

## **Political Disaffection and Candidate Personality on the 2009 Chilean Elections**

*Roberto Armijo*

### **Introduction**

Candidate centered voting is the preponderance of the personal attributes of candidates in the voter decision-making process over attributes such as their policy or considerations about the expected performance of candidates. One specific manifestation of this shift toward the personal attributes of candidates is that even though being a party insider is essential to get a party's support for candidacy to office, often times candidates attempt to portray themselves as party outsiders by creating a perception of distance to the party. This phenomenon, which I'll refer to as delinking, seems to particularly present itself when the party may be unpopular their stance on certain issues or the party system in general seems to be poorly evaluated.

In the US this can be observed during the 2008 election between Barack Obama and John McCain. The campaigns exalted the personal attributes of the candidates. While Barack Obama's eloquence denoted his intelligence, John McCain portrayed himself as a Maverick. This characterization is the product of his willingness to toe against the Republican Party line on certain issues. In an environment of economic downturn, McCain even went as far as suspending his campaign to return to Washington to supposedly help on the crafting of a bailout package for the financial industry.

Another case of interest is the 2009 Chilean presidential elections. Sebastián Piñera campaigns on his ability to more efficiently manage the state, over a corrupt and bureaucratic past that his main opponent Eduardo Frei represented. Campaigning issues such as on a regulation-liberalization axis would be detrimental to his cause, Frei tried to campaign on this issue by offering changes in the economic model but

this strategy did not take off. Frei seemed tired and lethargic, while Piñera was the opposite, an energetic businessman who did everything from piloting helicopters to spending time with his grandchildren. Frei, an ex-president and son of the former president, came from the political elite. Piñera on the other hand portrayed himself as a self-made man and comparatively an outsider, despite having even served as senator in the past.

This behavior raises a series of questions: Does the attempt of candidates to delink themselves from their parties have an effect on vote choice? Are some voters more susceptible than others to have their choice affected? My hypothesis is that if candidates are successful in distancing themselves from their own party in the mind of some voters, they should be able to increase the relative weight those voters place on candidate considerations. This is not necessarily the product of increasing the absolute magnitude of candidate considerations but could also be achieved by reducing the absolute magnitude of considerations that relate to the party, such as their issue and/or policy positions, past performance of the party, etcetera.

In the political behavior literature suggests that among the variety of considerations voters can take into account policy, performance and candidate considerations are the primary factors affecting the utility of voting for a candidate (See Rahn et al., 1990 and Luskin and Globetti, 2002). It does not seem far-fetched to make the assumption that individuals most likely give more weight to some of these considerations than others. The question is then what are the factors that affect these relative weights. One of the most often assumed factors that would affect the weight of considerations is political sophistication (See Luskin and Globetti, 2002; Peterson, 2005 and Iyengar et al., 2007).

Another factor that can affect these relative weights, and the one of substantive interest in this paper, may be the degree of political disaffection individuals have with the political parties. After all, one of the variables usually found to be a predictor of vote choice is party identification. A candidate that attempts to delink themselves from parties may actually become less attractive to partisan voters. It is then expected that the strategy of candidates to delink themselves to political parties be aimed at those voters that have some disaffection with the political system. The strategic purpose of the candidate would be to increase the relative weight of their personality attributes in relation to considerations associated with the party such as policy positions or performance considerations.

### **Research hypotheses**

My research program in this area consists of the following hypotheses. My main hypothesis is that if candidates are successful in delinking themselves from their own party in the mind of voters, they should be able to increase the relative weight voters place on candidate considerations.

A secondary hypothesis is that political sophistication should condition the capacity of candidates to delink themselves from the party. While candidates will be more effective to delink themselves from their party in the mind of less sophisticated individuals, these must have some notion of policy positions of the candidate and party in order for the candidate to be able distance himself from the party.

Another, but no less important, secondary hypothesis is that political disaffection is also a conditioning variable on the effects delinking on candidate assessment. Candidates should be attempting to delink themselves from their party in the minds of voters who are more disaffected with the political system but they should

take into account the effect political disaffection has on the assessment of their personality. If they are making the relative weight of their personal attributes larger for those voters, they should also consider whether they are being assessed positively on those attributes.

It is this last hypothesis that is the focus of this paper. In the following pages the plan is to explore the relationship between the personality attributes of candidates and political disaffection. The first step is to examine, through principal component factor analysis, how voters perceive the personality of candidates, attempting to delve on what are the dimensions of personality that affect the assessment of candidates. Similarly, an important and necessary undertaking is to investigate what are the dimensions of political disaffection.

After these aspects are studied separately, the next logical step is to examine the relationship between the independent pieces and see how they fit together. Through confirmatory factor analysis, I will test a causal model of how political disaffection affects the perception of the personal attributes of candidates. For this particular paper, as a pilot study, I plan on studying the December of 2009 Chilean presidential elections. In the future I plan to extend the methodology into other elections, such as the 2009 US presidential elections.

