Why People Protest: Explaining Participation in Collective Action

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Introduction

Research Statement and Questions

Against the expectations of most rational theorists, laypeople find a way to cooperate and engage in collective action, no matter what form or in which domain. When it comes to politics, it might be even more confusing to find people in one country protest for single or ad-hoc issue, while others who might experience persisting grievance have more tolerance and patience with their governments. This is exactly the difference between citizens in democratic and non-democratic countries. However, eventually, citizens in non-democratic settings would start to engage in collective action and finally revolt against their regimes. This happened in communist countries, Eastern European countries and most recently in the Arab world. This suggests that regardless people's tolerance levels which might be affected by cultural or socio-political reasons, people engage in collective action and at some point, converge into a revolutionary course of action. This probes the question: under what conditions do individuals revolt?

However, revolution is too difficult to be empirically studied. Revolutionary collective action can be defined as "simultaneous large-scale and spatially diffused protest". This definition captures the complexity of the phenomenon in terms of three features- think about them as sufficient conditions- that should accompany protest for a collective action situation to be described as "revolutionary" collective action, as follows:

a. ***Number of Actors***. Although Olson (1968) argues that there is a negative relationship between group size and the propensity to participate in collective action as the increase in the number of participants makes the individual unnoticeable and decreases the marginal profit of participation, others like Schelling (1978:41) argues that "[sometimes] there is "immunity in numbers". Between both arguments, it remains as the first obvious feature of revolutionary collective action is the large number of participants. This is even more important when individuals protest in authoritarian contexts where freedom of expression is expected and so is violence from security apparatus.

b. ***Spatial Diffusion***. A second distinctive feature of revolutionary collective action is its simultaneous spread over space. While some studies refer to the spatial dimension when analysing the spread of revolutionary vibes across countries, spatial dispersion here is confined to the sub-state units, be it states in federal systems, cantons in confederal system, cities, counties, or governorates…etc. Of course, this spatial diffusion in itself signals successful coordination efforts of the organizing agents. Yet, as a feature of revolutionary collective action, the importance of the momentum's spatial diffusion is double fold. On one side, some are concerned with the peripheries-centre relationship, the level of urbanization and how the state controls the revolution. On the other side,

another group of scholars put more emphasis on the city as an interactional field where distinctive features, be it static (population density, size, area, distance from the capital) (Kuran. 1989) or dynamic (social relations, information cascading and resources) contribute to individuals' mobilizability (Lohmann.1994). My concern about the sub-state unit, aka the city, falls under the rubric of the dynamic/relational aspect of the latter.

c. ***Time Synchronization***. The third feature of revolutionary collective action is its simultaneity across different sub-state units. People act together in different places at the same time to express their dissatisfaction and desire for change. However, it is noteworthy that features of spatial diffusion and time synchronization might interact. Charlesworth (1983) compared rural protests in British and French cities in the 1800s and the line of analysis showed that sometimes spatial diffusion takes place over time. In other words, riots start in one city, and because of media coverage showing what happened in neighbouring cities, it became contagion that other cities start to riot as well.

For this, if we cannot study revolutions as they happen or detect the simultaneous nature of people's collective actions, it can be relegated for now to protest as the core/essential component. Next is to question the spatial diffusion of this collective action situation. Accordingly, this thesis main research question can be simplified to be:

when/under what conditions do individuals protest?

Related to this is the following three questions:

1. How can the interaction between social and political trust affect individuals' decision to participate in collective action?
2. How can the interaction between social and political trust affect individuals' (non)compliance with social and political authorities?
3. How can the interaction between social and political trust explain the spatial diffusion of collective action?

The reason why trust is chosen as the main explanatory variable will be explained in detail in the literature review and the theoretical framework.

Literature Review

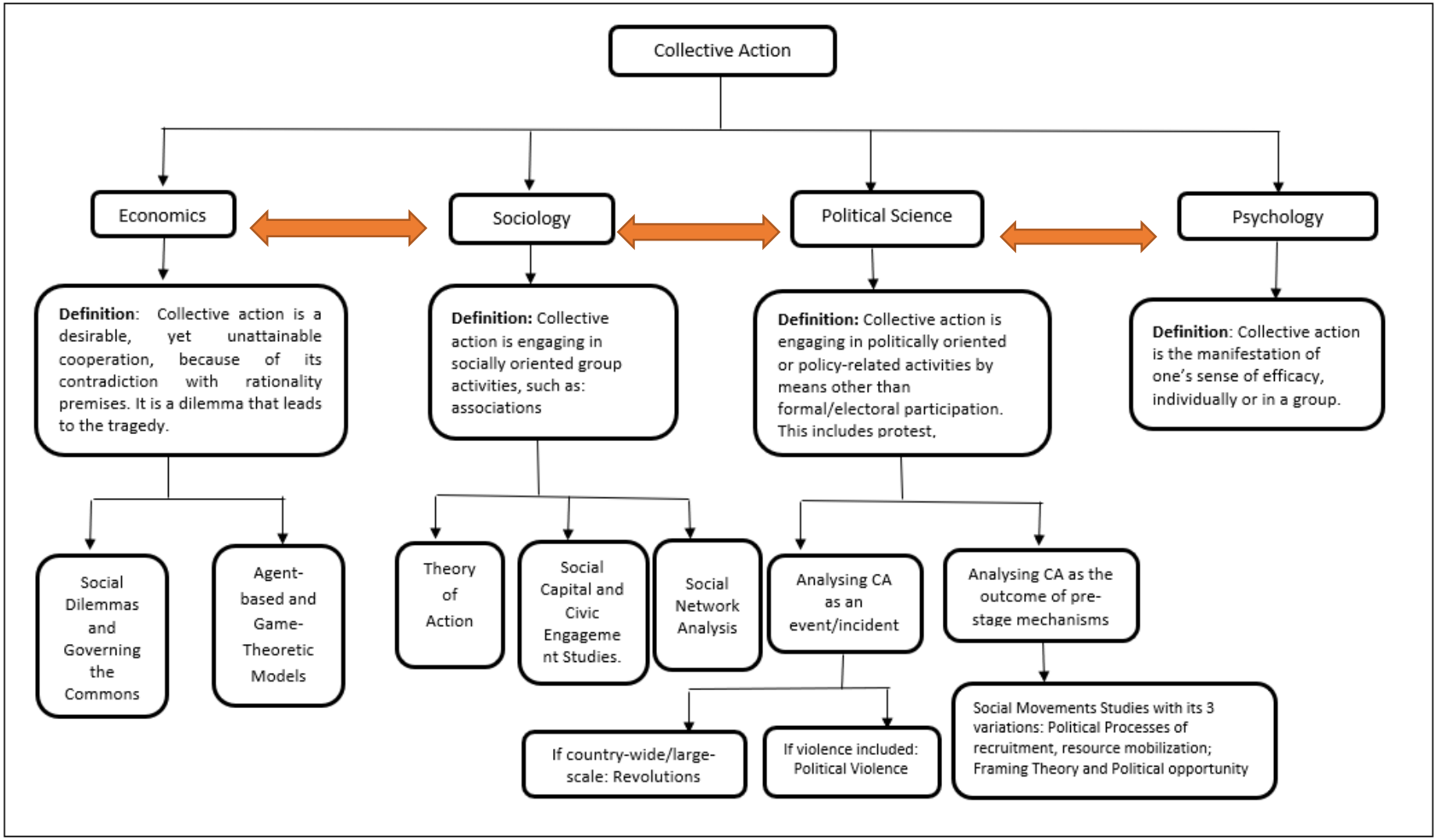
- **Different Conceptualizations of Collective action**

The study of collective action is spread across several fields in social sciences. As a multifaceted phenomenon, interdisciplinarity and cross-fertilization between these sub-fields should be embraced and appreciated. This literature review is to map out how collective action is conceptualized, and questioned within each field, which helps locating the thesis' theoretical framework and contribution among existent literature. As a priori, the organization of the literature review does not overlook the study of collective action as in cooperation and conflict studies, where cooperation can be either considered as a synonym of collective action or an overarching category. Alternatively, taking into consideration the existent literature- especially those that developed under organizational studies- on the theoretical, and logical philosophical differences between collective action, join action and the differences between cooperation, collaboration, and coordination; I prefer to consider collective action as the over-arching

category under which cooperation and conflict co-exist, especially when the subject matter of study is contentious politics. Figure (1) summarizes and depicts how collective action is defined in each sub-field and the ensued scholarly topics.

In economics, collective action revolves around how individuals manage to overcome the commons problem or find a pareto efficient cooperative outcomes to dilemmas that are usually summarized in game-theoretic models. Overwhelmed by rational choice assumptions, collective action is conceptualized as a desirable, yet unattainable situation because individuals- or generally speaking- actors are concerned with their narrow self-interests. As a result, free-riding problem emerges, defection is perceived as the rational decision, while cooperation is a deviation from the rational choice theory expectations, which needs to be explained. At the heart of the study of collective action in economics lie two pioneering pieces of literature that were produced in 1968. The first is Mancur Oslon's *Logic of Collective Action*, where he used the diminishing returns to explain why it is logical to defect from participating in collective action especially within large numbers. In part, the individual will not be noticed and thus, one's participation is not going to be recorded; and simultaneously, with the increase in the numbers of participants, the participation's returns are too tiny to make one bother. Ten years later, Thomas Schelling (1978) counter-argued Olson's take on the size of participants when he put forward "the safety in numbers" argument. In the same year of 1968, Hardin wrote an article about "the tragedy of the commons" where he stated that because common resources- such as fisheries, meadows…etc- are characterized by low/ non-excludability and high subtractability in use, if individuals rush to overuse the commons in pursuit of their self-interests, inevitable doom is the unescapable fate awaiting resources and individuals, alike. Yet, Elinor Ostrom (1990) proved Hardin wrong and led the path to the start of the institutional analysis of collective action. She concluded that individuals have the ability to develop rules and institutions through which they manage and govern natural resources to maintain these resources' economic feasibility and sustainability. As a result, Hardin published a revision to his original thesis where he clearly stated that he should have included the word "unmanaged" in the title. In other words, as Joranson (2008) put it, "his revised title might read, 'The Tragedy of the Unmanaged Commons" (Ibid, p.65)

Within economics as well, game theoretic models emerged as analytical tools to summarize rational choice assumptions and collective action dilemmas and they proved to be very efficient in solving market setting situations (Gibbon. 1992). Central to this is the idea of equilibrium in which "no actor wishes to change its behaviour on its own. Behaviour at an equilibrium is stable in the sense that no actor, given its current position and knowledge, can improve its own position on its own" (Morrow. 1994. P.8) Yet, game theoretical modelling has been criticized for being too descriptive to provide a convincing explanation to collective action mechanisms (Ostrom. 1990)


Collective Action
Economics
Sociology
Political Science
Psychology
Definition: Collective action is a desirable, yet unattainable cooperation, because of its contradiction with rationality premises. It is a dilemma that leads to the tragedy.
Definition: Collective action is engaging in socially oriented group activities, such as: associations
Definition: Collective action is engaging in politically oriented or policy-related activities by means other than formal/electoral participation. This includes protest,
Definition: Collective action is the manifestation of one's sense of efficacy, individually or in a group.
Social Dilemmas and Governing the Commons
Agent-based and Game-Theoretic Models
Theory of Action
Social Capital and Civic Engagement Studies.
Social Network Analysis
Analysing CA as an event/incident
Analysing CA as the outcome of pre-stage mechanisms
If country-wide/large-scale: Revolutions
If violence included: Political Violence
Social Movements Studies with its 3 variations: Political Processes of recruitment, resource mobilization; Framing Theory and Political opportunity

In sociology, collective action is related to civic engagement which includes volunteering, associational memberships, and other forms of "socially oriented group activities". If the underlying core of collective action is to improve people's lives, then how is collective action linked to social change and societies developments? Talcot Parsons (1937) was of the pioneering sociologists to answer this question when he put forward the basics for the theory of action. For Parsons, action is a process with key elements: "the "actor", "the end", the "situation, as decomposed into "conditions" and "means", and a "normative orientation" for selecting among means to ends" (Camic. 1998. P.288) This systematic outlook facilitates understanding the sociology of action and how it relates to the social order's stability, evolution and development. And if what binds individuals together in a specific social order is a shared meaning, then volunteerism should be considered at the heart of social action study where values, norms and standards for evaluation affect the dynamics of social action. Parson's theory led to the emergence of two dualities as Alexander (1988) suggested. First is the study of conflict as opposed to the study of order and under this category Marx is categorized as a conflict theorist who focuses on the instrumentality of action to break free from hegemonic power. In other words, Marx did not view social action as necessarily "voluntarily" social action, but it is an inevitable outcome of power relations. Second, the duality between action and order as a result of the internalization of social action norms. Here, it is individual's action that maintains or demolishes the structure. The result is that Parson's intensified the separation between the micro (the individual) and the macro (the structure).

Yet, it was Parson who extended the functional analysis of action theory to the study of action within comparative politics by offering the structural functionalism as an analytical framework, which differs from the eclectic functionalism version that focuses on the roles an action serves as a starting point for the analysis. Flanigan and Fogelman (1967) stated that "structural functional analysis does embody certain characteristics features: first, an emphasis on the whole system as the unit of analysis; second, postulation of particular functions as requisite to the maintenance of the whole system; third, concern to demonstrate the functional interdependence of diverse structures within the whole system". (in Charlesworth (ed). P.67) However, both authors criticized the structural functional analysis for lack of clear statements on the relationship between groups, or institutions on one hand and functions on the other hand and whether functions are equally or relatively important. More importantly, when sociologists examined forms of politically oriented collective action- as opposed to socially oriented one as mentioned above- such as rebellion, riots, civil disobedience, and revolution- they viewed these forms as disruptive actions to the stability of the system. In this respect, breakdown theories developed within sociology in the 1970s to refer to "[…](malintegration) [or] weak networks and a diffuse collective identity often created by chronic unemployment, family instability, and disruptive migration". (Useem. 1998.p.216) To state it differently, forms of politically oriented collective action emerge in a social reality when social control becomes dysfunctional.

In politics, collective action as the non-conventional form of political participation, and often contrasted with formal political participation that is mainly concerned with voting behaviour. In this respect, collective action is understood as *informal political participation that encompasses a wide range of activities for political/ policy-related purposes such as boycotting, campaigning, protest, demonstration, writing letters, and signing petitions*. This latter definition, if taken on country-wide scale, then revolution studies are another set of studies to be considered, and if collective action and revolutions are accompanied with violence, then research agenda turns to focus on the distinction between violent and non-violent collective action. A main remark here is that these studies deal with collective action as an event or sometimes, a series of events. In parallel, if one considers collective action as an act

of collective performance, then what happens behind the scenes to pave the way for this incident/event to exist is considered. For this scholarly trend, collective action is an outcome of an accumulated processes. This is exactly what differentiates between social movements studies and the political participation literature on collective action, for social movements studies focus on the pre-incident processes including resources mobilization, be it tangible and/or intangible; recruitment, framing processes with its variations; organizationally they focus on internal dynamics and organization of social movements and social movements industry at large; and finally structural transformations that allow for the emergence of political opportunity.
Psychologists studied collective action and put emphasis on the personal predispositions that motivate one individual to participate in collective action as well as the sense of efficacy that might develop within group dynamics, aka collective efficacy.

The scope of this thesis is confined to the study of "political collective action", in a way that acknowledges the interdisciplinarity of studies, depicted as the red arrow between politics and sociology, where most of the studies focus on how collective action participation affects trust or vice versa; and it is these studies that will be reviewed for the purpose of the thesis at hand. By collective action, the main focus will be on non-formal forms of participation that is directed towards political officials, government or institutions with the aim of changing policy outcomes or changing the regime, at the most extreme cases. This includes protest, demonstrations, boycotting, sit-ins, correspondence with politicians, signing petitions, and supporting a cause online. Wary of the vast literature on the difference between online and off-line participation, I include it here as part of the general definition that governs the three papers; but it will be clarified in more detail in the second paper, where it is relevant.

- **Explanations of Collective Action**

Explanations of collective action come into three categories: a) individual-based, which focuses on factors related to the individuals and where psychology and rational theory play major role, b) social-based, which emphasizes social factors and interactions, c) structural-based, which focuses on contextual factors such as culture and democracy. It is true that each perspective provides an explanation to the picture, but each one of them remains partial. Realizing that collective action participation happens while the three perspectives are simultaneously in play, scholars tend to combine more than perspectives while holding the third constant. Thus, almost every study restricts its scope of analysis to "democracies", "autocracies", "developed", "underdeveloped" or spatially to areas that might share almost the same cultural background such as "Latin America" (e.g. Alvarez et al. 2017), "South East Asia", "African" countries, or a cultural element such as "Arab", "Muslim",… etc. Opting for contextually restricted research is efficient for creating middle range theories which are celebrated for their capacity to develop and accumulate knowledge, but this edge is lost when findings become conflictual, and generally do not allow for cross context or country comparison; two pitfalls which the thesis at hand attempts to overcome and achieve, respectively.

Starting with individual-based explanations, Under the tenant of social movements studies, the individual's biographical profile plays a major role in the participation decision where McAdam (1980) argued that lack of personal constrains like marriage, having children and employment contributes to lowering down the costs attached to participation which makes it more likely that the individual participate. Likewise, person characteristics such as age is

another variable that was found to be crucial in determining who and whether would participate in demonstrations for the younger the individual, the more likely for him/her to protest mainly because they do not have family or employment responsibilities. Unlike the young cohorts who might have more time and freedom to protest, adults do not have a unified pattern because of their employment status. Here, research findings' point to opposite directions. While McCarthy and Zald (1973) and McAdam (1986) reported that employment reduces the likelihood of participation, Nepstad and Smith (1999) found that, within Nicaraguan context, those who are employed in full time jobs are more likely to protest.

The level of interest in politics in the first place is viewed as a prior determinant as to whether the individual might consider participating in collective action or not. Interest in politics is usually inferred from time spent in reading newspaper, knowledge about political issues in the country, and engaging in political discussions. In this respect, Verba, Schlozman and Brady (1995) concluded that individuals who lack political knowledge or who are not well-informed are less likely to participate in collective action in the United States of America.

The level of perceived efficacy is another prominent explanation under the tenant of individual-related explanations. In this respect, self-reported evaluation as to whether the individual's action can make a difference is the key to eliciting "the perceived" political efficacy (Paulsen.1991) In this respect, Finkel (1985) highlighted the difference between internal political efficacy which is related to feelings of competence, confidence and external efficacy which is defined as "the belief that the authorities or regime is responsive to attempted influence (Craig 1979)" (Finkel. 1985, P. 893). For this, Finkel advocated that a reciprocal relationship between political efficacy and participation as it starts off with internal efficacy as an individual predisposition and then got affected by the outcome of participation afterwards. Here, scholars are concerned with social psychology theories which focuses on attitudes the individual holds that might foster action or inaction (Klandermans. 2019)

Turning to collective action as a socially induced action, studies can be grouped into two sub-categories where the first focuses on trust and the second is more concerned with collective efficacy. On both accounts, the underlying assumption is that individuals got affected by their embeddedness in groups, be it social or political, and this is the reason why they become motivated to take part in collective action.

A) Trust and collective action:

The aim of this section to provide the reader with an account on how trust has been studied in relation to political participation, amongst collective action; for the reader to see how rich, yet fragmented, it is. The inconclusive and inconsistent findings are the elephant in the room and by highlighting them, the thesis inquiry is deemed most needed.

- **Social Trust(s):**

Not only did political science scholar occupy themselves with the linkage between social trust and political action, but scholars from subfields and subjects of sociology, psychology, social networks, and social movement, contributed to the debate. Although this enriched the literature stock on the subject, it also led to divergent results, and sometimes conceptualizations that disrupted scholarly continuity somehow and hindered the development of a solid theory of social trust.

The starting point is a positive relation between levels of trust and forms of civic engagement which explains why Putnam (1995a) concluded that, by reverse, Americans' civic engagement is declining because of the decline in levels of social capital or social trust, after analyzing General Social Survey data. As per Putnam, civic engagement includes voting, public meetings' attendance, volunteering, and working with political parties.

Under the tenet of social network studies, David A. Snow and his colleagues (1988), as part of studying the microstructural processes of recruitment, questioned whether recruitment by strangers is more effective than recruitment by known social networks like friends, kin or the like. Using dataset on Nichiren Shoshu movement (N=345) in Los Angles, the authors agreed that social networks- and largely speaking pre-existing interpersonal ties through family, friends, and colleagues- are the top avenue for recruitment, which means it is the main conduit to political engagement. Trusting one's acquaintance, relatives, friends, and colleagues is the glue that enables social networks to bring about its bridging function. From a psychological perspective, Broh (1982) zoomed into family relations to argue that older siblings might play an important role in transmitting knowledge and information to the younger, which shapes and affects the latter's political engagement likelihood. This implicitly is linked to the presumption that family affects the likelihood of political engagement through political socialization. Whether this political socialization is affected by one of the parents as a role model or one of the siblings, this is a very specialized question.

In 1990, Leighley asked how context and social interaction affect political participation, and his answer came to focus on the social networks' attributes, i.e. size, homogeneity/conflict, and politicization of a political discussions network as the main factors affecting the propensity to be politically active. In his attempt to break free from the aggregate nature of studying social networks, Leighley combined 1970 census data with the data of 1976 American National Election study and conceptualized participation to include: voting, campaigning, contacting a politician, and finally joining local organizations or committees. Although the results are mixed, the importance of this study is that it did indeed ask whether "you have discussed politics with a spouse, friend, neigbour?" and the focus is how social networks serve as a resource for informational flow and making decision. However, each one of these individuals represent a different circle than the other with a different level of trust, and frequency of interaction. On the surface, it seems that the study did not concern itself with trust, but if one delve deeper, the study is built on a presumption that political discussions occur with individuals one trusts.

Stolle (1998) decided to switch roles and investigate how civic engagement contributes to the development of generalized trust and results show that surveyed individuals from Sweden and Germany experience an increase in levels of generalized trust upon joining a new association. For his study, Stolle differentiated between personalized trust where individuals interact with their immediate circle and generalized trust that goes beyond one's kinship and friendship. The same inquiry about the flow of correlation from forms of political participation to forms of trust was tested by Veenstra using survey data of adults in Canada (2002) and concluded that engagement in secondary association has a significant positive correlation with the increase in social trust, but not with political trust. Paxton (2005) as well assumed that membership association affects levels of generalized trust. Using World Values Survey dataset for 31 countries, she concluded that generalized trust is produced in highly connected associations, while it is underproduced if associations are isolated. Paxton's study is the first to argue for a transferable nature of trust within the association, between associations and beyond the association. Generalized trust was operationalized through the question of whether the

individual thinks “people can be trusted” and “you cannot be too careful when dealing with people”.

Yet, Shah (1998), in the same volume where Stolle published his work along with other authors, decided to squarely address the circularity problem that overshadows the relationship between generalized/interpersonal trust and civic engagement. Civic engagement was operationalized as the frequency of involvement in local communities, volunteering, attending club meeting and attending church, while interpersonal trust was operationalized using a single question through which the author tried to elicit whether the respondent has general faith in people’s honesty! The author concluded, though structural modeling, that the relationship flows from political participation to trusting and not the other way around. The same conclusion is supported by Claibourn and Martin (2000) when they examined the circular relationship between interpersonal trust and voluntary group membership using Michigan Socialization Studies (1965-1982). No evidence was found to support that a trusting individual volunteers, while thin evidence was found to support the reverse.

Aside from social network/interaction perspective, Eric M. Uslaner (1998) tested whether television might contribute to declining inclination towards political engagement through the content it provides as it makes spectators less trusting. Although his findings challenge the abovementioned linkage, he offered a different point of view where trust is the strongest predictor as it contributes to individual’s optimism and, hence, the individuals’ engagement in their communities. Contextual trust, as the author called it, is defined as how trustworthy the individual thinks people are. Uslaner’s static perspective does explain how trust lead to optimism, but it does not explain how trust develops in the first place, aside from the fact that the television is symbol of “the possible”.

In 2001, Passy and Giugni posited the nexus between social network and rationality while examining how social networks might encourage/discourage political participation. The authors did not concern themselves with the social network attributes as Leighley (1990). Instead, the focus was on functions of a social network that, once fulfilled, lead an individual to rationally choose to be an active participant. With emphasis on Swiss Solidarity Movement, In addition to the longstanding argument for the positive role of individuals’ perception of the action, the authors argued that the intensity of involvement in the movement is more important. While involving in the movement, the individual is going through a socialization process that increases and intensifies one’s formal and informal ties, and even creates new ones. Trust exist where strong ties are, and then the structural relationship between the participant the one who recruited him/her increases the likelihood that this newly recruited participant will be actively involved. Unlike Granovetter’s thesis on “the strength of weak ties”, the analysis supported that strong ties have its strength compared to weak ties when their impact on the likelihood of participating is considered. In sum, the study suggests that recruitment through social networks increase the likelihood of active participation in social movements and the main explanation is bringing us back to the level of trust exhibited within strong ties.

- **Political Trust:**

Political trust is evidently crucial for the functioning of democracy. Yet, empirical research demonstrates the answer is far from being conclusive on the relationship between political trust and political participation, be it formal or informal. In addition, scholars defined and conceptualized political trust differently across contexts and studies.

It all started by the contrary, political distrust, when Almond and Verba (1965) discussed how high levels of political distrust interact with increasing sense of efficacy that leads to radical political action. At that time, Los Angeles riots took place in the United States of America, and

two years later when Newark riots erupted, the nexus between low trust and high political efficacy on one hand, and riot participation on the other hand became even more attractive for scholars. Paige (1971) put this relationship to empirical test to explain Newark riots, where the analysis supports that participating in riots might be correlated with the level of knowledge individuals attain about the political system, and trust in government, whether both variables are linearly or curvilinearly combined. More precisely, voting registration is positively affected by the level of trust in government, rioting is negatively affected by the level of trust in government, and joining civil rights groups is more affected with those who report intermediate level of trust in government.

It is remarkable, though, that Paige used political trust exchangeably with trust in political system and the main question to estimate this indicator was conceptualized around "trust in government". In his comment on Arthur Miller's research on the relationship between political issues and political trust, Jack Citrin (1974) argued that trust in government conflates those who are political alienated with those who are not satisfied with specific incumbent. In other words, trust in government is not the same as trust in political system/regime as the latter shall encompass the underlying values and principles based on which state institutions and authorities operate. This stance is also supported by Muller and Jukam (1977) who clearly concluded that the distinction between the incumbent vs. the system affect is of prime importance substantively and statistically when it comes to explaining the propensity to engage in aggressive political behavior. In addition, Miller defined political trust to be "whether or not the government is functioning and producing outputs in accordance with individuals expectations".(Miller, 1974a: 952, as cited in Craig, Niemi and Silver.1990: 291). Because this entails that political trust is closely defined as government's external efficacy, Craig, Niemi, and Silver (1990) differentiated between incumbent-based trust and regime-based trust (or diffuse support) and concluded that this separation improves the scale of trust and efficacy that were developed as part of the National Election Study in 1987.

I also agree with the need to be specific about the attitude object of political trust as the ensued political consequences/behavior of each one shall be proportionally different. For example, if an incumbent is the attribute object of political trust, it will be enough to vote against him/her in elections, if it is a specific policy, then change the government, protest the policy , sign a petition or write to your representative; but if it is the political system at large, then there will be a need for uprooting the obsolete system and we might be speaking about a revolution or an uprising.

