ratings are genuinely meant to capture. Among the policies that have been

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<sup>3</sup> Confirmation bias is the tendency of people to interpret evidence in favor of their existing beliefs (Wason, 1960). It is for the same reason that we almost never agree with the decision when a Filipino boxer loses a close fight in the Olympics.

<sup>4</sup> In the September 2016 SWS survey, the net satisfaction for President Duterte in Mindanao was +85. In June 2021, the latest data available at the time of this study, the net satisfaction for him in Mindanao was +79. Both are considered 'excellent' scores.



suggested as driving President Duterte's popularity are his drug war, the government's infrastructure program, universal health care, and free tertiary education.<sup>5</sup>

The third set of factors is the perception of the President's character or his charisma.<sup>6</sup> Those who take a positive view of the President's character are also likely more inclined to rate his performance positively – another manifestation of confirmation bias. Among the President's perceived character traits that are seen to resonate positively with people are authenticity, toughness, and decisiveness.

These three sets of factors can be grouped together as comprising what could be called *proximate causes* for Presidential satisfaction.<sup>7</sup> Of course, one can extend the question further back and ask what determines policy satisfaction and the positive perception of the President's character, touching on what could be called *ultimate causes*.<sup>8</sup>

The Presidential character traits that are important for people are likely shaped by culture, personal experience, and personal values. And people's perception of the character of any President can be shaped not just by personal experience and observation but also by information, which can be accurate information or propaganda. The same is true for policy satisfaction, which can be influenced not just by personal values, experience, and observation, but also by cognitive biases, and access to information or misinformation.

This is linked to a fourth factor that has been claimed to be driving President Duterte's high satisfaction rating, which is disinformation or fake news and some level of irrationality among survey respondents.<sup>9</sup> A fifth factor that has been posited is fear of reprisal for expressing anything critical of government, so that what is reported in satisfaction in surveys is not real satisfaction.

The different sets of factors and how they relate to satisfaction rating are summarized in Figure 2. In the statistical analysis for this study, we focus only on what we termed the proximate causes, as these

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<sup>5</sup> See, for example, Masigan (2019).

<sup>6</sup> See, for example, Heydarian (2020).

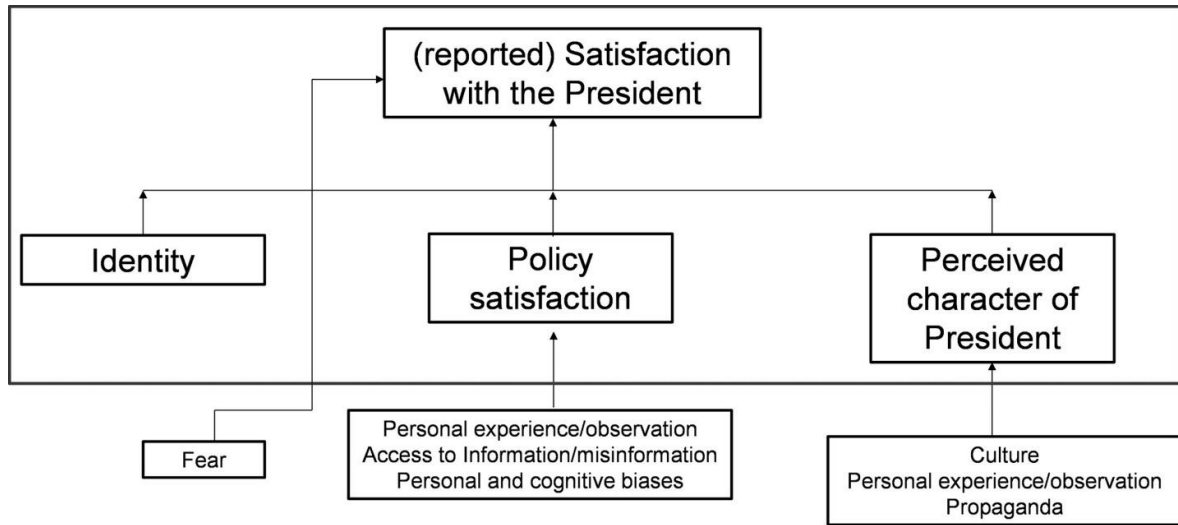
<sup>7</sup> Borrowing a term from evolutionary biology.

<sup>8</sup> Identity factors, as defined earlier, are mainly exogenous and may be thought of as ultimate causes already.

<sup>9</sup> See, for example, Canare *et al.* (2020).

are the factors that can be tested using the currently available data. In terms of Figure 2, we focus our analysis on the portion of the analytical framework circumscribed by the big rectangle.

Figure 2. Analytical Framework



#### 4. Data and Empirical Strategy

##### *Data*

The September 2016, June 2018, and June 2021 Social Weather Report National Surveys were conducted using face-to-face interviews of 1,200 adults (18 years old and above) nationwide: 300 each in Metro Manila, Balance of Luzon, Visayas and Mindanao (sampling error margins of  $\pm 3\%$  for national percentages and  $\pm 6\%$  for area percentages, at the 95% confidence level). The 1,200 respondents are obtained from 240 spots or barangays, with 5 respondents per spot. A fresh set of respondents is randomly drawn every survey round.

Multi-stage sampling is used in identifying respondents. In Metro Manila, 60 spots are selected with probability proportional to population size. Within sampled barangays, households are selected using interval sampling from randomly generated starting points (municipal/barangay hall, school, barangay captain's house, church/chapel/mosque, health facility or basketball court) and random start (any number from 1-6). Within sampled households, respondents are randomly selected among qualified

respondents using a probability selection table (Kish Grid – a standard method for probability sampling one member of a household).

For Balance Luzon, Visayas and Mindanao, provinces are proportionally allocated among all regions, with provision that each region must have at least one province. Provinces are sampled with probability proportional to population size. Within each study area, 60 spots are proportionally allocated among the sampled provinces. Barangays are selected with probability proportional to population size. Households and respondents are identified similar to the Metro Manila sampling procedure.

The area estimates were weighted by the Philippine Statistics Authority medium-population projections for the survey year to obtain the national estimates.

Face-to-face is the standard interviewing method for Social Weather Stations; the only exceptions were early in the pandemic when movement restrictions made face-to-face impossible and mobile phone interviews were conducted from May to September 2020. SWS employs its own staff for questionnaire design, sampling, fieldwork, data processing, and analysis, and does not outsource any of its survey operations.

#### *Ordered Logit Model*

We model satisfaction rating for President Duterte using ordered logit model. Ordered logit model is appropriate when the dependent variable is categorical but has a natural ordering (Kennedy, 2008). The underlying assumption in an ordered logit model is that the dependent variable (in this case the discrete satisfaction rating) results from a continuous unobserved measure (here taken to be the continuous level of satisfaction with the President), so that the higher the level of satisfaction with the President, the more likely a higher satisfaction rating will be given to him. The level of satisfaction can thus be viewed as an index with each satisfaction rating corresponding to a particular range of satisfaction.

We make two transformations on the original satisfaction rating variables for purposes of the analyses presented in this paper. The first is to reverse the order of the satisfaction rating so that a higher

number represents greater satisfaction. In its original form, the satisfaction rating took on discrete values from 1 to 5, representing a move from the highest to the lowest satisfaction levels.<sup>10</sup> We reversed this so that higher values represent higher levels of satisfaction. The second transformation we did is to collapse the satisfaction rating categories to only three from the original five, by combining *very satisfied* with *satisfied*, and *very dissatisfied* with *dissatisfied*. In fact, we performed ordinary logit model using both the 5 categories of satisfaction rating and the 3 categories, but found no notable difference in the results. We present only the latter results in this study for ease of exposition and because, in practice, such as for the computation of net satisfaction ratings, the 3-level categorization is the one used.

We performed the estimation using three SWR survey waves. We focus mainly on the most recent survey (June 2021), but also discuss the estimation results for the June 2018 and September 2016 survey waves.