### **Political disaffection**

According to Torcal (2003) political disaffection is comprised of two aspects that are partially independent. The first corresponds to attitudes relating to lack of engagement with the political process and a distrust of politics. The second aspect corresponds to beliefs regarding the responsiveness of political authorities and institutions as well as feelings of confidence in institutions of political representation.

The main difference with other related concepts, such as political alienation, in that it does not entail a questioning of the political regime (Di Palma, 1970).

Following Torcal, political disaffection unlike other similar concepts is not the product of citizen dissatisfaction with government performance or short-term fluctuations in its assessment. The assessment of government performance can affect political mobilization or lead to electoral defeat but should have no impact on political disaffection. Political disaffection then does not represent a crisis of democracy.

### **Personality Assessment**

The question is then how politicians highlight their personal attributes in the mind of individuals. The work of Druckman et al. (2010) highlights the importance of distinguishing frames from cues. While frames affect the weight individuals attach to different considerations, a cue allows the individual to make inferences regarding positions. Framing would make voters focus on candidate considerations but cues would help on creating the perception that the candidate is moving away from the party. Their results suggest that frames substantially affect voter preferences for a candidate while endorsements (cues) do not. Cues only matter on issues that can be construed as hard issues and have not been salient. Likewise they do not seem to matter in the interpersonal characteristics of the candidate but do on performance related traits that require more information. The works of Tversky and Kahneman (1981) and Arceneaux (2012) on framing suggest possible strategies candidates may follow in order to highlight their personal characteristics over other considerations. An individual that has been framed in the domain of losses on economic issues may be more likely take a chance and vote for a candidate he perceives to be more capable of improving the economy. Unlike performance and policy considerations, personality

attributes of the candidate require much less political sophistication to assess. For example, research by Borkenau et al. (2004) and McCulloch et al. (2007) finds that individuals are able to use thin slices of behavior to determine personal traits. This is of particular importance, as voters rarely get to meet candidates personally.

## **Data**

The data used to conduct this study comes from the October 2009 Centro de Estudios Públicos (CEP) Survey. It was fielded through personal interviews between the 8<sup>th</sup> and 29<sup>th</sup> of October of 2009. The universe of study was defined as the population over the age of 18 both urban and rural within the Chilean territory, excluding Easter Island. It has a probabilistic sample size of 1505, which covers 100% of the target population and 255 variables. It has a sample error of  $\pm 2.7\%$  with a 95% confidence level.

## **Indicators of personality attributes**

There are on the October 2009 CEP survey a series of questions that ask individuals about the personality attributes of candidates in a dichotomous manner. The questions ask how the respondent sees each of the candidates in the following dimensions: Prepared or unprepared to be president, capable or incapable of uniting the country, capable or incapable of solving the problems of the people, trustworthy or untrustworthy, appears close or distant, would act with strength or weakness, would act with or without skill and ability, is kind or unkind, is honest or manipulative. I construct a dummy of binary variables for the perception of the positive perception on each of these dichotomous questions for each of the candidates running in the election.

## **Indicators of political disaffection**

On the October of 2009 CEP survey there are a number of questions that relate to how individuals perceive parties, coalitions and other individuals who participate of party activities. The ones used as indicators of distance to the parties in this paper are the following:

*Unaffiliation to parties:* On the specific question whether the respondent is a member of a political party, I construct a dummy variable for individuals that are not member of any political party.

*Lack of Party I.D.:* On the question of whether the respondent identifies with any of the parties, I construct a dummy variable for when the respondent answers none. There is no option for independent on this question.

*Independence:* On the question on whether the respondent feels they are closer to one of the three coalitions that present candidates to the presidential elections, I construct a dummy variable for when respondents classify themselves as independent.

*Distrust of parties:* On the question on how much trust individuals have on parties on a 4-point scale, I recode the variable and rescale it so 1 represents the most least and 0 represents the most trust.

*Disapproval of participation by others:* On the 10-point scale question on whether the respondent approves or disapproves of individuals that participate in political parties, I recode and rescale the variable so that 1 represents the most disapproval and 0 represents the most approval.

## **The dimensions of personality**

Given the list of ten different indicators personality attributes, the first question that comes into mind is whether there is more than one dimension of

personality in the minds of voters. To explore the dimensions of personality I conduct principal component factor analysis with the personality attribute indicators of each candidate separately. The reason to conduct this analysis separately for each candidate is that otherwise the dimensions, as will be shown later on, get confounded with the candidate preferences of individuals.

As can be seen in appendix 1, for Eduardo Frei under the Kaiser criterion there is only one dimension of personality being measured by these indicators. This criterion calls for the Eigen value of retained factors to have a value over 1. All personality attributes indicators have similar loadings on the first factor. For the personality attribute indicators of Sebastian Piñera, which can be seen in appendix 2, I find that under the Kaiser criterion there is also one dimension of personality being measured by the indicators. Again the personality attribute indicators all have similar loadings on the first factor.