Nilson and Nilson (1980) took into consideration the attitude object of political trust when they used the difference between trust in established elite and trust in opposition leadership to explain individuals' propensity to join protests using survey data from Wisconsin 1973. They concluded that the relationship is strong, significant, and even more powerful than the orthodox trust in government indicator. Still confined to the American context, Guterbock and London (1983) tried to assess the relative usefulness of four competing theories for explaining Black political participation versus their White counterparts. In doing so, the authors followed into Paige's shoes and developed a typology for political participation based on two parameters: political efficacy and political trust. Political trust was conceptualized as a combination of four questions: trust in the congress, trust in local leader's usefulness to the community welfare, and trust in government as a source of help and that it will act in case of a problem. They concluded that high level of political efficacy and low level of political will lead to increasing social and political participation among American Black. In other words, this is another study that supports the negative linear relationship between levels of political trust and political

participation that included voting participation, campaign participation, communal participation, and particularized contact. (Ibid:443)

In 1993, Rosenstone and Hansen concluded that political trust does not correlate with voting participation, and Hetherington (1999) extended on this conclusion to argue that even if political trust does not affect the propensity to vote, it affects vote choice. In part of his study, Max Kaase (1999) examined the relationship between institutional political trust and non-institutional participation and results show that, apart from the Netherlands 1990, a weak negative relationship exists between political trust and informal political participation.

As part of Li's study (2008) on Chinese countryside, a positive relationship between trust in the central leadership (also referred to as political trust) and the propensity to lead, join or support a petition was empirically evident. Reasserting the centrality of trust in leadership within Chinese context, using local survey from 2007 in four rural Chinese counties, Li (2011) found out that there is a positive correlation between distrust in incumbent government leaders and preference for elections through increasing demands for leadership change. To measure trust in government leaders, three questions – negatively phrased- were introduced to include: whether the leader prioritizes their own interests over the farmers, cares about the farmers when making policies, and finally cares about the powerful and discards the poor. A positive relationship between political/institutional trust and political formal as well as informal participation was confirmed one more time within the Asian context by Kim(2014).

Moving to Australia and New Zealand, Goldfinch, Gauld, and Herbison (2009) counterargued the positive relationship that Asian context championed. Using phone interviews, they found no correlation between trust and political participation at large, but a significant relationship between higher level of trust in government and abstaining from voting, but lower levels of trust in government is associated with increasing use of e-government. The same negative relationship is confirmed by Henn and Foard (2012) who conceptualized political trust as trust in political parties and trust in politicians to conclude that U.K youth (>18 years old) abstain because they experience increasing distrust in political parties and politicians. Hooghe and Marien (2013) probed the linkage between political trust and political participation on a broader Western scale that encompassed 25 countries surveyed within 2006 European Social Survey. Analysis showed that political trust bears a positive impact on institutional participation, but a negative impact on non-institutional participation. It should be noted that political trust was measured as a composite index of trust in parliament, legal system, politicians, and political parties.

So far, I have displayed literature on how political trust affects political participation and it is time to provide an account on other group of literature that advocated that trust might be the dependent variable that is subject to the effect of political participation as an independent variable. In this regard, Anderson and LoTempio (2002) reversed the relationship to examine how political participation affects levels of trust in government using survey electoral data 1972 and 1996 in the U.S.A. Results show that presidential winners are more trusting in government compared to presidential losers. The relationship is completely insignificant for congressional winners/losers. In the same line, Frietag and Ackermann (2016) investigated how direct democracy in 26 Swiss cantons influences institutional trust, but results did not support that there exists a relationship, be it positive or negative.

- **Social and Political Trust together**:

A third group that tackled both social and political trust from various perspectives includes a couple of studies. Veenstra (2002) hypothesized that forms of social trust is weaker than trust in political systems. Bäck and Christensen (2016) investigated the impact of the interaction between individual's generalized trust- measured with three questions of faithfulness in people- and aggregate generalized trust in the society on the propensity of political participation, i.e. voting, institutionalized participation (contacting politicians), and non-institutionalized participation (signing petitions, demonstrations and boycotting). Results show that the moderation effect of generalized trust differs according to the form of political participation. For voting, the aggregate generalized trust has an impact on the individual's propensity to voting when the individual's generalized trust is high. For noninstitutionalized participation, the impact of generalized trust on the individual level is weak when the society's aggregated generalized trust is high, but similar role of generalized trust on the individual level cannot be claimed for institutionalized participation. It is undeniable how this study seriously attempted to link the micro and macro levels of analysis, but the meaning of "macro-level" within the study was confined to the "societal dimension". The study focused on European countries.
Studies that discussed the possibilities of bringing together social and political trusts, additively or interactively, are rare and way underdeveloped, and this is where the current thesis falls.

Theoretical Framework
A Functional Explanation of Participation in Revolutionary Collective Action

To analyse and explain why individuals participate in revolutionary collective action, this thesis adopts a modified version of the functional analysis and starts with depicting the pre-collective action situation (social contract and the early establishment of state-individual relationship. Next is to understand what gives rise to collective action, and thus, what functions collective action serves- which is linked to a greater extent to types/ levels of collective action. Finally, I will discuss of revolutionary collective as the highest intensity form of collective action that requires both spatial diffusion and time synchornization. In doing so, I divert from functionalism where functions of the phenomenon of concern is the main concern, towards a form of functionalism where functions serve as an explanation of the phenomenon of concern.

Central to the build-up of the analytical framework are two points.
First is that collective action participation is addressed as a decision, rather than a process. It is a final manifestation of non-compliance or binary decision, which prompts an explanation of why non-compliance emerges in the first place (Motivation) and how this non-compliance moves from micro-level to the macro behaviour of collective action participation (Mico-Macro Linkage). Given that the emergence of the decision does not mean, necessarily, its survival or its conversion into revolutionary collective action, to survive, the decision has to persist regardless new input/information that tries to discourage it. New information has two sources:
a) social networks like family and friends with whom political discussion and talk might be exchanged, and
b) political authorities which are the targeted actors of collective action. Information also might take one of two forms: a) encouraging the decision, or b) discouraging the decision.
If the information received supports the individual's initial decision, there will be no problem or dilemma. However, the problem emerges when there is a disagreement between the initial

position and the new information, be it from the family or authorities; and it is in this case the need for a filter/criterion emerges again.
Second, on studying collective action, it is essential to make a distinction as to whether the decision is ascribed to the individual as an initiator (leader) or a follower. For the purpose of this thesis, individuals are considered as followers. In this sense, collective action decision is a response to calls for demonstration, protests, signing petitions or boycotting. The importance of this distinction stems from a simple fact that individuals are different. This does not only mean that individuals have different motivations to engage, but also different thresholds for tolerance before they act and different outlook to reality. Add to this, by focusing on individuals as followers, it will be easier to capture the complexity of revolutionary/large-scale collective action, especially if the aim is to explain a phenomenon such as the Arab Uprising that has been described to be "leaderless" (Elharathi.2016)

a. The Emergence of Collective Action Situation:

The starting point is to declare two assumptions. ***The First Assumption*** is that social contract, and thus the emergence of the state, can be an analysed as a collective action in itself. ***The Second Assumption*** *is that* explaining the emergence of collective action is inseparable from explaining individual's participation in collective action. In doing so, the analysis shall overcome two of Merton's functional shortcomings that Flanigan and Fogelman (in Charlesworth. 1967. P.75) highlighted. First, it puts functions as one of the prerequisites for the emergence of the state as a whole and make it easy to derive the functions collective action serve from a pre-determined benchmark. Second, it analyses parts of the system in relation to each other, not in a discrete or isolated manner.

To develop the theoretical framework, the following statements are essential to understanding the state-individual relationship:

1. **The centrality of the individual:**
   Under rationality, individuals make choices that maximizes their happiness and minimizes pain. Rational individuals knew that they cannot satisfy their *needs* while the conflictual state of nature prevails. Thus, they cooperated to create the state as a way out of the state of nature.
2. **The instrumentality of the state:**
   Accordingly, the state is a means-to-an-end not an end in itself, where its main role is to organize the relationship between actors and provide the individuals with friendly environment so they can satisfy their needs and thrive. The regime survival or the maintenance of social order is not of prime importance.
3. **The conditionality of stability**: For the state to serve its purposes and the individuals to thrive, roles and duties are divided and/or shared between the state, individuals, and other actors in-between. It follows that the resultant socio-political order is stable as long as: a) actors fulfil their roles, i.e., state governs, and citizens obey; and b) no actor encroaches on the other actor's domain/roles.
4. **Individuals' needs as a benchmark**:
   Because individuals created the state as an organizational form to help them satisfy their needs, these very needs serve as the yardstick for evaluating state policies. Universal needs are perfect benchmark because the0y are shared by individuals regardless of race, colour, class, …etc; and they serve as the core of explaining human motivation.

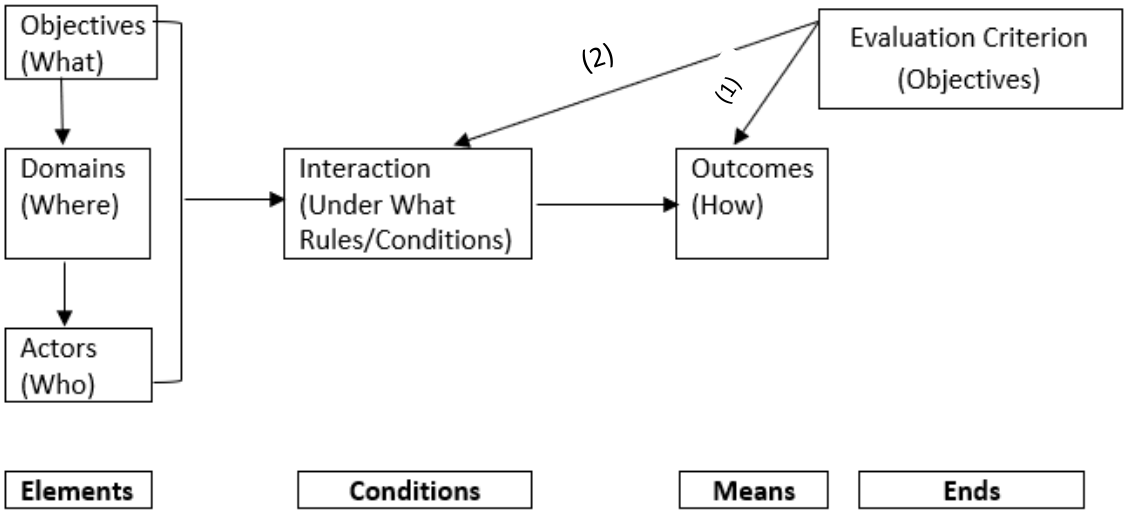


Figure 2. A Schematic Framework for Analysing State-Individual Relationship as a Contractual Relationship

One of the state formation theories is social contract theory which conceptualizes the emergence of the state as a result of voluntary action of individuals who agreed to give up their freedoms to a higher authority of their acceptance to be able to escape what Hobbes described as "the war-of-all-against-all" state. As such, social contract can be viewed as a result of collective action itself.

Shall we accept classifying the initial social contract as a socially driven action, it can be described and examined using four parts: elements, conditions, means and ends (Parsons. 1937:43-45). With abovementioned pillars in mind, figure 2. summarizes the generic schema framework for understanding and analysing any contractual relationship where four elements should be there for the contract to be concluded.

Elements are the constituent components of this contract which starts usually by having a clear objective about what the parties try to achieve out of this contractual relation. Next is to specify the domain where these objectives can be achieved. A domain can be defined as a sub-system, a sub-unit or a field of action. If the relationship, for example, is within a organization or a company, the domain here refers to the division(s) which should be responsible for achieving the objective(s). Within this division, specific actors/agents can be specified. Thus, specifying elements is built on answering the following their questions:

1. What is to be achieved? What are the main objectives, roles, and functions?
2. Within the system, which sub-system/sub-unit does perform each specific role(s)/functions?
3. Within this sub-system, who is in charge of fulfilling a specific (set of) role(s)?

Conditions is the second part of a contracts. They are about the rules under which actors are going to perform their roles in their capacities as parts of the sub-systems. To analyse these conditions, a set of questions should be answered:

1. Whose objectives are of concern? Who is the beneficiary of this contract?
2. What is the relationship between each single actor and this beneficiary?

3. What is the mode of interaction and the ensued terms of the relationship?

The answer to the first question provides an anchor to analysing the interactions, for if the objectives are specified from citizens perspective, the relationship between citizens and the state is political trust and compliance, but if the objectives are defined from the state perspectives, the relationship between the state and citizens can be described as control and authority. In other words, anchoring the analysis on the agent whose objectives are targeted as a starting point helps specifying the direction of the relationship and thus its nature, be it horizontal or vertical, centralized or decentralized, balanced or hegemonic….etc. Related to this are the factors that shape and affect the mode of interaction, most importantly culture and the level of democracy.

Outcomes. Fulfilling roles and achieving objectives are usually carried out through a specific plan, activities or policies and these are what I mean when referring to outcomes. The main question here:

1. How does each actor perform one's tasks? Through which activities, policies, action-plans?

Evaluation Criteria and Feedback paths come at the end to set the benchmark the effectiveness of this contractual relationship. The main question, herein, is:

1. Have the objective(s) been achieved or not?

The answer to this question might come in three different forms: a) full realization, b) partial realization, or c) no realization at all. Usually, the extremes are easier to expand on than the middle case. In other words, while the first scenario of fully achieved and realized objectives is an idealistic one bearing no consequences to the contractual relation between parties, the third scenario of zero-realized objectives will have repercussions on this contractual relationship where the beneficiary might try to change the contracted agent or break-free from the contract. The middle case where objectives are partially fulfilled it might lead to one of two paths:

Path (1) where beneficiaries announce the irrelevance of the means and seek change how objectives are being achieved. This is a mere rejection of policies and activities where no real threat to the sustainability of the contractual relationship.

Path (2), where beneficiaries develop an understanding that the core reason behind the inability of achieving objectives rests on the dynamics of the relationship and the rules, terms and conditions underlying these interactions. Here, the main concern is whether the relationships between actors are well-balanced. Imbalance might result from one of two possible sources:

a. If one actor, especially the contracted agent, seeks expanding its roles beyond its prescribed one(s).
b. If one actor, especially the contracted agent, falls short from fulfilling its prescribed roles.

Because conditions are the content of any contract, these two cases (a) and (b) clearly translate into changes in the contractual relationship between parties. As a result, path (1) might be either dealt with through formal or informal channels. Yet, again, it does not threaten the whole contract relation. On the other hand, path (2) is usually invoked through informal channels under:

a. A Necessary Condition:
   Beneficiaries exhausted path (a) with its formal or informal formats in vain (for example, government was not responsive and did not change its policies)
b. Either of the Following Sufficient Conditions:
   - Partial realization persisted but became intolerable by the beneficiaries.
   - Partial realization regressed into no realization, which is unacceptable by beneficiaries.

The combination of the necessary condition along with- at least one of- the sufficient conditions prepare the system for radical changes, i.e. revolutionary collective action. The magnitude of the collective action effects differs from one case to the other: sometimes it ranges from changing one actor (the head of the division in an organization or the president or the head of the government in a country) to changing the regime as a whole.

So far, the discussion is too general and to grasp how this framework help examining the individuals' decision to participate in collective action, I shall circle back to the four pillars and zoom into the state-individual relationship.
The first pillar speaks for the centrality of the individual and his/her needs. Thus, satisfying the individuals' needs is the main objective of going into social contract. Maslow's hierarchy of human needs (1943) is adopted as a universally accepted definition of individual's needs where individuals are motivated to act in a way that satisfy their needs. This implies that humans are purposive in their actions, which is the underlying logic of rational choice theory.
Most importantly, individuals move up the hierarchy while fulfilling their needs to start with the physiological ones to safety and up till they reach the self-actualization phase. Pertinent to the discussion of collective action participation as a decision is two points. ***First***, Maslow discussed what he called "the degree of fixity of basic needs" where he was clear that this hierarchy might undergo reversals or shifts. For instance, for an individual, growth-related needs, such as respect, self-esteem, self-actualization are perceived to be more important than food and love; and in this case those needs form the base of and come first in this person's pyramid of needs. By contrast, someone would put more importance on relationships, love and intimacy more than another individual. In addition, needs might shuffle in the hierarchy because of they are already satisfied for long time that they are currently taken for granted and undervalued. ***Second***, it is true that needs are ordered in a pyramid-like order, but this does not imply that they are being satisfied in stepwise order. One eats three times a day (basic needs) while he/she is in a relationship (belonging) and simultaneously holds a position in a company (self-esteem). Because needs' positions in the hierarchy should be understood "in terms of decreasing percentages of satisfaction as we go up the hierarchy of prepotency" (Maslow. Pp388-389), when discussing partial or no realization of objectives (needs here) as pre-conditions of individual's collective action this entails two possibility that end up in dissatisfaction:

a. Either individuals managed to satisfy their deficiency (basic needs), but the system could not allow them to grow. An illustrative example would be an individual in a poor country where he/she has to work in two or three jobs for breadwinning with no time left for engaging in cultural activities or thriving on a degree to use their intellect and improve their status.
b. Or individuals could not satisfy their basic needs, i.e. safety and physiological needs in the first place. Peasants' revolutions in France, Russia and China demonstrate how poverty and inequality can play a role in igniting social revolutions in the past (Skocpol. 1979) and the Arab uprisings are live examples in modern days.

To state it differently, it is the unfulfilled needs that motivate individuals to act or participate in collective action, for unfulfilled needs and the inability to find away to fulfil them are the heart of "grievances". It's about realizing that the individual is in a less favourable condition, has the desire to change this, but cannot and it seems that this will be an enduring situation.

Needs are fulfilled by actors each of whom play a role in the individual's life to make it meaningful and whole. With the development of state organization, it became understood that some social services should be guarded and provided by the state for they are socially valued,

but economically undervalued. Although physiological needs seem to be tightly bounded to the physical presence of the individual, the availability and provision of food and utilities (water, electricity, gas) falls on the shoulders of the state in the first place. Even jobs availability is part of state responsibilities towards the citizens. The same applies to security, it is one of the state's many roles as it is the only actor with the legitimate monopoly over means of violence. A point to denote is that when speaking of the state, it refers to state institutions, which includes: the parliament, executive branch, judiciary, military, media, companies, and banks; and sometimes people care about the head of the state or representatives.

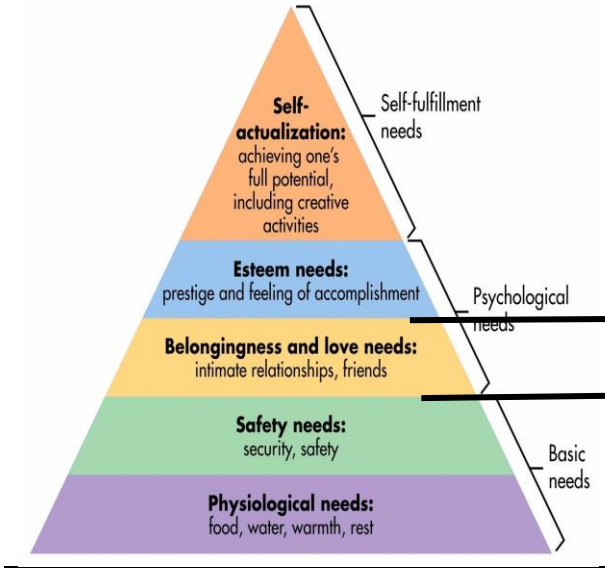
Elements			Interactions	
Objectives (The Satisfaction of Human Needs)	**Domains**	**Actors**	**1st Order Relationships**	**2nd Order Relationships**
	**Public**	- Fellow Citizens - Civil Society Organizations. - Clubs/ Local Community	Individual → Strangers (Generalized Trust)	Structural Conditions, i.e. State-Society Relationship which is shaped by cultural specificity, level of democracy, level of development, urbanization….etc.
	Private	- Family Members - Friends/Neighbours	Individual → People one Personally Know (Particularized Trust)	
	State	- State Institutions. - Head of the State. - Political Incumbents.	Individual -→ State Actors (Political Confidence/Trust)	

Figure 3. Deconstructing the Composition of Elements and Interactions in State-Individual Relationship

The need for love, affection, and belonging are satisfied by other people of the individuals' close circle, be it family members, friends, partners or even neighbours with whom the individual connect and develop familiarity. On the other hand, if individual seeks to grow, expand, and get recognition in circles different than one's acquainted circle, then it is the role of other fellow citizens, be they simply strangers or within an organizational form (like clubs, community organizations, civil society organizations).

The schematic framework, in this sense, not only describes, but also explains how collective action emerges. In doing so, I align myself with Parsons (1937) and Luhmann (1990) as both thought that systems and functions are interrelated that the survival of the system is dependent on whether it satisfies its functional needs. If the contractual relationship is a system, then the emergence of the state hinges on functional needs. Thus, my analysis deems the antecedents of the structure inseparable from its functions. This is supported by Turner and Alexander's criticism as quoted in Schwinn (1998) stating that "[m]ost neofunctionalists tiptoe around questions of needs; and in doing so, they abandon what is distinctive about functional analysis. Thus, much neofuncationalism is not functional at all, since needs and requisites do not appear as part of the theoretical explanation of events" (Schwinn. 1998: 78-79)

Literature shows that these actors are typically clustered in three domains or spheres of action: the public sphere, private sphere, and finally the state. The public sphere encompasses citizens who might be active participants, bystanders or who might present themselves in the public sphere through associational membership via civil society organizations, clubs, and local community. (Adut. 2012)

- **Compliance: A Manifestation of Positions and Relationships:**
  (two understandings of compliance/ result from these positions & relationships)

As interactions are about the ground rules that organize agents' relationships, they are related to specifying the roles, positions, and the nature of the relationships between these actors. In this section, I reflect on the relationship between citizens and the state, especially that the latter is the subject of collective action. Compliance to state regulation is central to this discussion where citizens- as subjects- obey the state's rules, that should be described as legitimate. In explaining compliance two explanatory models are there: a) the moral explanation that bases citizen's obedience on describing compliance as "the right thing to do", b) legitimacy as an explanation where the state's exclusive right to use force is central.

The individual-state relationship is summarized by Immanuel Kant's words: "argue as much as you want and about whatever you want but obey!" (Kant. 1784. P. 6)

a) Collective Action as an act of Non-compliance in itself

If compliance is the manifestation of positions, relations, rights and duties; then how can it contribute to understanding collective action? Legitimacy is exercised through law enforcement, and citizens accept these rules and abide by them as long as they serve individuals' interests. In retrospect to the individual's needs- regardless how different individuals order their needs- collective action emerges when rules, laws, and policies do not help individuals satisfying and fulfilling their needs. If state institutions defect on citizens' interests, and assuming that the relationship between the state and the individuals is well-balanced, then it follows that citizens can opt for the agreed upon rules to change these rules, laws or policies. In a democratic state, 'the agreed upon rule' goes through elected representatives, but sometimes when the issue is not either addressed properly or it is cross-

party identification, individuals might exercise their pressure through informal means such as: protest, demonstration, boycotting, or signing petitions.

Moving to non-democratic settings, the freedom and right to protest and assembly might be state on paper, but not exercised on ground. In some cases, these freedoms are constrained by the state of emergency laws as in a number of Arab countries such as Syria (1962-2011) and Egypt (1967-2012) and Bahrain (2011). Under the emergency laws, number of people getting together should not exceed a specific number, and the right to protest is suspended. As protest and demonstrations are deemed illegal as a priori, the police have the right to detain, arrest and use force without constraints on its actions. Thus, protest and demonstrations emerge as acts of non-compliance with the law as a priori. In this sense, there is no need to discuss what happens if protest organizers do not coordinate or communicate with the police. In all cases, the act is deemed illegal, and the use of brutal force is already justified.

b) (Non)Compliance as a risk-taking component of collective action participation decision.

In democracies, collective action participation is indeed informal, but not illegal. Freedom of expression and freedom of assembly and association are legal universal human rights that are guarded by constitutions and institutions in democratic countries. The same rights will be mentioned in authoritarian states' constitutions, but not guarded or enforced by state institutions. In either setting, demonstrating, or protesting requires authorities' approval, which probes the questions: how come that individuals ask state authorities' approval to protest against them (or an institution of the state's)? What if state authorities deny the protestors such approval: should they comply or not? Under what circumstances state authorities might disapprove protests or demonstrations?

Because rights are accompanied with responsibilities, protecting citizens' right to protest or demonstrate comes with the duty of maintaining the "peacefulness" of these protests. Peaceful demonstrations and protests are a shared responsibility between citizens and the police where the former is obliged not to use violence during the protest/demonstration, and the latter are obliged to protect others in case of violence, be they protesters or bystanders, and to ensure that there is no disruption to social order or harm to institutions and properties. In policing protests, preventive and gradually escalating measures are adopted to ensure "police control over protest actions that may entail unlawful and disruptive conduct. This includes large-scale preemptive arrests, the use of "less-lethal" weapons (such as pepper spray, tear gas, Tasers, long-range acoustic devices, flash-bang grenades, and rubber bullets), barricading strategies (such as protest pens, "free speech zones," and prolonged enclosure of protesters in contained spaces), and intrusive "intelligence gathering" methods (such as surveillance and infiltration)" (Smith. 2018. P. 185) If protests include marches, the government, or more specifically the police, should be informed by the date, time, route and the organizers name, and the police has the right to limit or change the route and location of the march, reduce the number of attendants, set any conditions for the march, limit the duration of the march and stop a sit-in protest if it blocks pathways or traffic (U.K Government Home Office, https://www.gov.uk/protests-and-marches-letting-the-police-know) Thus, through communication between the police and protest organization, logistics of protests can be negotiated; and compliance with the police guidance is essential to the actualization of such protest/demonstration. If there is no compliance with police guidance, the latter has the right to arrest individuals who are seen to be disruptive to peaceful protest, use "reasonable force" in case of resistance during arrest or searching individuals. However, sometimes when the protests are organized against "the police" itself, complying with police guidance might not come readily. Take for example, the

George Floyd Protests against police brutality in the United States of America in 2020, where protesters in 200 American cities gathered. Media reports showed that the protests were generally peaceful, but in some cities (for instance in New York where 20 police cars were burned and in Philadelphia 13 police members were hurt) it escalated to riots and the police responded with violence using rubber bullets and sprays, as well as with mass arrests (New York Times, https://www.nytimes.com/2020/05/31/us/police-tactics-floyd-protests.html). In response, the U.S. government deployed National Guard Officers and had to impose curfew in these cities, which was defied in all the cities (BBC, https://www.bbc.co.uk/news/world-us-canada-52865206). Citizens did decide to disobey the government on this instance. One might be in a rush to assume that these examples are somehow extreme illustrations of non-compliance because race (or being black) is entangled with the initial use of violence by police during arrests. Indeed, Davenport et al (2011) comapred 1500 protesting events in the United States between 1960 and 1990 and found out that African American protests draw in stronger police force presence than their white American dominated protests. Moreover, they concluded that police violence is more likely to be exercised during an African American dominated protests than in white American protests (Davenport et al. 2011) However, this can be counter-balanced if the United Kingdom's G20 protests in 2009 are called into the picture. Not only because the United Kingdom can be compared to the United States as a longstanding democracy in the world, but because these protests were for environmental issue (BBC, https://www.theguardian.com/politics/2009/apr/19/police-g20-tomlinson-assault). The same happened in Canada, Toronto 2010 when the police illegally and unrightfully arrested 1100 protestors at once, kettle them in and got them beaten with batons and shields. According to the police "15-20 known protestors/terrorists who caused property damage the day before were spotted in the crowd and were intent on attacking the G20 Summit fence" (CBC Documentary, min 5:39, https://www.youtube.com/watch?v=fgmGxKvGFWU). This resulted in the aforementioned mass protests and most recently in Augusts 2020, the Canadian police force had to compensate each protestor between $5000-$24000, depending on the nature of their detention, which means that for the £1100 wrongly detained protestors, a total " historic C$16.5m (US$12.5m) settlement in a class-action lawsuit" will be paid (Lindeman. 2020. The Guardian. https://www.theguardian.com/world/2020/aug/18/g20-protesters-toronto-police-canada). In brief, in democracies, protests and demonstrations as forms of collective action should be organized and liaised with the police where complying with the authorities' guidance is essential to the actualization of the protest. However, compliance might not be guaranteed if one side fail to fulfil its duties, be it the police or the protestors, prior to (like the U.S.A. example) or during (like the U.K and the Canadian examples) case.

