

Correlates of Trust and Engagement in Environmental Activism

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Abstract

Trust is such a nebulous and elusive concept that has fascinated social scientists for decades. It is a truism that no human society can exist and develop without a good foundation of trust. Trust deals with citizens' beliefs and expectations and encapsulates notions of integrity, credibility and dependability of an individual or institution. The relationship between trust and pertinent development issues such as environmental activism, pro-environmental behavior and climate change have not been widely investigated. Even when they are investigated, the focus is on developed countries, especially the United States. In the available literature, there is virtually no research that is focused on the correlates of trust and engagement in environmental activism, especially in the context of African countries. In that regard, this article fills the lacunae using nationally-representative data focusing on the following main research questions: to what extent do trust measures (intimate trust, distant trust, trust vs being careful, take advantage of vs be fair), together with institutional confidence, democratic satisfaction, democratic aspiration, globalization, social network embeddedness, socio-demographics, country of residence, etc. determine engagement in environmental activism and are there some commonalities in relation to the predictors of generalized trust and environmental activism? Data for the paper is based on Wave 6 of the World Values Survey, focusing on the following nine African countries: South Africa, Nigeria, Ghana, Rwanda, Zimbabwe, Libya, Egypt, Morocco and Tunisia. Based on the binary logistic regression models, generalized trust, distant trust (outside familiar circles) institutional confidence, media use, age and country of residence (Ghana, Zimbabwe and Rwanda) are significantly and positively associated with participation in a demonstration for an environmental cause, whereas democratic satisfaction, globalization, gender equality, being male, residing in South Africa and Nigeria are negatively and significantly associated with participation in a demonstration for an environmental cause. Institutional confidence and distant trust are the main consistently common predictors of both environmental activism and generalized trust.

Keywords: trust, environmental activism, democratic deficit, institutional confidence, subjective wellbeing, social network, globalization, Africa.

1. Introduction

Trust is such a nebulous and elusive concept that has fascinated social scientists for decades. It is a truism that no human society can exist and develop without a good foundation of trust. Trust provides the platform to build and maintain relationships. It is the foundation on which the edifice of good society stands (Sasaki, p.3, 2019). Social life may not develop and thrive without trust among the actors of society. It is difficult to genuinely interact with people in one's community without trust. In that context, the normal functioning, sustenance and development of any society may be dependent on trust. It "is one of the most important synthetic forces within society" (Simmel, 1950, p.

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318) and may provide a moral foundation that motivates citizens to work for their common good—that is, facilitates regard for the interest of the public.

It is apparent that trust is indispensable and central to the socio-economic development and the political life of any society. It was in that context that Knack and Zac (2003) noted that trust forms the basis of many activities in civil society. All spheres of society need trust to function. It is beneficial for individuals, groups and communities—it has an influence on interpersonal, group and community relationships. Trust promotes economic activity and growth (Fukuyama, 1995; Putnam, 1993) and also promotes good governance (Knack, 2002). Unfortunately, throughout the world, in both established and emerging democracies, industrialized or less-industrialized nations, social, economic and political challenges are threatening and eroding public trust in government and institutions. Trust levels are declining in many industrialized nations. This declining trust has recently been worsened by the COVID-19 pandemic.

This paper examines the correlates of trust and engagement in environmental activism based on evidence from nine African countries. It examines intimate and distant trust levels in the context of generalized trust and evaluates whether there is a divergence between people's democratic aspiration and democratic satisfaction. It further explores the extent to which trust measures (intimate trust, distant trust, trust versus being careful, take advantage of versus be fair), together with institutional confidence, democratic satisfaction, democratic aspiration, globalization, social network embeddedness, socio-demographics, country of residence, and other relevant variables determine engagement in environmental activism; and the commonalities in relation to the predictors of generalized trust and environmental activism.

2. Literature Review

Trust deals with citizens' beliefs and expectations and encapsulates notions of integrity, credibility and dependability of an individual or institution. The belief that an individual shares the moral values of other(s) is the central idea behind trust (Uslaner, 2008). Trust is a person's belief that another person or institution will act consistently with expectations of positive behavior (OECD, 2017, p. 44). It is a complex relationship linking principals (trusters) and agents—the trustees (Norris, Jennings, & Stoker, 2019); and is essential for social relationships (Norris, Jennings, & Stoker, 2019). In that vein, trust may be based on people's perception of how others may promote their interest and not cause them harm (Newton, 2007). Hearn (1997)'s explanation of trust is very insightful. He noted aptly:

Trust and trustworthiness, and the moral individuals who embody them, arise in communitarian interdependencies and social institutions that instill in people the habits of reciprocity and responsibility and the sense of moral obligation whose presence affords the strongest grounds people have for trusting one another. Social capital, those features and practices of cooperation that enable people to work together in pursuit of shared purposes, originates and becomes abundant only where trust prevails (Hearn, 1997, p. 97). In essence, trust deals with citizens' beliefs and expectations. Trust among citizens provides a platform that allows easier, less risky and rewarding civic engagement; and may ultimately facilitate building social institutions (Zmerli & Newton, 2008).

Trust may be rational or moralistic. Rational trust is considered a belief about other people's trustworthiness whereas moralistic trust is a norm that relates to how to treat other people—that is received from a person's parents, culture, or environment (OECD, 2019, pp.39). Rational trust is strategic in the sense that the trustee has internalized interests in the context of "trusting others." This is exemplified by type A trusts B to do X (Hardin, 2004). On the other hand, moralistic trust is acquired through socialization (Uslaner, 2008). Apparently, whether labeled as rational or moralistic trust, they all encapsulate notions of integrity, credibility and dependability of an individual or institution.

As noted earlier, trust is a nebulous and illusive concept. For conceptual clarity, this article makes a fundamental distinction between social and political trust (also referred to as institutional confidence or external political efficacy). Social trust is based on trust in specific people or groups with reference to a comparatively small or broad radius, which sets the inclusion or exclusion criteria for the object of trust. In that respect, social trust is broken down into intimate trust and distant trust. Political trust (institutional confidence) on the other hand, refers to trust in institutions such as political, law and order, and non-governmental organizations (OECD, 2017).

Even though social and political trust (institutional confidence) are distinct, they are interrelated. For some scholars, there is little evidence to confirm the idea that social and political trust are positively correlated and mutually reinforcing (Zmerli & Newton, 2017) and therefore interdependent.

A number of scholars questioned whether democratic stability is dependent on social and political trust (Mishler & Rose, 2005; Delhey & Newton, 2003). In that context, there is not enough evidence to establish association between social trust and institutional confidence (political trust). To the contrary, substantive research evidence shows a robust relationship between social trust and institutional confidence (Glanville & Paxton, 2007; Zmerlin and Newton, 2008). It is arguable that if individuals can trust people within their small and broad radii, then there is a good possibility for them to trust institutions. Thus a diminished faith in institutions equates to lesser community involvement and social trust (Zmerli & Newton, 2008). Trust in institutions requires that they (institutions) are competent and effective in delivering on their goals, but also that they operate consistently with a set of values that reflect citizens' expectations of integrity and fairness (OECD, 2017, pp. 28). Thus there is a distinct and positive association between social trust and institutional confidence (political trust).