Appendix 3, representing the principal component factor analysis of the personality attribute indicators of Marco Enriquez-Ominami show that for this candidate there is also one dimension of personality being measured by these indicators under the Kaiser criterion. Again, all indicators load similarly on the first factor. Finally, Appendix 4 represents the principal component factor analysis of the personality attribute indicators of candidate Jorge Arrate. Under the Kaiser criterion, the personality indicators relating to Arrate also seem to indicate one relevant dimension of personality, with all indicators again loading similarly on the first factor.

To show why I have conducted the analysis separately for each candidate, on appendix 5, I show the principal factor analysis for the personality attribute indicators for all candidates. Under the Kaiser criterion there are 4 relevant dimensions being measured by these indicators. Looking at how each of these indicators loads on the



first two factors we can see that each factor represents the personality attributes of each candidate. Having the personality attributes of Eduardo Frei loading highly on the first dimension and the personality attributes of Sebastián Piñera loading highly on the second dimension. The personality attributes of Enriquez-Ominai and Arrate load low on these two dimensions, each of them loading highly on the remaining two dimensions.

### **Dimensions of political disaffection**

Given the list of five indicators of political disaffection, the first question that comes into mind is whether there is more than one relevant dimension of political disaffection for potential voters. To explore the potential dimensions of political disaffection I conduct principal component factor analysis. As can be seen in appendix 6, under the Kaiser criterion there are two distinct dimensions of political disaffection being measured by these indicators. *Distrust of parties* and *Disapproval of participation by others* load more highly on the first factor, while *Unaffiliation to parties*, *Lack of Party I.D.* and *Independence* load more highly on the second factor.

The first factor seems to relate to a rejection of the political parties on part individuals, given that the indicators that load the most on this factor are those related to distrust of the parties and disapproval of participation by others. This dimension could relate to negative perceptions of the parties, such as those related to corruption. The second factor seems to relate to a lack of identification with the parties. This does not necessarily entail negative feelings towards the parties, unlike the first dimension. These two dimensions seem to fit well with the concept of political disaffection presented by Torcal. It can also be observed that these dimensions are not fully independent, which also fits with Torcal's conceptualization.

## **Causal model**

Having established that there is one relevant dimension of candidate personality and two relevant dimensions of political disaffection being measured through the available indicators, the next step is to establish whether there is a causal relationship with political disaffection having an effect on individual's assessment of candidate personality. And whether the effect of these dimensions is distinguishable.

Figure 1 represents basic the causal model. The top two latent variables of the causal model are those for the two dimensions of political disaffection, representing negative feelings towards the parties and lack of political representation. The corresponding indicators of these dimensions are being affected by the latent variables. Under the assumption that these two dimensions are not independent, the latent variables of political dissatisfaction are allowed to covary. Down to the next level, the latent variables corresponding to the personality of each of the candidates are shown to be affecting the indicators of personality of their corresponding candidates. Under the assumption that the personality assessment of one candidate does not affect the personality assessment of other candidates, their covariances are constrained to 0.

The model has a Chi-Square value of 4348.74 and 893 degrees of freedom, given the large sample size Chi-square may not be a good fit test. With a RMSEA value of 0.068 and a CFI value of 0.872, this model seems to be on the edge of a good fit. The covariance between feelings of negativity towards political parties and lack of representation are statistically significant. The covariance between negative feelings towards parties is only significant for the latent variable of the personality of Eduardo Frei and Sebastian Piñera, being this relationship negative. This makes sense, as these are the candidates of the large coalitions with legislative representation. While Arrate

belongs to the communist party, with minimal legislative representation and Enriquez-Ominami is independent. The covariance between the lack of representation is significant for the latent variables corresponding to the personality of Eduardo Frei, Sebastian Piñera and Jorge Arrate, again, all with a negative relationship. This also makes sense in the context of the election, as Enriquez-Ominami is the only independent candidate among the lot.

Another plausible assumption is that the assessment of each particular personality attribute indicator for any given candidate covaries with the indicator of that personality attribute for the other candidates. For example, there is a relationship between the assessment of the kindness of Frei, Piñera, Arrate and Enriquez-Ominani. To test this additional assumption added to the previously presented model, in figure, I remove the constraints of the covariance of particular attributes being null. This model can be observed in figure 2. This model also has a Chi-Square of value of 3141.77 and 876 degrees of freedom, again sample size may be a problem for assessing model fit. With a RMSEA value of 0.056 and a CFI value of 0.918, this model unlike the previous one is on the good side of the edge of good model fit. The conclusions from this unconstrained model regarding the relationship between the latent variables of political disaffection is the same. This is also the case for the relationships between the latent variables of political disaffection and personality assessment.