Next question to be considered: ***how compliance is linked to individual's decision to participate in collective action?*** So far, the discussion shows that, in democratic or non-democratic setting, protestors- when participating take some risks such as being arrested, beaten, detained or even death. Non-compliance and the ensued consequences/punishment should be counted in when explaining collective action. The difference in both cases comes in terms of probability of occurrence and the size of the risk.

Answering this question requires emphasizing that collective action is instrumental to achieving objectives. It is a challenge to the status quo. When individuals perceive the associated risks of participating in collective action, they might decide to: either a) choose a different course of action where low-intensity forms of collective action such as signing petitions might be favoured over high-intensity forms such as protest; or b) ignore the expected risks because one believes in the effectiveness of protest in achieving the required effects. Deciding between both options might be affected by two important factors:

a) ***Relational Qualities between Actors*** (the first order relationships) or as some sociologists prefer to call it, extra- individual relations). In this respect, one should find out how to describe the relationship between different actors in respect with the phenomenon at hand. As my concern in explaining collective action participation, the other actors are fellow citizens, whether they are close to the individual's circle (familiar with him/her), or not (not familiar with the individual), and state institutions or representatives. Here, trust presents itself as a bridging concept for it is held and reported on the individual level about one's evaluation to an extra-individual relationship.

b) The theoretical underpinning starts by unpacking the concept of "trust" to categorize it based on the domain and the subject of the concept, as follows:

	Domain of the Concept	**Subject/Direction of the Concept**	
		Known individuals to the person (Specified Clusters)	*Unknown Individuals to the person (General Clusters)*
Trust	*Social*	***Particularized Trust***, i.e. trust in family, friends, colleagues, and neighbors.	Interpersonal Trust/ Contextual Trust/ Generalized Trust, i.e. trust in one's ethnic group/ trust in foreigners/people you one meets for the first time.
	Political	Trust in "position holder", i.e. president, minister, incumbent, local representative, electoral candidate, party member/candidate…etc.	***Institutional Trust***/ Trust in state institution(s), i.e. trust in government, trust in parliament…etc.

c) **Table 1. Categorization of Forms of Trust**.

The thesis, herein, is concerned with the interaction between particularized trust and institutional trust, as a predictor for collective action participation (the red arrow).

d) ***Qualities of the Structure***, (second order relationships/ *extra-individuals*-relationships)

culture and social norms, which are linked to the individual's tendency to conform with others' opinion and might provide other sources for promoting the acceptance of hierarchical relations and obedience to higher authorities. This is of paramount importance given that collective action in its essence is based on three presumptions: a) that citizens are equal party to the state in the social contract, b) they have the ability to evaluate policies and actions, and c) have the right and the power to change what does not serve their interests. The first presumption is a direct challenge to hierarchical relations and, alternatively is based on egalitarianism and power parity, while the second challenges patriarchal relations and alternatively emphasizes citizens' rationality and awareness. Finally, the third presumption is linked to the exercise of agency. If citizens are equal to the state, then obedience cannot be taken for granted or unconditional. On the contrary, there is always an expectation of obligation fulfilment. Failure to carry out one's duties

leads to obedience withdrawn. Albeit the relationship between individuals and state is not as straightforward as it seems because intermediary or sub-state institutions- especially family- might play a role that might be support the underlying presumptions of collective action or undermine them.

Democratic values part of the second order relationships between the state and the society that is mainly affected culture (Inglehart and Wezel. 2003) State-soceity relationship affects every element of the framework. Starting with individuals' needs, the relationship was perfectly captured by Maslow when he stated that:

> "There are certain conditions which are immediate prerequisites for the basic need satisfactions. Danger to these is reacted to almost as if it were a direct danger to the basic needs themselves. Such conditions as freedom to speak, freedom to do what one wishes so long as no harm is done to others, freedom to express one's self, freedom to investigate and seek for information, freedom to defend one's self, justice, fairness, honesty, orderliness in the group are examples of such preconditions for basic need satisfactions. Thwarting in these freedoms will be reacted to with a threat or emergency response. These conditions are not ends in themselves but they are almost so since they are so closely related to the basic needs, which are apparently the only ends in themselves. These conditions are defended because without them the basic satisfactions are quite impossible, or at least, very severely endangered" (Maslow. 1943: 383)

Effective democracy was found to be linked to political culture where trust, tolerance, and self-expression are key to explaining why some societies have democratic institutions and others do not(Inglehart and Welzel. 2003. P.76). The explanation here circles back to trust as a pre-condition to democracy.

Indeed, trust is the lubricant between various actors. Towards developing the aforementioned framework, it was necessary to consider the relationship between agency and structure. In other words, the discussion has to engage the micro-macro dichotomy in social sciences. Typically, scholars would vote for the primacy of one side over the other. It is because both agency and structure are usually perceived to be ontologically separate from each other that the need to bridge the micro-macro levels of analysis should be in place. On the contrary, in my theoretical framework, structure is embedded in the relations between agents, and thus, both of them are not ontologically separate. Bringing some individuals and putting them in one place does not lead to the emergence of a community, society, or institution; unless these individuals decide to communicate, talk, and agree to put forward some rules for their encounters. Hence, it is interactions between the micro-agents that lead to the emergence of the macro/supra-individual structures. In sociology, Goffman (1967, as in Rawls, 1987) adopted the same stance where both agency and structure are not separated or competing, but for him it was rituals and routinization that govern what he called "the interaction order", which is out of the scope of my thesis and for this I refrain from discussing it.

Arguing for the embeddedness of structure in individuals' interactions does not only shrug the burden of explaining how micro-macro linkage is established off the scholars' shoulders, but also implies that individuals in real life managed to bridge the micro-macro gap and our roles as scholars is just to discover how. Phenomenologically, I argue, the answer is found in trust.

- **<u>The Corrective Function of Collective Action</u>**

Based on the postulated theoretical framework, it can be derived that from the participants' perspective, in its essence, collective action (participation) has a corrective function. There always exists a situation that the individuals want to change or alter by either creating a new situation or curbing the deterioration of the existing one. The substance of the individuals' (or protestors') demands speaks to a specific part of the situation structure or more than one, which decides on whether the situation is a collective action or a revolutionary collective action.
Refusing a specific policy, legislation or regulation is about the outcomes leads to the emergence of issue-specific collective action, which does not last for long and usually ends relatively quickly. The U.K latest train strikes (23-25 June) is an illustrative example. Whilst, requesting a reconsideration of the rules based on which citizens obey the state might lead to a revolutionary situation that might take the form of a series of demonstrations, rebellion, civil disobedience and social revolutions at large such as the Russian revolution. When changing the underlying rules between the state and the society, this is usually because one actor is encroaching over the roles of the other. For example, if the state is overly controlling and intervenes in what should have been left to the societal level, be it in the public or the private sphere, it might be conducive to a rebellion. Take for example the role of the state in Egypt during the Muslim Brotherhoods-supported ex-president Muhammed Morsi when the state tried to enforce on citizens how to dress, marry, …etc, it was met by civil disobedience at first, which escalated to a rebellion at last in June 30th, 2013.

As well, when the state fails to deliver its basic functions that are tightly linked to individuals' basic needs, such as employment and social services, and the situation endures, it leads to a revolutionary situation, especially when it uses lethal force to assert its control and dominates the public sphere through cracking down on basic rights and freedoms; but the opposite does not hold. To get the idea, compare between Egypt during Mubarak's era, Tunisia during Ben Ali, and Syria during Bashar's on one hand, and Gulf countries on the other. Gulf countries, with the exception of Iraq, as oil-producing and rentier states use the oil revenues to provide and deliver social services and execute its function, but they hold a fierce grip over freedoms and rights. When citizens in Saudi Arabia tried to revolt, they were easily oppressed, and the large population was contained by distributed perks in the form of social protection schemes. In Bahrain, when citizens demonstrated for days, they were oppressed by lethal force and Saudi Arabia intervened to help supress protestors.

- **The Thesis Analytical Model**

Building on the proposed theoretical framework, the 2nd order relationships are general circumstances that masks actors and their first order interactions. As well, when the individual makes one's decision to participate in collective action, the decision is highly tuned to this individual's first order relationships. Analytically, this suggests that 2nd order relationships are confounders while first order interactions are moderators. As collective action involves two actors in relation to the individual, I would suggest that the moderator that controls the interaction is the relationship between the individual and the recipient/the target of the action. By that being said, social trust can be viewed as the main independent variable, political trust is the moderating variable, while the decision to participate is the dependent variable. Throughout the thesis, the main analytical model is as follows:

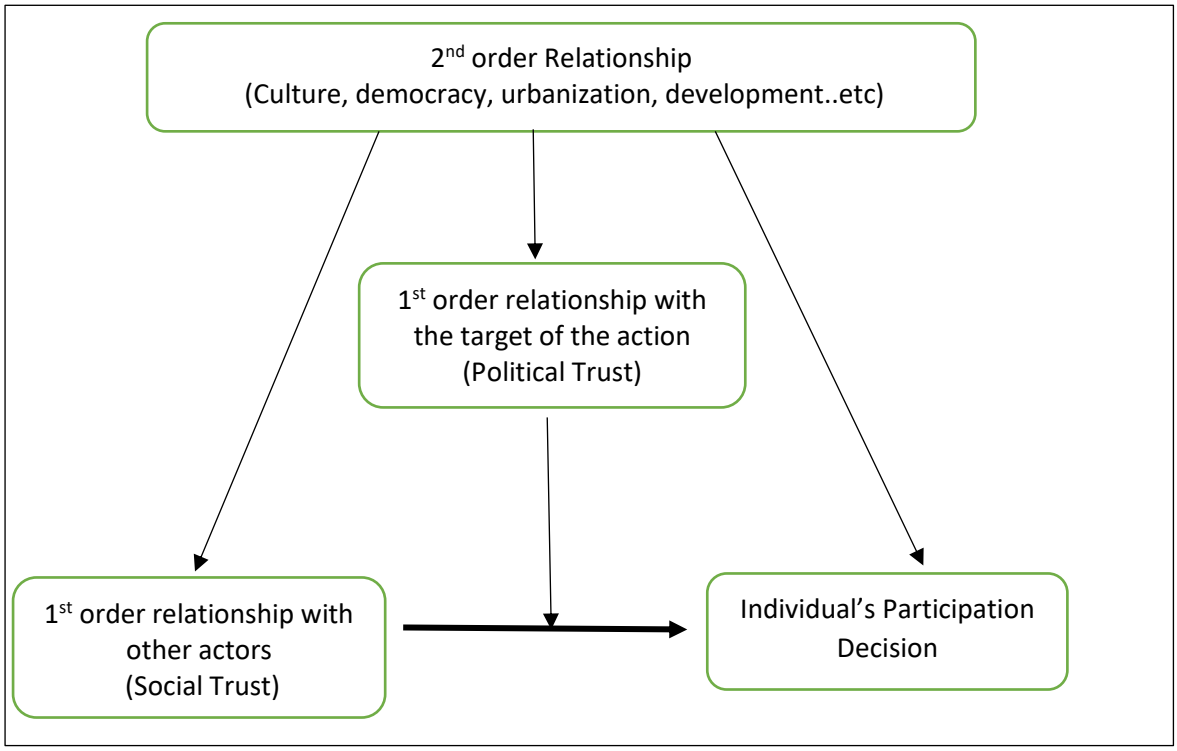


Figure 3. Thesis Analytical Model

Significance of the Thesis

This thesis seeks to systemize the relationship between trust and collective action participation to add some organization to the accumulated knowledge on the relationship and outline the common framework of basic assumptions that governs the relationship between trust and individual's participation in collective action.

Now the question that follows: what is meant by "organization" of the accumulated knowledge? How is it going to be implemented? Abdul Mannan when explaining Lakatos' research program, stated that "Newtonian science could not have been science if it was just a set of four conjectures—three laws of mechanics and the law of gravitation. But rather it has been science because these four laws constitute only the 'hard core' of the Newtonian program. And there is something more than 'hard core', which is called auxiliary hypotheses that make a vast protective belt to keep the hard core protected from refutation". (Abdul Mannan. 2012:63) Building on this notion, systemizing the accumulated body of knowledge- for the purpose of this thesis- means to distinguish between what is the "hard-core" and what is the "auxiliary" assumptions. Herein, three steps are identifying:

Step I: Rethinking the logic of the relationship between variables through:

a. Reconfiguring the structure of the relationship between social and political trust (from additivity to Interaction)
b. Disentangling concepts (social trust into particularized and generalized trust).

Step II: What are the mechanisms through which the moderating effect of trust uncover itself?
Step III: To what extent these new configurations have a predictive power?

The rationale behind this is that there is a need to zoom out of the main two variables in question, i.e. trust and collective action, and reconfigure the relationship between elements of the decision situation. Understanding the initial structure of where collective action situation emerges is paramount because it leads to uncovering patterns of relationships and opening up a range of possibilities for collective action forms, intensities and outcomes. Elements of the structure of collective action situation (objectives, actors, roles, domains) can be viewed as the givens or the general logic of the collective action theory, while mechanisms and interactions (obedience, compliance…etc) vary depending on how actors relate to each other, and how cultural norms and values might interfere with this relationship. Outcomes of this interaction might come in the form of rules, legislations, policies and depending on how citizens evaluate these outcomes in relation to the objectives, collective action might emerge to adjust, support, or refuse them. By this understanding, the thesis provides a broader framework for distinguishing between forms of collective action depending on which part of the structure it targets.

In addition, this outlook allows individuals to play three sequential roles: active participant in setting out the collective action situation, a spectator to the state's outcomes, then back to the active participant mode when outcomes are not up to expectations. This alternation between action and in-action is responsible for creating a vibrant democratic context where actors engage and communicate and, theoretically is an advanced position on the individual's spectator role in social and political change as put forward by Talcott Parsons and structural functional theorists. As well, the theoretical framework of the thesis breaks free from the micro-macro dichotomy and practically steer the study of collective action to middle ground between rationalist (micro-level) and structural (macro-level) theorists.

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(I)

Interaction between Trusts and Collective Action Participation: Evidence from Egypt, Tunisia, Libya, and Yemen

Introduction•

A televised scene of people rushing into streets demonstrating and voicing out their demands is the final episode in collective action processes. Prior to this revealing moment, individuals had to solve many internal dilemmas: to protest or to go to work? Is it good for one's future and his/her children's or will not it make a difference? Will the government respond or not? Will one's parents, friends or neighbours participate or not? Why? What if one got arrested? Tones of what-ifs and whys puzzle everyone's mind before they join the crowds.

The aim of this paper is to contribute to answering an old question in political science: *How does an individual make his/her participatory decision in collective action?* The main argument, herein, is that this decision is conditioned by the interaction between forms of social trust, i.e. particularized trust and generalized trust, and political trust, an interaction that might result in one of two effects: a) substitution effect where political trust might be working in an opposite direction to either forms of social trust, and b) amplification effect where both forms of trust work in the same direction and reinforce each other. The paper's theoretical outlook links social group membership to a specific type of social trust, to be particularized or generalized trust. The novelty of this approach resides in the fact that: a) it bridges studies on trust, identities, and collective action, as well as structural and agency approaches to explaining collective action,[1] b) it requires a serious conceptualization to the social domain to allow for a convincing explanation to collective action, and finally, c) it announces the superiority of the content of relationships and identities- through the concept of trust- over identification/label attachment; a stance that puts the paper- from this perspective more in line with studies on social networks and tie-strength than their counterpart on mobilization and collective action.

• I am grateful to to Prof. Dr. Marco Steenbergen (The University of Zurich, the department of political science) for referring me to the Johnston-Neyman Technique for marginal effect estimation.

[1] However, it is not the intention of this paper to provide an account to both structural and agency approaches in explaining collective action. Interested readers can read: Mario Diani and Doug McAdam (Eds). (2003) *Social Movements and Networks: Relational Approaches to Collective Action.* Oxford University Press.

The importance of trust for political engagement is undebatable. Yet, findings on the relationship between forms of trust and political participation are patchy and inconclusive. Results on the relationship between generalized trust, that exists when individuals who do not know each other engage in social interactions[2], and political participation are inconclusive in its direction and strength. Claibourn and Martin examined the circular causality between generalized trust and civic engagement using panel data from the Michigan Socialization Studies from 1965 to 1982; and concluded that "results cast doubt on the existence of a simple causal mechanism between interpersonal trust and group membership in either a positive or negative direction at the individual level".[3] Similarly, van Ingen and Bekkers examined whether civic engagement augments generalized trust using Swiss Household panel data (2004-2008), but there was no evidence that volunteering enhances generalized trust, and thin evidence that membership does.[4] In addition, the results demonstrated that membership is associated with an initial, yet short-lived, increase in levels of trust that comes with entry, and there is no difference across types of associations to support a positive impact of civic engagement on levels of generalized trust. Meanwhile, Putnam illustrated how high levels of generalized trust are conducive to a politically active society.[5]

The picture is also mixed when considering the association between particularized trust and political participation. Using a survey fielded by Los Angeles Times in South California in 1997, Uslaner and Conley studied how particularized trust affects civic engagement different types of participation among Chinese immigrants in the U.S.A. Their findings showed that high level of particularized trust is negatively associated with civic engagement in American politics in large.[6] In this sense, Chinese immigrants who have high level of particularized trust either are not politically active or they participate with Chinese associations only. Yet, generalized trust is positively associated with civic engagement in U.S. politics. By contrast, threshold models pioneered by Granvotter emphasized the importance of intimate links. It is true that the

[2] Ingen van Erik and Rene' Bekkers. "Generalized Trust Through Civic Engagement: Evidence from Five National Panel Studies", *Political Psychology*, 36 (June 2015), 277-294

[3] Michele P. Claibourn and Martin, Paul S., "Trusting and Joining? An Empirical Test for the Reciprocal Nature of Social Capital", Political Behavior, 22 (December 2000), 267-291.

[4] Ingen van Erik and Rene' Bekkers.

[5] Putnam, Robert D., *Bowling Alone: The Collapse and Revival of American Community*. (New York: Simon & Schuster, 2000).

[6] Uslaner, Eric M. and Conley, Richard S., "Civic Engagement and Particularized Trust: The Ties that Bind People to Their Ethnic Communities", *American Politics Research*, 31(July 2003), 331-360.

locus of these models was group size, but one of his firm conclusions was that trust between friends, aka particularized trust, is the main reason behind stabilizing cooperation in protest movements.[7] More recently, Crepaz and Polk provided empirical evidence that in-group trust is associated with formal participation, i.e. voting; while out-group trust is linked to informal forms of participation, i.e. demonstration, boycott and petition.[8]

Conclusions on the relationship between political dparticipation and political trust are equally perplexing. In part of his study, Max Kaase (1999) examined the relationship between institutional political trust and non-institutional participation and results show that, apart from the Netherlands 1990, a weak negative relationship exists between political trust and informal political participation. By contrast, Kasse's results also show strong relationship between interpersonal trust and non-institutional participation.[9] Meanwhile, as part of Li's study on Chinese countryside, a positive relationship between trust in the central leadership (also referred to as political trust) and the propensity to lead, join or support a petition was empirically evident.[10] The same positive relationship between political/institutional trust and political formal as well as informal participation was confirmed one more time within the Asian context by Kim.[11] Although the analysis did not support the argument that generalized trust affects individuals' willingness to vote, surprisingly generalized trust was found to be positively correlated with the individuals' willingness to get involved in demonstrations, signing petitions and boycotting. When political/institutional trust is moderated by the level of democratic freedom in the country, its conditional impact on the likelihood of participation conventionally or unconventionally preserves its significance, but looms to be weaker with the increase in the level of perceived democratic freedom.

[7] Mark Granovetter, "Threshold Models of Collective Behaviour", *American Journal of Sociology*, 83(May 1978), 1420- 1443.

[8] Markus M.L. Crepaz and Jonathan Polk, "Forms of Interpersonal Trust and Types of Political Participation", *World Values Survey Working Paper 05 (2012)*. Available on the following URL: https://www.sun.ac.za/english/faculty/arts/wvsaperseries/Documents/05%20Interpersonal%20trust%20and%20political%20participation.pdf (accessed and Downloaded on 9th, August, 2019, at 15:59).

[9] Max Kaase, "Interpersonal trust, political trust and non-institutionalised political participation in Western Europe", *West European Politics*, 22 (July 1999), 1-21.

[10] Lianjiang Li, "Political Trust and Petitioning in the Chinese Countryside", *Comparative Politics*, 40 (January 2008), 209-226.

[11] Harris Hyun-sso Kim, "Generalized Trust, Institutional Trust and Political Participation: A cross-National Study of Fourteen Southeast and Centralized Asian Countries", *Asian Journal of Social Science*, 42 (2014), 695-721.

This paper engages the debate by introducing the interaction between forms of trust as an explanatory variable for the likelihood of participating in collective action. It starts by theorizing the nexus between intimate social groups, i.e. family, friends and neighbours, and particularized trust, and why explaining the decision to participate in collective action invites interaction between forms of trust. Next, the paper proceeds to presenting the research design, the analysis and discussion.

Theory

1. *Within the Social Domain: Particularized Trust, Generalized Trust and Social Groups:*

Although the role of social identities in collective action is well-documented in both social movements and social networks literature, alike; the focus has been mainly on how identification with a specific social group encourages or discourages engagement in collective action. In this sense, social identity is about attaching labels, especially that it is defined through race, ethnicity, religion, or social class…etc.[12]

Yet, for the purpose of this paper, social identity is seen through a less abstract lens where narrower social groups are easily identifiable by the individual. This includes immediate social circles that affect the individual's opinion, beliefs and perceptions on everyday basis, i.e. family, friends, neighbours. The development of the paper's theoretical outlook passes two steps. *First*, I lay out two criteria for defining which social group's trust is linked to particularized and generalized trust, i.e. daily-basis interaction and familiarity that contribute to the individual's socialization. *Next*, I explain the rationale behind considering particularized and generalized trust as two components of social trust at large.

Family is the first social group (or social network) of interest. It is the primary agent of socialization through which individuals shape their opinions, beliefs, and personal identities. Friendship is the second social group that exercises an immediate influence on individuals' decision. As friendships got forged over a series of reciprocal interactions, friends play an important role in every individual's social reality. Blais and his colleagues posit that "Friends become more important in the socialization process of the individual after childhood, taking

[12] for extensive review read: Alan S. Zuckerman, "Returning to the the Social Logic of Politics", in Alan S. Zuckerman, Ed, *The Social Logic of Politics: Personal Networks as Contexts for Political Behaviour*, (Philadelphia: Temple University Press, 2005), 3-20.

precedence over parents until a romantic partner appears".[13] Indeed, although it is evident that political discussion with like-minded family members increases chances of civic engagement,[14] peer-talks and discussion with friends proved to have a larger impact compared to family members'[15] and its positive impact on the likelihood of adolescents' engagement is also larger than the family's.[16]

The most important remark, herein, is that friendship is part of the individual's private sphere exactly as family for their influence is deeply rooted in the notion of social embeddedness and connectedness that Quintelier considered friendship to be an agent of socialization. Neighbours form the third circle that has the same two properties as family and friends: a) almost daily-basis interaction (the least is greeting one's neighbour in the morning) and b) familiarity. Recalling Weber's differentiation between primal and associative social circles, family and friends might have an affective/psychological basis, while neighbours do not necessarily have an emotional bond (associative circle). Albeit, neighbours influence each other's decisions to vote through the threat of observing the behaviour of deviants, which creates social pressure that induces potential abstainers to comply and vote[17]or through playing the role of recruiters for community services.[18] Moreover, social proximity plays a key part in the influential role of neighbours when it comes to civic engagement, and collective action is not an exclusion.[19]

Let us not forget the fact that overlapping membership in social circles is a salient feature of social reality for your neighbour might be your friend or your colleague, and your co-worker might be your friend! In the final account, social circles with whom the individual is familiar and exposed to on everyday basis are considered carriers of particularized trust. Meanwhile, strangers or individuals whom the individual meets for the first time are seen to be associated

[13]Andre' Blais, Carol Galais, and Maxim Coulombe , "The Effect of Social Pressure from Family and Friends on Turnout", *Journal of Social and Personal Relationships*. 36(September 2019), 2827.

[14] Klaus Levinsen and Carsten Yndigegn, "Political Discussions with Family and Friends: Exploring the Impact of Political Distance", *The Sociological Review,* 63(December 2015), 72-91.

[15] Mats Ekström and Johan Östman, "Family Talk, Peer Talk and Young People's Civic Orientation", *European Journal of Communication,* 28 (June 2013), 294- 308.

[16] Ellen Quintelier, "Engaging adolescents in politics: the Longitudinal Effect of Political Socialization Agents", *Youth and Society*, 47(January 2015), Pp 51-96.

[17] Andre' Blais, Carol Galais, and Maxim Coulombe. P. 2824-2841

[18] Chaeyoon Lim, "Social Networks and Political Participation: How Do Networks Matter?", *Social Forces,* 87 (December 2008), 961-982.

[19]Peter V. Marsden and Noah E. Friedkin, "Network Studies of Social Influence", *Sociological Methods and Research,* 22 (August 1993), 127-151.

with generalized trust (even if they share the same race, ethnicity, religion, or social class…etc).

In retrospect to literature on social trust, it is remarkable how studies on generalized trust treated it as synonymous to social trust or social capital. This has been voiced out in some studies, for example: van Ingen and Bekkers clearly stated that "Generalized (or social) trust is an essential part of cooperation and an indicator of that public spiritedness". Other studies treated generalized trust as social capital or part of it, for instance: Rothstein and Stolle stated that "social capital has been defined as generalized trust…The attitudinal aspects of the concept, such as generalized interpersonal trust, are the most important part of social capital".[20] However, I find this equation neither acceptable nor reasonable. Social trust resides in the social domain, which in turn encompasses those whom an individual might or might not know, and so does social trust: it encompasses trust in those whom the individual knows (particularized trust) and those who might be described as strangers/others (generalized trust). It is not reasonable to exclude family, friendship/colleagueship, and neighbourhood- and their attributed trust- from defining the individual's 'social domain'. And assume that such exclusion is accepted in principle, which circle/domain will it be considered as part of? It is not equally reasonable to consider family, friendship/colleagueship, and neighbourhood as part of the political domain. With parallel attachment between groups and its attributed trusts, it follows that particularized trust cannot be excluded from social trust's definition. For this, I deviate from this academic tradition and, alternatively, define social trust as a combination of both generalized and particularized trust.