The relationship between trust and pertinent development issues such as pro-environmental behavior, environmental activism, and climate change have not been widely investigated. Even when they are investigated, the focus is on developed countries, especially the United States. For example, Dietz, Dan & Shwom (2007) noted that in the United States, trust was one of the significant predictors of support for climate change policies. Dietz and colleagues found that trust in government agencies did not relate to support (for climate change) but greater trust in environmental scientists and environmental groups and less trust in industry were associated with stronger support (p. 208). Prior to that, a number of research reveals that public acceptance of government environmental policies is influenced by their trust (Siegrist, Cvetkovich and Roth 2000; Laird, 1989).

Kim-Pong and Hoi-Wing (2018) noted that generalized trust at both the individual and to some extent country level, strengthen the association between environmental concern and translating that concern into pro-environmental behavior. In their view, people's generalized trust can moderate the reluctance to engage in pro-environmental behavior based on the expectation (trust) that others will contribute and will not be exploited by free riders—having trust in generalized others may lead people to expect that others are willing to contribute to addressing pertinent environmental problems. This may spur engagement in environmental activism.

Some scholars conceptualize environmental activism as a process of collective action with the ultimate goal of supporting the environmental movement (Brechtin and Kempton, 1994; Horton, 2003; Tindal 2002; Mohai, 1992). Others conceptualize it as a behavior type such as environmental group membership (Manzo and Weinstein, 1987); while others view it as engaging in a behavior of political action (Stern, Dietz, Kalof, and Guagnano, 1995). Other scholars conceptualize the concept of environmental activism in terms of engagement in behaviors to protect the environment (Syme, Bevan, and Sumner, 1993).

The concept environmental activism is sometimes used interchangeably and conflated with pro-environmental behavior. It is worthy of note that most scholars view pro-environmental behavior in terms of intentionally engaging in a behavior to reduce the undesirable impact of an action on the environment (Kollmuss and Agyeman, 2002; Tindall, Davies, and Mauboules, 2003). However, some scholars view them conceptually different though interrelated. For example, Stern (2000) considers environmental activism in relation to behaviors such as participation in demonstrations, and active involvement in an environmental organization as a sub-set of pro-environmental behavior—with an intent and impact on environmental protection. Similarly, Dono, Webb and Janine (2010) also share the view that environmental activism and pro-environmental behavior are conceptually different but have some commonalities in the context of models and variables explaining environmental behavior being relatively poor predictors of environmental activism. In that respect, Dono and colleagues noted that only the “environmental citizenship component” of the environmental behavior scale significantly predicts environmental activism.

In essence, the conceptualizations and corresponding measurements of environmental activism and environmental behavior lack clarity. For conceptual clarity in the present research, environmental activism is conceptualized as participation in demonstration for an environmental cause. In the available literature, there is virtually no research that is focused on the correlates of trust and engagement in environmental activism, especially in the context of African countries. In that regard, this article fills the lacunae using nationally-representative data focusing on the following research objectives:

1. To examine intimate and distant trust levels in the context of generalized trust.
2. To evaluate whether there is a divergence between people's democratic aspiration and democratic satisfaction.
3. To what extent do trust measures (intimate trust, distant trust, trust vs being careful, take advantage of vs be fair), together with institutional confidence, democratic satisfaction, democratic aspiration, globalization, social network embeddedness, socio-demographics, country of residence, etc. determine engagement in environmental activism?

4. To determine if there are some commonalities in relation to the predictors of generalized trust and environmental activism?

3. Data and Measurement of Variables

This paper on the correlates of trust and engagement in environmental activism—in the context of nine African countries utilized the World Values Survey (WVS) Wave 6 dataset. Specifically, the paper is based on nationally-representative data from the following African countries: South Africa, Ghana, Nigeria, Egypt, Rwanda, Zimbabwe, Morocco and Tunisia and Libya. It is worthy of note that in order to ensure proportional representation of each country (stratum), the final dataset was weighted by WVS. The main variables of interest are as follows: intimate trust, generalized trust, internal political efficacy (interest in politics), external political efficacy (institutional confidence), social network embeddedness, democratic aspiration, democratic satisfaction, democratic deficit, people can be trusted versus need to be careful, people can take advantage or be fair, gender equality, free choice, subjective well-being, media usage, globalization index, and socio-demographics.

3.1 Sociodemographic Variables

Based on a sample size of 15928, the following socio-demographic variables were examined: age, years of schooling, income level, and gender. The average age of respondents from the nine countries was 35.6 years. At least 50% of the sample had minimum of secondary school or technical or vocational education. About 10% had university level education whereas about 10% and 13% had primary and no formal education respectively. With respect to income, the mean is 4.9, as measured on a ten-point scale (with 1 being lowest income level and 10 being highest income level. In relation to gender, 50.1% were female and 49.1 % were male.

3.2 Social Trust

A concept must be clearly defined and made operational with a specification of its concrete attributes in order to be accurately measured. Social trust is an “expectation of reliance that individuals in a community have towards each other on the basis of shared norms, mutual reciprocity, and cooperative behavior” (Moreno 2011, p. 2672) and it is horizontal in nature. For the sake of conceptual clarity and purposes of measurement, social trust is defined with respect to two dimensions. These are intimate trust and distant trust.

A statement by one of the credible trust scholars is very useful in defining intimate trust, that is: for me to trust you, I have to know a fair amount about you (Hardin, 2000, p. 34). This apparently suggests intimate trust may generally refer to a fairly small circle of family, friends, neighbors, work colleagues and thus connotes a comparatively small radius of specific others (Delhey et al., 2011). It is a horizontal relationship. “Distant trust” logically deals with people in a comparatively bigger radius; and are thus outside familiar or kinship circles (Uslaner, 2018).

Intimate trust is measured by requesting survey respondents to specify whether they could trust people from their family, neighborhood, and people they know personally. These

were the response options: trust completely (coded 1), trust somewhat (coded 2), do not trust very much (coded 3), and do not trust at all (coded 4). For higher levels to be associated with increasing levels of intimate trust, the response options were reverse coded—this treatment is useful for analysis of statistical models.

Distant trust is measured by asking respondents whether they could trust people they meet for the first time, people of another religion, and people of another nationality. The response options were the same as those for intimate trust. The Cronbach’s alpha coefficient of an additive scale of intimate trust and generalized trust (each with three items) are .63 and .79 respectively. These generally indicate high reliability of the scale. The six items fall into two dimensions, with strong loading based on an exploratory factor analysis with varimax rotation. The results are shown in Table 1 below.

Table 1: Social trust measures

Scale/Indicators	Factor loading
<u>Intimate trust</u>	
Your family (M=3.8, SD=0.51)	.65
Your neighborhood (M=3.0, SD=0.85)	.83
People you know personally (M=2.9, SD=0.88)	.79
Alpha reliability=0.62	
<u>Distant trust</u>	
People you meet for the first time (M=1.98, SD=0.86)	.79
People of another religion (M=2.19, SD= 0.91)	.87
People of another nationality (M=2.03, SD=0.89)	.87
Alpha reliability=0.79	

Extraction Method: Maximum Likelihood

A “longstanding and conventional measure” of trust used in measuring being taken advantage of versus fairness in society was also used as one of the independent variables. In that respect, the following survey question was used: do you think that most people would try to take advantage of you if they got a chance, or would they be fair? The response options were: people would try to take advantage of you (coded 1) and people would try to be fair (coded 10). The sample average was 5.49, which is middle of the ground.