Figure 1. *Basic causal model*

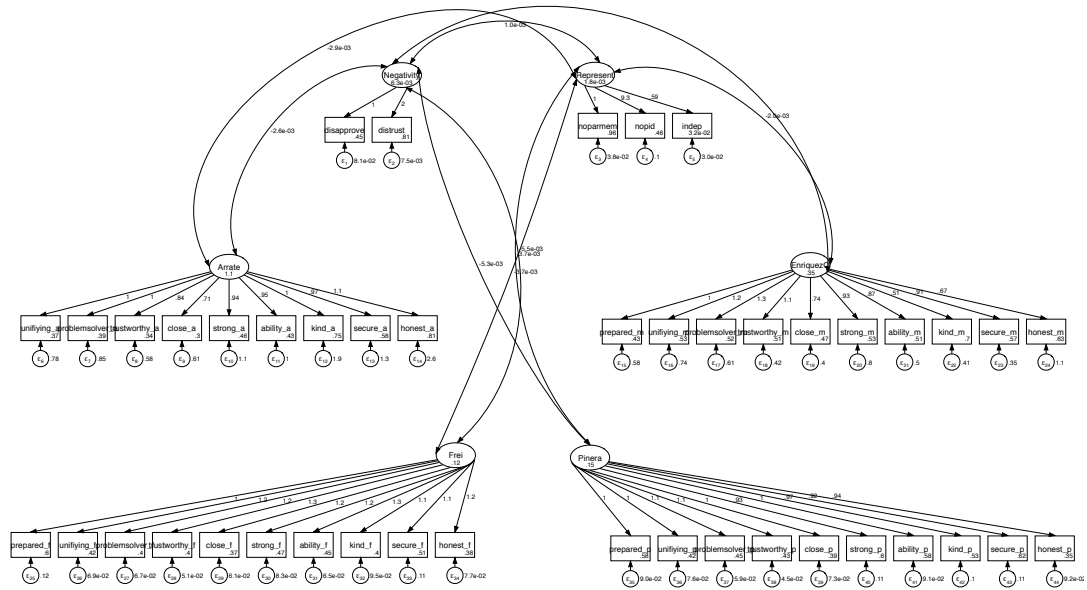
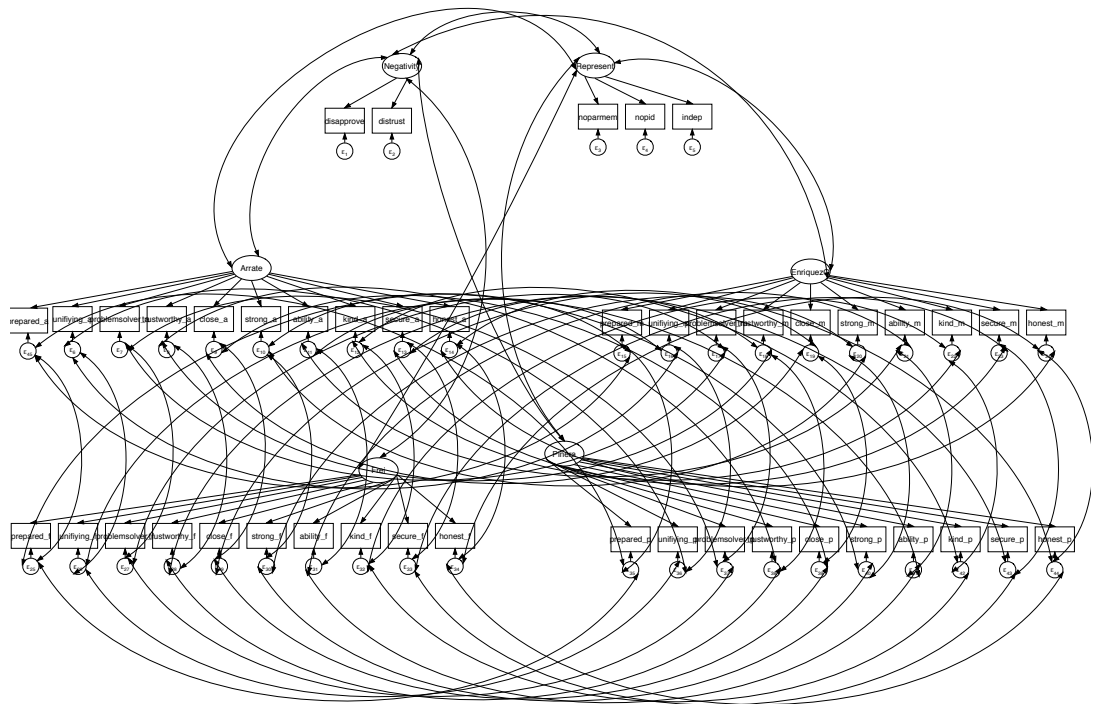


Figure 2. *Expanded causal model*



## **Conclusion**

The purpose of this paper has been to study the relationship between political disaffection and the assessment of the personality of candidates. To study the relationship it was first necessary to determine first how personality is assessed. By studying the 2009 Chilean presidential elections, I have determined that in this case there seems to be only one relevant dimension of personality in the minds of voters. Following that, I have separated political disaffection into two separate dimensions: The level of representation in the political system and feelings on negativity towards political parties. This fits with the conceptualization of political disaffection done previously by Torcal.

Having studied personality assessment and political disaffection individually, I then set out to study their relationship. Through confirmatory factor analysis, I determine that political disaffection mainly has an effect on the assessment of personality of candidates that belong to major coalitions, that is that incumbent in presidential office or that are one of the parties with major legislative representation. The assessment of the personality of independent or minority party candidates seems to be majorly unaffected by political disaffection.