Furthermore, scholars disagree on what to include/exclude when discussing particularized and/or generalized trust. For example, Wollebaek and his co-authors distinguished between three forms of interpersonal trust: a) particularized trust that included family, relatives, and friends, b) community trust that included neighbourhood and local municipalities, and c) generalized trust that goes beyond the scope of the first two towards the wider society. It is true that Wollebaek and his colleagues considered the three forms collectively as "social trust", which is in line with this paper's aforementioned stance; but it is equally true that my definition collapses Wollebaek's particularized and community trusts into particularized trust leading my

[20]Bo Rothstein and Dietlind Stolle, "The State and Social Capital: An Institutionalized Theory of Generalized Trust", *Comparative Politics*, 40(July 2008), 441.

analysis to implicitly vote for a stance that the authors explicitly repelled in their paper, i.e. treating social trust as a combination of two dichotomies: particularized and generalized trust.[21]

Similarly, Freitag and Bauer examined social trust across cultural context using datasets from Switzerland and World Values Surveys between 2005-2008 and distinguished between three forms of social trust: a) particularized trust, b) identity-based trust, and c) generalized trust.[22] While Wollebaek and his colleagues agreed with the Freitag and Bauer on the tripartite distinction where an intermediate category is formed, they disagree regarding of which pole the third intermediate category originates.[23] The formers created it out of the particularized trust by isolating neighbourhood and local community and leaving family, relatives, and friends to form particularized trust, while the latters extracted the third category of the generalized trust. For Freitag and Bauer, particularized trust consists of family, friends/ colleagues, and neighbours- which is the exact definition adopted here in this paper. Yet, generalized trust is trusting people whom the individual has not met before and has no shared sub-national identity with. Identity-based trust is about trusting people whom the individual is not familiar with, but he/she shares the same sub-national identity with. Again, for this paper, there is no need to disentangle generalized trust based on shared sub-national identity.[24] More support to the proposed conceptualization can be drawn from Bäck and Christensen's work where they plainly declared they understand "[…] generalized interpersonal trust as opposed to particularized interpersonal trust, both of which can be considered to belong to the broader 'social trust' concept".[25]

[21] It should be noted that Wollebaek and his colleagues work is so rich as it provides a spatial analysis to social trust, and brings new insights. However, I have recalled it here as much as it serves as a justification for my classification. It also should be noted that it is my conviction that such flexibility in classifying and re-arranging the social circles and their components is grounded in the inevitable overlap between them: your relative might be your neighbour and your colleague might be your friend and simultaneously your neighbour, and so on, that it became too difficult to set the boundary where each form of trust starts and where it ends. Yet, such difficulty is the reason why academics enjoy this scholarly flexibility that enriches literature and research on trust. To read the full article: Dag Wollebaek (et al), "Three Forms of Interpersonal Trust: Evidence from Swedish Municipalities", *Scandinavian Political Studies*, 35(December 2012), 319- 346.

[22] Markus Freitag and Paul C. Bauer, "Testing for Measurement Equivalence in Surveys: Dimensions of Social Trust across Cultural Contexts", *Public Opinion Quarterly*, 77(2013), 24-44.

[23] Dag Wollebaek (et al).

[24] In this sense, identity-based trust is synonymous of in-group trust or kin-group trust

[25] Maria Bäck and Henrik Serup Christensen, "When Trust Matters: A Multilevel Analysis of the Effect of Generalized Trust on Political Participation in 25 European Democracies, *Journal of Civil Society*, 12(June 2016), 180.

So far, conceptualizing the social domain in its relation to forms of social trust passed two steps: a) establishing the criteria for linking social groups to forms of trust and b) explicating why particularized and generalized trust are components of social trust. The importance of this two-step approach stems from the fact theorizing the substantive aspects of concepts is intertwined with their measurability. Getting the components of these concepts right from the outset ensures that these concepts, when operationalized, capture, and represent what constructs trust in the individual's private domain versus what constructs it elsewhere. Succinctly, it was important to establish content validity when measuring concepts of interest in the paper.

Additionally, this contributes to a better understanding to collective action. Regardless of which form of trust is discussed, trust can lead to collective action once its bridging function is effective.[26] This is the moment when people who do not know each other communicate and social movements (as organizations) come into being, after bonding as a precondition- is fulfilled. As mentioned before, literature demonstrates how friends, neighbours and family members act as mobilizing agents/ recruitment channels that introduce individuals to join collective action. Realizing how particularized trust (aka thick ties) facilitates the birth of generalized trust (aka thin ties) is intuitive and self- evident. Think of a trusted friend who might be a node through which an individual gets introduced to a stranger.[27] This is the core of embeddedness as a central concept in social network that the paper align itself with.

2. Interaction between forms of social trust and political trust

In the previous section, I conceptualized particularized trust and generalized trust in reference to the individual's private sphere. To complete the picture, political trust should be considered, especially that collective action is a politically oriented action that targets political authority itself (and/or) its decisions and it takes place in the political domain of the public sphere. On these premises, collective action is analysed from the individual perspective, where the individual is argued to be influenced by the close social groups in one's private sphere to partake in a non-conventional form of participation that falls into the public domain. This transition from the private to the public, and from the social to the political, is not automatic

[26] Here, trust here is being used as synonym for social capital.

[27] Extending the logic of this hypothetical example is the base for social network analysis where Granovetter praised weak ties in his famous paper on the strength of weak ties for: a) bridging the relationship between two high dense networks, and b) allowing for more access to information by diversifying the individual's contacts. For interested readers: Mark Granovetter, "The Strength of Weak Ties", *American Journal of Sociology*. 78(May 1973),1360-1380.

and its dynamics cannot be captured by the mere combination of social and political trust. Indeed, the complexity of the social logic of political action implies that atomized components integrate to create a new whole reality that exceeds its parts.

Relatedly, boundaries between what is public and what is private, and between what is political and what is social are so porous that speaking of interaction is more reasonable and reflective. State it differently, the participatory decision starts from the microlevel of analysis, passing by the meso- level of analysis to be realized in the form of either participation or abstention on the macro level. Thus, participation in collective action is conditioned by trust in fellow citizens, aka social trust (which consists of both particularized trust and generalized trust), which- in its role- is conditioned by political trust. Long story short, it is about the interaction between social trust and political trust, where mutual conditionality is translated into multiplication.

To the best of the author's knowledge, only Bäck and Christensen's article studied the interaction between forms of trust and political participation where the emphasis was the impact of the interaction between individual's generalized trust- measured with three questions of faithfulness in people- and aggregate generalized trust in the society on the propensity of political participation, i.e. voting, institutionalized participation (contacting politicians), and non-institutionalized participation (signing petitions, demonstrations and boycotting). Results show that the moderation effect of generalized trust differs according to the form of political participation. For voting, the aggregate generalized trust has an impact on the individual's propensity to voting when the individual's generalized trust is high. For noninstitutionalized participation, the impact of generalized trust on the individual level is weak when the society's aggregated generalized trust is high, but similar role of generalized trust on the individual level cannot be claimed for institutionalized participation. It is undeniable how this study seriously attempted to link the micro and macro levels of analysis, but the meaning of "macro-level" within the study was confined to the "societal dimension". The authors were concerned about political participation as a form of cooperation between citizens, and for this "the aggregate level" referred to citizens only. Indeed, political participation is cooperation between citizens, but it is oriented towards political authority. The study introduced a new perspective to look at the relationship between trusts, but when it comes to explaining political participation (and especially collective action), the story is rather incomplete.

Alternatively, this paper adopts the same interactive perspective, but with four different manifestations where: a) social trust (composed by considering particularized and generalized trust additively) interacts with political trust in regard with the propensity for collective action

participation, b) particularized trust interacts with political trust, c) generalized trust interacts with political trust, and finally e) a three-way interaction between particularized trust, generalized trust and political trust. These possible interactions are the basis for this paper's hypotheses.

Considering the interaction between two dimensions of the same concept, i.e. political and particularized trust, helps understand anomalies and discrepancies between serious empirical findings.

As well, considering the interaction between political and particularized trust has its merits for establishing endogenous causal mechanisms. When looking at the majority of studies on trust and political behavior, they might consider pre-conditions of trust (including the demographic profile of participants), or the consequences of trust on various forms of political behavior (electoral and non-electoral), which leads to the emergence of non-causal mechanisms between both core variables through exogenous effects (which might lead to spurious relations). By contrast, unpacking the forms of trust and see how they interact leads to the emergence of direct and causal mechanisms between trust and political behavior (cf. Britt. 1997: 94-111).

3. Hypotheses and Model Specification:

As indicated in previous literature, the impact of social trust and political trust on participating in collective action will remain indeterminate if either of them considered individually or linearly combined with the other. Instead, this paper's general hypothesis is about the interaction between social and political trust:

H1: the likelihood of participating in collective action is dependent on the interaction between both social and political trust.

Two-way interactions between social trust and political trust, and between particularized trust and political trust, and between generalized trust; as well as three-way interaction between particularized, generalized, and political trust will be tested. Based on the general hypothesis, when the direction and strength of the relationships are considered, two effects are expected:

a) The amplification effect hypothesis:

Under this hypothesis, if the impact of two forms of trust on the likelihood of participating in collective action work in the same direction individually, their multiplication amplifies their impact on the likelihood of the dependent variable and hence, the same relationship will be retained, leading to lower/higher likelihood of participation.

What is monitored here is whether the signs of the individual variables' estimates (lower-order coefficients) are the same as the interactive term's coefficient.

b) The substitution effect hypothesis:

Under this hypothesis, the higher one form gets over the other, the more likely abstention from collective action to be realized. What is monitored here: if the interaction term switches the estimate's sign ascribed to each variables individually, this entails that they might be working as substitutes to each other.

This hypothesis constitutes the sufficient condition for non-participatory behaviour to be realized in the context of collective action.

Table (1) summarizes both hypotheses, where the diagonal cells represent the amplification effect, and off-the-diagonal cells represent the substitution effect.

		Form of Trust 1	
Form of Trust 2		Low	High
	Low	Abstention	Abstention
	High	Abstention	Participation

Table 1. The Amplification and Substitution Effect Hypotheses

Research Design

Data and measurement. Daa from wave 6 of the World Values Survey (henceforth, WVS-6) (2010-2014) is utilized, where four Arab countries have been sub-set, namely: Egypt, Tunisia, Libya and Yemen. The sample size of the four countries combined was initially 5859, which dropped later on to 4273 after omitting missing values.

The Dependent variable. Collective action participation, is generated and coded as a dichotomous variable of five questions in the WVS6 (V85-89), covering five forms of collective action, i.e. signing petitions, boycott, attending peaceful demonstrations, joining strikes and any other act of protests. Interviewees were asked to choose whether they have participated in any of these forms in the past, might do it, and would never do it. Only one answer was allowed in the questionnaire. Accordingly, if the interviewee answered "have done

it" or "might do it" in at least one form of collective action, he/she was coded as (1), otherwise it gets zero.

Independent Variables. The study focuses on four key independent variables. Two key independent variables are social trust and trust in political institutions (I will refer to it as political trust in the remainder of the paper). For political trust, questions (V. 109-V.118) about confidence in institutions and questions about confidence in elections (V228A – V228I), were used as a proxy for political trust. Prior to averaging, some variables' codes were reversed by subtracting the score of the highest value of the scale plus one. Items on confidence in elections received different treatment as the wording of some questions came with positive connotation (for example: votes are counted fairly), while others had negative connotation (for example, voters bribed). In the former, codes were reversed, while the wording was reversed in the latter to be (voters are not bribed); afterwards an index for trust in elections was generated by simple averaging (with high internal consistency of 92% on Cronbach's alpha test) before using it as an input item for generating the political trust index. As an index, political trust enjoys relatively high internal consistency of 86% on Cronbach's alpha.

The second independent variable is social trust which was generated out of averaging a number of items in the questionnaire (V.102-V.108), with a relatively high score of 79% in Cronbach's alpha test for internal consistency. Because social trust is defined as trust between fellow citizens, which is quite broad definition, it consists of two parts that have been usually addressed separately in literature: a) generalized trust, that measures trust in strangers, and others who might be different from the individual (V105-V107), and b) particularized trust, where the main concern is trust in the individual's close circles of family, friendships and neighbourhood (V102-V104). In the analysis, I test the interaction between social trust as a compact index and political trust, and then the interaction between each of its components individually, to be particularized trust or generalized trust, and political trust.

Control variables. A number of control variables were considered, namely: age group (which has been recoded into two groups with age 45 as a cut-point), social class (where upper middle class and lower middle class were collapsed into middle class category, and recoded accordingly), gender, education (which was originally coded into 9 categories, but was reduced to a dummy variable for the purpose of this paper for educated to be 1 and uneducated to be zero), and marital status (which has been used with its original coding).

Case Selection. The analysis is a cross-country comparison between four Arab countries: Tunisia, Egypt, Libya and Yemen. These countries were the heart of the Arab uprisings that led each country in a different trajectory. To a certain degree, cases selection was influenced by the fact that these countries are under-studied, and that political abstention seems to be the rule in the Arab region compared to other world regions. Interestingly, prior to the Arab Spring, research focused on questioning authoritarian perseverance in the region. For example, Comparative Politics Journal featured a volume on a project highlighting how persistent authoritarianism in the Middle East qualified the region to be treated as "exceptional".[28] The volume's editor clearly concluded that "[taken] together, these articles leave little cause for optimism that authoritarian regimes in the Middle East will begin transition to democracy in the near future".[29] Lured by the short-lived optimism that accompanied the Arab Spring, scholars embarked on explaining what happened and how this pattern of protests unfolded. Sooner than expected, people went back to their political abstention, leaving behind a big question mark regarding the conditions under which Arab citizens participate and/or abstain. This paper attempts to contribute to part of the answer depending on the interaction between social trust and political trust.

Tunisia and Egypt are often analysed in relation to each other, and comparisons have been drawn on the trajectories of events and how Tunisia managed to achieve a more democratic outcome compared to Egypt, despite having almost the same starting points. This paper shows how this difference stems from deeper differences in both populations' levels of trust. Tunisia is considered more democratic than Egypt, for it witnessed a steady increase in its score in polity IV between 2011 to 2014, from -4 to 7- which means that it managed to move from an autocratic regime to a democratic one. On the other hand, Egypt scored (-2) in 2011, and its score became (-4) in 2013 in polity project scores, which suggests that Egypt was less democratic than Tunisia at the time of fielding the World Values Survey in 2013 in both countries. Since 2011, Libya has been classified as a failed state, while Yemen is an autocratic regime (Polity IV). Needless to say, both Libya and Yemen witness deployment of foreign countries' troops on their territories since 2011, and terrorist groups managed to seize control over parts of Libya. On this background, I believe that it is necessary to go beyond the relative

[28] Eva Bellin, "The Robustness of Authoritarianism in the Middle East: Exceptionalism in Comparative Perspective", *Comparative Politics*. 36(January 2004), 139-157.

[29] Marsha Pripstein Posusney, "Enduring Authoritarianism: Middle East Lessons for Comparative Theory", *Comparative Politics*, 36(January 2004), 135.

cultural homogeneity of these Arab countries and delve deep into their cases. In addition, Arab countries have different levels of development and urbanization. On this account, Egypt and Tunisia are more developed and urbanized compared to Yemen and Libya. In fact, Yemen and Libya still have strong tribal systems that enhances in-group trust compared to out-group trust. Having these differences in mind should deepen the analysis and provide more insights to the conclusions.

The empirical model is estimated using maximum likelihood in logistic regression model, where the link function is the log-function.

Analysis and Discussion

The analysis starts with the sample as one unit and then proceeds to, as observations are nested into countries, multilevel analysis to check whether heterogeneity effect due to country-membership exists. Thus, variables are centred around the country-based mean and constrained as well as augmented models are fitted. In all steps, models are initially fitted using additive model to estimate the direct impact of each of the independent variables, then two-way interaction are investigated for the interaction between: a) political and social trust, b) political and particularized trust, c) political and generalized trust, and d) particularized and generalized trust. Finally, a three-way interaction model is fitted. when discussing the estimates of the individual variables in interaction terms, *aka* lower-order coefficients, the emphasis will be on the sign of the individual term in relation to the main effect coefficient, rather than the magnitude of the estimate. This is driven by the fact that lower-order coefficients in interaction terms are meaningless in themselves[30].

Results are summarized in the appendix where Table (A.1) provides findings for analysing the sample as one unit. In model (1) social and political trusts are linearly combined and results indicate that both forms of trust affect the likelihood of participating in collective action with almost the same magnitude, but in opposite direction. An increase in social trust leads to a lower probability of joining collective action, while the same increase in political trust will lead to an increase in individual's willingness to take part in collective action. This suggests

[30]Bear F. Braumoeller, "Hypothesis Testing and Multiplicative Interaction Terms", International Organization, 58(October 2004), 807-820. And if scholars want to interpret lower-order coefficients, a good strategy is to estimate their individual conditional effects "within the range of experience", for more details on how to estimate the range of experience, read: Robert J. Friedrich, "In Defense of Multiplicative Terms in Multiple Regression Equations", *American Journal of Political Science*, 26 (November 1982), 804-809.

that an observer cannot predict whether the individual will participate or not. Model (2) is a disaggregated version of model (1) where social trust has been replaced with its main components: particularized trust and generalized trust. Based on this model, generalized trust has no impact on individual's willingness to join collective action while particularized trust is responsible for pattern that social trust uncovered in model (1).

Two -way interactions are considered in models (3), (4), and (5). Model (3) includes the interaction between social and political trust; model (4) is about the interaction between particularized trust and political trust with control variables, while model (5) is about the interaction between generalized and political trust. The three models support the substitution effect hypothesis where, for instance, the impact of social and political trust individually is positive, but the sign is flipped to be negative in the interaction term and the same applies for models (4) and (5). This means that it suffices that either political or social trust gets high for people to abstain from participating in collective action. Three-way interaction between particularized trust, generalized trust and political trust is examined in model (6) where the tri-partite interaction term has no impact on the likelihood of participating in collective action.

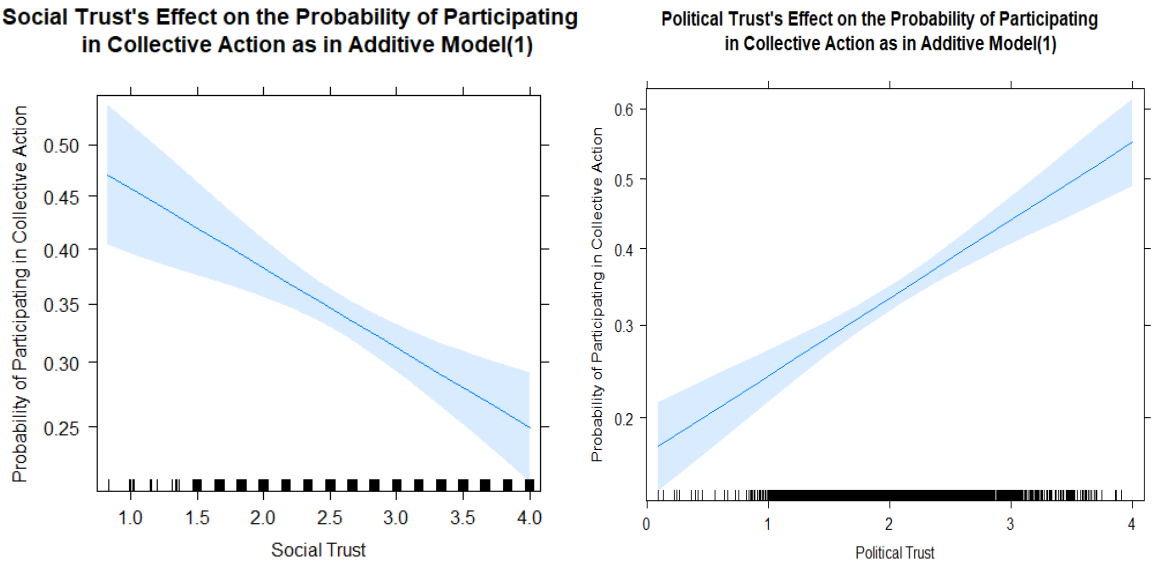

Figure 1. The Impact of Social and Political Trust on the Probability of Participating in Collective Action as in Additive Model (1)

Robustness Check

Countries are analysed individually and findings are summarized in tables A.3-A.6 of the appendix.

- *Main Effects' Interpretation*

Starting with **Egypt** in table A.3, the sample size (N= 1523) where 88.2% of the participants reported that they are non-participants in collective action and only 11.8% are participants in collective action. When considering additive model (1), social trust has a negative impact on the probability of participating in collective action, while political trust has a positive impact. Both estimates are statistically significant. In model (2), the interaction between social trust and political trust cannot be said to have an impact on the individual's tendency to participate in collective action. Model (3) suggests that the interaction between particularized trust and political trust reduces the probability that an individual participates in collective action. Interaction terms in models (4), (5) and (6) are non-significant.

Although **Libya** shares its Eastern borders with Egypt, it reflects a different result. With a relatively large sample size (N= 1467), where 804 (54.8%) participants and 663 (45.2%) are abstainers, the direct impact of social trust and political trust individually on the likelihood of political participation is positive in both cases with high statistical significance.
Two-way interaction models start with modifying social trust with political trust in model (2) where positive significant impact for both variables individually can be detected, but the interaction term reports no impact on the dependent variable. While particularized trust and political trust express positive impact on the dependent variable in model (3), their interaction term flips the sign to have a negative impact on the likelihood of collective action participation. In model (4), neither the individual variables nor their interaction affects the likelihood of participation in collective action within Libya's context. Conditioning particularized trust on generalized trust has a negative impact on the probability according to model (5), while no significance impact is reported under three-way interaction in model (6) individually or interactively.

For Yemen, whose sample size is the smallest (N=452), 207 are participants in collective action (45.8%), while 245 are abstainers (54.2%). Model (1) shows that social and political trust have a direct positive impact on the likelihood of participating in collective action as in Egypt. In model (2), conditioning social trust on political trust does not have an impact on the probability of collective action participation. Similar to Egypt, model (3) suggests that trust in family, friends and neighbours mitigates the individual's tendencies to participate in collective

action when moderated by political trust. None of the remaining interactive models reports a significant association between interaction terms and the probability of participating in collective action in Yemen.

Tunisia offers a similar account in additive model (1) where social trust is negatively associated with the propensity to participate in collective action and political trust works in the opposite direction. Whilst the mutual interdependence of both forms of trust in model (2), social and political, does not have a significance impact on the likelihood of participating in collective action. When particularized trust interacts with political trust, a relatively strong significance lends credence to the substitution effect hypothesis as the main estimate's sign is the opposite of the signs of both variables' lower coefficients in model (3). Similarly, a significant negative impact for the interaction between generalized trust and political trust on the probability of participation in collective action emerges in model (4). None of the findings in the two-way interaction model (5) or the three-way interaction model is statistically significant.

Detected Non-Linearity and Threshold Effect

Given the difficulty associated with explaining interaction terms, the discussion will be incomplete without results' visualization. Two-way interaction effects for country based unconditional models have been visualized and organized in reference to the interaction terms , and figures are reported in the appendix (Figures 2, 3, and 4)

Based on the graphical representation of the significant models, the analysis provides partial support for the substitution effect hypothesis. When measuring political trust, particularized trust, and generalized trust on the same scale (0-4), there might be a threshold effect that flips the relationship between an interaction term and the ensued likelihood of political participation-given that political trust is considered the moderating variable. Because the interaction between particularized and political trusts is the only significant interaction across the four countries, I will examine the relationship with the threshold effect for the marginal effect of the moderating variable's (political trust) value (M=2). Understandably, Yemen constitutes an exception where the interaction between social and political trust is significant. However, given that the interaction between generalized and political trusts is non-significant and that the interaction between particularized and political trust is, I assume that this exception is due to particularized

trust only and this is enough reason to just focus on the interaction between particularized and political trusts exactly as the other three countries.

Now, guided by country-based visualization, the initial hypotheses should be reconsidered to be as follows: a) for Tunisia, when political trust is low (M < 2), the conditional effect of particularized trust on the probability of participating in collective action is negative, and vice versa; and b) For Egypt, Libya and Yemen, when political trust is low (M < 2), the conditional effect of particularized trust on the probability of participating in collective action is positive. To test the adjusted mixed hypotheses stated above, a Johnston-Neyman technique is used to the earlier fitted models with statistically significant interaction. Compared to marginal effect techniques that depend on arbitrary chosen fixed value for testing the interaction like: pick-a-point or simple slopes; Johnston-Neyman "works backwards and solves for the values of [the moderator] for which the effect of X on Y becomes or ceases to be significant".[31] Using "probemod" package in R, Jonhston-Neyman is run to determine which point of the moderating variable (M), political trust, affects the interaction between social trust and the probability of participating in collective action., with confidence level set to 95% to establish the statistical significance of the region. The intuition behind the test is to differentiate the log(odd) function in respect to the moderator (political trust), which can be expressed as follows:

$$\frac{\partial\, Log(Odd)}{\partial\, Political\ Trust} = \beta_2 + \beta_3\, Particularized\ Trust$$

The partial first derivative equation represents the slope of the conditional effect of particularized trust on the likelihood of collective action participation. To determine the significant regions, the equation is solved in three scenarios: equal to zero, larger than zero and finally lower than zero.[32] On figures (5-8), the shaded areas are the significant ones, and the horizontal line represents the scenario where the equation is set to zero (no effect scenario).