As already stated, our model posits that individual satisfaction with President Duterte is influenced by various factors, and that these factors can be categorized into three groups of variables. These three groups are the following: (i) identity variables; (ii) policy satisfaction variables; and (iii) perceived character variables.

More formally, the model can be represented as

$$y^* = I\beta + P\theta + C\gamma + e ,$$

where  $y^*$  is an  $n$ -dimensional vector denoting the satisfaction of  $n$  respondents for President Duterte;  $I$  is an  $n \times k$  matrix where  $k$  is the number of identity variables included in the model;  $\beta$  is  $k \times 1$  denoting the coefficients attached to each identity variable;  $P$  is an  $n \times s$  matrix where  $s$  is the number of policy satisfaction variables included in the model;  $\theta$  is  $s \times 1$  denoting the coefficients attached to each policy satisfaction variable;  $C$  is an  $n \times t$  matrix where  $t$  is the number of perceived character variables

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<sup>10</sup> 1-Very satisfied; 2-Satisfied; 3-Undecided; 4-Not Satisfied; 5-Very dissatisfied

included in the model;  $\gamma$  is  $t \times 1$  denoting the coefficients attached to each perceived character variable; and  $e$  is an  $n \times 1$  vector of error terms.

Let  $\alpha_1 < \alpha_2$  be unknown cutoff points, then we can define the satisfaction rating  $y$  as follows:

$$y = -1 \text{ (dissatisfied)} \quad \text{if } y^* \leq \alpha_1$$

$$y = 0 \text{ (undecided)} \quad \text{if } \alpha_1 \leq y^* \leq \alpha_2$$

$$y = 1 \text{ (satisfied)} \quad \text{if } y^* > \alpha_2$$

The identity variables that we include in the model are the respondent's area of residence, locale (whether urban or rural), sex, age group, education level, self-rated poverty status, and experience of hunger in the previous three months. The list of variables and their definitions are in Annex Tables 1 to 3.

Because the policy questions included in the SWR sometimes change depending on the issues of interest during the period of the survey, the policy satisfaction variables we include also change depending on the date of the survey. For the June 2021 estimations, the policy satisfaction variables we include are on the following: the national administration's performance helping the poor; controlling prices, fighting hunger; COVID-19 care; COVID-19 vaccination; and overall "pamamalakad". For these variables, the higher the value, the more satisfied they are with the national administration's policy. We also include among the policy satisfaction variables the variable containing the respondent's view on the bloodiness of the drug war. For this variable, the higher the value the more they agree with the statement that President Duterte's drug war is bloody.

For the perceived character variables, we include three, representing the respondent's agreement or disagreement with the statement that President Duterte is (i) decisive, (ii) authentic, and (iii) diligent. For these variables, a higher value means the more the respondent agrees that the President possesses the quality described by the variable.

*September 2016 policy satisfaction and character variables*

In the estimation using September 2016 data, the policy satisfaction variables included are on the national administration's defense policy, economic policy, governance policy, public safety policy, foreign policy, the national administration's overall performance or "pamamalakad", and the drug war. Except for the "pamamalakad" variable and the drug war variable, the policy satisfaction variables included are themselves a composite of several policy variables under the heading. What each broad policy satisfaction variable includes and how it was computed is described in Annex Table 2. The drug war variable is couched in terms of effectiveness and so a higher value means more effective.<sup>11</sup> Meanwhile, the character variables included for this survey round pertain to agreement or disagreement that President Duterte is (i) trustworthy, (ii) tough, (iii) in possession of a clear plan (or prepared), (iv) caring, (v) can bring change, (vi) can get things done, and (vii) listens.

#### *June 2018 policy satisfaction and character variables*

In the estimation using June 2018 data, similar to the September 2016 data, the policy satisfaction variables included are on the national administration's defense policy, economic policy, governance policy, public safety policy, foreign policy, the national administration's overall "pamamalakad", and the drug war. As with the September 2016 data, except for the overall "pamamalakad" and drug war variables, the policy satisfaction variables included are themselves a composite of several policy variables under the heading. The specific policy variables under each broad policy satisfaction variable are not necessarily the same as in the September 2016, however. The specific compositions are described in Annex Table 3. The only character variable included in this data set is a variable measuring the respondent's agreement that President Duterte is "bastos" or vulgar. This is constructed based on the respondent's view on whether President Duterte was bastos" in three specific incidents that occurred close to the period of the survey. These incidents were President Duterte kissing a married lady in the lips in Korea, his public pronouncement that priests are not better than

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<sup>11</sup> Note the difference with drug war variable in the June 2021 data, which was in terms of bloodiness.

him, and his cursing the Chief and members of the UN Human Rights Council. The specific way the variable was constructed is described in Annex Table 3.

## 5. Discussion of Results

### **June 2021 SWR**

Table 1 shows the model estimation results using the June 2021 survey data. To see how well each group of explanatory factors is able to explain President Duterte's satisfaction rating, we also estimate models where satisfaction is regressed against each group of factors separately.

#### *Model 1: Identity variables only*

Model 1 uses only identity variables as explanatory variables. The model is highly significant ( $p$ -value $<0.001$ ), which imply identity variables are able to explain satisfaction with President Duterte to some extent. The individual identity variables that come out significant in the model are area of residence and education level. In particular, relative to the base area NCR, respondents in Mindanao are found to be significantly more likely to be satisfied with President Duterte, while respondents in Visayas are less likely to be satisfied with President Duterte. As to education level, the results indicate that better educated respondents (those who completed at least junior high school) were significantly more likely to be satisfied with President Duterte than those with incomplete junior high school or lower education. The model has limited predictive power, however. When the model is used to predict the actual satisfaction rating given by the respondents, it predicts that all respondent will give a positive satisfaction rating.<sup>12</sup> As a result, it predicts all of the actual satisfied correctly (75% of total respondents), but none of the not satisfied or undecided. The predicted net satisfaction rating of the model is 100 compared to the actual 62.

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<sup>12</sup> Operationally, this is done by generating the probability that a respondent will be in each of the three possible categories (not satisfied, undecided, satisfied) and selecting the category with the highest predicted probability as the model prediction as to which category the respondent will belong.

*Model 2: Policy satisfaction variables only*

Model 2 uses only policy satisfaction variables as explanatory variables. The model is highly significant, which again imply policy satisfaction variables are able to explain satisfaction with President Duterte to some extent. The individual policy satisfaction variables that come out significant in the model are helping the poor, “pamamalakad”, and the bloodiness of the drug war. In particular, respondents who rated President Duterte positively on helping the poor are also more likely to be satisfied with him. Those who are satisfied with the national administration’s “pamamalakad” are also more likely be satisfied with President Duterte. Finally, those who agree that President Duterte’s drug war is bloody are significantly less likely to be satisfied with President Duterte. The other policy satisfaction variables do not come out significant (controlling prices, fighting hunger, COVID care, and COVID vaccination). The model performs better than Model 1 in terms of predictive power, however. When the model is used to predict the actual satisfaction rating given by the respondents, it correctly predicts 38% of those who are not satisfied apart from correctly predicting 97% of those who are satisfied. The model is unable to correctly predict any of the undecided. Overall, the model is able to correctly predict the categories of 78% of the respondents. The predicted net satisfaction rating of the model is 82.

*Model 3: Perceived character variables only*

Model 3 uses only perceived character variables as explanatory variables. Again, the model is highly significant. All the individual perceived character variables come out significant in the model (at the 10% significance level). Those who think President Duterte decisive are significantly more likely to be satisfied with President Duterte. Those who think President Duterte diligent are more likely to be satisfied with him. And those who find President Duterte authentic are also more likely to be satisfied with him. The model performs better than Model 1 and Model 2 in terms of predictive power. When the model is used to predict the actual satisfaction rating given by the respondents, it correctly predicts 45% of those who are not satisfied apart from correctly predicting 99% of those who are satisfied. As with the previous two models, the model is unable to correctly predict any of the undecided. Overall,



the model is able to correctly predict the categories of 80% of the respondents. The predicted net satisfaction rating of the model is 82.