This finding is at first surprising as it would be expected that political disaffection would have a positive impact on the assessment of personality of these candidates just as it has a negative impact on the assessment of the candidates of the major coalitions. This could be explained by a number of factors, one of them is political sophistication. If these candidates are less known among voters, it is to be expected that they don't have a clear assessment of their personality that can be affected by their level of political disaffection or that they are not receiving cues on which to assess their personality.

The main conclusion of these findings is that candidates of the major coalitions may do well to follow the delinking strategy, especially if their strategy also includes highlighting their personal attributes. Being a candidate of these parties means that politically disaffected individuals are more likely to perceive their personality attributes negatively. If they are able through delinking to appear independent, the negative effects of being associated to parties may be diminished.

## References

- Arceneaux, Kevin. 2012. Cognitive Biases and the Strength of Political Arguments. *American Journal of Political Science*, 56 (2): 271–285.
- Bartels, Larry. 2002. “The Impact of Candidate Traits in American Presidential Elections,” in Anthony King, editor, *Leader’s Personalities and the Outcomes of Democratic Elections*. Cambridge and New York: Cambridge University Press.
- Bartels, Larry M. 2002. Beyond the Running Tally: Partisan Bias in Political Perceptions. *Political Behavior*, 24 (2): 117- 150.
- Campbell, Angus, Philip Converse, Warren Miller, and Donald Stokes. 1960. *The American Voter*. Chicago: The University of Chicago Press.
- Dancey, L. and G. Sheagley. 2012. Heuristics Behaving Badly: Party Cues and Voter Knowledge. *American Journal of Political Science*,.
- Di Palma, Guiseppe. 1970. *Apathy and Participation. Mass Politics in Western Societies*. New York: The Free Press.
- Druckman, James N., Cari Lynn Hennessy, Kristi St. Charles, and Jonathan Webber. 2010. Competing Rhetoric Over Time: Frames versus Cues. *Journal of Politics*, 72 (1): 136–148.
- Fiorina, Morris P. 1978. “Economic Retrospective Voting in American National Elections: A Micro-Analysis,” *American Journal of Political Science*, Vol. 22, No. 2, pp. 426-443.
- GARRIDO SILVA, Carolina. SUBCAMPEONES DE LA CONCERTACIÓN: LA MISIÓN PARLAMENTARIA Y EL RETORNO A LA LABOR GUBERNAMENTAL. *Rev. cienc. polít.* (Santiago), Santiago, v. 29, n. 1, 2009
- Gomez, Brad T. and J. Matthew Wilson. 2001. Political Sophistication and Economic Voting in the American Electorate. *American Journal of Political Science*, 45 (4): 899-914.
- Iyengar, Shanto, Robert C. Luskin, and James S. Fishkin. 2007. “Deliberative Preferences in Presidential Nomination Campaigns: Evidence from an Online Deliberative Poll.” Unpublished Manuscript.
- Lau, Richard R., and David P. Redlawsk. 2001. Advantages and Disadvantages of Cognitive Heuristics in Political Decision Making. *American Journal of Political Science* 45(October):951-971.
- Lau, R. and Redlawsk, P. (2006) “How Voters Decide: Information Processing during Election Campaigns” Cambridge University Press, Cambridge.
- Luskin, Robert C. 1987. “Measuring Political Sophistication,” *American Journal of Political Science*, Vol. 31, pp. 856-899.
- Luskin, Robert C. 1990. “Explaining Political Sophistication,” *Political Behavior*, Vol. 12, No. 4, pp. 331-361.
- Luskin, Robert C. and Suzanne Globetti. 2002. “Candidate versus Policy Considerations in the Voting Decision.” Unpublished Manuscript.
- Madrid, Andres and Patricio Navia “¿Víctima de su propio éxito? Disminución de la pobreza en Chile y apoyo electoral a la Concertación” in Patricio Navia, Renato Briceño and Mauricio Morales, eds., *El genoma electoral chileno. Dibujando el mapa genético de las preferencias políticas en Chile*, Ediciones Universidad Diego Portales, pp. 117-141, 2009.

Mainwaring, Scott and Mariano Torcal. 2005. "Party System Institutionalization and Party System Theory after the Third Wave of Democratization." Working Paper #319, Kellogg Institute for International Studies, University of Notre Dame.

McCulloch, Kathleen C., Melissa J. Ferguson, Christie C.K. Kawada, and John A. Bargh. 2007. "Taking a closer look: On the operation of nonconscious impression formation," *Journal of Experimental Social Psychology*, Vol. 44, pp. 614–623.

Navia, P. y J.L. Saldaña (2009), "Voto cruzado en las elecciones parlamentarias y presidenciales de Chile (1993-2005)", In Patricio Navia, Mauricio Morales y Renato Briceño (eds.), *El genoma electoral chileno: Dibujando el mapa genético de las preferencias políticas en Chile*, Santiago, Ediciones Universidad Diego Portales

Peterson, David A. 2005. "Heterogeneity and Certainty in Candidate Evaluations," *Political Behavior*, Vol. 27, No. 1 pp. 1-24.