[31] Stephen W. Carden, Nicholas Holtzman, and Michael Strube, "CAHOST Facilitating the Jonhston-Neyman Technique for Two-Way Interactions in Multiple Regression", *Frontiers in Psychology* 8 (2017): 1-7.
[32] R.L.C. Butsch, "A Work Sheet for the Johnston-Neyman Technique", *The Journal of Experimental Education*, 12 (March 1944), 226-241

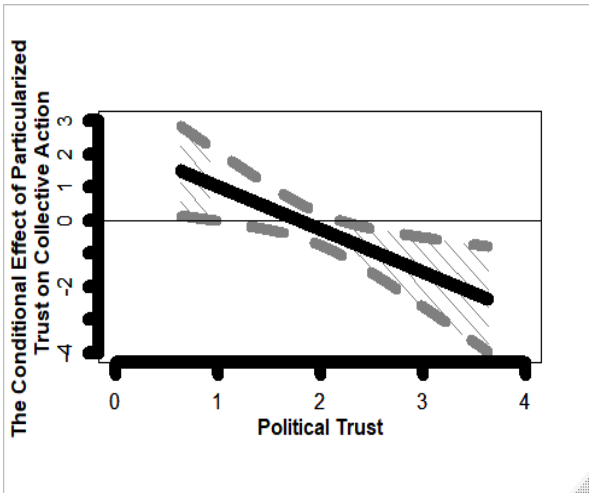

Figure 5. Egypt's Johnston-Neyman Plot: Region of Significance

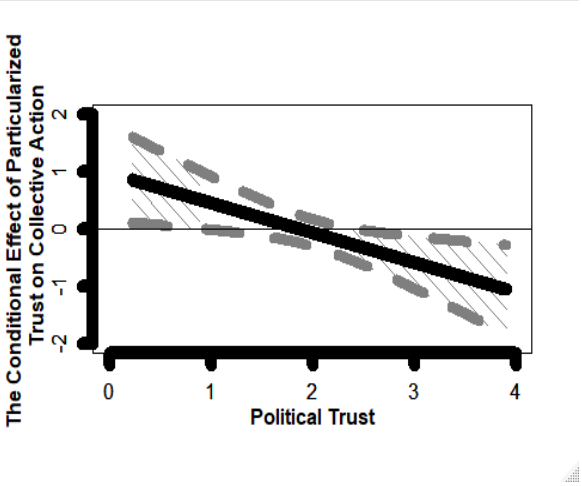

Figure 6. Libya's Johnston-Neyman Plot: Region of Significance

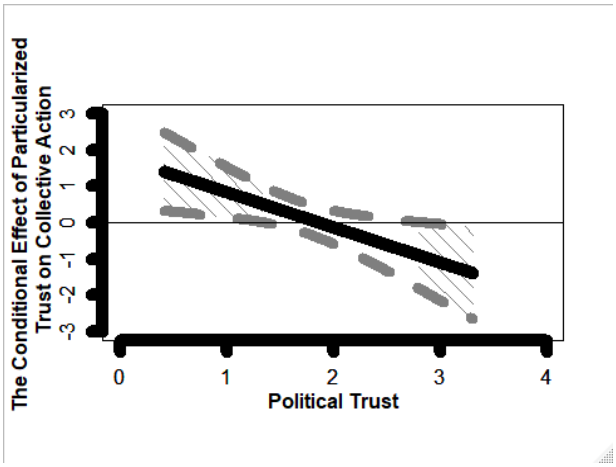

Figure 7. Yemen's Johnston-Neyman Plot: Region of Significance

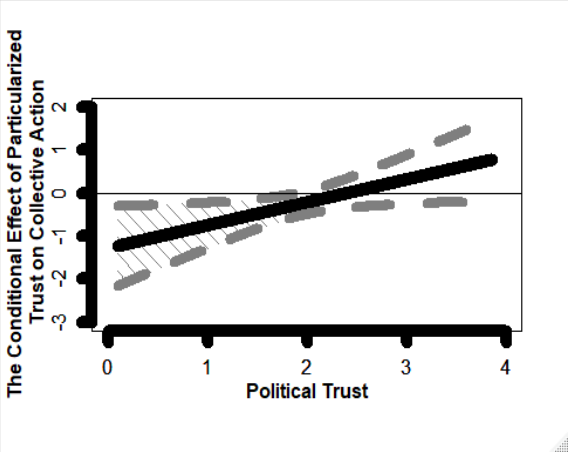

Figure 8.Tunisia's Johnston-Neyman Plot: Region of Significance

It is evident now that Tunisia stands out in respect with the moderating effect of political trust on particularized trust's effect on the dependent variable. When level of political trust is lower than the threshold of 2, it mitigates the impact of particularized trust on the tendency to participate in collective action; and individuals are less likely to take part in collective action. Interestingly, crossing the threshold does not suffice to produce an immediate reinforcing or amplifying effect. Figure (7) shows that a one-unit increase in the level of political trust above the threshold (M > 2) is still non-significant. But, political trust has to get as high as possible to have an amplifying effect on the conditional effect of particularized trust on the probability

of participating in collective action. This implies that Tunisia provides direct support for the amplification hypothesis where particularized and political trust share the same direction in their impact on the likelihood of participating, and hence strengthen each other when multiplied.

Meanwhile, Yemen, Egypt and Libya voiced out the substitution-effect hypothesis where lower level of political trust than the threshold value (M< 2) mitigates the impact of particularized trust and reinforces individuals' tendencies towards participation in collective action. Meanwhile, levels of political trust above the threshold are responsible for higher probability of abstention. In these three countries, people join collective action when they become completely desperate about their political systems.

Explaining these results can be ascribed to the level of democracy in each country and the structure of the relationship between the public and the private sphere. Tunisia is the most democratic Arab country, while the other three countries are either autocratic or failing. Within the literature of democracy and modernization, public and private sphere are separated in democratic/modernized countries; and that the less democratic and less modernized a country gets, the more diffused these two spheres become. From a structural perspective, public sphere- where citizens interact with the political system- and private sphere- where interpersonal networks play the major role- are thought to be autonomous, yet mutually dependent in modern societies, in the sense that "[..]as the freedom of autonomous citizens in the public sphere rested on their private autonomy as masters of their domestic environment, the autonomy of masters in the domestic sphere reinvigorated their freedom in the public sphere."[33] From a functional perspective, the importance of differentiating between the public and the private is inbuilt in the interdependent essence of social life and the meaning of association within Hobbes' Leviathan.

In modern societies, public sphere provides a way of coordinating conflicting demands, scarce resources in a deliberative manner. Social integration, security and material needs are mostly fulfilled through the public sphere. On the other hand, private sphere is where the individual fulfils one's immaterial needs. So, structural, or symbolic separation between the public and

[33] S. Susen, "Critical Notes on Habermas's Theory of the Public Sphere", *Sociological Analysis*, 5(February 2011), 39.

the private is based on their autonomous functions that 'complement' each other for individual's needs to be fulfilled.

In less modernized societies, both spheres get diffused, functions overlap, and individuals have tendency to depend on their family, friends, and neighbours to fulfil their needs that are intrinsically part of the state's domain. For example, the poor depend on their extended families for financial support, low-skilled workers depend on their friendship network to migrate, nepotism is the way through which an unemployed gets a job, sense of security and protection is driven from sticking to one's ethnic or religious group and so on. Our results find support in what Michael Woolcook stated "that 'rampant corruption, frustrating bureaucratic delays, suppressed civil liberties, failure to safeguard property rights and uphold the rule of law, force communities back on themselves, demanding that they supply privately and informally what should be delivered publicly and formally.'"[34] The authors further explained that "[…] the type of trust that can thrive in such communities would be particularized and not generalized trust... For attitudes of a generalized nature, such as generalized trust, things work the other way around."[35] In short, the dependency on one's narrower circles substitute for the role of the state. As long as individuals find ways to satisfy their needs, they do not raise their demands to the state; and the longer this tendency sustains, the more they feel disengaged from the public sphere and they willingly turn a blind eye on their states' politics. This explains why the interaction terms between political trust and particularized trust flip the sign of the individual variables and explains why the increase in levels of political trust is not met with a positive conditional effect for social trust on the likelihood to participate in collective action.

When do individuals in these countries turn to the state or to their political authority? Based on our dataset and analysis, Johnston-Neyman technique provided the answer: when political trust is less than 2; only then the conditional effect of particularized trust on the likelihood of participating in collective action is positive (> 0 , the shaded area depicted above the horizontal line). State it differently, individuals in Egypt, Libya, and Yemen are more likely to cooperate in forms of collective action when their levels of political trust get desperately low that narrow circles of friends, family and neighbours cannot compensate for the absent role of the state.

[34] as quoted in Bo Rothstein and Dietlind Stolle, 2008, 445.
[35] Ibid.

The underlying logic of the impact of the threshold effect is that there is a minimum level of political trust to exist between citizens and the political regime for the conditional effect of particularized trust leads the former to continue cooperating with the latter, which translates into the sustainability/stability of the regime. If levels of political trust fail to meet this minimum level, citizens defection is realized and alternatively they cooperate with each other against the regime. This sheds light on an unbeaten track in analysing collective action from rational decision perspective: when protesting against the regime, citizens might be approaching their participatory decision with a coalition-formation mentality where the conditional effect of particularized trust above the political trust threshold acts as an alignment decision criterion, i.e. a criterion to decide which side to align and cooperate with and which side to defect on.[36]

Conclusion

The paper offers a number of takeaways. ***First***, the interaction between particularized and political trusts matter for understanding under what conditions people in the Arab region cooperate in forms of collective action. ***Second***, as long as social trust is always high in Arab countries, and especially particularized trust, individuals' participatory decisions in collective action will be tuned by and sensitive to the level of political trust. ***Third,*** threshold effect political trust matters when it comes to evaluating whether the final direction of the conditional effect of particularized trust. As per the analysis, political trust's threshold value was equal to (M=2). If political trust is below this threshold, the conditional effect of social trust on the likelihood of participating in collective action is positive, which translates into higher likelihood of collective action participation in Egypt, Libya, and Yemen. By contrast, if political trust is above the threshold, this pattern is reversed in the three countries. This is not the same for Tunisia; which implies the fourth remark. ***Fourth***, the analysis of the interaction

[36] The reader might think there is a leap from "trust in political institutions" to "trust in the regime" and criticism might emerge against the analysis on the basis that political institutions is part of the regime, but cannot be treated equivalently to it. Such criticism has a point. Yet, I believe that part of reporting levels of confidence in a specific institution within the state is related to the political/policy-outcomes that have been championed by the ruling party or elite; such outcomes have an impact on individuals' satisfaction, and hence confidence that these outcomes represent them. Another line of defence stems from the group of countries under investigation. Egypt, Tunisia, Libya and Yemen have been under authoritarian regimes since the end of the colonization era in the 1950s, a legacy that made it difficult to distinguish between state institutions and the ruling regime as such. The link between citizens' satisfaction, institutional trust/confidence and informal political participation has been discussed in Max Kaase (1999).

between particularized and political trust in respect with collective action is context-dependent and based on the analysis, it can be argued that within democratic countries (like Tunisia), particularized and political trust are complementing each other, a pattern which translates into a reinforcing impact under the amplification effect hypothesis. By contrast, in less democratic countries (like Egypt, Libya, and Yemen) where public and private spheres are diffused, particularized and political trust are functional substitutes to each other, a pattern that was translated into their substitution impact that hinders collective action from being realized. Still, one should bear in mind that these hypotheses have being confirmed only after threshold effect became evident using Johnston-Neyman technique.

As these conclusions are based on the WVS6 for four countries, the results can be generalized only if they cannot be falsified across time and space. For this, more research on trust and collective action should be conducted to further investigate the last concluding remark using panel data.

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Appendix

Table A.1 Logistic Regression for WVS6 dataset of Egypt, Tunisia, Libya and Yemen as one Unit

	Dependent variable:					
	Collective Action					
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-1.31***	-0.80**	-3.27***	-3.32***	-2.56***	-4.53*
	(0.37)	(0.40)	(0.78)	(0.97)	(0.46)	(2.34)
Social Trust	-0.31***		0.43			
	(0.07)		(0.27)			
Particularized Trust		-0.39***		0.33		0.58
		(0.07)		(0.26)		(0.67)
Generalized Trust		-0.03			0.28	1.07
		(0.05)			(0.18)	(1.35)
Political Trust	0.45***	0.47***	1.43***	1.76***	0.76***	1.28
	(0.06)	(0.06)	(0.35)	(0.46)	(0.17)	(1.15)
Social Trust * Political Trust			-0.37***			
			(0.13)			
Particularized Trust * Generalized Trust						-0.26
						(0.38)
Particularized Trust * Political Trust				-0.37***		-0.18
				(0.13)		(0.33)
Generalized Trust * Political Trust					-0.18**	0.14
					(0.09)	(0.66)

Particularized Trust * Generalized Trust * Political Trust						-0.06
						(0.18)
Age (45,100]	-0.10	-0.10	-0.09	-0.10	-0.10	-0.09
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
Gender (Male)	0.93***	0.94***	0.93***	0.95***	0.91***	0.96***
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Political Orientation (NA)	0.33***	0.36***	0.35***	0.38***	0.36***	0.37***
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
Social Class (Working Class)	-0.51***	-0.51***	-0.51***	-0.51***	-0.51***	-0.51***
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Education (Educated)	0.60***	0.59***	0.59***	0.58***	0.60***	0.59***
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Marital Status (Widowed)	-0.93***	-0.92***	-0.92***	-0.93***	-0.96***	-0.95***
	(0.35)	(0.35)	(0.35)	(0.35)	(0.35)	(0.35)
Observations	4,273	4,273	4,273	4,273	4,273	4,273
Log Likelihood	-2,511.27	-2,504.91	-2,507.17	-2,500.92	-2,515.92	-2,493.05
Akaike Inf. Crit.	5,054.53	5,043.82	5,048.34	5,035.84	5,065.84	5,028.10
Note:						*p**p***p<0.01

Table A.3. Egypt's Unconditional Logistic Regression Models

	Dependent variable:					
	Collective Action					
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-15.05	-16.44	-24.52	-14.99	-19.99	-30.38
	(430.12)	(428.65)	(426.16)	(430.95)	(430.27)	(425.12)
Social Trust	-0.42*	0.07				
	(0.22)	(0.81)				
Particularized Trust			2.31**		1.34*	4.42
			(0.98)		(0.76)	(3.10)
Generalized Trust				-0.57	2.55*	3.10
				(0.49)	(1.36)	(5.49)
Political Trust	0.31*	1.01	5.01***	-0.04		5.28
	(0.17)	(1.11)	(1.74)	(0.49)		(5.43)

Social Trust * Political Trust		-0.25				
		(0.39)				
Particularized Trust * Political Trust			-1.29***			-1.55
			(0.47)			(1.48)
Generalized Trust* Political Trust				0.16		-0.19
				(0.23)		(2.61)
Particularized Trust * Generalized Trust* Political Trust						0.15 (0.81)
Age (45,100]	-0.42*	-0.41*	-0.42**	-0.41*	-0.40*	-0.42*
	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)
Gender (Male)	0.77***	0.78***	0.77***	0.75***	0.77***	0.80***
	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Political Orientation(Right)	-0.18	-0.19	-0.15	-0.19	-0.17	-0.19
	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)
Social Class (Working Class)	-0.63***	-0.64***	-0.63***	-0.61***	-0.63***	-0.67***
	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Education (Educated)	0.29	0.28	0.26	0.30	0.28	0.28

	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)
Marital Status (Married)	13.52	13.53	13.44	13.46	13.47	13.46
	(430.12)	(428.64)	(426.15)	(430.95)	(430.26)	(424.97)
Marital Status (Widowed)	12.92	12.92	12.82	12.85	12.88	12.83
	(430.12)	(428.64)	(426.15)	(430.95)	(430.26)	(424.97)
Observations	1,523	1,523	1,523	1,523	1,523	1,523
Log Likelihood	-514.15	-513.95	-511.62	-514.16	-513.78	-507.47
Akaike Inf. Crit.	1,054.29	1,055.89	1,051.23	1,056.32	1,055.55	1,050.94
Note:						*p**p***p<0.01

Table A.4. Libya's Unconditional Logistic Regression Models

	Dependent variable:

	Collective Action					
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-1.67***	-3.79***	-4.20***	-1.81**	-2.17*	-7.57**
	(0.61)	(1.25)	(1.57)	(0.74)	(1.15)	(3.79)
Social Trust	0.39***	1.19***				
	(0.12)	(0.43)				
Particularized Trust			0.97**		0.35	1.73
			(0.43)		(0.30)	(1.08)
Generalized Trust				0.65**	1.48**	2.51
				(0.29)	(0.60)	(2.11)
Political Trust	0.14	1.17**	1.99***	0.40		2.79
	(0.10)	(0.54)	(0.71)	(0.25)		(1.80)
Social Trust * Political Trust		-0.39*				
		(0.20)				
Particularized Trust * Political Trust			-0.52***			-0.73
			(0.20)			(0.51)

Generalized Trust * Political Trust				-0.13		-0.57
				(0.13)		(1.01)
Particularized Trust * Generalized Trust					-0.31*	-0.58
					(0.17)	(0.59)
Particularized Trust * Generalized Trust * Political Trust						0.15
						(0.28)
Age (45,100]	0.08	0.09	0.13	0.07	0.09	0.09
	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Gender (Male)	0.94***	0.95***	1.02***	0.97***	1.02***	1.02***
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Political Orientation (NA)	-0.43***	-0.42***	-0.43***	-0.43***	-0.45***	-0.40***
	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Social Class (Working Class)	-0.10	-0.10	-0.12	-0.10	-0.12	-0.11
	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)

Education (Educated)	0.49	0.51*	0.49	0.45	0.41	0.46
	(0.30)	(0.30)	(0.30)	(0.30)	(0.30)	(0.30)
Marital Status (Married)	-0.58	-0.60	-0.55	-0.60	-0.64*	-0.62
	(0.39)	(0.39)	(0.39)	(0.39)	(0.39)	(0.39)
Marital Status (Widowed)	-0.91*	-0.90*	-0.85	-0.94*	-1.03*	-0.96*
	(0.54)	(0.54)	(0.54)	(0.54)	(0.55)	(0.55)
Observations	1,467	1,467	1,467	1,467	1,467	1,467
Log Likelihood	-916.47	-914.57	-917.72	-910.39	-909.59	-904.76
Akaike Inf. Crit.	1,864.95	1,863.14	1,869.43	1,854.78	1,853.18	1,851.51
Note:						*p**p***p<0.01

Table. A.5. Yemen's Unconditional Logistic Regression

	Dependent variable:					
	Collective Action					
	(1)	(2)	(3)	(4)	(5)	(6)

Constant	-3.78***	-6.70***	-7.49***	-3.49**	-4.51*	-15.79*
	(1.03)	(2.59)	(2.69)	(1.41)	(2.33)	(9.17)
Social Trust	0.55**	1.71*				
	(0.26)	(0.97)				
Particularized Trust			1.46*		0.63	3.59
			(0.75)		(0.64)	(2.59)
Generalized Trust				0.56	1.76	5.46
				(0.69)	(1.32)	(5.23)
Political Trust	0.71***	2.41*	3.59**	0.79		7.40
	(0.22)	(1.38)	(1.45)	(0.65)		(5.33)
Social Trust * Political Trust		-0.66				
		(0.53)				
Particularized Trust * Political Trust			-0.81**			-1.91
			(0.41)			(1.50)
Generalized Trust * Political Trust				-0.03		-2.45
				(0.37)		(2.99)

Particularized Trust * Generalized Trust					-0.35	-1.43
					(0.37)	(1.47)
Particularized Trust * Generalized Trust * Political Trust						0.70
						(0.84)
Age (45,100]	-0.65**	-0.64**	-0.60**	-0.63**	-0.57**	-0.60**
	(0.28)	(0.28)	(0.28)	(0.28)	(0.28)	(0.28)
Gender (Male)	-0.04	-0.03	0.05	-0.03	-0.12	-0.003
	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)
Political Orientation (NA)	0.42*	0.39	0.32	0.52**	0.48*	0.52**
	(0.25)	(0.25)	(0.25)	(0.26)	(0.26)	(0.26)
Political Orientation (Right)	-0.81**	-0.82**	-0.86**	-0.73*	-0.43	-0.71*
	(0.37)	(0.37)	(0.37)	(0.37)	(0.36)	(0.38)
Social Class (Working Class)	-0.08	-0.07	-0.11	-0.04	-0.03	-0.05
	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
Education (Educated)	0.65***	0.64***	0.66***	0.66***	0.75***	0.67***
	(0.24)	(0.24)	(0.24)	(0.25)	(0.24)	(0.25)

Marital Status (Married)	0.61	0.60	0.61	0.65	0.78	0.58
	(0.73)	(0.74)	(0.74)	(0.73)	(0.72)	(0.74)
Marital Status (Widowed)	0.16	0.22	0.31	0.17	0.48	0.21
	(0.89)	(0.89)	(0.90)	(0.89)	(0.88)	(0.90)
Observations	452	452	452	452	452	452
Log Likelihood	-283.06	-282.28	-283.31	-281.46	-287.12	-279.17
Akaike Inf. Crit.	596.12	596.55	598.62	594.91	606.24	598.35
Note:						*p**p***p<0.01

Table A.6. Tunisia's Unconditional Logistic Regression

	Dependent variable:					
	Collective Action					
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-2.09**	-2.59	1.09	-4.17***	-2.21	1.86
	(0.98)	(1.68)	(1.83)	(1.15)	(1.40)	(4.10)
Social Trust	-0.43***	-0.23				

	(0.15)	(0.57)				
Particularized Trust			-1.29***		0.27	-1.99*
			(0.49)		(0.33)	(1.19)
Generalized Trust				0.63	0.75	0.35
				(0.41)	(0.76)	(2.63)
Political Trust	0.73***	0.98	-1.07	1.43***		-2.16
	(0.15)	(0.69)	(0.82)	(0.35)		(2.00)
Social Trust * Political Trust		-0.10				
		(0.27)				
Particularized Trust * Political Trust			0.53**			1.14*
			(0.24)			(0.59)
Generalized Trust * Political Trust				-0.44**		0.23
				(0.19)		(1.30)
Particularized Trust * Generalized Trust					-0.28	0.16
					(0.22)	(0.75)
Particularized Trust * Generalized Trust * Political Trust						-0.23

						(0.37)
Age (45,100]	0.01	0.02	0.02	0.04	0.13	0.05
	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)
Gender (Male)	0.72***	0.72***	0.72***	0.72***	0.64***	0.73***
	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
Political Orientation (NA)	-0.06	-0.06	-0.06	-0.12	-0.17	-0.11
	(0.17)	(0.17)	(0.18)	(0.17)	(0.18)	(0.18)
Political Orientation (Right)	0.76***	0.77***	0.75***	0.71***	0.88***	0.69***
	(0.20)	(0.20)	(0.21)	(0.20)	(0.20)	(0.21)
Social Class (Working Class)	-0.35**	-0.35**	-0.35**	-0.33**	-0.35**	-0.29*
	(0.17)	(0.17)	(0.17)	(0.17)	(0.16)	(0.17)
Education (Educated)	0.51*	0.51*	0.52**	0.52**	0.54**	0.56**
	(0.26)	(0.26)	(0.26)	(0.26)	(0.26)	(0.27)
Marital Status (Married)	0.35	0.35	0.41	0.40	0.30	0.42
	(0.83)	(0.83)	(0.84)	(0.83)	(0.83)	(0.84)
Marital Status (Widowed)	0.50	0.49	0.58	0.54	0.40	0.50

	(0.97)	(0.96)	(0.97)	(0.96)	(0.96)	(0.98)
Observations	831	831	831	831	831	831
Log Likelihood	-510.47	-510.40	-510.53	-508.41	-522.23	-501.81
Akaike Inf. Crit.	1,052.94	1,054.80	1,055.06	1,050.81	1,078.45	1,045.62

Note: *p **p ***p<0.01

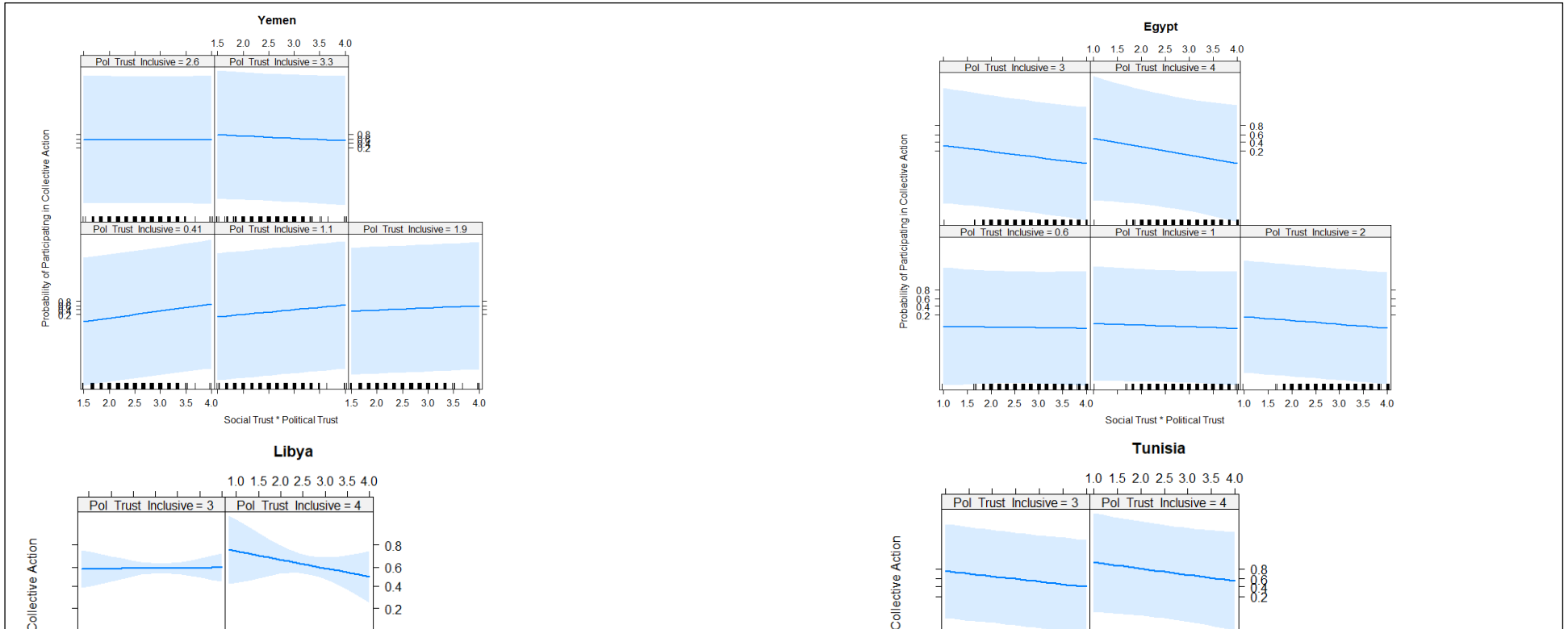


Figure 2. Two-Way Interaction between Social Trust and Political Trust and the Probability of Participating in Collective Action