*Model 4: All variables*

Model 4 includes all the three groups of explanatory variables. The model is highly significant. Among the identity variables, area of residence, age-group, and education come out significant. In particular, respondents from Mindanao are still found to be significantly much more likely to be satisfied with President Duterte compared to respondents from NCR. Those in the 25-39 and 60 and up age-groups are found to be significantly less likely to be satisfied with President Duterte compared to those in the 18-24 age-group. Alternatively stated, this means that those in the youth group (18-24) are significantly more likely to be satisfied with President Duterte than those in the older age groups. And those with higher education are significantly more likely to be satisfied with President Duterte. Two policy satisfaction variables come out significant in the model: helping the poor and “pamamalakad”. As before, those who rated President Duterte positively on helping the poor, and those who are satisfied with the national administration’s “pamamalakad” are also more likely to be satisfied with him. The bloodiness of drug war variable ceases to be significant at the 10% level. Among the perceived character variables, decisiveness and diligence come out significant. Again, those who think President Duterte decisive are significantly more likely to be satisfied with President Duterte and those who think President Duterte diligent are more likely to be satisfied with him. The authenticity variable ceases to be significant. This model performs best in terms of predictive power. When the model is used to predict the actual satisfaction rating given by the respondents, it correctly predicts more than half (57%) of those who are not satisfied apart from correctly predicting 98% of those who are satisfied. As with the previous models, the model is unable to correctly predict any of the undecided. Overall, the model is able to correctly predict the categories of 82% of the respondents. The predicted net satisfaction rating of the model is 76, which is closest to the actual of 62.

## **September 2016 SWR**

### *Model 1: Identity variables only*

In the first SWR survey featuring a satisfaction rating for President Duterte, identity variables by themselves also came out highly significant. Area of residence, sex of respondent, age of respondent, education of respondent, and self-rated poverty status of the household respondent were individually statistically significant in explaining satisfaction with President Duterte. Specifically, relative to the base area of NCR, respondents in Mindanao and also Visayas were significantly more likely to be satisfied with President Duterte. Note the difference from the June 2021 results, where Visayas respondents were less likely to be satisfied with President Duterte than NCR respondents. This is because President Duterte's satisfaction rating declined in Visayas in between the two surveys whereas his satisfaction rating in NCR increased. By sex, male respondents were significantly more likely to be satisfied with President Duterte at the beginning of his term. This differs from the June 2021 results where difference by sex was statistically insignificant, which is driven both by a decline in President Duterte's satisfaction rating among males, and a slight increase among females. By age-group, those 25-39 were more likely to be satisfied with President Duterte compared to those in the base age-group 18-24. By education level, compared to the base category of incomplete high school and below, those with complete high school to incomplete college were significantly more likely to be satisfied with President Duterte. Finally, by self-rated poverty status, the self-rated non-poor respondents were found to be significantly more likely to be satisfied with President Duterte than those who are on the line and those who are poor. The model has limited predictive power and predicts that all respondent will give a positive satisfaction rating. As a result, it predicts all of the actual satisfied correctly (76% of total respondents), but none of the not satisfied or undecided. The predicted net satisfaction rating of the model is 100 compared to the actual 64.

### *Model 2: Policy satisfaction variables only*

Model 2, which uses only policy satisfaction variables, is also highly significant. The individual policy satisfaction variables that come out significant in the model are the defense policy satisfaction

index, “pamamalakad”, and the effectiveness of the drug war. In particular, respondents who rated President Duterte high on defense policy are also more likely to be satisfied with him. Those who are satisfied with the national administration’s “pamamalakad” are also more likely to be satisfied with President Duterte. Finally, those who found President Duterte’s drug war to be effective are also significantly more likely to be satisfied with him. The other policy satisfaction variables do not come out significant. Model 2 performs better than Model 1 in terms of predicting those who are not satisfied. It correctly predicts 27% of those who are not satisfied apart from correctly predicting 97% of those who are satisfied. Still, the model is unable to correctly predict any of the undecided. Overall, the model is able to correctly predict the categories of 76% of the respondents. The predicted net satisfaction rating of the model is 86 against the actual 64.

*Model 3: Perceived character variables only*

Model 3, which uses only perceived character variables, is also highly significant. In particular, what comes out are the respondents’ view on President Duterte’s trustworthiness, toughness, caring, and capacity for listening. Those who think positively of President Duterte in each of these individual dimensions of character are significantly more likely to be satisfied with President Duterte. The model performs better than Model 1 but worse than Model 2 in predicting those who are not satisfied. It correctly predicts 15% of those who are not satisfied apart from correctly predicting 99% of those who are satisfied. The model is unable to correctly predict any of the undecided. Overall, the model is able to correctly predict the categories of 77% of the respondents, which is slightly better than Model 2,. The predicted net satisfaction rating of the model is 93.

*Model 4: All variables*

Model 4, which combines the three groups of variables, is also highly significant, as would be expected. Among the identity variables, area of residence, age-group, and education come out significant. In particular, respondents from Mindanao are still found to be significantly much more likely to be satisfied with President Duterte compared to respondents from NCR. Those in the 25-39 and 40-59 age-groups are found to be significantly more likely to be satisfied with President Duterte

compared to those in the 18-24 age-group, a result which is almost the opposite compared to the June 2021 survey. By education level, those complete high school to incomplete college were significantly more likely to be satisfied with President Duterte compared to those with lower education. The three policy variables that came out significant in Model 2 still come out significant in the full model. Respondents who rated President Duterte high on defense policy, those who are satisfied with the national administration's "pamamalakad", and those who found President Duterte's drug war to be effective are also significantly more likely to be satisfied with him. Only two perceived character variables come out significant in the full model, which are toughness and capacity for listening. Respondents who rate President Duterte high in terms of toughness and his capacity for listening are also more likely to be satisfied with him. This model performs better than Models 1 to 3 in terms of predictive power. It correctly predicts 43% of those who are not satisfied apart from correctly predicting 97% of those who are satisfied. As with the previous models, the model is unable to correctly predict any of the undecided. Overall, the model is able to correctly predict the categories of 79% of the respondents. The predicted net satisfaction rating of the model is 81 compared to the actual 64.

### **June 2018 SWR**

#### *Model 1: Identity variables only*

In the survey that had the lowest net satisfaction rating for President Duterte, identity variables by themselves also came out highly significant. More specifically, two variables came out significant: area of residence and locale. Mindanao respondents were significantly more likely to be satisfied with President Duterte compared to NCR respondents, and rural respondents were likely to be satisfied with Duterte than urban respondents. The model has limited predictive power and predicts that all respondent will give a positive satisfaction rating. As a result, it predicts all of the actual satisfied correctly (65% of total respondents), but none of the not satisfied or undecided. The predicted net satisfaction rating of the model is 100 compared to the actual 45.

*Model 2: Policy satisfaction variables only*

Model 2, which uses only policy satisfaction variables, is also highly significant. The individual policy satisfaction variables that come out significant in the model are the economic policy satisfaction index, “pamamalakad”, and the effectiveness of the drug war. Note that this differs from the September 2016 results where it was instead the defense policy satisfaction index that came out significant. Respondents who rated President Duterte high on economic policy are also more likely to be satisfied with him. Those who are satisfied with the national administration’s “pamamalakad” are also more likely to be satisfied with President Duterte. Finally, those who found President Duterte’s drug war to be effective are also significantly more likely to be satisfied with him. Model 2 performs better than Model 1 in terms of predicting those who are not satisfied. It correctly predicts 41% of those who are not satisfied apart from correctly predicting 96% of those who are satisfied. Still, the model is unable to correctly predict any of the undecided. Overall, the model is able to correctly predict the categories of 72% of the respondents. The predicted net satisfaction rating of the model is 72 against the actual 45.

*Model 3: Perceived character variables only*

Model 3, which only has the Bastos index as explanatory variable, also comes out highly significant. As expected, those who found President Duterte to be “bastos” were less likely to be satisfied with him. The model does not have a strong predictive power, however, as it still predicts almost everyone to be satisfied. Overall, the model is able to correctly predict the categories of 64% of the respondents. The predicted net satisfaction rating of the model is 100 compared to the 45 actual.