3.3 Institutional Confidence/External Political Efficacy

The concept of institutional confidence relates to the notion of external political efficacy. The belief by an individual that the political system is responsive to him or her is defined as external efficacy (Peterson, 1990). In that context, it may be considered as a reflection of a government’s responsiveness to citizen’s demands (Adugu, 2016). In the view of Sullivan & Riedel (2001), it is concerned with the responsiveness of political institutions to citizen’s actions. Institutional confidence is an indication of citizens’ belief that their government has the expertise, technical knowledge, capacity, and impartiality to make good judgment (Fukuyama, 2020). Following Norris (2010), a ten-item summated

scale of institutional confidence was constructed (alpha reliability=. 87). The corresponding results are shown in Table 2 below.

Table 2: Institutional confidence

Variable	Mean	SD
Government	2.4	.99
Parliament	2.2	.97
The Press	2.4	.92
Courts	2.6	.97
Civil service	2.5	.93
Labor unions	2.3	.94
Police	2.6	.98
Armed forces	2.8	.95
Political parties	2.1	.93
Television	2.6	.97
Institutional confidence scale alpha reliability=.87		

3.4 Democratic Aspiration, Democratic Satisfaction; and Democratic Deficit

As noted earlier, institutional confidence is an indication of citizens' belief that their government has the expertise, technical knowledge, capacity, and impartiality (fair-mindedness) to make good judgment (Fukuyama, 2020). Unfortunately, currently institutions are not delivering thereby driving anti-politics (Clarke, Jennings, Moss, & Stoker, 2018).

The crisis and erosion of political trust is not new. For example, Crozier, Huntington and Watuniki (1975) raised their concerns about the growing dissatisfaction and deficit of confidence among citizens in democratic societies. Later and in a similar vein, other scholars expressed dissatisfaction with and lack of confidence in democratic institutions. In that context, Dalton (2004) eloquently stated that citizens are distrustful of politicians, skeptical of democratic institutions and disillusioned.

In keeping with the above "theoretical" perspectives, democratic aspiration was measured using the following question: how important is it for you to live in a country that is governed democratically? The response options ranged on a scale from 1 to 10. On this scale, 1 means it is "not at all important" and 10 means "absolutely important." Similarly, democratic satisfaction was measured using the following question: how democratically is this country being governed today? The response options range from 1 to 10, where 1 means that it is "not at all democratic" and 10 means that it is "completely democratic." The mean values for democratic aspiration and democratic deficit are 7.96 and 5.54 respectively. Democratic deficit is the mean difference between democratic aspirations and satisfactions. Thus there is an average democratic deficit of 2.42 in the nine African countries surveyed. These may have implications for levels of social trust. Table 3 and Figure 1 show the specific country democratic aspirations, democratic satisfactions and corresponding democratic deficits.

Table 3: Democratic aspiration, democratic satisfaction and democratic deficit

Country	Democratic aspiration	Democratic satisfaction	Democratic deficit
Ghana	8.4	7.4	1.0
Libya	7.7	4.0	3.7
Morocco	7.6	3.7	3.9
Rwanda	7.7	7.2	0.5
South Africa	7.4	6.6	0.8
Zimbabwe	8.8	5.5	3.3
Tunisia	8.0	3.6	4.4
Egypt	9.0	4.6	4.4
Nigeria	7.9	5.7	2.2
Sample average	7.96	5.54	2.42

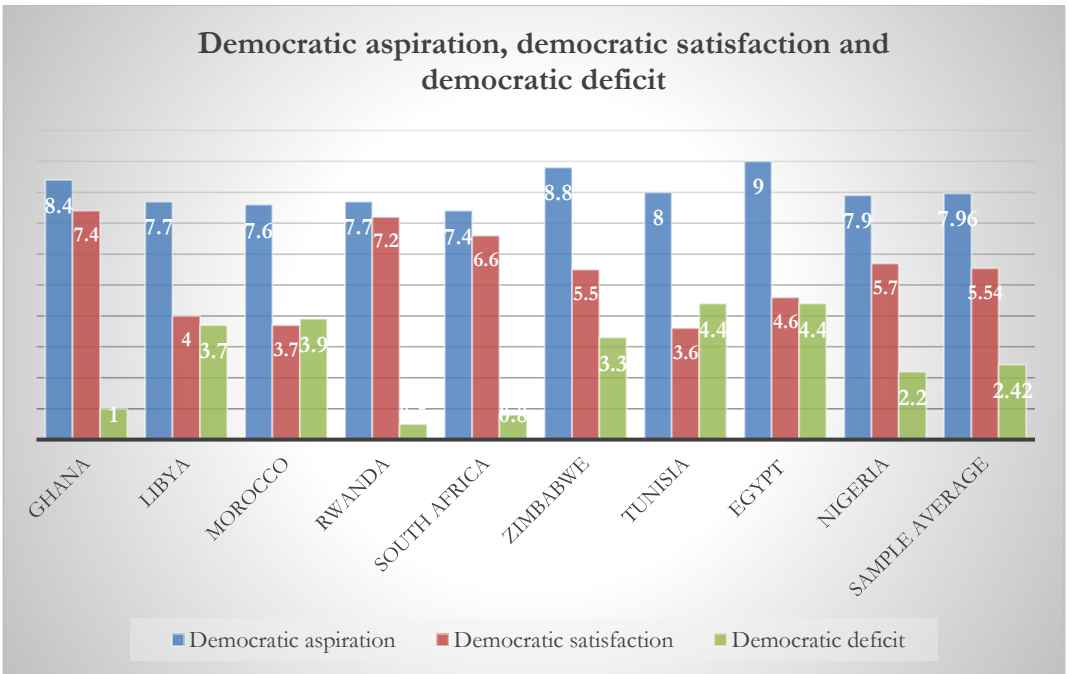


Figure 1: Democratic aspiration, satisfaction and deficit

3.5 Internal Political Efficacy/Interest in Politics and Freedom of Choice

Political efficacy deals with the notion that individuals’ political actions in their respective societies influence the political processes (Campbell, Gurin & Miller, 1954). Campbell and colleagues’ conceptualization focuses on internal political efficacy. This suggests individuals can play a role in effecting social change. Based on this conceptualization, survey respondents were asked about how interested they are in politics. The response options ranged from 1 to 4, with 1 (coded very interested), 2 (coded somewhat interested), 3 (coded not very interested), and 4 (coded not at all interested).

These response options were reverse coded such that higher values reflect greater levels of political interest (internal political efficacy). The sample mean is 2.5.

Turning to understanding respondents' perception of freedom of choice and control over their lives, they were asked to indicate how much freedom of choice and control they feel that they have over the way their lives turn out. The response options range from one to 10, with 1 meaning "no choice at all" and 10 meaning "a great deal of choice." The average for the sample is 6.9.