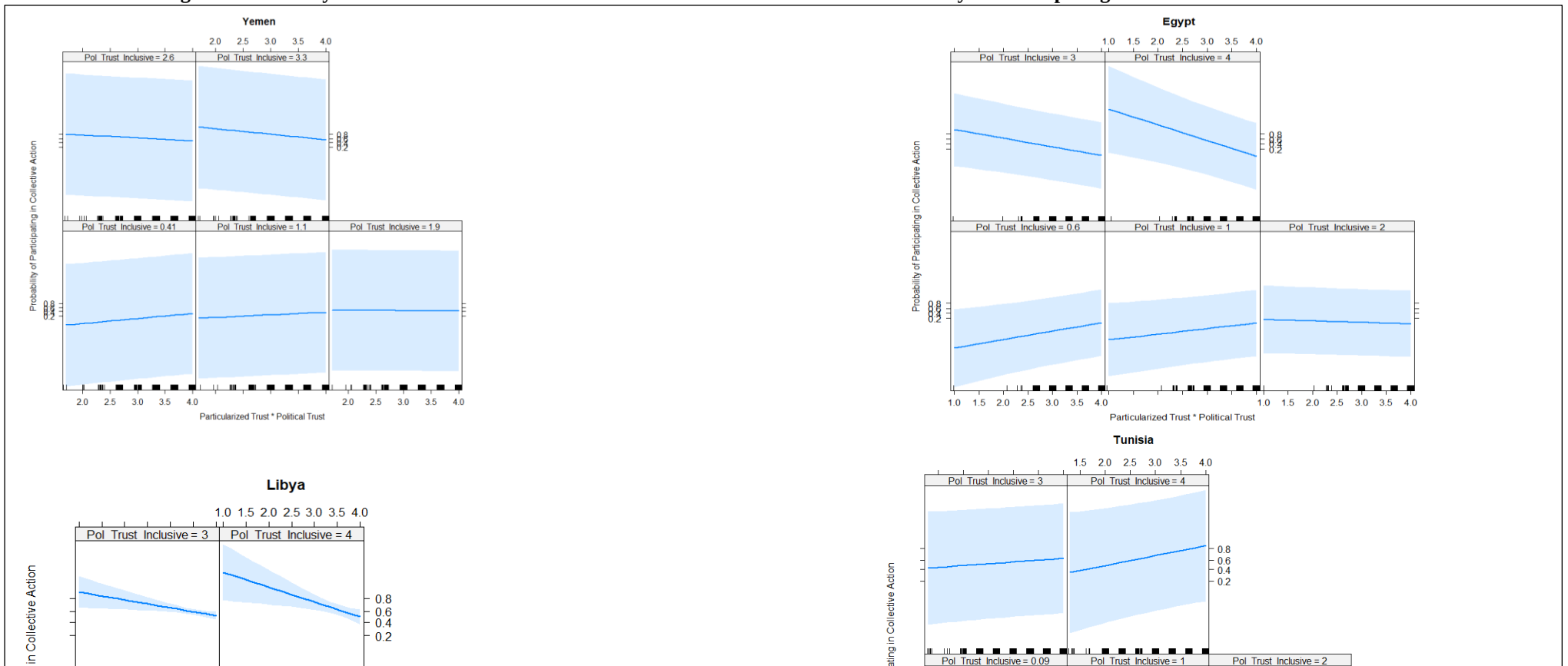
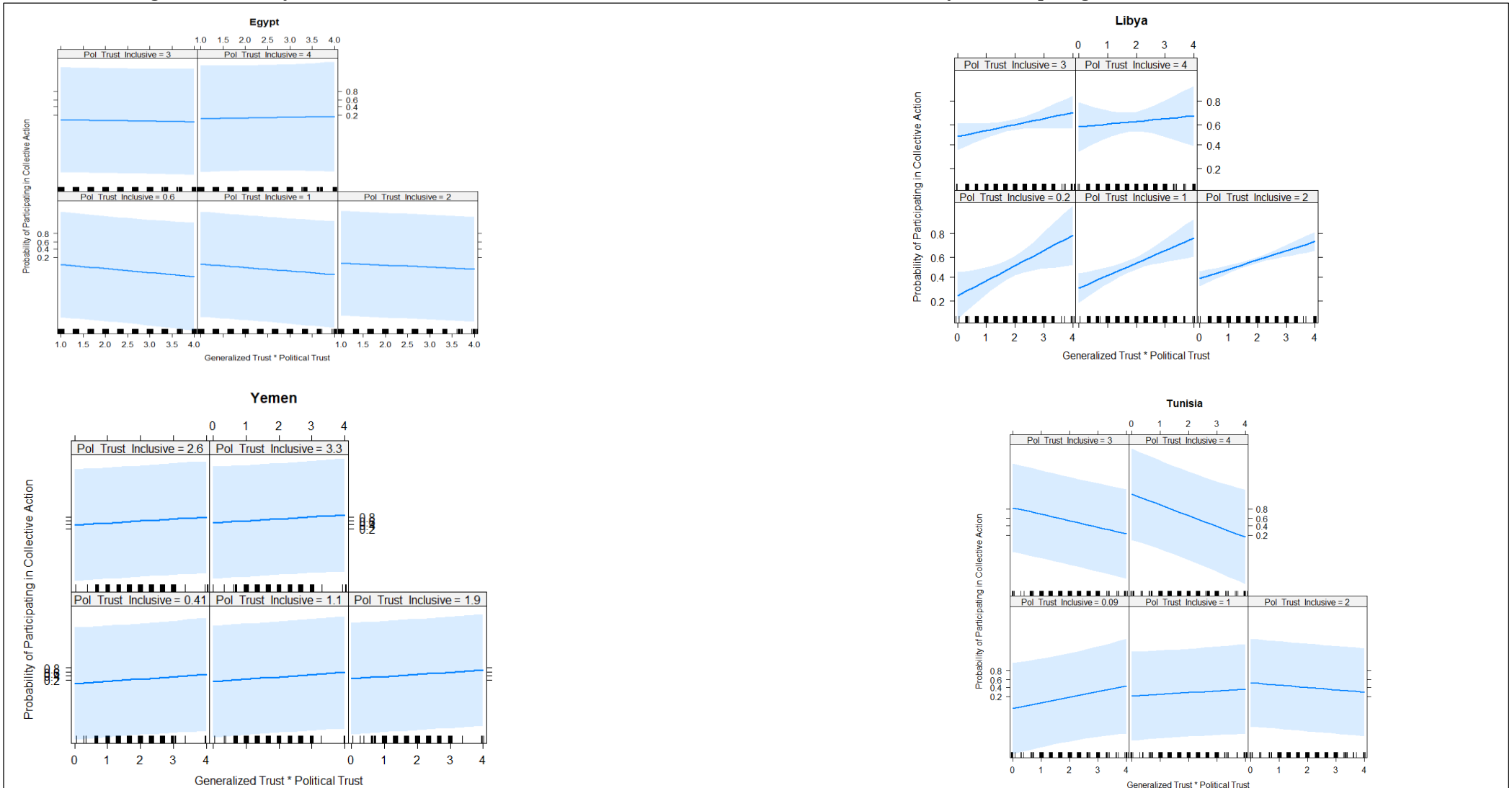


Figure 4. Two-Way Interaction between Generalized Trust and Political Trust and the Probability of Participating in Collective Action



(II)

Explaining Collective Action Participation: Survey Experiment•

Somaia M. Elsayed
Han Dorussen

Motivation

Collective action participation has been subject to rigorous study by various scholars from various disciplinary backgrounds. From individual-centred perspective, scholars can be classified under one of two main camps: endogenous or exogenous. First, endogenous explanations that focus on one's predispositions, internal motivations, emotions, and genetic-based attitudes. Risk-taking, proactivity, and rebelliousness are examples of endogenous explanations. Second, exogenous explanations that put more emphasis on contextual factors and characteristics. As per this camp, features of the surrounding environment, such as: networks, their sizes, homogeneity, and ideology, play an important role in the final decision an individual takes.

Bearing in mind the existence of a related large body of research about the nexus between trust, be it social or political, and the propensity to political participation and collective action. Admittedly, these relationships are inconclusive. While some argue that there is no relationship between social trust and political participation (van Ingen and Bekkers .2015), others argued that the relationship is too complicated to be linear (Claibourn and Martin. 2000). And at the time when some contend that social trust positively affects political participation (Granvotter. 1978; Kasse.1999; Putnam. 2000; Ekström and Östman. 2013; Levinsen and Yndigegn. 2015; Quintelier.2015), others provided evidence that the relationship is negative (Uslaner and Conley. 2003), and a third camp distinguished between outgroup trust claiming it matters for collective action, and in-group trust that matters for formal political participation(Crepaz and Polk. 2012). For political trust, the picture is equally mixed: some offered empirical evidence that political trust encourages political participation (Li. 2008; Rothstein and Stolle.2008; Kim.2014) others found the opposite is non-falsifiable (Kasse.1999) We seek to pull all the threads together, and question: of these competing explanations, what are the underlying mechanisms (*aka the moderating variables*) for the nexus between social and political

• The survey experiment is ethically approved by University of Essex IRB committee on 12/11/2020 [REF#ETH2021-0029]

approval, respectively, and the decision to participate in collective action- a question that has not been examined before. A second motivation for our paper lies in the fact that political approval towards protests and demonstrations have not been subject to scholar study either. Third, these explanations coexist is reality, but do they affect individual's decisions equally? Are their influences the same across various forms of collective action?

The paper addresses these questions experimentally[37] and defines collective action, as forms of non-formal political participation, namely: protests/ demonstrations, signing petitions, and extending online support to a cause. Picking these three forms is an intentional based on two strands in literature. First, the majority of studies distinguished between online and offline participation and concluded that some online activists complement their online activism with offline action. Furthermore, some scholars tackled how online participation affects offline political participation- which implicitly means that both of them are inherently different. If both are distinct, then it makes sense to incorporate online support as a form of collective action side by side with offline forms of collective action. (For expansion, read: Conroy, Feezell, and Guerrero. 2012; Oser, Hooghe, and Marien.2013; Vissers and Stolle.2014; Ahmad, Alvi, and Ittefaq.2019). Second, literature has distinguished between low-risk, such as signing petition, and high risk petition such as demonstrations and incorporated both of them here reinforced the validity of our conclusions. Similarly, literature typically distinguished between individually based political action, i.e. signing petition, writing letters to officials and using the campaign button on shirts…etc, and socially-based political action such as demonstrations, protests and sit-ins. Again, incorporating a form of each one of them controls for the variance over such distinction and solidifies our findings. (Iron.1984; McAdam.1986; Wiltfang and McAdam. 1991; Ayanian and Tausch.2016).

Literature Review

From individual-centred perspective, scholars can be classified under one of two main camps: endogenous or exogenous. First, endogenous explanations that focus on one's predispositions, internal motivations, emotions, and genetic-based attitudes. Risk-taking, proactivity, and

[37] The survey experiment design as well as its theoretical expectations were ethically approved by the University of Essex Ethical Committee on Nov.12nd.2020 (Ref: ETH2021-0029)

rebelliousness are examples of endogenous explanations. People reacted towards grievances, Ted R. Gurr argues (1970), by falling desperately under the spell of their uncontrollable emotions where their actions are governed by the mechanism of collective anger, frustration, and violence. The causal mechanism flows as following: "discontent arising from the perception of relative deprivation is the basic, instigating condition for participants in collective violence. The linked concepts of discontent and deprivation comprise most of the psychological states implicit or explicit in such theoretical notions about the causes of violence as frustration, alienation, drive and goal conflicts, exigency, and strain" (Gurr.1970:13). Such psychological/emotional drift argument was refined by psychologists where genes (Dawes et al. 2015), psychological attributes and personal predispositions came in to explain collective action. There is an agreement that proactivity and altruism are positively correlated to cooperation propensity and civic engagement at large (Fowler. 2006; Fowler and Kam.2007; Jankowski. 2007 &2019), but also Dee (2018) concluded that more altruistic individuals are more likely to engage in protests in Philippine. McIntyre (1995) discussed how the French village Le Chambon is an illustrative example on the nexus between altruism and instrumental rationality as villagers provided shelter for more than two thousand Jews during the period 1941-1944 in a heroic collective action. As well, risk-taking and rebelliousness were found to be positively correlated to protesting and demonstrations (Loverman. 1998; Steinberg. 2007; Bukobza.2009) as such engagement provides excitement (and/or) novelty for participants (Kam.2012).

Second, exogenous explanations that put more emphasis on contextual factors and characteristics. As per this camp, features of the surrounding environment, such as: networks, their sizes, homogeneity, and ideology, play an important role in the final decision an individual takes. Leighley (1990) It all started with ties and networks of family, friends, neighbours, and colleagues, where social interaction cultivates increased opportunities for political engagement to manifest. Family discussions are so vital for aligning one's voting or participatory decision with his/her family members, but friends are believed to have a stronger impact on individual's political participation decision compared to the parents' (Blais, Galais, and Coulombe, 2019) Neighbors have also proved themselves to be strong mobilizing agencies as research demonstrated that neighbours influence each other's decisions to vote through the threat of observing the behaviour of deviants, which creates social pressure that induces potential abstainers to comply and vote (Ibid), or through playing the role of recruiters for community services. (Lim, 2008)

Ties, networks, and social interactions function through various mechanisms that have been studied thoroughly in previous studies. Viewed as soft selective (de)incentives, acting against the prevailing or socially expected behaviour put the deviant individual at risk of being banished, socially shamed, alienated, or marginalized. Hence, Social (dis)approval as well as social support is a second mechanism. In 1984, Klandermans designed a questionnaire to probe motives related to participation in moderate and militant actions. One of the questions was on social motives where he clearly asked whether the individual expects (un)favorable reactions towards (non)participation and findings supported a negative correlation between others' expectations about one's behavoir and participation in moderate action, but a positive relationship when it came to partaking in militant action. After thirty years of this initial study, in collaboration with Oegma, he conducted phone interviews to study the failure of Netherlands' Peace Movement to mobilize people to sign petition. They concluded that increased discussion in one's environment, and at some point, the actual signing of petitions of one's relatives increased the probability of signing a petition. For those who were mobilizable, but decided not to sign the petition, the authors straightforwardly stated that "the fact that their decision not to sign evoked supportive reactions from significant others are evidence of social pressure." (Oegma and Klandermans. 2014. p.718)

Another mechanism through which social networks affect the propensity to participation is through information exchange. McClurg (2003) made a reasonable remark when he noted that participants and abstainers engage in social interaction, but the impact of social interaction should be conditional on the relevant information supply. It does not matter whether the individual is socially interacting, but whether the substance of the discussion is focused on what makes participation a favourable action. Recalling McClurg's own logic, information about the desirability of participation can be compared with the availability of information about the undesirability of participation leading us to accept that knowledge and information availability about the merits of participation can be accepted as a necessary condition for political participation to take place, but still insufficient to explain individual's participation.

Two remarks should be noted, herein. First, a crucial component that has been largely overlooked by the contextual stream is political actor's approval. Political authorities are the ones whose responsiveness is intended to be evoked by the political action, they are on the receiving side of political action. Political actions' permissiveness and legitimacy are essential to its acceptability as a form of action, especially in democratic contexts, as it indicates its

conformity with legal and social standards. (Costa Lopes, Dovidio, Pereira, & Jost, 2013; as cited in Zlobina and Vazquez.2018: 237).

Secondly, by and large, previous research on social networks, ties, and social (dis)approval, presume that individual's decision to participate is nothing but a mere reflection of the general trend in the environment or a passive receipt to circulated information within one's interpersonal network. It will not be an exaggeration if we claim that the environmental explanation of participation is a mutant version of the herding behavior theory.[1]

To escape the passivity ascribed to the previous school, another group of studies emerged to examine the rationality of the individual's participatory decision. This strand emphasized the individual's ability to make calculative decisions through evaluating the usefulness of the action in achieving required outcomes, and the cost of the action. In this respect, individual's perceptions are also central to the analysis of one's decision to participate in collective action. A cognitive assessment to the situation, the usefulness of the action, its riskiness, and consequences, makes a difference, at least from the rational theorists' perspective. Tactics' effectiveness is one of the frames of justification discussed under framing theory and its vitality cannot be overlooked when it comes to individual's participatory decision (Zlobina and Vazquez, 2018.236) It should be noted, though, that the major bulk of research conducted on perceived effectiveness conflated individual or collective efficacy with action's effectiveness-which explains why some studies tend to use effectiveness and efficacy interchangeably. For example, Ayanian and Tausch (2016) argued that "political efficacy referred to perceived efficacy of an action in achieving the political goals of a movement". For the present paper, by the perceived effectiveness, we refer to the usefulness of the form of collective action to bring about the participants' intended changes to real world . This is different from individual's perceived efficacy that is ascribed to the individual's self-assessment on whether he/she has the ability to change the course of action/outcomes. Think about it this way: a carpenter's efficacy might be affected by the effectiveness by his/her tool but cannot be reduced to it. Our stance is in aligned with Bäck, Bäck, and Sivén (2018) when they differentiated between internal efficacy and external efficacy. While the former refers to the individual's perception about one's ability to change outcomes, the latter is about whether the action is the best way to evoke governmental responsiveness, aka *perceived effectiveness of the action* as intended in our paper.

Likewise, the perceived riskiness of the action is a predictor of individual's mobilization and participation. McAdam (1986) criticized prior studies for overstudying safe forms of participation and overlooking the distinction between high risk and low risk activities. One of his key findings is that newly recruited personnel tend to engage in low-risk activities and step by step, this intensifies their involvement until they develop an affinity with the movement and voluntarily engage in high-risk activities. A main observation about literature, that we intend to follow on in our analysis, is that scholars discuss the perceived level of riskiness as a synonym of the individual's risk-taking attitude, which allows for collapsing risk-taking attitude as a personal predisposition/endogenous explanation into the perceived level of riskiness as an exogenous explanation.

Altogether, political action's perceived effectiveness and riskiness can be categorized under the same banner of the exogenous explanation that will be our main focus.

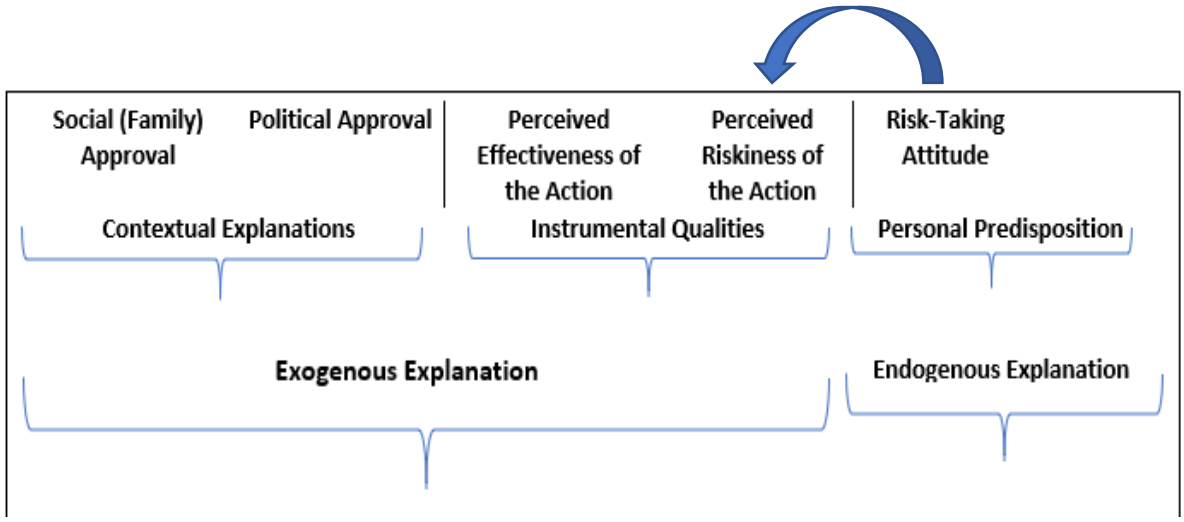


Figure 1. A Summary of the Causal Model

Hypotheses

Individuals care about the expectations of those whom opinion matter for them and this is what McAdam and Paulsen (1993) labeled identity salience or psychological centrality of relationships, an idea that simply entails that, of our multiple ties, some matter more. Building on this, we distinguish between two groups in the decision environment: a) family, and b) political authority. If social pressure matters, then family members' stance will have the main share in defining social pressure. One of the reasons is that individuals care about these ones' reactions towards his/her actions either because they trust their opinion so much that he/she

would like to align with their stances or because norms of compliance and obedience has been part of the participant's upbringing. Political authorities are also so important, not only because of their effective monopoly of violence, but also because they are the targeted audience of any political action who are at the receiving side of the spectrum. The reaction of this stakeholder is what citizen look forward and intend to change. Exactly as the case with family, if authorities are trusted by citizens, their stances towards collective action will matter. Family and political authorities, together, are traditional authorities whose stances the individual's might be willing to comply with or deviate from.

We follow on previous literature's mainstream when assuming that social support is positively affecting political participation. Central to social support is family support/approval as this is the closest circle to the individual as a potential participant.

H1: Family approval is positively affecting the likelihood of participating in collective action.

This entails that absence of family support will discourage individuals from participating in collective action, which is refelected in the decreaing probabilities. When trust in family is considered as a moderating variable, we assume that with the increase in levels of trust in family members, individuals are going to consider family positions on participation seriously and consolidates the impact of family support. Trusting family members ensues caring for their opinions and adds more weight to family opinions as an input to the individual's decision calculus. Thus, the relationship between family approval and the decision to participate is tuned to/conditioned by how much the individual trust his/her family members. This leads to the auxiliary hypothesis:

H1.1: Trust in family reinforces and amplifies the impact of family approval on the likelihood of participating in collective action.

Thinking of these relationship across forms of collective action, we hypothize that if the intensity of involvement/ the degree of riskiness involved in the form of collective action will accentuate the impact of both trust in family and family approval on the likelihood of participating; for individuals care about their closest circle's opinion when making big decisions like demonstrating. As mentioned before, demonstrations are classified as high-risk political activity, followed by signing peititon as a low-risk political activity and finally comes support demonstrations online. Thus, hypothesis H1.1 can be restate across forms of collective action as follows:

H1.1.a: *trust in family reinforces and amplifies the impact of family approval on the likelihood of participating in collective action as high as possible for joining demonstrations, and with a lesser degree for signing petition, and its impact will be the lowest for supporting demonstrations online.*

The same logic applies for political authorities' approval and the propensity to partake in collective action. It will be assumed that the relationship is positive:

H2. Political authorities' approval positively affects the likelihood of participating in collective action

And vice versa. So, authorities' disapproval matters for individual's decision to participate in collective action. And it will matter more for demonstrations, not only because it entails high risks/costs, but also because it is the more pressing form of participating. Yet, authorities' (dis)approval matters as long as the individual trust their political authorities/institutuions. It follows that:

H2.1.: The higher the level of political trust, the more likely an individual to be affected by political authorities' (dis)approval/support, leading to an (de/in)creased probability of participating in collective action, respectively.

Across forms of collective action, the same gradual relationship will be poisted and incorporated in the hypothesis as following:

H2.1.a. high level of political trust amplifies the impact of political (dis)approval on the likelihood of participating in collective action as high as possible for joining demonstrations, and with a lesser degree for signing petition, and its impact will be the lowest for supporting demonstrations online.

The third exogenous variable to be considered is related to the qualities of collective action. Starting with effectiveness, we align ourselves with the literature once more time where it is assumed that the higher level of perceived effectiveness the individual ascribe to a form of collective action, the more likely he/she to adoit it.

H3: The higher perceived level of effectiveness an individual ascribes to a form of collective action, the more likely he/she to adopt it.

As demonstrations are always expected to be the highest form of pressure individual exert on their government, highest returns and risks are always expected.We assume that the perceived effectiveness across forms of collective action to be ordered as follows:

Perceived Effectiveness of Demonstrations > of Signing Petition ≤ of Online Support

So, we exected that this graudation will be reflected in the strength and significance of the examined theoretical expectation *H3*. When considered in combination with the main hypotheses of family and political approval, theoretical expectations we formulate to reflect an inverse relationship, as following:

H3.1. *The higher level of perceived effectiveness of a given form of collective action, the more likely it is to offset the impact of family disapproval on individual's probability to join that form of collective action leading to an increase in the likelihood of participation.*

In other words, the more effectivess an individual perceives a given form of political action, the more likely he/she to forget about his/her family's discouraging stance or lack of their approval and he/she will participate regardless! The same applies for lack of political approval, it might be counteracted by the perceived levels of effectiveness:

H3.2. *The higher level of perceived effectiveness of a given form of collective action, the more likely it is to offset the impact of political disapproval on individual's probability to join that form of collective action leading to an increase in the likelihood of participation*

Perceived riskiness of forms of collective action works in the opposite direction as in perceived effectivess. As rational decision makers, individuals tend to minimize their risk-exposure and costs which translates into an inverse relationship between perceived level of riskiness and the likelihood of participating in collective action, and this is the core of the general hypothesis:

H4. The higher perceived level of riskiness an individual ascribes to a form of collective action, the less likely he/she to adopt it.

As pereceived riskiness of forms of collective action can be orded as follows:

Perceived level of riskiness of demonstrations > of siging petition > of Online Support.

When combined with family's and political authorities' approval hypotheses, we expect that the higher the perceived riskiness of a form of collective action, the more likely family's

approval to have an impact on the individual's propensity to participate in collective action, leading to the following hypothesis:

H4.1: The higher level of perceived riskiness of a given form of collective action, the more likely it is to heighten the impact of family (dis)approval on individual's probability to join that form of collective action.

H4.2: The higher level of perceived riskiness of a given form of collective action, the more likely it is to heighten the impact of authorities' (dis)approval on individual's probability to join that form of collective action.

Experimental Design

To test the competing explanations, we ran a survey experiment on U.K young people whose ages range between (18-35) via Prolific for three forms of collective action: joining demonstrations, signing petition, and supporting protests online.

The Dependent Variable. The respondent's answer to the question of 'how likely are you to participate in demonstration, signing petition and online support'.

Independent Variables. Contextual variables, i.e. political trust and trust in family, are reported by the respondents. For political trust, we used the exact battery of eight questions the World Values Survey adopts on confidence in institutions. Answers to these eight questions were averaged and used as a proxy for political trust. For trust in family, the exact question of the World Values Survey on trust in family, friends and neighbors were exported, used- yet on a scale from (1= very unlikely to 4= very likely).

The perceived level of a form's effectiveness and riskiness are two independent variables that are thought to affect the likelihood of adopting a specific form of collective action. Perceived level of effectiveness is measured through a question asking, "how effective would you rate……?" on a scale from 1= Not effective at all to 5= highly effective. Perceived level of riskiness is also probed by the question asking, "how risky would you rate…?" on a scale from 1= not risky at all to 5= highly risky.

Risk-taking attitude is another independent variable that is considered and measured as an average to the answers for a battery of four questions on the likelihood of parachuting, disobeying parents or being disobeyed by children and breaking traffic lights. Table 1. offers

a summary for descriptive statistics of these variables and the wording of the treatments along with the codebook can be found in Appendix I.

The Manipulated Variables: The presence or absence of family support and authorities approval were manipulated, leading to four treatment groups.

Treatments:

a) treatment I where both of family support and authorities approval are present, b) treatment II where family support is cancelled out, but authorities grant approval for demonstrations, c) treatment III where family support exists, but authorities do not grant permission to the demonstrations, and finally,

d) treatment IV where both family support and authorities' approval are absent. The experiment was designed on Qualtrics and treatments were randomly assigned. Once assigned to an experiment, the first questions participants are asked are about the baseline and treatment, after which they are asked to report on their levels of social and political trust, as well as their previous collective action. The experiment is ordered in this way in order to avoid any bias in the answers on the participants side which increases the responses' reliability.

Main Design: Between-subjects design with treatment I as a the control group where both manipulated variables are positively presented. Between subject design allows for comparing responses when conditions changes from one treatment to another, which allows for avoiding saturating the effects of changing conditions that is high likely to happen when the same individual is exposed to different conditions leading to a threat in the study's internal validity.

To sum up the treatments:

Treatment	Family Approval	Political Approval	Individual's Expected Behavior
I	√	√	Participation
II	x	√	Abstention from demonstrations and switching to other forms
III	√	X	Abstention from demonstrations and switching to other forms
IV	x	X	Abstention from demonstrations and switching to other forms

Table 2. A Simplified Summary of the Experiment's Treatments

Results and Analysis

As a starter, the difference between the treatments' means is examined using one-way ANOVA, for each form of collective action and reported *p*-values speaks for obvious heterogeneity between treatments (for demonstrations <2e-16***, for signing petition <0.000132***, and finally for supporting protest online < 0.000132***).