*Model 4: All variables*

Model 4, which combines the three groups of variables, is highly significant. Among the identity variables, two come out significant: area of residence and experience of hunger. In particular, respondents from Mindanao are found to be significantly much more likely to be satisfied with President Duterte compared to respondents from NCR. Those who did not experience hunger are also

significantly less likely to be satisfied with him compared to those who experienced hunger. Only two policy variables come out significant in the full model. Respondents who are satisfied with the national administration's "pamamalakad" and those who found President Duterte's drug war to be effective are also significantly more likely to be satisfied with him. The only perceived character variable in the model also comes out significant: those who found President Duterte to be "bastos" were less likely to be satisfied with him. This model performs better than Models 1 to 3 in terms of predictive power. It correctly predicts 43% of those who are not satisfied apart from correctly predicting 96% of those who are satisfied. The model is unable to correctly predict any of the undecided. Overall, the model is able to correctly predict the categories of 72% of the respondents. The predicted net satisfaction rating of the model is 67 compared to the actual 45.

## 6. Summary and conclusion

To sum up, based on the preceding analyses, there is no single explanation for President Duterte's high satisfaction rating. Instead, there are multiple explanations.

One explanation is his strong base support, which has so far stuck with him, regardless of economic and other developments, and best exemplified by Mindanao residents. In June 2018, when President Duterte had his lowest national-level net satisfaction rating, 84% of those in Mindanao were still satisfied with him. This is what we earlier termed the hometown advantage. This kind of sticky hometown advantage did not exist for President B. Aquino, for instance, who started out with the highest net satisfaction rating in NCR and other Luzon, what could be considered his hometowns, but towards the end had the lowest net satisfaction ratings in these areas.<sup>13</sup>

Another explanation is satisfaction with the national administration's overall "pamamalakad", as well as satisfaction on some specific policy issues, such as helping the poor and, to some extent, the drug war.

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<sup>13</sup> See Annex Figure 1 for a comparison of President Duterte and President B. Aquino's net satisfaction rating at comparable periods in their terms.

A third explanation is that people relate to or are attracted to some aspects of the President’s character, such as his perceived decisiveness and diligence. Those who see these character traits in him tend to be better satisfied with his performance.

Of the three types of factors, perception of his character appears to be the most important factor explaining satisfaction and dissatisfaction with President Duterte, especially in the most recent survey wave examined. In the models that we considered, it is the set of factors that have the most predictive power, and that best distinguishes between those who are satisfied and those who are not satisfied with the President.

But to circle back to the analytical framework. Our models looked at the proximate causes of satisfaction with President Duterte, and we showed that identity, policy satisfaction, and perceived character matter. But again one can extend the question further and ask what has been driving the positive perception of President Duterte’s character and policy satisfaction. How much is due to personal experience or observation? How much from good information and how much from misinformation and propaganda? How much due to cognitive biases? One can also ask, as others have speculated, how much is driven by fear of expressing dissatisfaction, so that what is observed is not real satisfaction? These are not easily answerable with existing data, but are ripe subject for further studies.

Table 1. Ordinary Logit Models of President Duterte Satisfaction Rating, (June 2021)

| Explanatory Variables      | Model 1 |      | Model 2 |      | Model 3 |      | Model 4 |      |
|----------------------------|---------|------|---------|------|---------|------|---------|------|
|                            | Coeff.  | sig. | Coeff.  | sig. | Coeff.  | sig. | Coeff.  | sig. |
| <b>IDENTITY VARIABLES</b>  |         |      |         |      |         |      |         |      |
| <i>Locale (base=Urban)</i> |         |      |         |      |         |      |         |      |
| Rural                      | 0.106   |      |         |      |         |      | -0.046  |      |
|                            | (0.178) |      |         |      |         |      | (0.211) |      |
| <i>Area (base=NCR)</i>     |         |      |         |      |         |      |         |      |
| Balance Luzon              | -0.294  |      |         |      |         |      | 0.101   |      |
|                            | (0.224) |      |         |      |         |      | (0.258) |      |
| Visayas                    | -0.390  | *    |         |      |         |      | 0.306   |      |
|                            | (0.228) |      |         |      |         |      | (0.272) |      |
| Mindanao                   | 0.525   | **   |         |      |         |      | 0.683   | **   |
|                            | (0.239) |      |         |      |         |      | (0.286) |      |
| <i>Sex (base=Male)</i>     |         |      |         |      |         |      |         |      |
| Female                     | -0.174  |      |         |      |         |      | -0.263  |      |
|                            | (0.152) |      |         |      |         |      | (0.182) |      |

|   |                     |                      |                      |                      |
|---|---------------------|----------------------|----------------------|----------------------|
| <i>Age Group (base=18-24)</i>                         |                     |                      |                      |                      |
| 25-39   | -0.003<br>(0.252)   |                      |                      | -0.607 **<br>(0.306) |
| 40-59   | 0.016<br>(0.252)    |                      |                      | -0.297<br>(0.299)    |
| 60 and up   | -0.414<br>(0.275)   |                      |                      | -0.646 **<br>(0.311) |
| <i>Education Level (base=incomplete HS and below)</i> |                     |                      |                      |                      |
| Complete JHS to incomplete college                    | 0.350 **<br>(0.173) |                      |                      | 0.427 **<br>(0.210)  |
| Complete college                                      | 0.457 *<br>(0.245)  |                      |                      | 0.641 **<br>(0.304)  |
| <i>Self-rated Poverty (base=Not poor)</i>             |                     |                      |                      |                      |
| On the line   | -0.125<br>(0.228)   |                      |                      | -0.170<br>(0.293)    |
| Poor  | -0.087<br>(0.222)   |                      |                      | -0.062<br>(0.258)    |
| <i>Experienced hunger (baseline=Yes)</i>              |                     |                      |                      |                      |
| No  | 0.269<br>(0.220)    |                      |                      | 0.243<br>(0.255)     |
| <b>POLICY VARIABLES</b>                               |                     |                      |                      |                      |
| Helping the poor                                      |                     | 0.423 ***<br>(0.130) |                      | 0.293 **<br>(0.132)  |
| Controlling prices                                    |                     | 0.116<br>(0.114)     |                      | -0.033<br>(0.122)    |
| Fighting hunger                                       |                     | -0.015<br>(0.115)    |                      | -0.032<br>(0.135)    |
| COVID care  |                     | 0.079<br>(0.146)     |                      | -0.097<br>(0.159)    |
| COVID vaccination                                     |                     | 0.151<br>(0.138)     |                      | -0.056<br>(0.162)    |
| National Admin overall performance (pamamalakad)      |                     | 1.154 ***<br>(0.121) |                      | 0.898 ***<br>(0.125) |
| Bloodiness of drug war                                |                     | -0.257 **<br>(0.128) |                      | -0.197<br>(0.125)    |
| <b>(PERCEIVED) CHARACTER VARIABLES</b>                |                     |                      |                      |                      |
| Decisiveness  |                     |                      | 1.098 ***<br>(0.107) | 0.961 ***<br>(0.116) |
| Authenticity  |                     |                      | 0.196 *<br>(0.113)   | 0.190<br>(0.124)     |
| Diligence   |                     |                      | 1.170 ***<br>(0.149) | 0.992 ***<br>(0.163) |
| No. of observations                                   | 1199                | 1173                 | 1186                 | 1163                 |
| Wald chi2   | 39.8                | 187.78               | 270.22               | 348.7                |
| p-value   | 0.0001              | 0.0000               | 0.0000               | 0.0000               |
| Pseudo R2   | 0.0249              | 0.1589               | 0.237                | 0.3044               |
| % accuracy predicting category of respondents         |                     |                      |                      |                      |



|                                   |     |    |    |    |
|-----------------------------------|-----|----|----|----|
| Not satisfied                     | 0   | 38 | 45 | 57 |
| Undecided                         | 0   | 0  | 0  | 0  |
| Satisfied                         | 100 | 97 | 99 | 98 |
| All                               | 75  | 78 | 80 | 82 |
| Predicted % satisfied by model    | 100 | 91 | 91 | 88 |
| Predicted % dissatisfied by model | 0   | 9  | 9  | 12 |
| Predicted net satisfaction rating | 100 | 82 | 82 | 76 |
| Actual net satisfaction rating    | 62  | 62 | 62 | 62 |