3.6 Social Network Embeddedness

Embeddedness in social organizations may facilitate learning about affairs in society and equip citizens with the requisite skills to take action that may elicit the desired public policy (Adugu & Ampadu-Ameyaw, 2014). Generalized trust may accelerate membership of voluntary associations, especially when the association promotes the common good of society. People with high levels of generalized trust are more inclined to join associations simply because they 'are all-round good citizens' (Putnam, 2000, p. 137). Citizens having greater levels of generalized trust are more likely to join public good producing associations (Sonderskov, 2011). When people are embedded in social networks, they may have the opportunity to learn how to frame issues, influence and recruit fellow citizens and engage in activities that target political decision makers in relation to social change—in this case, desirable environmental change.

Survey respondents' embeddedness or membership of social organization is measured by their participation in associations such as: church or religious organization; educational organization; labor union; political party; environmental organization, etc. (see Table 4 for details). A ten-item summated scale (alpha reliability=0.96) of social network embeddedness was constructed, following Norris & Inglehart (2009). The corresponding results are presented in Table 4 below.

Table 4. Social network embeddedness

Scale/indicators (alpha reliability=.91)	Factor loading
Church or religious organization	.51
Sport or recreational organization	.72
Art, music or educational organization	.76
Labor union	.77
Political party	.66
Environmental organization	.81
Professional association	.81
Humanitarian or charitable organization	.81
Consumer organization	.83
Self-help, mutual aid group	.78

Extraction Method: Maximum Likelihood

3.7 Media Use

The media may be a good source of information and learning in most societies. Media exposure facilitates greater levels of civic engagement (Norris, 2012; Norris & Inglehart, 2019). It is in that vein that the media may be a source of socialization—shaping

acceptable behavior and practices in society. For example, the media may shape citizens' views about support for climate change, demonstrations to promote an environmental cause, good governance, globalization, and trust. As a result of the growing liberalization of the media landscape (thanks to democratic governance) in most developing countries, most media houses perform agenda-setting roles, thereby urging citizens to take responsibility in seeking social, political and economic changes. Consistent with Norris (2011), an eight item summated scale (with alpha reliability=0.76) of media use was constructed for analytical purposes, with scale indicators on sources of information such as: mobile phone, e-mail, internet, radio news, television news, "talk with friends and colleagues, et cetera. Television and radio news have high frequency of use. As a result of the interconnectedness of communities in developing countries in general, and the surveyed countries specifically, "talk with friends and colleagues" have a relatively high frequency of use.

3.8 Subjective Wellbeing

Consistent with Norris (2011), the concept of subjective well-being is measured by an index comprising survey measures of life satisfaction, self-reported state of health, subjective happiness and financial satisfaction, standardized to 100 points. Respondents were asked to indicate whether they are very happy (coded 1), rather happy (coded 2), not very happy (coded 3) and not at all happy (coded 4). These were reverse coded such that higher values reflect greater levels of happiness. Similarly, state of health was measured on a 4-point scale. Respondents were asked: in all, how would you describe your state of health these days. The response options were very good (coded 1), good (coded 2), fair (coded 3), and poor (coded 4). The response options were reverse coded so that higher values indicate greater levels of state of health. Life satisfaction was measured by asking respondents: all things considered, how satisfied are you with your life as a whole these days? The response options were 1 (coded completely dissatisfied) and 10 (completely satisfied). The final composite measure of subjective wellbeing is financial satisfaction. It is measured by asking respondents to indicate how satisfied they are with their household financial situation. The response options were similar to those used for indication respondents' state of health above. The 4-point index of subjective wellbeing was standardized to 100 points. The mean standardized values are shown in Table 5 below. Similarly, Figure 2 depicts the standardized subjective well-being scores.

Table 5: Subjective wellbeing scale

Variable	Mean (100 point scale)
Happiness	76.2
State of health	79.1
Financial satisfaction	56.0
Life satisfaction	62.3
Subjective wellbeing scale	68.4
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Subjective wellbeing scale (alpha reliability=.73)	

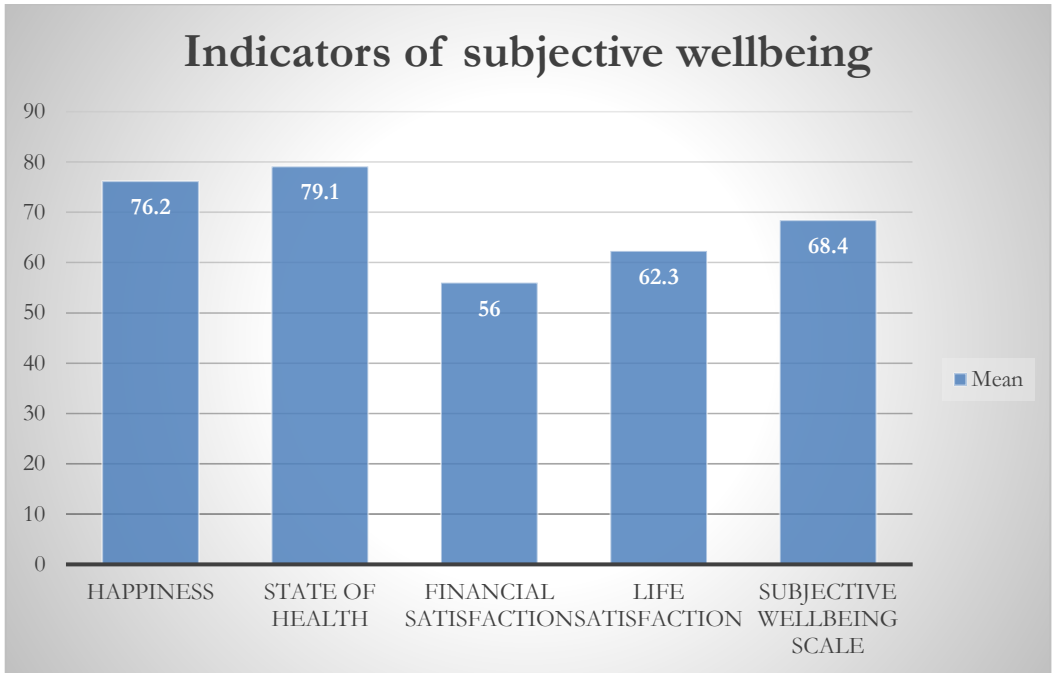


Figure 2: Subjective wellbeing indicators

3.9 Gender Equality

A number of research show that women are actively engaged in political actions to protect themselves and their families against injustices in society (Micheletti et al, 2006; Davidson & Freudenburg, 1996; and Young, 1994). A five-item scale of gender equality (with alpha reliability=.73) was created consistent with Norris and Inglehart (2009). In that regard, the scale has items or indicators such as: when mother works for pay, the children suffer; on the whole, men make better political leaders than women; and others.

3.10 Globalization Index

Globalization index is a good predictor of social values, which may influence trust in contemporary society and have implications for engagement in environmental activism. It is a 100-point index constructed by experts using a comprehensive list of variables from economic, social and political perspectives. This paper is based on the 2012 KOF Composite Index of Globalization to match with the data collection period of the WVS Wave 6. The 2012 Globalization Index for the respective countries used in this study are depicted in Figure 3 below.