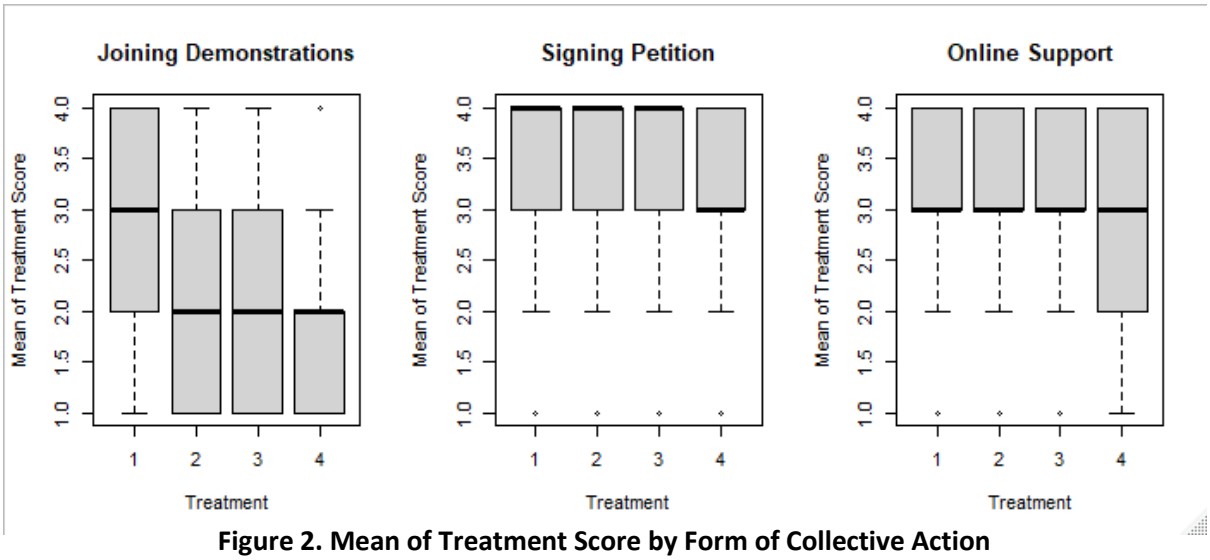


Figure 2. Mean of Treatment Score by Form of Collective Action

As presented in figure 2, repondents of treatment I varies considerably compared to the other three treatments for joining demonstrations. The mean of respondents under treatment I is almost 3 and respondents are distributed evenly around the mean. For treatment II, III, and IV; the mean is around 2. While respondents' distribution for treatments II and III is even, data of treatment IV is skewed to the left (below the mean). In addition, there exists an outlier in the scores reported under treatment IV.

Signing petition's boxplots offer a different picture. While the first three treatments have almost the same relatively high mean (≈4) and data are negatively skewed. Treatment IV is different as the mean is lower compared to treatment I, II, and III; and data are skewed to the right of the mean!

Data on the four treatments for supporting a demonstration online share the same mean, but data distribution of the fourth treatment is different from the first three treatments as data for treatment IV are evenly distrubted around the mean and spread (boxplots are tall) while the first three treatments data are concentrated/skewed to the right (above the mean).

As the differences between groups are graphically so pronounced, our next step is to probe the contribution of each variable to differences between treatments. Findings show that political trust significantly decreases the likelihood of joining demonstrations under treatment II, III and IV, and on the likelihood of both signing petition and supporting a protest online under treatment III and IV, alike. Under treatment I, political trust moderates a positive and significant relationship between the treatment and the likelihood of joining demonstrations. In short, our hypothesis for the moderating impact of political trust is empirically supported. For trust in family, it does not moderate the relationship between treatment III, and IV for joining demonstrations, but when it interacts with the absence of family approval under treatment II, it leads to a decrease in the individual's propensity to partake in demonstration. For signing petition, which corroborates our hypothesis H1.1. that trust in family reinforces and amplifies the impact of family support when it comes to making participatory decisions for joining demonstrations.

Meanwhile, when interacts with both family and political disapproval under treatment III, trust in family increases the likelihood of signing petition and online support. Bearing in mind that the experiments ask directly about demonstration, it makes sense that participants, as long as they trust their family and will comply with their stance, would shift for alternative ways of supporting the cause they strongly believe in; which implies a decrease in the propensity to joing demonstration that is to be compensated for by an increase in the propensity to participate in substituting forms of collective action, namely, signing petition and supporting the demonstration online.

As for the perceived qualities of collective action forms, perceived effectiveness increases the likelihood of participating in demonstration, singing petition, and supporting the demonstration online under treatment I. The moderating effect of perceived effectiveness shifts to the opposite direction under treatment III and IV for demonstrations, under treatment II for both singing petition, and supporting the demonstration online. This entails that our hypotheses H3.1. and H.3.2 are partially supported as results for demonstrations under treatment I lends credence to both hypotheses, but the same cannot be concluded for treatment III and IV on joining demonstrations. The empirical deviation from our theoretical expectation can be understood in the light that treatment III and IV are about political disapproval, and family and political disapproval, respectively; which might lead one to think that if the authorities- the ones whose decisions are intended to change by demonstration- do not approve demonstrations, this means that the those targeted actors are not going to be responsive to the demonstrations,

deeming it ineffective in these two specific scenarios/treatments. Still, this is another implicit, and overlooked, mechanism through which political approval might affect the propensity to participate in collective action that invites further research and pobeling. Findings regarding perceived riskiness support our hypothesis H4.1.and H4.2., that it leads the relationship between lack of political approval and joining demonstration under treatment III in a negative direction. In other words, when authorities disapprove of the demonstration and announce that they intend to coerce the protestors, perceived riskiness increases leading rational decision makers to abstain from participating. The same applies for siging petitions under treatment II and online support under treatment I.

Table 3. Between Treatments Comparison

	Dependent variable:		
	Joining Demonstrations	Signing Petition	Online Support
Receiving Treatments			
Treatment=2	2.43***	0.71	-0.18
	(0.73)	(0.58)	(0.67)
Treatment=3	2.13***	0.0003	-0.65
	(0.69)	(0.55)	(0.63)
Treatment=4	1.14	0.53	-0.03
	(0.73)	(0.59)	(0.67)
Contextual Variables			
Political Trust	0.22*	0.13	0.18
	(0.12)	(0.11)	(0.12)
Political Trust*Treatment=2	-0.37**	-0.23	-0.15
	(0.16)	(0.15)	(0.17)
Political Trust*Treatment=3	-0.64***	-0.48***	-0.59***
	(0.17)	(0.15)	(0.17)
Political Trust *Treatment=4	-0.38**	-0.35**	-0.44***
	(0.16)	(0.15)	(0.17)
Trust in Family	0.09	0.01	-0.11
	(0.11)	(0.10)	(0.11)
Trust in Family*Treatment=2	-0.40**	0.11	0.20
	(0.16)	(0.14)	(0.16)
Trust in Family*Treatment=3	0.004	0.31**	0.41***
	(0.15)	(0.13)	(0.15)
Trust in Family*Treatment=4	-0.14	0.13	0.21
	(0.15)	(0.14)	(0.16)
Qualities of Collective Action			
Joining Demonstrations			
Perceived Effectiveness	0.36***		
	(0.05)		

Perceived Effectiveness *Treatment = 2	-0.08
	(0.08)
Perceived Effectiveness *Treatment= 3	-0.13*
	(0.08)
Perceived Effectiveness*Treatment= 4	-0.15**
	(0.08)
Perceived Riskiness	-0.05
	(0.06)
Perceived Riskiness*Treatment=2	-0.13
	(0.09)
Perceived Riskiness*Treatment=3	-0.19**
	(0.09)
Perceived Riskiness*Treatment=4	-0.04
	(0.09)

Table 3. Between Treatments Comparison (Cont.,)

	Dependent Variable:		
	Joining Demonstrations	Signing Petition	Online Support
Signing Petition			
Perceived Effectiveness		0.25***	
		(0.05)	
Perceived Effectiveness * Treatment=2		-0.14**	
		(0.07)	
Perceived Effectiveness * Treatment=3		-0.03	
		(0.07)	
Perceived Effectiveness * Treatment=4		-0.08	
		(0.07)	
Perceived Riskiness		-0.14**	
		(0.06)	
Perceived Riskiness * Treatment=2		-0.10	
		(0.08)	
Perceived Riskiness * Treatment=3		-0.09	
		(0.08)	
Perceived Riskiness * Treatment=4		-0.16*	
		(0.08)	
Online Support			
Perceived Effectiveness			0.27***
			(0.06)
Perceived Effectiveness*Treatment=2			-0.17**
			(0.08)
Perceived Effectiveness*Treatment=3			0.05
			(0.08)
Perceived Effectiveness*Treatment=4			-0.002
			(0.08)
Perceived Riskiness			-0.23***

			(0.06)
Perceived Riskiness *Treatment=2			0.10
			(0.08)
Perceived Riskiness *Treatment=3			0.07
			(0.08)
Perceived Riskiness *Treatment=4			-0.06
			(0.08)
Constant	0.74	2.56***	2.91***
	(0.52)	(0.42)	(0.48)
Observations	825	825	825
R^2	0.28	0.19	0.18
Adjusted R^2	0.26	0.17	0.16
Residual Std. Error (df = 805)	0.83	0.74	0.83
F Statistic (df = 19; 805)	16.21***	10.12***	9.54***
Note:		*p**p***p<0.01	

[1] A number of studies were reviewed where it was made clear that some participants act against the social pressure because of their "rebellious" nature- which reinforces our critique on the reactional flavour that dominated the contextual/environmental explanations. For example: against the longstanding positive linear relationship between social (dis)approval and political (non)participation, Bolcq and Damen (2019) concluded that the relationship is curvilinear. For them, rebelliousness and lack of awareness might be two processes that govern this behavior and they admitted that they cannot detangle them.

Daniel Blocq, and Marie Louise-Damen, "Social (Dis)approval and Collective Action: Re-evaluating the Positive Linearity Thesis", *Sociological Inquiry*, 89(November 2009), 727-749.

Chartrand, Tanya, Amy Dalton, and Gavan Fitzsimons. 2007. "Nonconscious Relationship Reactance: When Significant Others Prime Opposing Goals", *Journal of Experimental Social Psychology*, 43(5):719–26.

Another article that examined how adolescences choose to act against traditional authority and social expectations as a way of reasserting their autonomy in this life stage:

Gabriel Bukobza, "Relations between Rebelliousness, Risk-Taking Behavior and Identity Status During Emerging Adulthood", *Identity: An International Journal of Theory and Research*, 9 (2009), 159-177.

Harold D. Grotevant and Catherine R. Cooper, "Individuation in Family Relationships: A Perspective on Individual Differences in the Development of Identity and Role-Taking Skill in Adolescence", *Human Development*, 29 (March-April, 1986), 82-100.

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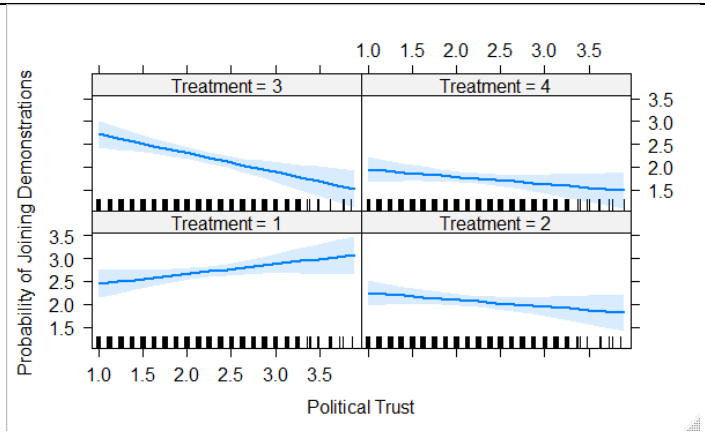
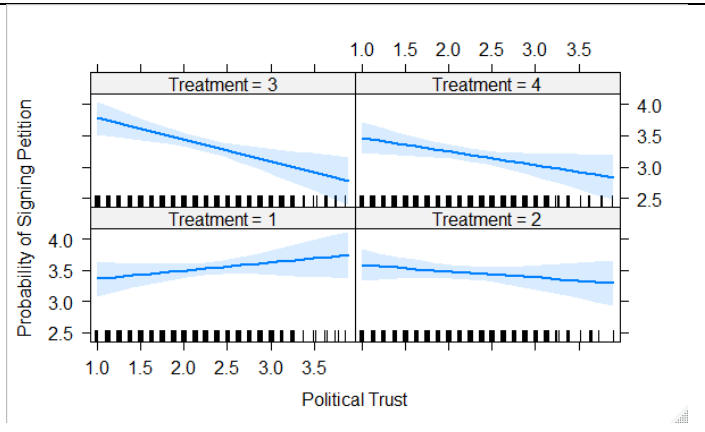
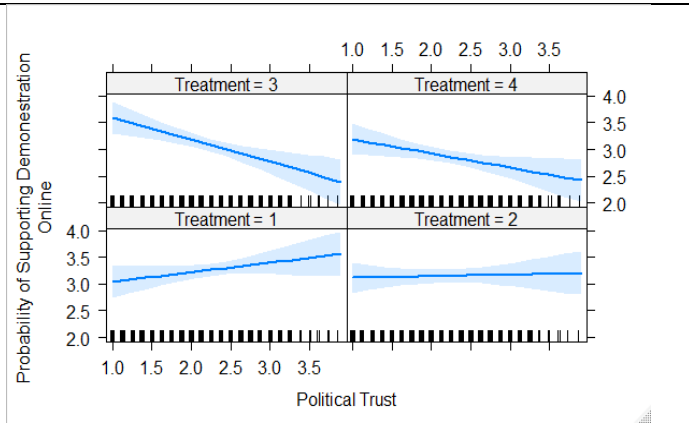
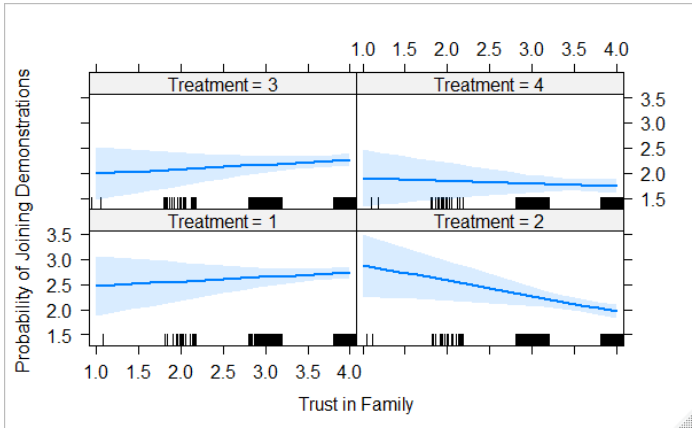
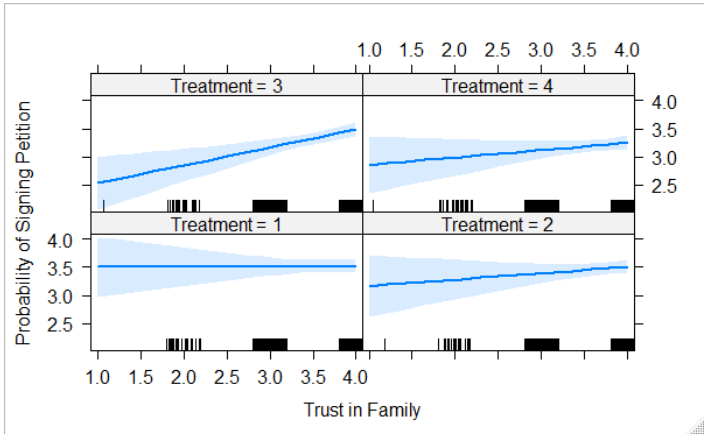
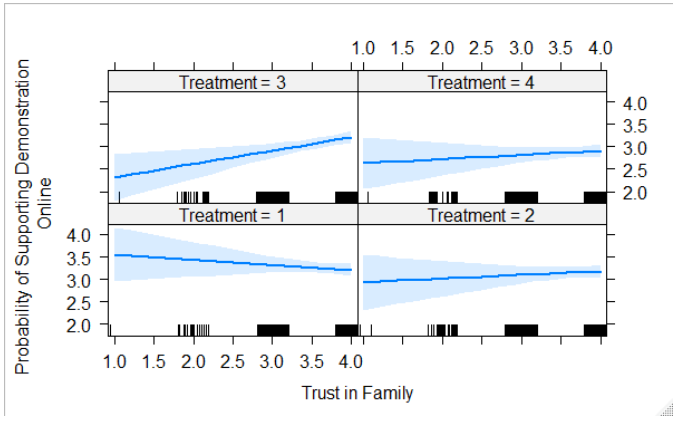
Figure 3. How Political Trust, and Trust in Family Moderate the Relationship between Family and Political Approval and Collective Action Participation

	Joing Demonstrations	Signing Petition	Supporting Demonstration Online
Political Trust			
Trust in Family			

Conclusion

This paper attempts to figure out, of the competing explanations, which moderates the impact of family and political approval on the individual's propensity to participate in collective action. While trust in family, political trust and perceived effectiveness prove to have a significant impact on individual's propensity to participate in collective action, the same cannot be said about the impact of perceived riskiness/ the individual's risk-taking attitude. Of the statistically significant variables, political trust stands out as the variable with the highest magnitude (stronger impact), followed by perceived effectiveness and trust in family comes in the third place. Our research contributes to the existent literature by counting in political approval as part of the contextual variables. Second, it is the first rigorous attempt to probe trust as an underlying mechanism for social and political approval. Third, it provides a future research agenda where scholar can investigate the link between the influence of friends' approval and trust in friends, the same for neighbors, and further examine what happens when a potential participant's network approves while the other disapproves.

One caveat to our work is that the experiment treatments were the first thing a participant sees before they are asked to report on their level of trust in various institutions, in their family, friends…etc. There is a possibility that this might have primed the participants to think about their families, friends, and political authorities. In other words, there is a possibility that participants' reported levels of trust might have been affected by the treatment themselves! Yet, the alternative was asking participants about their levels of trusts before they go into the main treatments, which would have definitely coloured their eyes and affected the reliability of the treatment reponses they provided. It was a trade off and we chose the lesser evil.Though, we are aware of this limitation.

Another point that has been raised by reviewers is related to how family disapproval was justified as an issue-based wording (because they fear for your safety) compared to how authorities' disapproval was presented in a risk-based light. Although we believe they are both different sides of the same risk exposure coin, a number of reviewers commented that this might invite some emotional reaction of love and fear which meddle with the results in an unobserved way. We also acknowledge the legitimacy of such concern, and hopeful other scholars can avoid such a shortcoming.

Finally, questioning what the underlying mechanisms of social and political approval in relation to the propensity to participate in collective action are is a valid question that can be

examined in various contexts. Our expectation is that, in a democratic and modernized contexts, findinings will lead to similar relationships and conclusions as in our U.K sample. Understandably, the relationship between political authorities and citizens, the relationship between citizens and their family ties and the ensued levels of political and social trust, respectively, are almost similar. In short, results can be generalized to similar contexts to the U.K. On the contrary, our results cannot travel to other undemocratic, less modernized or more conservative contexts. For example, in Arab countries, like Egypt, Yemen, Libya and Gulf countries, the nature of the relationship between political authorities and citizens differs teremendously, where levels of government's responsivess to citizens' demands are known to be lower than its counterpart in democratic contexts, and it is given that political action is a risky venture to start with as authorities are ready to deal with protestors and activists with lethal force. Socially, citizens have strong family ties that imply high level of compliance with family figures/elders and ordinary sources of authority. Obedience is readily expected in these contexts. In contexts whose characteristics can be constrasted with the U.K's, our results cannot be generalized and further empirical work needs to be done.

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Appendix I

Survey Experiment and Codebook

EXPERIMENT: Respondents should be randomly allocated to one of the following groups (Treatment I, II, III, IV)

Baseline (To be asked to all participants)

1. In the town where you live, demonstrations are planned for a cause that you strongly agree with. How likely are you to:

Code		4	3	2	1
		Very Likely	Likely	Unlikely	Very Unlikely
Baseline_JoinDemo	a. Join the demonstration	☐	☐	☐	☐
Baseline_Petition	b. Sign a petition	☐	☐	☐	☐
Baseline_OnlineSupport	c. Support the protest online?	☐	☐	☐	☐

Treatment I

1. In the town where you live, demonstrations are planned for a cause that you strongly agree with. Authorities have granted permission for the protests and your family have told you that they agree with the cause.
   How likely are you to:

Code		4	3	2	1
		Very Likely	Likely	Unlikely	Very Unlikely
T1_JoinDemo	a. Join the demonstration?	☐	☐	☐	☐
T1_Petition	b. Sign a petition	☐	☐	☐	☐
T1_OnlineSupport	c. Support the protest online?	☐	☐	☐	☐

Treatment II:

1. In the town where you live, demonstrations are planned for a cause that you strongly agree with. Authorities have granted permission for the protests, but your family have asked you NOT to join the demonstrations because they are worried for your safety.
   How likely are you to:

Code		4	3	2	1
		Very Likely	Likely	Unlikely	Very Unlikely
T2_JoinDemo	a. Join the demonstration?	☐	☐	☐	☐
T2_Petition	b. Sign a petition	☐	☐	☐	☐
T2_OnlineSupport	c. Support the protest online?	☐	☐	☐	☐

Treatment III:

1. In the town where you live, demonstrations are planned for a cause that you strongly agree with. Authorities have NOT granted permission and they plan to stop the protests, but your family have told you that they agree with the cause.
   How likely are you to:

Code		4 Very Likely	3 Likely	2 Unlikely	1 Very Unlikely
T3_JoinDemo	a. Join the demonstration?	☐	☐	☐	☐
T3_Petition	b. Sign a petition?	☐	☐	☐	☐
T3_OnlineSupport	c. Support the protest online?	☐	☐	☐	☐

Treatment IV

1. In the town where you live, demonstrations are planned for a cause that you strongly agree with. Authorities have NOT granted permission and they plan to stop the protests, and your family have asked you NOT to join the demonstrations because they are worried for your safety

Code		4 Very Likely	3 Likely	2 Unlikely	1 Very Unlikely
T4_JoinDemo	a. Join the demonstration?	☐	☐	☐	☐
T4_Petition	b. Sign a petition?	☐	☐	☐	☐
T4_OnlineSupport	c. Support the protest online?	☐	☐	☐	☐

Post- Experiment Survey

IV1: Particularized and Generalized Trust

1. Could you tell me for each whether you trust people from this group completely, somewhat, not very much or not at all?

Codes		**4** Trust Completely	**3** Trust Somewhat	**2** Do not Trust very Much	**1** Do not Trust at all
Trust_Family	a. Your family				
Trust_Neighbors	b. Your neighbours				
Trust_Friends	c. Your Friends				
Trust_FirstTime	d. People you meet for the first time				
Trust_DiffReligion	e. People of another religion				

Trust_Foreigners	f.	People of another nationality

IV2: Political Trust

1. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?

Codes			**4**	**3**	**2**	**1**
			A Great Deal	A Moderate Amount	A Little	Not at All
Trust_ArmedF	a.	The armed forces				
Trust_Media	b.	Media				
Trust_Unions	c.	Labour unions				
Trust_Police	d.	The police				
Trust_Courts	e.	The courts				
Trust_Gov	f.	The government				
Trust_Parties	g.	Political parties				
Trust_Parliament	h.	Parliament				

DV: Collective Action Participation

1. In the past three years, have you ever participated in any of the following protest actions:

Codes			**1**	**0**
			Yes	**No**
Past_Petition	a.	Signed a petition	☐	☐
Past_OnlineSupport	b.	Supported protest online	☐	☐
Past_Demo	c.	Joined a demonstration	☐	☐
Past_Strike	d.	Joined a strike	☐	☐
Past_WritePolitician	e.	Wrote to a politician	☐	☐
Past_WriteNewspap	f.	Sent a letter to newspaper	☐	☐
Past_Boycott	g.	Joined a boycott	☐	☐

2. In the future, can you imagine that you would participate in any of the following protest actions:

Codes			1	0
			Yes	**No**
Future_Petition	h.	Sign a petition	☐	☐
Future_OnlineSupport	i.	Support a protest online	☐	☐
Future_Demo	j.	Join a demonstration	☐	☐
Future_Strike	k.	Join a strike	☐	☐
Future_WritePolitician	l.	Write to a politician	☐	☐
Future_WriteNewspap	m.	Send a letter to newspaper	☐	☐
Future_Boycott	n.	Join a boycott	☐	☐

Demographics

1. How old are you? ……..
2. What is your country of origin? …….
3. How long have you been living in your country of birth? ……**Code:** Living_Countryof Birth

4. Gender: ☐Male ☐Female

5. Do you see yourself as a religious person? **Code:** Religiosity
- ☐A very religious person 3
- ☐Somehow religious. 2
- ☐Not a religious person. 1
- ☐Refuse to answer. 9

6. Education: **Code**: Education
- ☐Primary School (=1)
- ☐Secondary School/High School (=2)
- ☐Postgraduate degree (M.A/Ph.D) (=5)
- ☐ Professional Degree (=3)
- ☐University (=4)
- ☐ Not educated at all (=0)

7. On scale from 1 (far left)-10 (far right), what is your political orientation **Code**: Pol_Orientation

Left ←					→				**Right**
1	2	3	4	5	6	7	8	9	10

8. Generally, do you think joining demonstrations and signing a petition: **Code**: Relation_DemoPet
- ☐Complement each other (they should be together) 1
- ☐Substitute each other (one form is enough) 0

9. Generally, do you think joining demonstrations and supporting a protest online
Code: Relation_DemOnline

☐Complement each other (they should be together) 1

☐Substitute each other (one form is enough) 0

10. Generally, on a scale from 1-5, how effective would you rate:

Code		5	4	3	2	1
		Highly Effective	Very Effective	Moderately Effective	Slightly Effective	Not Effective at All
Effectiveness_Demo	a. Joining a Demonstration					
Effectiveness_Petition	b. Signing a Petition					
Effectiveness_OnlineSupport	c. Supporting a protest online					

11. Generally, on a scale from 1-5, how risky would you rate:

Code		5	4	3	2	1
		Highly Risky	Very Risky	Moderately Risky	Slightly Risky	Not Risky at All
Risky_Demo	a. Joining a Demonstration					
Risky_Petition	b. Signing a Petition					
Risky_OnlineSupport	c. Supporting a protest online					

12. Generally, which of the following forms of protest do you prefer: Code: Preferred_Form

☐Joining Demonstrations 1

☐ Signing Petitions 3

☐Support a protest online 2

☐None of them 0

13. Generally, how likely:

Code		4	3	2	1
		Very Likely	Likely	Unlikely	Very Unlikely
Parachuting	a. You are to do Parachuting				
Upset_wChildren	b. You are to get upset with your child if he/she does not listen to you?				
Break_Traffic	c. You are to cross a red traffic light because you are late, and no pedestrian was crossing the road already.				
Upset_Parents	d. Your parents will be upset when you do not follow their advice				

14. To what extent do you agree with the following sentences:

Codes		**4**	**3**	**2**	**1**
		Strongly Agree	Agree	Disagree	Strongly Disagree
Trust_PoliceJob	a. If I see a crime, I will report it because I am certain the police will take an action				
Trust_CourtsJob	b. When I have a legal conflict, I take it to the court because I am sure courts help the oppressed				
Trust_ParliamentJob	c. I trust parliament generally to represent citizens' demands.				
Trust_GovJob	d. I am confident that the government does it best for the public good.				