Rahn, Wendy M., John. H. Aldrich, Eugene Borgida, and John L. Sullivan. 1990. "A Social-Cognitive Model of Candidate Appraisal," in John A. Ferejohn and James H. Kuklinski, editors. *Information and Democratic Processes*. Urbana and Chicago: University of Illinois Press.

Torcal, Mario. 2003. *POLITICAL DISAFFECTION AND DEMOCRATIZATION HISTORY IN NEW DEMOCRACIES\** Working Paper #308



Appendix 1. Principal component factor analysis on the personality indicators of Eduardo Frei.

Factor analysis/correlation	Number of obs	1073
Method: principal-component		
factors	Retained factors	1
Rotation: (unrotated)	Number of params	10

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	7.02565	6.44333	0.7026	0.7026
Factor2	0.58232	0.0642	0.0582	0.7608
Factor3	0.51812	0.13561	0.0518	0.8126
Factor4	0.38251	0.06565	0.0383	0.8509
Factor5	0.31686	0.03097	0.0317	0.8825
Factor6	0.28589	0.02243	0.0286	0.9111
Factor7	0.26347	0.02403	0.0263	0.9375
Factor8	0.23943	0.03232	0.0239	0.9614
Factor9	0.20711	0.02848	0.0207	0.9821
Factor10	0.17863	.	0.0179	1

LR test: independent vs. saturated:  $\chi^2(45) = 9268.27$  Prob> $\chi^2 = 0.0000$

Variable	Factor1	Uniqueness
prepared_f	0.733	0.4627
unifying_f	0.8595	0.2612
problemsol~f	0.8603	0.2599
trustworth~f	0.8944	0.2001
close_f	0.8663	0.2496
strong_f	0.8436	0.2884
ability_f	0.8772	0.2305
kind_f	0.8015	0.3576
secure_f	0.7974	0.3641
honest_f	0.8365	0.3003

Appendix 2. Principal component factor analysis on the personality indicators of  
Sebastian Piñera

Factor analysis/correlation	Number of obs	1056
Method: principal-component		
factors	Retained factors	1
Rotation: (unrotated)	Number of params	10

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	6.88456	6.11166	0.6885	0.6885
Factor2	0.7729	0.35196	0.0773	0.7657
Factor3	0.42095	0.03753	0.0421	0.8078
Factor4	0.38342	0.01194	0.0383	0.8462
Factor5	0.37148	0.09329	0.0371	0.8833
Factor6	0.27819	0.00738	0.0278	0.9111
Factor7	0.27081	0.02103	0.0271	0.9382
Factor8	0.24977	0.03549	0.025	0.9632
Factor9	0.21428	0.06065	0.0214	0.9846
Factor10	0.15364	.	0.0154	1

LR test: independent vs. saturated:  $\chi^2(45) = 8971.18$  Prob> $\chi^2 = 0.0000$

Variable	Factor1	Uniqueness
prepared_p	0.8255	0.3186
unifying_p	0.8428	0.2897
problemsol~p	0.8697	0.2436
trustworth~p	0.9006	0.1889
close_p	0.8405	0.2936
strong_p	0.7955	0.3672
ability_p	0.8317	0.3082
kind_p	0.8041	0.3534
secure_p	0.7892	0.3771
honest_p	0.7905	0.3751

Appendix 3. Principal component factor analysis on the personality indicators of  
Marco Enriquez-Ominami

Factor analysis/correlation	Number of obs	1013
Method: principal-component		
factors	Retained factors	1
Rotation: (unrotated)	Number of params	10

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	6.62285	5.92476	0.6623	0.6623
Factor2	0.69809	0.18011	0.0698	0.7321
Factor3	0.51798	0.06923	0.0518	0.7839
Factor4	0.44875	0.01606	0.0449	0.8288
Factor5	0.43268	0.10727	0.0433	0.872
Factor6	0.32542	0.02177	0.0325	0.9046
Factor7	0.30365	0.03501	0.0304	0.9349
Factor8	0.26864	0.06366	0.0269	0.9618
Factor9	0.20498	0.02802	0.0205	0.9823
Factor10	0.17696	.	0.0177	1

LR test: independent vs. saturated:  $\chi^2(45) = 7787.12$  Prob> $\chi^2 = 0.0000$

Variable	Factor1	Uniqueness
prepared_m	0.7707	0.406
unifying_m	0.8342	0.3041
problemsol~m	0.8595	0.2612
trustworth~m	0.8955	0.1981
close_m	0.8264	0.317
strong_m	0.8348	0.3032
ability_m	0.8731	0.2376
kind_m	0.695	0.5169
secure_m	0.773	0.4025
honest_m	0.7547	0.4305