Note: Figures in parentheses are standard errors. \*\*\* is 0.01; \*\* is 0.05; and \* is 0.1

Table 2. Ordinary Logit Models of President Duterte Satisfaction Rating, (Sept 2016)

| Explanatory Variables                                 | Model 1           |      | Model 2           |      | Model 3 |      | Model 4           |      |
|---|-------------------|------|-------------------|------|---------|------|-------------------|------|
|   | Coeff.            | sig. | Coeff.            | sig. | Coeff.  | sig. | Coeff.            | sig. |
| <b>IDENTITY VARIABLES</b>                             |                   |      |                   |      |         |      |                   |      |
| <i>Locale (base=Urban)</i>                            |                   |      |                   |      |         |      |                   |      |
| Rural   | 0.024<br>(0.179)  |      |                   |      |         |      | 0.156<br>(0.216)  |      |
| <i>Area (base=NCR)</i>                                |                   |      |                   |      |         |      |                   |      |
| Balance Luzon   | 0.118<br>(0.204)  |      |                   |      |         |      | 0.224<br>(0.231)  |      |
| Visayas   | 0.396<br>(0.221)  | *    |                   |      |         |      | 0.415<br>(0.253)  |      |
| Mindanao  | 1.402<br>(0.256)  | ***  |                   |      |         |      | 1.134<br>(0.302)  | ***  |
| <i>Sex (base=Male)</i>                                |                   |      |                   |      |         |      |                   |      |
| Female  | -0.445<br>(0.153) | ***  |                   |      |         |      | -0.324<br>(0.178) | *    |
| <i>Age Group (base=18-24)</i>                         |                   |      |                   |      |         |      |                   |      |
| 25-39   | 0.664<br>(0.256)  | **   |                   |      |         |      | 0.666<br>(0.300)  | **   |
| 40-59   | 0.269<br>(0.249)  |      |                   |      |         |      | 0.582<br>(0.300)  | *    |
| 60 and up   | 0.202<br>(0.286)  |      |                   |      |         |      | 0.377<br>(0.323)  |      |
| <i>Education Level (base=incomplete HS and below)</i> |                   |      |                   |      |         |      |                   |      |
| Complete JHS to incomplete college                    | 0.536<br>(0.175)  | ***  |                   |      |         |      | 0.446<br>(0.199)  | **   |
| Complete college                                      | 0.358<br>(0.265)  |      |                   |      |         |      | 0.165<br>(0.297)  |      |
| <i>Self-rated Poverty (base=Not poor)</i>             |                   |      |                   |      |         |      |                   |      |
| On the line   | -0.867<br>(0.224) | ***  |                   |      |         |      | -0.711<br>(0.267) | ***  |
| Poor  | -0.566<br>(0.230) | **   |                   |      |         |      | -0.512<br>(0.262) | *    |
| <i>Experienced hunger (baseline=Yes)</i>              |                   |      |                   |      |         |      |                   |      |
| No  | 0.009<br>(0.250)  |      |                   |      |         |      | -0.008<br>(0.308) |      |
| <b>POLICY VARIABLES</b>                               |                   |      |                   |      |         |      |                   |      |
| Defense policy satisfaction index                     |                   |      | 0.647<br>(0.145)  | ***  |         |      | 0.491<br>(0.143)  | ***  |
| Economic policy satisfaction index                    |                   |      | 0.076<br>(0.215)  |      |         |      | -0.002<br>(0.207) |      |
| Foreign policy satisfaction index                     |                   |      | 0.034<br>(0.138)  |      |         |      | 0.010<br>(0.147)  |      |
| Governance satisfaction index                         |                   |      | -0.014<br>(0.249) |      |         |      | 0.004<br>(0.239)  |      |
| Public safety satisfaction index                      |                   |      | -0.021<br>(0.231) |      |         |      | -0.012<br>(0.236) |      |

|   |        |                  |     |                   |                  |                   |
|---|--------|------------------|-----|-------------------|------------------|-------------------|
| National Admin overall performance<br>(pamamalakad) |        | 1.091<br>(0.145) | *** |                   | 0.943<br>(0.154) | ***               |
| Effectiveness of drug war                           |        | 0.671<br>(0.154) | *** |                   | 0.512<br>(0.172) | ***               |
| <b>(PERCEIVED) CHARACTER VARIABLES</b>              |        |                  |     |                   |                  |                   |
| Trustworthy   |        |                  |     | 0.679<br>(0.408)  | *                | 0.134<br>(0.444)  |
| Tough   |        |                  |     | 1.134<br>(0.388)  | ***              | 1.084<br>(0.411)  |
| Has clear plan                                      |        |                  |     | -0.038<br>(0.349) |                  | -0.365<br>(0.403) |
| Caring  |        |                  |     | 0.719<br>(0.359)  | **               | 0.188<br>(0.401)  |
| Can bring change                                    |        |                  |     | 0.546<br>(0.357)  |                  | 0.363<br>(0.374)  |
| Can get things done                                 |        |                  |     | -0.595<br>(0.365) |                  | -0.316<br>(0.327) |
| Listens   |        |                  |     | 0.816<br>(0.208)  | ***              | 0.758<br>(0.233)  |
| No. of observations                                 | 1198   | 1150             |     | 1190              |                  | 1144              |
| Wald chi2   | 73.03  | 169.21           |     | 104.46            |                  | 240.82            |
| p-value   | 0.0000 | 0.0000           |     | 0.0000            |                  | 0.0000            |
| Pseudo R2   | 0.0531 | 0.1645           |     | 0.084             |                  | 0.2127            |
| % accuracy predicting category of respondents       |        |                  |     |                   |                  |                   |
| Not satisfied                                       | 0      | 27               |     | 15                |                  | 43                |
| Undecided   | 0      | 0                |     | 0                 |                  | 0                 |
| Satisfied   | 100    | 97               |     | 99                |                  | 97                |
| All   | 76     | 76               |     | 77                |                  | 79                |
| Predicted % satisfied by model                      | 100    | 93               |     | 96                |                  | 91                |
| Predicted % dissatisfied by model                   | 0      | 7                |     | 4                 |                  | 9                 |
| Predicted net satisfaction rating                   | 100    | 86               |     | 93                |                  | 81                |
| Actual net satisfaction rating                      | 64     | 64               |     | 64                |                  | 64                |

Note: Figures in parentheses are standard errors. \*\*\* is 0.01; \*\* is 0.05; and \* is 0.1

Table 3. Ordinary Logit Models of President Duterte Satisfaction Rating, (June 2018)