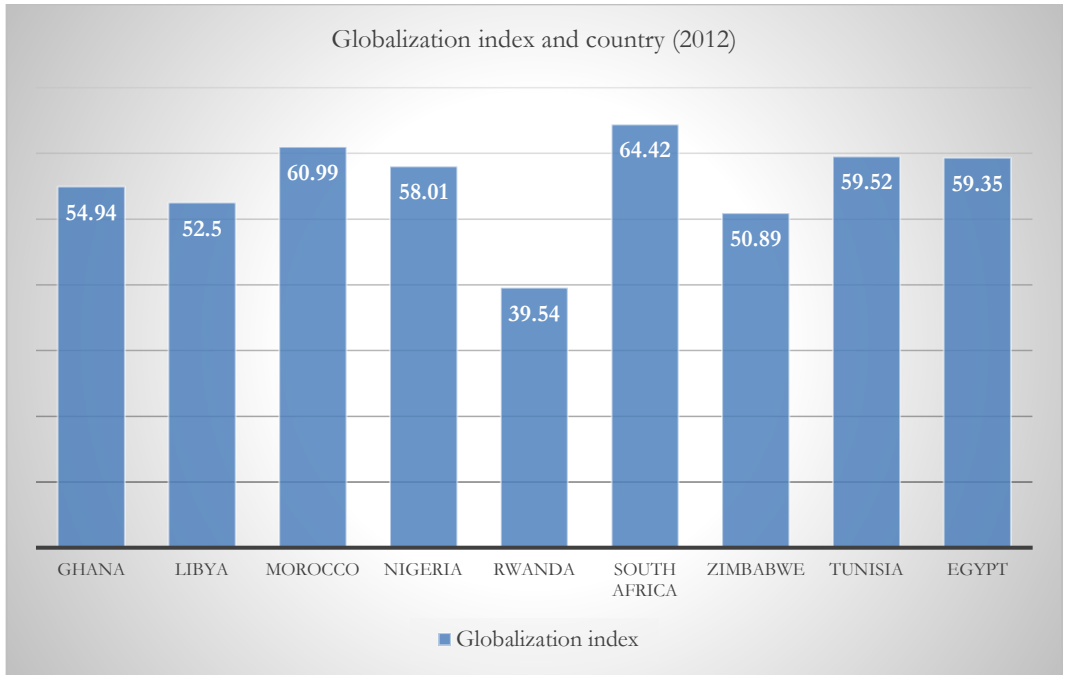


Figure 3: Globalization index

4. Bi-Variate and Multivariate Results

Bi-variate analyses between social trust and external political efficacy (institutional confidence), internal political efficacy (political interest), democratic aspiration, satisfaction, deficit and media usage are depicted in Table 6 below. Findings reveal that there is a positive and significant correlation between institutional confidence and both intimate and distant trust. Similarly, internal political efficacy is positively and significantly associated with intimate and generalized trust. Social network embeddedness is positively and significantly correlated with distant trust, but negatively and significantly associated with intimate trust.

Table 6: Bi-variate analysis between social trust and political efficacy, democratic aspiration, satisfaction, deficit and media usage

Variable	Type of social trust	
	Intimate trust	Distant trust
External political efficacy (institutional confidence)	0.26**	0.17**
Social network embeddedness	-0.07**	0.28**
Internal political efficacy	0.07**	0.10**
Democratic aspiration	0.07**	-0.01
Democratic satisfaction	-0.07**	0.16**
Democratic deficit	0.14**	-0.18**
Media usage	0.03**	-0.08**

** Correlation significant at the 0.01 level (2-tailed)

For multivariate analyses, two dependent variables were utilized. The first one is derived from the following “longstanding and conventional” trust question. It is usually referred in the literature as generalized trust and widely considered as the standard measure of the concept of generalized trust (Kim-Pong & Hoi-Wing, 2018; Nannestad, 2008). In that respect, survey respondents were asked: generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? The response options were: “most people can be trusted” (coded 1) and “need to be very careful” (coded 2). For logistic regression purposes, “need to be very careful was recoded to zero (0). Figure 4 below shows the distribution of the dependent variable (most people can be trusted versus need to be very careful. It also depicts the distribution of the following survey question (which is another “longstanding and conventional” measure of trust, used as an independent variable): do you think that most people would try to take advantage of you if they got a chance, or would they be fair?

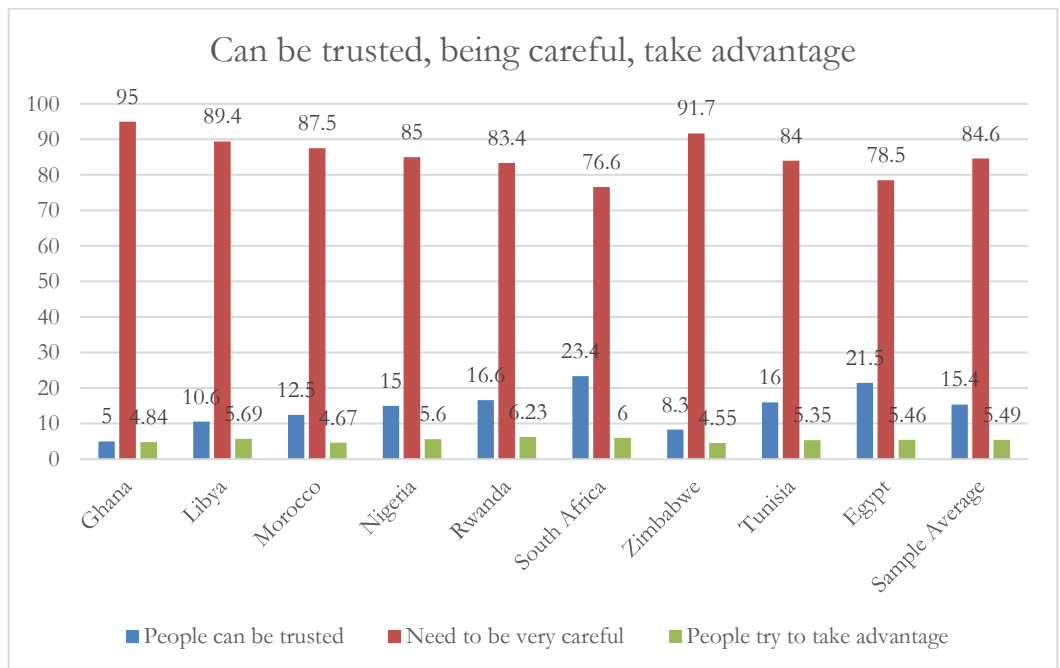


Figure 4: People can be trusted or be careful and people may take advantage or be fair

The second dependent variable is related to participation in demonstration for an environmental cause. Participation in demonstration in support for an environmental cause may be a behavior that citizens engage in order to bring about desirable changes in their communities. In that connection, respondents were asked whether they have participated in a demonstration for some environmental cause during the past two years. The response options were: Yes (coded 1), and No (coded, 2). These response options were recoded into Yes=1, and No=0 for data reduction and analytical purposes.

Using the above dependent variables, a logistic regression analysis technique is used. Depending on the model, the explanatory variables are: intimate trust, distant trust, institutional confidence (external political efficacy), democratic aspiration, democratic satisfaction, internal political efficacy (interest in politics), social network embeddedness, people can be trusted versus need to be careful, people can take advantage or be fair, globalization index, media usage, subjective wellbeing, gender equality, freedom of choice, level of education, gender, age and country level dummies.