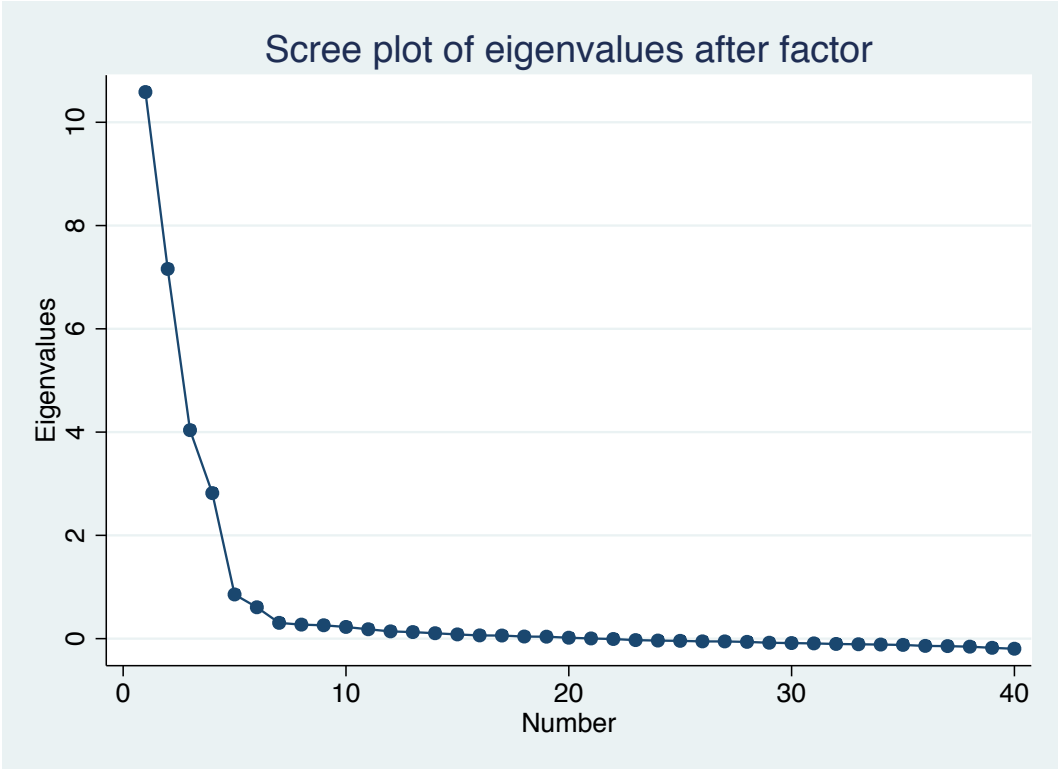
Appendix 4. Principal component factor analysis on the personality indicators of  
Marco Jorge Arrate

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	5.81668	4.93515	0.5817	0.5817
Factor2	0.88153	0.23553	0.0882	0.6698
Factor3	0.646	0.14167	0.0646	0.7344
Factor4	0.50434	0.03677	0.0504	0.7849
Factor5	0.46756	0.0538	0.0468	0.8316
Factor6	0.41376	0.02625	0.0414	0.873
Factor7	0.38751	0.0396	0.0388	0.9117
Factor8	0.34791	0.04042	0.0348	0.9465
Factor9	0.30749	0.08027	0.0307	0.9773
Factor10	0.22722	.	0.0227	1

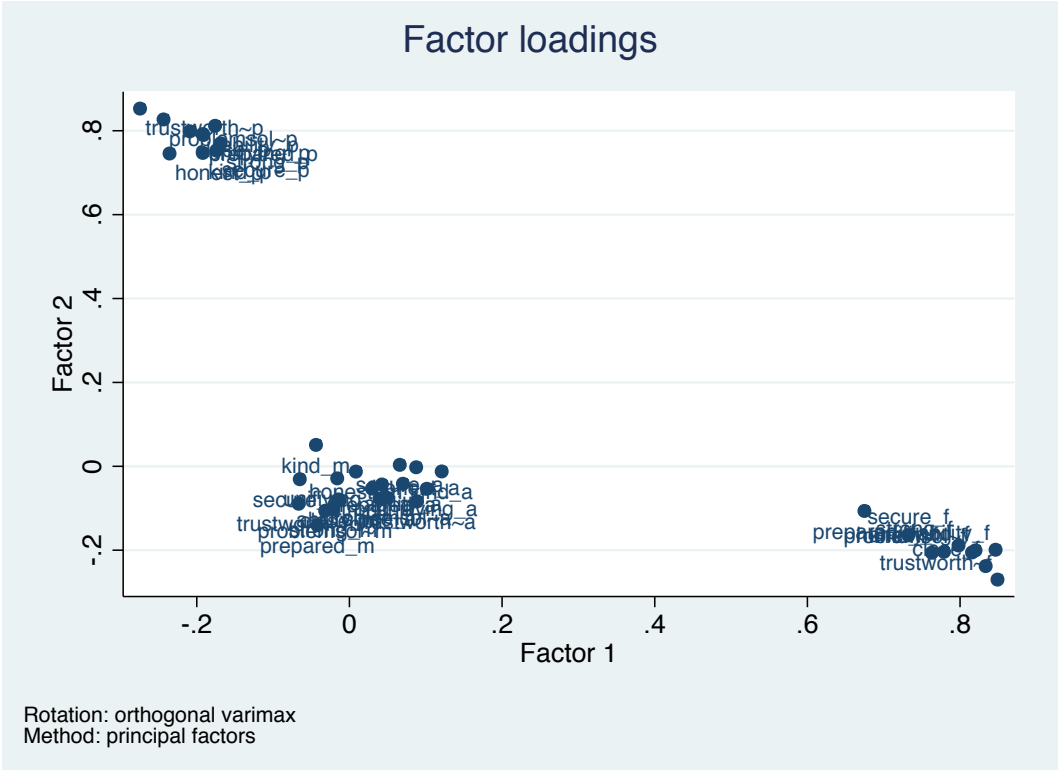
LR test: independent vs. saturated:  $\chi^2(45) = 5370.54$  Prob> $\chi^2 = 0.0000$