| Explanatory Variables                                 | Model 1           |      | Model 2           |      | Model 3 |      | Model 4           |      |
|---|-------------------|------|-------------------|------|---------|------|-------------------|------|
|   | Coeff.            | sig. | Coeff.            | sig. | Coeff.  | sig. | Coeff.            | sig. |
| <b>IDENTITY VARIABLES</b>                             |                   |      |                   |      |         |      |                   |      |
| <i>Locale (base=Urban)</i>                            |                   |      |                   |      |         |      |                   |      |
| Rural   | 0.378<br>(0.162)  | **   |                   |      |         |      | 0.092<br>(0.200)  |      |
| <i>Area (base=NCR)</i>                                |                   |      |                   |      |         |      |                   |      |
| Balance Luzon   | -0.253<br>(0.179) |      |                   |      |         |      | 0.026<br>(0.222)  |      |
| Visayas   | 0.152<br>(0.201)  |      |                   |      |         |      | 0.361<br>(0.237)  |      |
| Mindanao  | 1.082<br>(0.227)  | ***  |                   |      |         |      | 0.878<br>(0.280)  | ***  |
| <i>Sex (base=Male)</i>                                |                   |      |                   |      |         |      |                   |      |
| Female  | -0.053<br>(0.137) |      |                   |      |         |      | 0.024<br>(0.174)  |      |
| <i>Age Group (base=18-24)</i>                         |                   |      |                   |      |         |      |                   |      |
| 25-39   | -0.106<br>(0.248) |      |                   |      |         |      | -0.200<br>(0.286) |      |
| 40-59   | -0.041<br>(0.240) |      |                   |      |         |      | -0.085<br>(0.276) |      |
| 60 and up   | -0.126<br>(0.268) |      |                   |      |         |      | -0.153<br>(0.313) |      |
| <i>Education Level (base=incomplete HS and below)</i> |                   |      |                   |      |         |      |                   |      |
| Complete JHS to incomplete college                    | 0.231<br>(0.152)  |      |                   |      |         |      | 0.224<br>(0.192)  |      |
| Complete college                                      | 0.401<br>(0.255)  |      |                   |      |         |      | 0.405<br>(0.377)  |      |
| <i>Self-rated Poverty (base=Not poor)</i>             |                   |      |                   |      |         |      |                   |      |
| On the line   | 0.258<br>(0.196)  |      |                   |      |         |      | 0.151<br>(0.240)  |      |
| Poor  | 0.017<br>(0.183)  |      |                   |      |         |      | 0.073<br>(0.232)  |      |
| <i>Experienced hunger (baseline=Yes)</i>              |                   |      |                   |      |         |      |                   |      |
| No  | -0.005<br>(0.240) |      |                   |      |         |      | -0.605<br>(0.299) | **   |
| <b>POLICY VARIABLES</b>                               |                   |      |                   |      |         |      |                   |      |
| Defense policy satisfaction index                     |                   |      | -0.036<br>(0.125) |      |         |      | -0.031<br>(0.145) |      |
| Economic policy satisfaction index                    |                   |      | 0.263<br>(0.130)  | **   |         |      | 0.153<br>(0.146)  |      |
| Foreign policy satisfaction index                     |                   |      | 0.099<br>(0.142)  |      |         |      | 0.087<br>(0.160)  |      |
| Foreign governance satisfaction index                 |                   |      | 0.110<br>(0.231)  |      |         |      | 0.249<br>(0.261)  |      |
| Foreign safety satisfaction index                     |                   |      | 0.202<br>(0.158)  |      |         |      | 0.150<br>(0.177)  |      |

|   |        |                      |                       |                       |
|---|--------|----------------------|-----------------------|-----------------------|
| National Admin overall performance<br>(pamamalakad)                     |        | 1.069 ***<br>(0.107) |                       | 0.984 ***<br>(0.120)  |
| Effectiveness of drug war<br><b>(PERCEIVED) CHARACTER<br/>VARIABLES</b> |        | 0.489 ***<br>(0.115) |                       | 0.353 ***<br>(0.126)  |
| Bastos index  |        |                      | -2.031 ***<br>(0.300) | -1.339 ***<br>(0.385) |
| No. of observations   | 1,199  | 1,109                | 1,058                 | 996                   |
| Wald chi2   | 70.32  | 175                  | 46                    | 220                   |
| p-value   | 0.0000 | 0                    | 0                     | 0                     |
| Pseudo R2   | 0.0389 | 0                    | 0                     | 0                     |
| % accuracy predicting category of<br>respondents                        |        |                      |                       |                       |
| Not satisfied   | 0      | 41                   | 0                     | 43                    |
| Undecided   | 0      | 0                    | 0                     | 0                     |
| Satisfied   | 100    | 96                   | 100                   | 96                    |
| All   | 65     | 72                   | 64                    | 72                    |
| Predicted % satisfied by model  | 100    | 86                   | 100                   | 84                    |
| Predicted % dissatisfied by model                                       | 0      | 14                   | 0                     | 16                    |
| Predicted net satisfaction rating                                       | 100    | 72                   | 100                   | 67                    |
| Actual net satisfaction rating  | 45     | 45                   | 45                    | 45                    |

Note: Figures in parentheses are standard errors. \*\*\* is 0.01; \*\* is 0.05; and \* is 0.1

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## References

- Canare, Tristan A., Mendoza, Ronald U., Yap, Jurel K., Jaminola III, Leonardo M., and Mendoza, Gabrielle Ann S. "Unpacking Presidential Satisfaction: Preliminary Insights from Survey Data on the Bottom Poor in Metro Manila." *Philippine Political Science Journal* 42(1) 2021: 1-29.
- Carlin, Ryan, Hartlyn, Jonathan, Hellwig, Timothy. "Public support for Latin American presidents: The cyclical model in comparative perspective." *Research and Politics* 2018.
- Endo, Jun. "Duterte's honeymoon is far from over." NIKKEI Asia, December 29, 2016. Retrieved November 2, 2021 from <https://asia.nikkei.com/Politics/Duterte-s-honeymoon-is-far-from-over>.
- Gregorio, Xave. "Fearless forecast: Makabayan solons predict Duterte satisfaction to drop further due to 'anti-poor' policies." POLITIKO Metro Manila (12 April 2018). Retrieved November 2, 2021 from <https://metromanila.politics.com.ph/2018/04/12/fearless-forecast-makabayan-solons-predict-duterte-satisfaction-to-drop-further-due-to-anti-poor-policies/>.
- Heydarian, Richard Javad. 2017. The Interpreter (17 October 2017). Retrieved November 2, 2021 from <https://www.lowyinstitute.org/the-interpreter/putting-duterte-s-popularity-perspective>.
- Heydarian, Richard. "Duterte: The art of 'performative governance'." The Philippine Daily Inquirer, October 13, 2020. Retrieved November 2, 2021 from <https://opinion.inquirer.net/134401/duterte-the-art-of-performative-governance>.
- Jennings, Ralph. "Why Philippines President, Criticized Abroad, Has Record High Approval." Voice of America, July 23, 2019. Retrieved November 3, 2021 from [https://www.voanews.com/a/east-asia-pacific\\_why-philippines-president-criticized-abroad-has-record-high-approval/6172458.html](https://www.voanews.com/a/east-asia-pacific_why-philippines-president-criticized-abroad-has-record-high-approval/6172458.html).

Jung, Ji Won and Oh, Jinhwan. 2019. "Determinants of presidential approval ratings: Cross-country analyses with reference to Latin America." *International Area Studies Review* 00(0) 2019: 1-17.

Kennedy, Peter. *A Guide to Econometrics*. Malden, MA: Blackwell Publishing, 2008.

Kenny, Paul. 2020. "Why is there no political polarization in the Philippines?." In *Political Polarization in South and Southeast Asia: Old Divisions, New Dangers*. Edited by Thomas Carothers and Andrew O'Donahue. Washington, D.C.: Carnegie Endowment for International Peace, 81-94.

Retrieved November 2, 2021 from <https://carnegieendowment.org/2020/08/18/political-polarization-in-south-and-southeast-asia-old-divisions-new-dangers-pub-82430>.

Lagman, Oscar. Musings; "Fear a factor in voters' preference surveys." *Business World*, June 7, 2021. Retrieved November 3, 2021 from <https://www.bworldonline.com/fear-a-factor-in-voters-preference-surveys/>.

Lalu, Gabriel Pabico. "Activists doubt surveys on Duterte's high satisfaction, trust ratings." *Inquirer.net*, July 19, 2019. Retrieved November 2, 2021 from <https://newsinfo.inquirer.net/1143846/activists-doubt-surveys-on-dutertes-high-satisfaction-trust-ratings>.

Mangahas, Mahar. "A Honeymoon with Misgivings." *Inquirer.net*, December 17, 2016. Retrieved October 29, 2021 from <https://opinion.inquirer.net/100078/a-honeymoon-with-misgivings>.

Masigan, Andrew J. Numbers don't lie; "Understanding President Duterte's approval ratings." *BusinessWorld*, June 3, 2019. Retrieved November 2, 2021 from <https://www.bworldonline.com/understanding-president-dutertes-approval-ratings/>.