If *P* is the probability that a person does not participate in a demonstration for some environmental cause, then the logistic regression equation is as follows:

$$\ln \left[\frac{P}{1 - P} \right] = \alpha_0 + \sum_{i=1}^n \alpha_i X_i$$

Where α_0 is the intercept, X_i s are the different explanatory variables and α_i s are the corresponding regression coefficients.

In order to find out the correlates of “people can be trusted or one needs to be very careful” and “individuals’ participation in a demonstration for some environmental cause”, binary logistic regression models were performed. The results assessing the relationships between whether “people can be trusted or one needs to be very careful” and “participation in a demonstration for an environmental cause” (as dependent variables) and the afore-mentioned independent variables are shown in Table 7 (depicting models 1 & 2) below. It shows the values of the regression coefficients of the explanatory variables and the intercept. It also provides the standard error (in bracket), corresponding odd ratios and significance levels. The logistic regression models are all well-fitting due to the fact that they show non-significance, where $p > .05$ (Hosmer & Lemeshow, 2000; Menard, 2002; Norusis, 2008).

Table 7: Logistic regression models of participation in demonstration for an environmental cause (Model 1) and generalized trust (Model 2)

Independent variable	Model 1		Model 2	
	B(S.E.)	Odds Ratio	B(S.E.)	Odds Ratio
Intimate trust	-.041(.024)	.960	.108(.020)	1.114***
Distant trust	.066(.018)	1.068***	.061(.015)	1.062**
Institutional confidence	.028(.006)	1.028***	.018(.005)	1.018***
Democratic aspiration	-.021(.017)	.979	-.109(.013)	.896***
Democratic satisfaction	-.021(.016)	.979***	.014(.013)	1.014
Internal political efficacy	.244(.037)	1.276	.025(.029)	1.025
Social network embeddedness	.174(.011)	1.190	.025(.009)	1.025**
Trust vs. be careful	.181(.092)	1.199*	Not applicable	Not applicable
Take advantage vs. be fair	.003(.014)	1.003	.044(.012)	1.045***
Globalization index	-.272(.044)	.762***	.109(.020)	1.115***
Media use	.041(.006)	1.042**	-.014(.005)	.986**
Subjective wellbeing	.001(.003)	1.001	.007(.002)	1.007**
Freedom of choice	-.034(.019)	.966	-.118(.015)	.889***
Gender equality	-.034(.010)	.967**	-.031(.008)	.969***
Level of education	.034(.019)	1.035	.058(.015)	1.059***
Gender	-.200(.072)	.819**	-.063(.056)	.939

Age	.011(.003)	1.011***	.004(.002)	1.004
South Africa	-2.062(.517)	.127***	.562(.204)	1.754**
Nigeria	-1.456(.248)	.233***	.247(.115)	1.280*
Ghana	.496(.187)	1.642**	.925(.154)	2.521***
Rwanda	5.064(.624)	158.211***	-1.616(.352)	.199***
Zimbabwe	1.399(.185)	4.051***	.066(.166)	1.068
Constant	6.630(2.514)	757.479**	-8.784(1.027)	1.027***
-2 log likelihood	5910.251		8641.205	
Hosmer & Lemeshow Goodness-of-Fit Test	.201		.172	
N=15928				

*Significance for coefficients: * $p < .05$; ** $p < .01$; *** $p < .001$*

5. Discussion

Trust can be viewed as a two-way relationship, where individual A believes that individual B will reciprocate). Figure 5 below shows the distribution of intimate and distant trust radii. It is apparent that in general, levels of intimate trust are much higher compared with distant trust. The high levels of intimate trust may be attributable to the homogeneous nature of the countries in the cross-national dataset used—the sampled countries are not heterogeneous (in terms of being socially mixed) and hence relatively higher levels of intimate trust. It is arguable that bonds of mutuality, reciprocity and cooperation get weaker along the radii from intimate trust to distant trust in the African societies that comprise the dataset used for this paper. There is thus a relatively stronger bond of trust in relation to family, neighbor and people known personally as compared with weak ties beyond citizens' close kin circles and identity groups such as people of another religion and nationality. Citizens are less trusting of individuals outside their small radii. This type of weak trust is reflective of weak ties. Some scholars refer such weak trust as “bridging” trust (Delhey et al. 2011), due to the fact that though weak, they are important in understanding the expectation of reliance and mutual reciprocity that individuals have toward each other in their society.

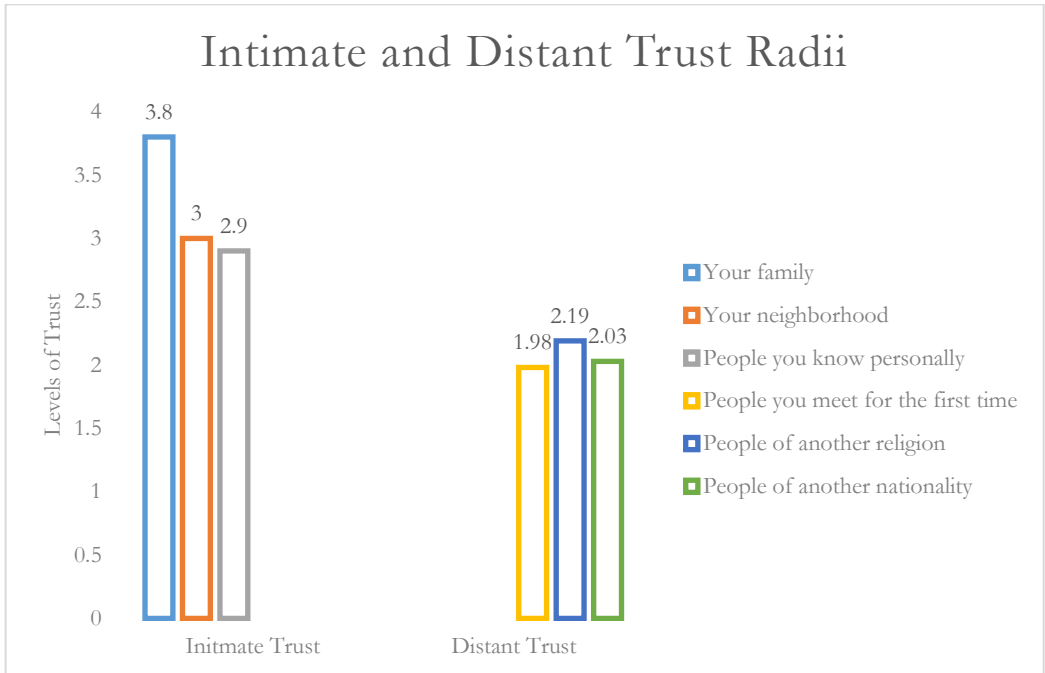


Figure 5: Intimate and Distant Trust Radii

Both intimate and distant trust are positively and significantly associated with external political efficacy (institutional confidence) and internal political efficacy. Trust (intimate and distant) is *sine qua non* for good governance—since trust between those governed and their governors influences good governance. In that context, the governors have the capacity to undertake their responsibilities and those governed have the expectation that the governors will be responsive to their demands—in the best interest of the public. As Fukuyama (2020) would say, these are indications of citizens’ belief that their government has the expertise, technical knowledge, capacity, and impartiality to make good judgment. Trusting citizens convey a sense of confidence in their governments’ responsiveness to their needs while at the same time believing that they play a role in facilitating change.