Variable	Factor1	Uniqueness
prepared_a	0.757	0.427
unifying_a	0.7336	0.4618
problemsol~a	0.8145	0.3366
trustworth~a	0.8577	0.2643
close_a	0.7705	0.4063
strong_a	0.7846	0.3845
ability_a	0.7751	0.3993
kind_a	0.7036	0.5049
secure_a	0.7073	0.4998
honest_a	0.7079	0.4989

Appendix 5. Principal component factor analysis of all personality indicators



LR test: independent vs. saturated:  $\chi^2(780) = 2.7e+04$  Prob> $\chi^2 = 0.0000$

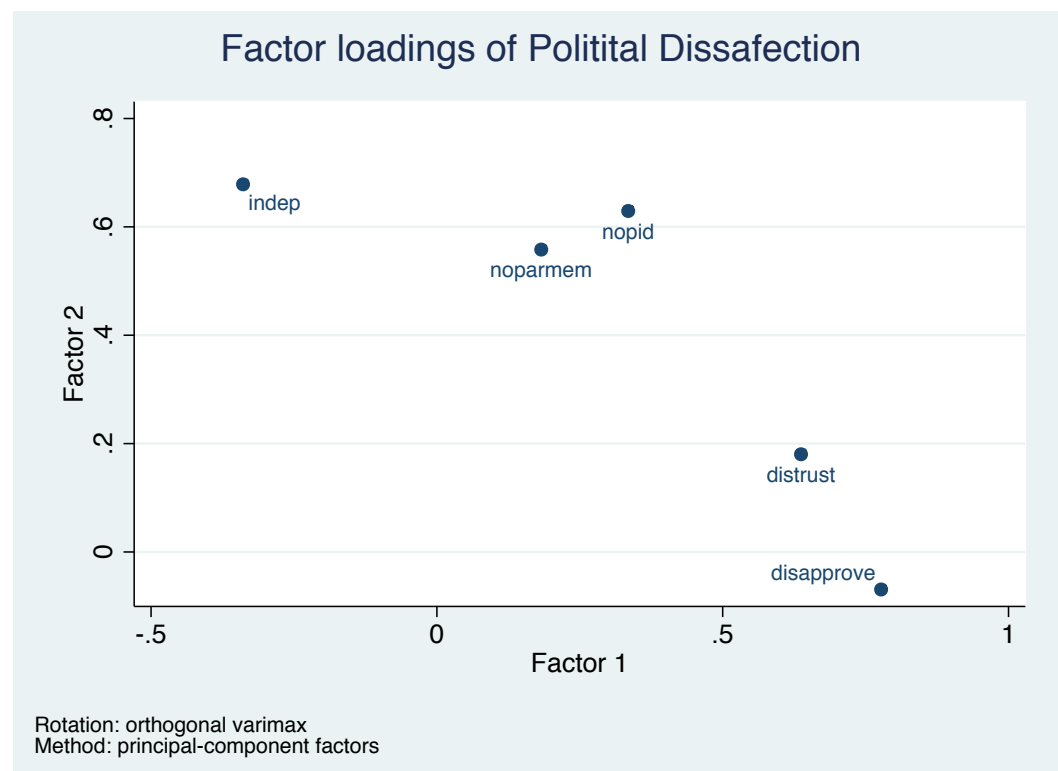


## Appendix 6. Principal component factor analysis for political disaffection

Factor analysis/correlation	Number of obs	1438
Method: principal-component	factors	Retained factors
Rotation: (unrotated)	Number of params	9

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	1.38473	0.29423	0.2769	0.2769
Factor2	1.0905	0.13758	0.2181	0.495
Factor3	0.95292	0.1527	0.1906	0.6856
Factor4	0.80022	0.0286	0.16	0.8457
Factor5	0.77162	.	0.1543	1

LR test: independent vs. saturated:  $\chi^2(10) = 169.68$  Prob> $\chi^2 = 0.0000$



## **Appendix 7:**

### **Confirmatory factor analysis from models 1 and 2.**