Mendoza, Ronald U. and Canare, Tristan. "Herd Behavior and Approval Bubbles: A Closer Look at Duterte's Popularity." *The Diplomat*, January 29, 2020. Retrieved October 30, 2021 from <https://thediplomat.com/2020/01/herd-behavior-and-approval-bubbles-a-closer-look-at-dutertes-popularity/>.

- Mueller, John E. "Presidential Popularity from Truman to Johnson." *The American Political Science Review* 64(1) 1970: 18-34.
- Neustadt, Richard E. *Presidential Power: The Politics of Leadership*. New York: John Wiley & Sons, 1960.
- Neustadt, Richard E. *Presidential Power and the Modern Presidents: The Politics of Leadership from Roosevelt to Reagan*. New York: Free Press, Rev. Ed., 1991.
- Newport, Frank and Saad, Lydia. "The Polls—Review: Presidential Job Approval." *Public Opinion Quarterly* 85(1) 2021: 223-241.
- Nonato, Vince F. and Yap, DJ. "Duterte popularity puzzles solon." Inquirer.net, July 2, 2018. Retrieved November 3, 2021 from <https://newsinfo.inquirer.net/1006000/duterte-popularity-puzzles-solon-on-2-November-2021>.
- Palatino, Mong. "Why is Rodrigo Duterte still popular in the Philippines?." *The Diplomat*, October 21, 2021. Retrieved November 30, 2021 from <https://thediplomat.com/2020/10/why-is-rodrigo-duterte-still-popular-in-the-philippines/>.
- Regencia, Ted. "Why is Duterte still riding high despite recession, COVID?." ALJAZEERA, July 28, 2021. Retrieved October 29, 2021 from <https://www.aljazeera.com/news/2021/7/28/duterte-still-rides-high-in-polls-amid-pandemic-economic-slump>.
- Rood, Steven. "P-Noy: 100 Days, Honeymoon continues, power flows?." *The Asia Foundation*, October 13, 2021. Retrieved November 3, 2021 from <https://asiafoundation.org/2010/10/13/p-noy-100-days-honeymoon-continues-power-flows/>.
- Wason, P.C. "On the failure to eliminate hypotheses in a conceptual task." *The Quarterly Journal of Experimental Psychology* 12 1960: 129-140.





Annex Table 1. Variables used in the June 2021 model

| Variable  | Variable description  | Variable values  |
|---|---|--|
| <b>DEPENDENT VARIABLE</b>   |   |  |
| Satisfaction rating   | Satisfaction rating for President Duterte   | -1=dissatisfied or very dissatisfied;<br>0=undecided; 1=satisfied or very satisfied  |
| <b>IDENTITY VARIABLES</b>   |   |  |
| <i>Locale (base=Urban)</i><br>Rural   | Locale of residence of respondent   | Dummy variable, 1=rural, 0=urban   |
| <i>Area (base=NCR)</i><br>Balance Luzon<br>Visayas<br>Mindanao  | Area of residence of respondent   | Dummy variable, 1=other Luzon, 0=otherwise<br>Dummy variable, 1=Visayas, 0=otherwise<br>Dummy variable, 1=Mindanao, 0=otherwise      |
| <i>Sex (base=Male)</i><br>Female  | Sex of respondent   | Dummy variable, 1=female, 0=male   |
| <i>Age Group (base=18-24)</i><br>25-39<br>40-59<br>60 and up  | Age group of respondent   | Dummy variable, 1=25-39, 0=otherwise<br>Dummy variable, 1=40-59, 0=otherwise<br>Dummy variable, 1=60 and up, 0=otherwise             |
| <i>Education Level (base=incomplete HS and below)</i><br>Complete JHS to incomplete college<br>Complete college | Education level of respondent   | Dummy variable, 1=complete Junior HS to incomplete college, 0=otherwise<br>Dummy variable, 1=complete college or higher, 0=otherwise |
| <i>Self-rated Poverty (base=Not poor)</i><br>On the line<br>Poor  | <i>Self-rated poverty status of household of respondent</i>                       | Dummy variable, 1=on the line, 0=otherwise<br>Dummy variable, 1=poor, 0=otherwise  |
| <i>Experienced hunger (baseline=Yes)</i><br>No  | <i>Household experience of hunger</i>   | Dummy variable, 1=household did not experience hunger, 0=otherwise   |
| <b>POLICY VARIABLES</b>   |   |  |
|   | Respondent's satisfaction with National Administration performance on helping on: |  |

|  |   |   |
|--|---|---|
| Helping the poor<br>Controlling prices<br>Fighting hunger<br>COVID care<br>COVID vaccination | helping the poor<br>controlling prices<br>fighting hunger<br>covid care<br>covid vaccination              | -1=dissatisfied; 0=undecided; 1=satisfied<br>-1=dissatisfied; 0=undecided; 1=satisfied<br>-1=dissatisfied; 0=undecided; 1=satisfied<br>-1=dissatisfied; 0=undecided; 1=satisfied<br>-1=dissatisfied; 0=undecided; 1=satisfied |
| National Admin overall<br>performance (pamamalakad)  | Respondent's<br>satisfaction with<br>National<br>Administration's<br>overall performance<br>(pamamalakad) | -1=dissatisfied; 0=undecided; 1=satisfied   |
| Bloodiness of drug war   | Respondent's view on<br>bloodiness of<br>Duterte's drug war   | -1=disagree; 0=undecided; 1=agree   |
| <b>(PERCEIVED) CHARACTER<br/>         VARIABLES</b>  | Respondent's<br>satisfaction with<br>Duterte's:   |   |
| Decisive   | decisiveness  | -1=disagree; 0=undecided; 1=agree   |
| Authentic  | authenticity  | -1=disagree; 0=undecided; 1=agree   |
| Diligent   | diligence   | -1=disagree; 0=undecided; 1=agree   |

Annex Table 2. Variables used in the September 2016 model

| Variable  | Variable description  | Variable values  |
|---|---|--|
| <b>DEPENDENT VARIABLE</b>   |   |  |
| Satisfaction rating   | Satisfaction rating for President Duterte   | -1=dissatisfied or very dissatisfied;<br>0=undecided; 1=satisfied or very satisfied  |
| <b>IDENTITY VARIABLES</b>   |   |  |
| <i>Locale (base=Urban)</i><br>Rural   | Locale of residence of respondent   | Dummy variable, 1=rural, 0=urban   |
| <i>Area (base=NCR)</i><br>Balance Luzon<br>Visayas<br>Mindanao  | Area of residence of respondent   | Dummy variable, 1=other Luzon, 0=otherwise<br>Dummy variable, 1=Visayas, 0=otherwise<br>Dummy variable, 1=Mindanao, 0=otherwise      |
| <i>Sex (base=Male)</i><br>Female  | Sex of respondent   | Dummy variable, 1=female, 0=male   |
| <i>Age Group (base=18-24)</i><br>25-39<br>40-59<br>60 and up  | Age group of respondent   | Dummy variable, 1=25-39, 0=otherwise<br>Dummy variable, 1=40-59, 0=otherwise<br>Dummy variable, 1=60 and up, 0=otherwise             |
| <i>Education Level (base=incomplete HS and below)</i><br>Complete JHS to incomplete college<br>Complete college | Education level of respondent   | Dummy variable, 1=complete Junior HS to incomplete college, 0=otherwise<br>Dummy variable, 1=complete college or higher, 0=otherwise |
| <i>Self-rated Poverty (base=Not poor)</i><br>On the line<br>Poor  | <i>Self-rated poverty status of household of respondent</i>                                       | Dummy variable, 1=on the line, 0=otherwise<br>Dummy variable, 1=poor, 0=otherwise  |
| <i>Experienced hunger (baseline=Yes)</i><br>No  | <i>Household experience of hunger</i>   | Dummy variable, 1=household did not experience hunger, 0=otherwise   |
| <b>POLICY VARIABLES</b>   |   |  |
|   | Index measuring respondent's satisfaction with National Administration performance on helping on: |  |