In general, there is a low level of generalized trust in the nine African societies surveyed—on average, 15.5% and 84.6% of respondents were of the view that “people can be trusted” and “need to be very careful” respectively. In spite of that, though distant trust is relatively low compared with intimate trust, social network embeddedness is significantly and positively associated with distant trust. This finding, though confounding, appears to be for the common good of the society—it may foster social cohesion and ultimately, trust among citizens. Citizens’ embeddedness in social organizations may facilitate learning about affairs in society and equip citizens with the requisite skills to take action that may elicit the desired public policy (Adugu & Ampadu-Ameyaw, 2014). This may have implications for democratic aspiration, democratic satisfaction democratic deficit.

A paired sample t-test was conducted to evaluate whether there is a divergence between people’s democratic aspiration and democratic satisfaction. There was a statistically

significant decrease (difference between democratic aspiration and democratic satisfaction, known as democratic deficit). For democratic aspiration, $M=7.96$, $SD=2.44$, and for democratic satisfaction, $M=5.54$, $SD=2.86$, $t(15926) = 90.22$, $p < 0.0005$ (two-tailed). The mean decrease = 2.42, with a 95% confidence interval ranging from 2.37 to 2.47. The eta squared statistic (0.34) indicated a large effect size, following Cohen (1988).

Democratic deficit is the magnitude of the relationship or difference between democratic aspiration and satisfaction. This value (the eta squared statistic of 0.34) reveals that the quantitative reflection of the phenomenon of democratic deficit is large and important. The size of any democratic deficit derives from overwhelming approval of democratic values and principles, which are widely expressed in most societies today, on the one hand, and yet the more skeptical evaluations of the democratic performance of governments, which are also relatively common (Norris, 2011). Thus for the countries surveyed, citizens' democratic aspirations are not being realized.

Internal political efficacy is relatively good but it appears that people feel that what is being offered by the system does not satisfy their concerns. Obviously, when people are enlightened about affairs of their societies while at the same time realizing that they are dis-embedded from "conventional" political life, they may be spurred to take much-needed responsibility and agency to address their concerns. This accounts for the divergence from people's aspirations and satisfaction with democracy—manifested in terms of the democratic deficit in the countries surveyed. There is generally a deficit of trust which may be driving anti-politics. It is therefore arguable that the realization of dis-embeddedness from "conventional" political life changes people's target of participation from the government to innovative behaviors such as environmental activism.

It is worthy of note that generalized trust, distant trust (outside familiar circles) institutional confidence, media use, age and country of residence (Ghana, Zimbabwe and Rwanda) are significantly and positively associated with participation in a demonstration for an environmental cause, whereas democratic satisfaction, globalization, gender equality, being male, residing in South Africa and Nigeria are negatively and significantly associated with participation in a demonstration for an environmental cause. Institutional confidence and distant trust are the main consistent predictors of both environmental activism and generalized trust.

6. Conclusion

In conclusion, trust may provide a moral foundation that motivates citizens to work for the common good—the public interest. Citizens' trust in government institutions (external efficacy) is a reflection of government's responsiveness to the demands that citizens make through conventional political action. There is generally a deficit of trust among citizens of the surveyed African countries which may be driving the divergence between people's democratic aspiration and democratic satisfaction. This supports Devine, Gaskell, Jennings, & Stoker (2020) argument that trust between governors and the governed is seen as essential to facilitating good governance. The pervasiveness of globalization compounded and necessitated an understanding of its influence on trust. Consequently, intimate and generalized trust levels may be impacted due to the growing exposure to other cultures, coupled with interactions with diverse social and political

systems. It is notable that there is a substantive relationship between trust and environmental activism. In that context, it is arguable that in the African societies surveyed for this paper, there are like-minded individuals willing to take action to bring about desirable environmental change to enhance the wellbeing of their respective societies.

A limitation of this paper is that the World Values Survey, Wave 6 dataset used lacks certain pertinent variables that would have provided more insight into trust and engagement in environmental activism. Future survey research should include data items on relevant variables such as: how climate change will harm future generations; personal experience with climate change and environmental pollution; government responsibility for reducing pollution that causes climate change; views on whether taking action on climate change and environmental degradation will ultimately improve economic growth/wellbeing and create jobs.

References

- Adugu, E. (2016). "Correlates of Political Consumption in Africa." In Gbadamosi, A. (Ed.). "*Handbook of Research on Consumerism and Buying Behaviour in Developing Nations.*" (pp. 452-473). IGI Global Publishers, Hershey, Pennsylvania, USA. DOI: 10.4018/978-1-5225-0282-1.
- Adugu, E., & Ampadu-Ameyaw, R. (2014). "Attitudinal Measures of Political Consumption as a Form of Civic Engagement in a Developing Country." *International Journal of Civic Engagement and Social Change (IJCESC)*, 1(4), 28-46. doi:10.4018/IJCESC.2014100102.
- Brechin, S. R., & Kempton, W. (1994). Global environmentalism: a challenge to the postmaterialism thesis? *Social Science Quarterly*, 75, 245–269.
- Campbell, A., Gurin, G., & Warren, M. (1954). *The voter decides*. Evanston, IL: Row Peterson.
- Clarke, N., Jennings, W., Moss, J., & Stoker, G. (2018). *The Good Politician: Folk Theories, Political Interaction, and the Rise of Anti-Politics*. Cambridge University Press.
- Cohen, J. W. (1988). *Statistical power analysis for the behavioral sciences*. 2nd Ed. Hillsdale, NJ: Lawrence and Erlbaum Associates.
- Crozier, M. J., Huntington, S. P. & Watanuki, J. (1975). *The Crisis of Democracy*. New York: New York University Press.
- Dalton, R. J. (2004). *Democratic Challenges, Democratic Choices: The Erosion of Political Support in Advanced Industrial Democracies*. Oxford: Oxford University Press.
- Davidson, D. J., & Freudenburg, W. R. (1996). Gender and environmental risk concerns: A review and analysis of available research. *Environment and Behavior*, 28 (3), 302-39.
- Delhey, J., K. Newton and C. Welzel (2011), 'How general is trust in "most people"? Solving the radius of trust problem', *American Sociological Review*, 76 (5), 786–807.
- Delhey, J. and K. Newton (2003), 'Who trusts? The origins of social trust in seven societies', *European Societies*, 5 (2), 93–137.
- Devine, D., Gaskell, J., Jennings, W. Stoker, G. (2020). Trust and the Coronavirus: What are the Consequences of and for Trust? An Early Review of the Literature. *Political Science Review*. I-12. Sage.
- Dietz, T, Dan, A, Shwom, R. (2007). Support for Climate Change Policy: Social Psychological and Social Structural Influences. *Rural Sociology*, 72(2), 2007, pp. 185–214.
- Dono, J., Webb, J., Richardson, B. (2010). The relationship between environmental activism, pro-environmental behavior and social identity. *Journal of Environmental Psychology*, 30, 178-186.
- Fukuyama, Francis. 2020 "The Thing That Determines a Country's Resistance to the Coronavirus" The Atlantic, 30th March (https://www.theatlantic.com/ideas/archive/2020/03/thing-determineshow-well-countries-respond-coronavirus/609025/?utm_campaign=theatlantic&utm_content=edit-promo&utm_term=2020-03-30T10%3A30%3A38&utm_source=twitter&utm_medium=social).
- Glanville J.L. and P. Paxton (2007), 'How do we learn trust? A confirmatory tetrad analysis of the sources of generalized trust', *Social Psychology Quarterly*, 70 (3), 230–42.