|  |  |  |
|--|--|--|
| Defense policy satisfaction index                | defense  | takes on value from -1 to +1; computed based on performance ratings on 3 defense-related items (fighting terrorism, reconciliation with Muslim rebels, reconciliation with communist rebels), where dissatisfaction in any item gets a point of -1, being undecided zero point, and being satisfied +1 point; the index is the sum of the point for all 3 items divided by 3   |
| Economic policy satisfaction index               | economy  | takes on value from -1 to +1; computed based on performance ratings on 5 economy-related items (helping the poor, fighting infation, fighting hunger, providing jobs, ensuring efficient transportation system), where dissatisfaction in any item gets a point of -1, being undecided zero point, and being satisfied +1 point; the index is the sum of the points for all 5 items divided by 5   |
| Governance satisfaction index                    | governance   | takes on value from -1 to +1; computed based on performance ratings on 4 governance-related items (eradicating graft and corruption, promoting the welfare of OFWs, defending the country's territorial rights, developing science and technology), where dissatisfaction in any item gets a point of -1, being undecided zero point, and being satisfied +1 point; the index is the sum of the points for the 4 items divided by 4                        |
| Public safety satisfaction index                 | public safety  | takes on value from -1 to +1; computed based on performance ratings on 4 public safety-related items (fighting crimes that victimize ordinary citizens, campaign against illegal drugs, promoting human right, distributing lands to deserving tillers under land reform), where dissatisfaction in any item gets a point of -1, being undecided zero point, and being satisfied +1 point; the index is the sum of the points for the 4 items divided by 4 |
| Foreign policy satisfaction                      | Respondent's satisfaction with National Administration's foreign policy                    | -1=dissatisfied; 0=undecided; 1=satisfied  |
| National Admin overall performance (pamamalakad) | Respondent's satisfaction with National Administration's overall performance (pamamalakad) | -1=dissatisfied; 0=undecided; 1=satisfied  |

|  |  |                                   |
|--|--|-----------------------------------|
| Effectiveness of drug war              | Respondent's satisfaction with Administration's drug war | -1=disagree; 0=undecided; 1=agree |
| <b>(PERCEIVED) CHARACTER VARIABLES</b> | Respondent's view on Duterte's:                          |                                   |
| Trustworthy                            | trustworthiness  | -1=disagree; 0=undecided; 1=agree |
| Tough                                  | toughness  | -1=disagree; 0=undecided; 1=agree |
| Has clear plan                         | possession of a clear plan                               | -1=disagree; 0=undecided; 1=agree |
| Caring                                 | caring   | -1=disagree; 0=undecided; 1=agree |
| Can bring change                       | ability to bring about change                            | -1=disagree; 0=undecided; 1=agree |
| Can get things done                    | ability to get things done                               | -1=disagree; 0=undecided; 1=agree |
| Listens                                | ability to listen  | -1=disagree; 0=undecided; 1=agree |

Annex Table 3. Variables used in the June 2018 model

| Variable  | Variable description  | Variable values   |
|---|---|---|
| <b>DEPENDENT VARIABLE</b>   |   |   |
| Satisfaction rating   | Satisfaction rating for President Duterte                   | -1=dissatisfied or very dissatisfied;<br>0=undecided; 1=satisfied or very satisfied   |
| <b>IDENTITY VARIABLES</b>   |   |   |
| <i>Locale (base=Urban)</i><br>Rural   | Locale of residence of respondent                           | Dummy variable, 1=rural, 0=urban  |
| <i>Area (base=NCR)</i><br>Balance Luzon<br>Visayas<br>Mindanao  | Area of residence of respondent                             | Dummy variable, 1=other Luzon,<br>0=otherwise<br>Dummy variable, 1=Visayas, 0=otherwise<br>Dummy variable, 1=Mindanao,<br>0=otherwise |
| <i>Sex (base=Male)</i><br>Female  | Sex of respondent   | Dummy variable, 1=female, 0=male  |
| <i>Age Group (base=18-24)</i><br>25-39<br>40-59<br>60 and up  | Age group of respondent                                     | Dummy variable, 1=25-39, 0=otherwise<br>Dummy variable, 1=40-59, 0=otherwise<br>Dummy variable, 1=60 and up,<br>0=otherwise           |
| <i>Education Level (base=incomplete HS and below)</i><br>Complete JHS to incomplete college<br>Complete college | Education level of respondent                               | Dummy variable, 1=complete Junior HS to incomplete college, 0=otherwise<br>Dummy variable, 1=complete college or higher, 0=otherwise  |
| <i>Self-rated Poverty (base=Not poor)</i><br>On the line<br>Poor  | <i>Self-rated poverty status of household of respondent</i> | Dummy variable, 1=on the line,<br>0=otherwise<br>Dummy variable, 1=poor, 0=otherwise  |
| <i>Experienced hunger (baseline=Yes)</i><br>No  | <i>Household experience of hunger</i>                       | Dummy variable, 1=household did not experience hunger, 0=otherwise  |
| <b>POLICY VARIABLES</b>   |   |   |

|                                    | Index measuring respondent's satisfaction with National Administration performance on helping on: |  |
|------------------------------------|---|--|
| Defense policy satisfaction index  | defense   | takes on value from -1 to +1; computed based on performance ratings on 3 defense-related items (fighting terrorism, reconciliation with Muslim rebels, reconciliation with communist rebels), where dissatisfaction in any item gets a point of -1, being undecided zero point, and being satisfied +1 point; the index is the sum of the points for all 3 items divided by 3  |
| Economic policy satisfaction index | economy   | takes on value from -1 to +1; computed based on performance ratings on 3 economy-related items (helping the poor, fighting inflation, fighting hunger), where dissatisfaction in any item gets a point of -1, being undecided zero point, and being satisfied +1 point; the index is the sum of the points for all 3 items divided by 3  |
| Foreign policy satisfaction index  | foreign relations   | takes on value from -1 to +1; computed based on performance ratings on 2 foreign relations-related items (foreign relations, fulfilling commitment in international treaties), where dissatisfaction in any item gets a point of -1, being undecided zero point, and being satisfied +1 point; the index is the sum of the points for the 2 items divided by 2   |
| Governance satisfaction index      | governance  | takes on value from -1 to +1; computed based on performance ratings on 10 governance-related items (eradicating graft and corruption, promoting women's rights, deciding quickly on important problems of the country, defending Philippine sovereignty in the West Philippine Sea, ensuring efficient public transport system, building and maintenance of public works, having clear policies, promoting the welfare of OFWs, transparency in providing information about government activities, reconstruction of Marawi City), where dissatisfaction in any item gets a point of -1, being undecided zero point, and being satisfied +1 point; the index is the sum of the points for the 10 items divided by 10 |



|  |  |   |
|--|--|---|
| Public safety satisfaction index                 | public safety  | takes on value from -1 to +1; computed based on performance ratings on 2 public safety-related items (fighting crimes that victimize ordinary citizens, protection of human rights), where dissatisfaction in any item gets a point of -1, being undecided zero point, and being satisfied +1 point; the index is the sum of the points for the 2 items divided by 2  |
| National Admin overall performance (pamamalakad) | Respondent's satisfaction with National Administration's overall performance (pamamalakad) | -1=dissatisfied; 0=undecided; 1=satisfied   |
| Effectiveness of drug war                        | Respondent's satisfaction with Administration's drug war                                   | -1=disagree; 0=undecided; 1=agree   |
| <b>(PERCEIVED) CHARACTER VARIABLES</b>           | Respondent's view on whether Duterte is  |   |
| "Bastos" index                                   | "Bastos"   | takes on value from -1 to +1; computed based on whether Duterte was Bastos or Not Bastos in 3 specific incidents (kissing a married lady in the lips in Korea, public pronouncement that priests are not better than him, Duterte cursing the Chief and member of the UNHRC), where Not Basto gets a point of -1, and Bastos gets a +1 point; the index is the sum of the points for the 2 items divided by 2 |

Annex Figure 1. Net satisfaction rating of President Duterte and President B. Aquino by area