- Hardin, R. (2000). 'The public trust', in S.J. Pharr and R.D. Putnam (eds), *Disaffected Democracies: What's Troubling the Trilateral Countries*, Princeton, NJ: Princeton University Press, pp. 31–51.
- Hardin, R. (2004). *Trust and Trustworthiness*, Russel Sage Foundation, New York.
- Hearn, F. 1997. *Moral Order and Social Disorder: The American Search for Civil Society*. New York: Aldine de Gruyter.
- Horton, D. (2003). Green distinctions: the performance of identity among environmental activists. *Sociological Review*, 51, 63–77.
- Hosmer, D. W., & Lemeshow, S. (2000). *Applied logistic regression*. New York: John Wiley and Sons.
- Kim-Pong, T, Hoi-Wing, C. (2018). Generalized trust narrows the gap between environmental concern and pro-environmental behavior: Multilevel evidence. *Global Environmental Change*. 48, 182-194.
- KOF 2012 Composite Index of Globalization. <http://globalization.kof.ethz.ch/>
- Kollmuss, A., & Agyeman, J. (2002). Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8, 239–260.
- Laird, F.N. (1989). "The Decline of Deference: The Political Context of Risk Communication." *Risk Analysis*, 9:543–50.
- Manzo, L. C., & Weinstein, N. D. (1987). Behavioral commitment to environmental protection: a study of active and nonactive members of the sierra club. *Environment and Behavior*, 19, 673–694.
- Menard, S. (2002). *Applied logistic regression analysis*. Sage Publications. Thousand Oaks. London.
- Micheletti, M., Follesdal, A., Stolle, D. (Eds.). (2006). *Politics, products and markets: Exploring political consumerism past and present*. New Brunswick, USA: Transaction Publishers.
- Mishler, W. and R. Rose (2005), 'What are the consequences of political trust: A test of cultural and institutional theories in Russia', *Comparative Political Studies*, 38 (9), 1050–78.
- Mohai, P. (1992). Men, women and the environment: an examination of the gender gap in environmental concern and activism. *Society and Natural Resources*, 5, 1–19.
- Moreno, A. (2011). Social trust. In Bertrand Badie, Dirk Berg-Schlosser, and Leonardo Morlino, eds., *International Encyclopedia of Political Science*, 2672– 2674. Thousand Oaks, CA: Sage.
- Nannestad, P. (2008). What have we learned about generalized trust, if anything? *Ann. Rev. Polit. Sci.* 11, 413–436. <http://dx.doi.org/10.1146/annurev.polisci.11.060606.135412>.
- Neilson, L. A., & Paxton, P. (2010). Social capital and political consumerism: A multilevel analysis. *Social Problems*, 57(1), 5-24.
- Newton, K. (2007). *Social and political trust*. In Russell Dalton and Hans-Dieter Klingmann, eds., Oxford Handbook of Political Behaviour, 342– 361. Oxford: Oxford University Press.
- Norris, P. (2011). *Democratic Deficit: Critical Citizens Revisited*. Cambridge University Press.
- Norris, P. (2012). To them that hath...news media and knowledge gaps. *Z Vgl Polit Wiss*, 6, 71-98.
- Norris, P., & Inglehart, R. (2009). *Cosmopolitan communications: Cultural diversity in a globalized world*. Cambridge University Press.
- Norris, P. & Inglehart, R. (2019). *Cultural Backlash: Trump, Brexit, and Authoritarian Populism*. Cambridge University Press.
- Norris, P. Jennings, W. & Stoker, G. (2019). *Trust but Verify*. TrustGov Working Paper Series. No. 002/September/2019.
- Norusis, M. (2008). *SPSS 16.0 statistical procedures companion*. Upper Saddle River, NJ: Prentice Hall.
- OECD (2017). OECD Guidelines on Measuring Trust, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264278219-en>.
- Peterson, S. A. (1990). *Political behavior: Patterns in every day life*. Newbury Park, CA: Sage.
- Putnam, R. (2000). *Bowling Alone. The Collapse and Revival of American Community*. New York: Simon & Schuster.
- Sasaki, M. (2019). *Trust in Contemporary Society*. Brill, NV, Leiden, The Netherlands.
- Siegrist, M., G. Cvetkovich, and C. Roth. (2000). "Salient Value Similarity, Social Trust, and Risk/Benefit Perception." *Risk Analysis*, 20:353–62.
- Simmel, G. (1950). *The Sociology of Georg Simmel*, translated and edited by Kurt Wolff, Glencoe, IL: Free Press.
- Sonderskov, K. M. (2011). Does generalized social trust lead to associational membership? Unraveling a bowl of well-tossed spaghetti. *European Sociological Review* 27(4): 419-434.
- Stern, P. C., Dietz, T., Kalof, L., & Guagnano, G. A. (1995). Values, beliefs, and proenvironmental action: attitude formation toward emergent attitudes objects. *Journal of Applied Social Psychology*, 25, 1611–1636.
- Stern, P. C. (2000). Theory of environmentally significant behavior. *Journal of Social Issues*, 56, 407–424.

- Sullivan, J., & Riedel, E. (2001). *International Encyclopedia of the Social and Behavioral Sciences*. Elsevier Science, 4353-4356.
- Syme, G. J., Bevan, C. E., & Sumner, N. R. (1993). Motivation for reported involvement in local wetland preservation: the roles of knowledge, disposition, problem assessment, and arousal. *Environment and Behavior*, 25, 586–606.
- Tindall, D. B., Davies, S., & Mauboules, C. (2003). Activism and conservation behavior in an environmental movement: the contradictory effects of gender. *Society and Natural Resources*, 16, 909–932.
- Tindall, D. B. (2002). Social networks, identification and participation in an environmental movement: low-medium cost activism within the British Columbia wilderness preservation movement. *Canadian Review of Sociology and Anthropology*, 39, 413–452.
- Uslaner, E. (2018). *The Oxford Handbook of Social and Political Trust*. Oxford University Press. Kindle Edition.
- Uslaner, E. (2008), "Trust as a moral value", *The Handbook of Social Capital*, D. Castiglione, J. Van Deth and G. Wolleb (eds.), Oxford University Press, Oxford, pp. 101-121.
- Young, I. M. (1994). Gender as seriality: Thinking about women as social collective. *Signs: Journal of Women in Culture and Society*, 19, 735.
- Zmerli, S. and K. Newton (2008), 'Social trust and attitudes towards democracy', *Public Opinion Quarterly*, 72 (4), 706–24.
- Zmerli, S. Newton, K. (2017). *Objects of political and social trust: scales and hierarchies*, In *Handbook of Political Trust*, Zmerli, S. Van der Mee, T. (Eds). Edward Elgar Publishing Limited.