Theoretical Expectations

(Without Considering Particularized or Political Trust)

	Treatment I (Encouraging Authorities' and Family's Positions)	Treatment II (Encouraging Authorities' Position, but Discouraging Family Pressure)	Treatment III (Discouraging Authorities Position, but Encouraging Family's)	Treatment IV (Discouraging Family Pressure and Authorities' Position)
Join a demonstration (higher risk form of collective action)	- Higher Likelihood of participating compared to the baseline.	Unsure (Needs another criterion for decision, which is the interaction between political trust and particularized trust)	Unsure (Needs another criterion for decision, which is the interaction between political trust and particularized trust)	Lower likelihood compared to the baseline group (assuming that the respondent is going to join)
Sign a petition (lower risk collective action compared with demonstration)	- Higher Likelihood of signing a petition compared to the baseline.	Unsure (Needs another criterion for decision, which is the interaction between political trust and particularized trust)	Unsure (Needs another criterion for decision, which is the interaction between political trust and particularized trust)	- Higher likelihood compared to the baseline group. - Higher likelihood than the demonstration's likelihood for the same respondent

<u>Summary of the Hypothesis</u>

H1: In the UK, Pr(joining a demonstration) will be
p(D|Treatment I) >= pr(D|Baseline) >= pr(D|Treatment II) >=< p(D|Treatment III) >= p(D|Treatment IV)

H2: In Egypt, Pr(joining a demonstration) will be
p(D|Treatment I) > p(D|Treatment III) > p(D|Baseline) > p(D|Treatment II) > p(D|Treatment IV)

H3: In the UK, the probability of signing a petition will be p(D|Treatment I) >= p(D|Treatment III) > p(D|Treatment II) >= p(D|Treatment IV) >= p(D|Baseline)

H4: In Egypt, the probability of signing a petition will be p(D|Treatment I) > p(D|Baseline) > p(D|Treatment III) > p(D|Treatment II) > p(D|Treatment IV)

Theoretical Expectation for Treatments II and III
(While Considering Levels of Particularized and Political Trust)

It should be noted that:

a. The wording of treatments II and III are all about conflicting inputs with the individual's position:
Treatment II: authorities approve protests (+), family clearly discourages participation (-)
Treatment III: authorities disapprove protests (-), but family encourages participation (+)

To have a clear theoretical expectation, an additional criterion is needed. In this research, we theorize that the interaction between levels of particularized trust, i.e. trust in family, friends and neighbours, and levels of political trust, i.e. confidence in political institutions; can explain the individual's final decision regarding one's participation in collective action.

b. It should be noted that the role ascribed to political trust as well as particularized trust is context dependent:
- In a conservative context like Egypt, family plays a pivotal role in individual's life and it is expected that a son/a daughter to be obedient. Compliance with family position is highly expected.
Under an autocratic regime like Egypt, political abstention has been the norm for long and generally speaking people tend to be too obedient to demonstrate against the regime.
- In a liberal context like the U.K., family position is not expected to be obligatory for the children.
Likewise, under a democratic rule, people tend to participate against the government as they believe in their right to express their demands and they expect the government to be responsive to such demands.

- **Theoretical Expectation for Treatment II**

	High Particularized Trust	Low Particularized Trust
High Pol. Trust	• In U.K sample, this will lead to higher probability for joining the demonstration compared to the baseline group: - High pol. trust means individuals trust the government will be responsive to their demands and they whom live in a democracy consider it is their right to express their opinion and will be inclined to go to demonstrations anyway. - High particularized trust does not necessarily imply that family's clear disapproval will be taken as obligatory by young people. It will NOT reduce the probability of participating in demonstrations. • In Egypt Sample, this leads to equal (at best) or lower probability of joining the demonstration compared to the baseline group. For signing petition, its probability is expected to be higher compared to the baseline group. - High particularized trust means that the individual is more likely to be affected by the family's discouragement; which might outweigh one's inclination to	• In U.K sample, the probability of participating in demonstrations is expected to be at least as high as in the baseline group because individual's decision is expected to be unaffected by levels of particularized trust. • In Egypt sample, the probability of participating in demonstrations is expected to be slightly higher than its counterpart in the baseline group.
Low Pol. Trust	• In U.K sample, this is expected to lead to lower probability of participating in	• In U.K sample, this will lead to lower probability of

	demonstrations compared to the baseline group. - If political trust is low, people will not expect much of their government and the fact that particularized trust is high will amplify the impact of family discouragement. • In Egypt sample, this is expected to lead to, at best, unchanging probability of joining demonstration compared to the baseline group- if not lower probability of participating in demonstrations.	joining demonstrations compared to the baseline group. • In Egypt sample, this is expected to lead to higher probability of joining demonstration compared to the baseline group.

Theoretical Expectations of Treatment III

	High Particularized Trust	Low Particularized Trust
High Pol. Trust	- In the U.K Sample, it will lead to lower probability of joining a demonstration compared to the baseline. - In Egypt Sample, the probability of participation is expected to be at least as in the baseline.	- In the U.K sample, lower levels of joining a demonstration is expected compared to the baseline. - In Egypt sample, the probability of participation is expected to be at least as in the baseline.
Low Pol. Trust	- In the U.K sample, lower probability of participating in demonstration- compared to the baseline- is expected. - In Egypt sample, as levels of political trust goes down, the probability that the person will demonstrate increases compared to the baseline.	- In the U.K, the probability of joining a demonstration is expected to be as in the baseline. - In Egypt sample, the probability of participating in demonstrations is expected to be higher than the baseline.

Appendix 3

INFORMATION SHEET & CONSENT FORM

Institution: University of Essex, U.K.
Authors: Prof. Han Dorussen (PI)
Somaia M. Elsayed
Study Title: Particularized Trust, Political Trust and Collective Action Participation [Working Title]

Ethical Approval: Obtained by the University of Essex's IRB Committee on 12/11/2020 [REF#ETH2021-0029]

The Purpose of the Study:
To investigate the relationship between various forms of trust, to be particularized, political or their interaction, and the individual's decision to participate in forms of collective action.

Your Participation in this survey is voluntary and you are free to withdraw from it at any point you feel like to.

Expected Duration of the Survey: 10 minutes maximum.

Confidentiality: the identifiable data provided will be securely stored and accessible only by both authors and confidentiality will be maintained. Unidentifiable data will be submitted for research/ journal repository as part of the replication files when submitting a paper for publication.

Risk and Harm: No physical or psychological risks are expected of your participation in the survey.

Data Controller: Prof. Han Dorussen

If you have questions about this study, please feel free to contact the PI at: hdorus@essex.ac.uk

University of Essex Director of Research
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STATEMENT BY THE PERSON AGREEING TO PARTICIPATE IN THE SURVEY:
I have read this document and all the information contained in it. I understand my participation is voluntary and I freely and voluntary choose to take part in it. I am free to withdraw from the project at any time without giving any reason and without penalty.
I also understand that any data collected to the point of my withdrawal will be destroyed.

☐Yes, I consent

☐No, I do NOT consent.

A Post-dictive Study to Egyptian Uprising 2011
Can We Retrospectively Expect in Which City It Would Start?

Introduction

No doubt that the Arab uprising in 2011 was a surprise to political science scholars who were unable to predict its occurrence for two reasons. First, with the exception of Egypt that was included in the World Values Survey in 2001 and 2008, none of the Arab countries that witnessed uprisings were included in systematic surveys like the World Values Survey, Arab Barometer and African Barometer till 2010. Second, even with Egypt's datasets, questions on confidence in government and key state institutions like the parliament were not asked. Indeed, data collection in the Arab region was- and still is- constrained by security parameters for fielding surveys where crucial questions usually got excluded from the approved version of the survey or the unsettling political environment makes it risky to send researchers out to field the survey in the first place. In short, data unavailability is the core problem that shall it be solved, research could have been possible.

By inviting machine learning techniques, the article provides a systematic procedure for replacing the data of the unasked questions with proxy questions from the same sample in order to retrospectively predict which cities were of the uprising-igniting one in the Egyptian uprising. The article's main contribution is thus methodological, and technical on how to manage and work with survey data.

Substantively, this article questions the Egyptian uprising and how such level of mass mobilization took place in a number of governorates simultaneously on the same day, but not other governorates? The centrality of one space over the other stems from the unique mechanisms and dynamics that are contained within one space compared to the other. For social movement, geographic proximity gives participants access to material and non-material resources to mobilize. Of the latter, levels of trust matter. As trust is contextually bound, speaking of how spatially contained human interactions vary in terms of trust and what this means for political mobility makes perfect sense. If these cities produced this level of collective action on the same day, then what is the common between these cities that led to this outcome? The present article argues that these cities share the same relational attributes, i.e. low levels of political trust and high level of social trust. Concerned with individual's participation in

collective action, this article contributes to solving the data availability issue by suggesting substitute proxies for two indicators:

a) particularized trust which is defined as trust in family, friends, and
b) Trust in government which is acknowledged as an indispensable indicator to measuring political trust (defined as confidence in political institutions).

The article has, thus, two main parts. ***The first part*** is concerned with survey data management where practical steps are outlined on how to rhetorically substitute unasked question of trust in government and then check on the proxies' reliability. ***In the second part***, data of 2008 is analysed on the individual level to check whether an individual is a resident of one of the Egyptian governorates/cities that witnessed protests on the first day of the Egyptian uprising (henceforth referred to as"Uprising-igniting cities") using the proxied predictors. On the aggregate level, the article examines whether Egypt's Uprising-igniting cities can be predicted by the proposed proxies. Models are fitted by Cox Proportional Hazard technique, and the predictive power of the models are reported in terms of the concordance score.

As the introduction so far charted out what this paper is about, it is equally important to highlight what this paper is not about. It is out of the scope of this article to discuss literature on the relationship between political trust, social trust, or particularized trust…etc, and collective action. There exists a large body of literature on the relationship's strength and direction, but the nexus is evident, and I take it here at face value that political and social trust matter for political mobilization.

Part I: Survey Data Management

Data and Measurement The analysis depends on three waves of World Values Survey (WVS) data on Egypt, wave 4, 5 and 6. Although the dataset is declared by the WVS a longitudinal dataset, three remarks should be noted: a. the collected data is not for the same individual observation every year, b. these waves are not evenly distanced for W4 was fielded in 2001 while W5 was in 2008 and W6 was collected in 2013, and c. the three waves yielded different sample sizes W4 (N=3000), W5 (N= 3051) and W6 (N=1523). So, for accuracy, these datasets should be handled as time-series cross-sectional data.

For the dependent variable, three variables should be created.

The first is collective action participation, participation in signing petition, boycotting, and demonstration were summed up. Then, this was dichotomized into a new vector "Collective_Action_Dich" where any respondent who has participated in at least one form of collective action is coded as 1 otherwise, he/she got a zero.

The second is a dichotomous variable named "Uprising" coded based on whether the reported city of the respondent's interview is one of the Uprising-igniting cities or not. Uprising-igniting cities are the cities that witnessed protests on the first day of the Egyptian uprising- known in media outlets as "the day of wrath", on January25th, 2011. They are nine well-defined cities: Cairo, Dakahlia (with Mansoura is the Capital city), Alexandria, Suez, Port Said, Ismailia, Damietta, Luxor, and Gharbia (with Al-Mahalla Al-Kubra is the capital city). If the respondent is in one of these nine cities, he/she is coded as 1 for uprising and otherwise is coded as 0.

The third dependent variable is "TimetoEvent", entries for this variable came out of the difference between 2011 and the year of the fielded survey. In other words, entries for this variable are 10 and 3, for 2001, and 2008, respectively.

I. Substituting Unanswered Questions for the Independent Variables

- **Step One: Rhetorical Substitution of Questions for the Independent Variable**

The Independent Variables. Three independent variables were considered.

First is political trust, which is usually measured by averaging questions on confidence in political institutions. The three waves included questions on confidence in press, national television, labor unions, and civil services; but questions on confidence in armed forces, the police, the government, political parties, the parliament and election were not asked in either wave 4 or wave 5 or both. Yet, for confidence in government, I used a proxy: Question E115 (Having experts, not the government, making decision). Because of the inclusion of "not the government", the question can be interpreted as if the respondent is evaluating the experts' vs the government's decision making. If the respondent highly endorses the expert's decision making, it can be understood as if the government is not trusted in this sense. In other words, "Having Experts, not the government, making decision" can be rhetorically interpreted as asking "Do not trust *the current* government in making decisions", which makes the connotation of former negatively linked to the former. This rhetorical understanding is

supported by the Pearson r's result for the correlation between both questions in 2013 dataset = (-0.14***). Indeed, there is a negative weak, yet highly significant, correlation between both questions.

Political trust variable was created by averaging 5 questions on confidence in labor unions, civil service, press, television, and government. All these questions got their scale reversed before averaging except for confidence in government decision making question.

The dataset of 2013 includes the conventional indicators of confidence in political institutions. For the sake of comparison, two variables were created in this dataset alone. The first is "PolTrust_AllInd" which is the average of all the indicators on confidence in political institutions, i.e. confidence in government, parliament, police, T.V., the press, labour unions, political parties, and civil service. The second is "PolTrust_withProxy" where "trust in government" is replaced with the proposed proxy of Q.E115.

The second main independent variable is particularized trust, measured as the simple average of trust in family and friends. As the surveys did not include a relevant question for neighbors and because of the possibility of overlap between social circles, neighbors have been excluded from the operationalization of particularized trust. there was a gap in the question of "How much do you trust your parents and relatives" as it was asked in two years only 2008 and 2013. So, I decided to merge it with question (A057: how much time you spend with family?) that was asked on 2001 only. The logic is that the more time you spend with your family, the higher trust you will have for them as literature confirms that trust evolves over time in close relationships (Lazeler and Huston. 1980 & Couch and Johns. 1997). The coding of this question is originally as follows: (1 for weekly, 2 twice a month, 3 few times a year and 4 not at all). It can be considered as highly trust, 2 high trust, 3 little trust and 4 no trust). Thus, this code was reversed.

For trust in friends, there is no complete data for this. What is there is: Question (A058: time spent with friends) covers year 2001 only, and Question (G007_33_B: Trust in People you know personally) covers years 2008 and 2013. I decided to create the time series for trust in friends out of merging these three questions one for each year. The scale for both variables is (0-4) and they got their codes reversed before merging in a new vector named "merged_Trust_Friends". Zero values remained as such until the particularized trust variable is created (because if one has a value for trust in family, but your answer is missing for trust in friends; then when averaging you should get a value...so it is better to leave them until we are

done with averaging the two variables). For the composite variable (particularized trust), it was created by averaging both variables “Trust_Family” and ““merged_Trust_Friends” and if a value is (zero), it is coded as missing (NA).

Before proceeding with the analysis, missing values on political trust variables were omitted and the number of observations for the three waves are as follows: Wave 4 (N=2959), Wave 5 (N=3038) and finally Wave 6 (N=1523).

Table 1. provides a summary to the relevant questions that were either asked or missing in each wave of the WVS; and the proxies that were used.

Table 1. Summary of The Rhetorical Substitution of Questions between Waves

	Independent Variable	**WVS 4 (2001)**	**WVS 5 (2008)**	**WVS 6 (2013)**
Political Trust	Confidence in Institutions	Confidence in: ☒**Government.** √ Labour Unions. √ Political Parties. √ Parliament. √ Civil Service. √ Press √ T.V.	Confidence in: ☒**Government.** √ Labour Unions. √ Political Parties. √ Parliament. √ Civil Service. √ Press √ T.V.	Full Battery of Questions Available and Includes: √ Government. √ Labour Unions. √ Political Parties. √ Parliament. √ Civil Service. √ Press √ T.V.
	Proxy for Confidence in Government should exist in the three datasets	**Proxy Q for "Confidence in Government"** "Having experts, not the government, making decisions"	**Proxy Q for "Confidence in Government"** "Having experts, not the government, making decisions"	**Proxy Q for "Confidence in Government"** "Having experts, not the government, making decisions"
Particularized Trust	Trust in Family	☒How much do you trust your parents?	√ How much do you trust your parents?	√ How much do you trust your parents?
		√ How much time do you spend with family?	☒How much time do you spend with family?	☒How much time do you spend with family?
	Trust in Friends	√ How much time do you spend with friends?	☒How much time do you spend with friends?	☒How much time do you spend with friends?
		☒How much trust do you have in people you personally know?	√ How much trust do you have in people you personally know?	√ How much trust do you have in people you personally know?

- **Step Two: Checking the Reliability of the Proposed Proxies**

It is true that the relationship between the rhetorical interpretation of a given question and the composite indicator the researcher seeks to construct is a necessary condition for its inclusion, but it is not still a sufficient one to base our decision on. Following Ward, Greenhill and Bakke (2010), I argue that how much added value a variable brings to the overall predictive power is more important than its statistical significance, especially if the purpose of the study is prediction or postdiction as in the present article.

Methodologically, the article makes use of logistic regression to systematically test the reliability of the proposed proxies. The analysis starts by using the available data of waves 4 (fielded in 2001) and 5 (fielded in 2008) as training dataset while considers data of wave 6 (fielded in 2013) as test and benchmark dataset. Training dataset is partitioned randomly using (k=5) cross-validation (henceforth abbreviated as "CV"), and leave-one-out cross-validation (henceforth abbreviated as "LOOCV") to run a base-model containing crucial demographic data and for models after adding the two variables of interest. These two techniques assess the in-sample predictive power of the variables. Next is to evaluate the out-of-sample predictive power by using the models fitted on the training dataset to predict values for the same response variable/class (participation in collective action) of the test dataset in 2013. At this first check, the main hypothesis is that *the addition of the variables to the base model contributes to increasing the in-sample predictive power of the model.*

Table 2.Steps of the Reliability Checks

	Role	**Steps**	**Objective**	**Criteria**
WVS 4 (2001)	Training Dataset	1. Fit base model (with demographics only) 2. Fit a base model + variables measured with proxies.	Testing in-sample predictive power of the proxies	The addition of the variables should increase the predictive power of the model compared to the base model.
WVS 5 (2008)				
WVS 6 (2013)	Testing Dataset	3. Using the fitted model with proxies in #2 to test its ability to predict response variables that are not part of the training dataset.	Testing out-of-sample predictive power of the proxies	The use of the proxies enjoys out-of-sample predictive power, at least equal to the in-sample predictive power.

		4. Fitting a model using the conventional battery of questions regarding confidence in institutions and extracting its predictive power. 5. Fitting a model using the proxy question and extracting its predictive power. 6. Compare between the two models' predictive powers.	Testing the in-testing-sample predictive power, but this time within the testing dataset.	The predictive power of the model fitted with proxy variable has, at least, to be equal to its counter part that is fitted with the conventional battery of items.

- ***First Check: The In-Training-Sample Predictive Power of the Proxies***

Speaking of a model's predictive power, no single measure of predictive power can capture the overall picture, and for this the six measures are reported, and results are summarized in table 3. Base model includes demographic indicators of age, gender, marital status, level of education and social class. Applying the extreme case of cross validation, namely LOOCV, shows that the base model has fair ability to correctly predict the true negative values, i.e. specificity. Whilst, it scores extremely low on sensitivity. The Area under the curve (AUC) is 60%, while the overall accuracy of the model is 58%. As for precision, positive predicted value (PPV) is 57% and the conditional probability that the model predicts negative values (NPV) is a little bit higher 59%. After the addition of political trust to the base mode, specificity goes down with 2% while sensitivity increases by 4% and this actually reflects the understandable trade-off between sensitivity and specificity. The AUC increased with 1% only and so do accuracy and NPV. PPV remained the same as with the base model. The added value of particularized trust to the predictive capacity of the base model looms larger than its counterpart of political trust in all the accounts. Compared with the base model, it leads specificity down by 1% only, but drives sensitivity 5% up, increased the AUC by 4%, accuracy by 2%, NPV by 2% and PPV by 1%. It almost has double the impact the addition of political trust only has.

Relaxing the underlying resampling condition of LOOCV and adopting k-fold cross validation(k=5) yields resembling results as those in the LOOCV as summarized in table 3.

Table 3. In-Sample Predictive Power Using LOOCV and K-Fold CV (Using Training Dataset, i.e 2001 and 2008 Datasets)

	Sensitivity	Specificity	AUC	Accuracy	PPV	NPV
LOOCV (Base Model)	0.39	0.74	0.60	0.58	0.57	0.59
LOOCV (with Political Trust)	0.43	0.72	0.61	0.59	0.57	0.60
LOOCV (with Particularized Trust)	0.44	0.73	0.64	0.60	0.58	0.61
LOOCV (with both variables linearly combined)	0.47	0.72	0.64	0.61	0.59	0.61
LOOCV (with both variables' interacting)	0.47	0.72	0.64	0.61	0.59	0.62
CV (*k*=5, Base Model)	0.39	0.75	59	0.58	0.56	0.60
CV (*k*=5, with Political Trust)	0.45	0.70	60	0.59	0.57	0.60
CV (*k*=5, with Particularized Trust)	0.46	0.70	63	0.60	0.57	0.60
CV (*k*=5, with both variables linearly combined)	0.47	0.73	63	0.61	0.59	0.62
CV (*k*=5, with both variables' interaction)	0.47	0.73	63	0.61	0.59	0.61

A linear combination between both variables when added to the base model leads to an increase in the predictive performance of the model compared to adding either of the variables without the other to the base model. Specificity goes down by 2% compared to the base model, while sensitivity rises by 8% (almost double the effect of the addition of either of the variables alone to the base model), the AUC increases by 4% which is similar to the impact of adding particularized trust alone and four-times of the impact of adding political trust alone to the base model. Accuracy triples when contrasted with the base model's, which is two times the impact of the addition of any one of the variables rather than the other. NPV is the same when combined both variables linearly to the base model as with particularized trust only, while it is one unit above what political trust alone offers. PPV shows a general increase compared to the base model and both individual variable's models.

Multiplicative combination of both particularized and political trust when added to the base model shows the same exact results as their linear combination, except for the NPV which scores 1% improvement over their linear combination and 3% compared with the base model's.

- ***Second Check: The Out-of-Training-Sample Predictive Power***

As a robustness check, the predictability of the model should be tested on observations that were not used in the training phase. The logic is that if the addition of the proposed proxied variables increase the predictive power of the model externally as well as internally, then it enjoys a second reason to believe in its credence and reliability. Table 4 shows the results of the out-of-sample predictive power of the same models that were fitted on the training dataset

and summarized in table 1. The accuracy of the models is tested on two thresholds (0.5 and 0.3) and the AUC is also reported.

Table 4. Out of Sample Predictive Power (Using 2013 as a Test Sample)

	Accuracy		AUC
	Threshold= 0.5	*Threshold= 0.3*	
Base Model	0.75	0.54	0.65
with Political Trust	0.80	0.77	0.65
with Particularized Trust	0.81	0.18	0.64
with both variables linearly combined	0.86	0.23	0.64
with both variables' interaction	0.86	0.24	0.64

Findings demonstrate that the addition of variables in the models fitted using 2001 and 2008 as training dataset for predicting values of response variable (Collective_Action_Dich) for 2013 dataset as test data, has the same pattern revealed in the in-sample predictive power tests. So, adding political trust significantly increases the accuracy of the model for predicting unknown observations whether the threshold is set to 0.5 or 0.3, but it does not affect the area under the curve compared to the base model. With the addition of particularized trust, accuracy jumped by 6% compared to the base model when the threshold is 0.5, but when the threshold is 0.3, the model's accuracy suffers tremendous drop from 0.54 to 0.18! The AUC goes down with only 1%. Combining both variables linearly and adding them to the base model improves the predictive performance with 11% compared with the base model's accuracy at 0.5 threshold. When tuning the threshold to 0.3, the model's accuracy drops by half compared with the base model, but AUC remains the same predictive capacity at 64%. Once again, the interaction between particularized trust and political trust and their addition to the base model shows the same predictive capacity as in their additive combination, except that the multiplicative combination increases the accuracy at threshold 0.3; which improves with 1%.

- ***Third Check: In-2013- Sample-Predictive-Power-based Comparison*:**

Thus far, two main conclusions can be drawn. First, the addition of particularized and political trust which are constructed using the proposed proxies improves the predictive performance of the model. Second, adding both variables to the model is better than leaving one out and the interaction between these two variables is slightly better than their additive combination. Still, does this necessarily imply that the proposed proxies can be a substitute for the original indicators? To answer this question, a third check is needed to decide whether the proposed

proxy performs *at least as well as* the conventional indicator. Hence, the in-2013 sample predictive power should be assessed using the conventional indicator and then compared with its counterpart using the proposed proxy. As data for direct indicators that are typically used for measuring confidence in political institutions are available in 2013 data, models are fitted using cross validation and leave-one-out cross validation to obtain its predictive power and then the original indicator is replaced with the proposed proxy and the tests are repeated to obtain the new predictive power measures.

Table 5 sums up the results. At this stage, there is no need to fit a base model, and it will be enough to focus on the variables' linear and interactive combination as it became clear that they should be considered in the same model simultaneously. The results show a complete resemblance between the predictive power of the models when variables are constructed using the conventionally used indicators and its counterpart when the variables are constructed using the proposed proxies.

In sum, I have provided a systematic way of deciding on the proxy- after considering its general interpretation in relation to the index to be constructed- and obtained a solid ground for moving on and using the proxies discussed for retroactively predicting cities where Egyptian uprising started in 2011.

Table 5. A comparison between the in-Sample Predictive Power for 2013 Dataset with the conventional indicator and with the proposed proxy

	Specificity		**Sensitivity**		**AUC**		**Accuracy**		**NPV**		**PPV**	
	Original Indicator	**Proposed Proxy**	**Original Indicator**	**Proposed Proxy**	**Original Indicator**	**Proposed Proxy**	**Original Indicator**	**Proposed Proxy**	**Original Indicator**	**Proposed Proxy**	**Original Indicator**	**Proposed Proxy**
LOOCV (both variables linearly combined)	1.00	0.99	0	0	0.68	0.68	0.89	0.89	0.89	0.89	0	0
LOOCV (with both variables' interacting)	0.99	0.99	0	0	0.68	0.68	0.89	0.89	0.89	0.89	0	0
CV (*k*=5, with both variables linearly combined)	0.99	0.99	0	0	0.68	0.60	0.89	0.89	0.89	0.89	0	0
CV (*k*=5, with both variables' interaction)	0.99	0.99	0	0.01	0.68	0.62	0.89	0.89	0.89	0.89	0	0.20

Part II: The Proxies in Action: Post-diction of Egypt's Uprising-Igniting Cities

- **Theory and Context**

Although the focus of this article is methodological, it is still important to introduce the socio-political underpinning for the linkage between the city, political and particularized trust, and collective action before running the analysis. Literature on how the city is linked to political behaviour can be classified into to streams. ***First*** is about how geographical attributes such as area, location, distance between two cities, and population size are associated with collective action. ***Second*** is the relational approach that explains how relationships that develop within a specific place affect the propensity towards collective action. The present article's inquiry falls under the tent of the latter where "relational attributes' such as trust, loyalty, and duty that facilitate the mobilisation of resources and tighten solidarities". (Nicholls. 2009: 79)

Starting with the city attributes, using 2000 data on U.S. cities, Oliver (2000) studied the relationship between city size and political participation, where the former was measured in population size and the latter included contacting local officials, attending organizational meetings, attending community meetings, and voting in local election. Results show that municipalities with lower population density witness heightened tendencies for civil political engagement. With the increase in population size, individual's perception about their political efficacy declines and their impact on political is negligible, which leads to political abstention from local politics. As well, within smaller communities, close relations with neighbours and local community allows for fluid informational flows and recruitment patterns that encourage political involvement compared to larger communities where networks are loose and no social incentives or pressure for participation exist.

Likewise, the positive relationship between the small city size and political engagement finds support in Lander's (2002) analysis to the relationship between Switzerland's cantons and political participation in local politics, i.e. assembly attendance and voting in local elections, where he argues that "it is precisely in municipalities with fewer than 5000 inhabitants where size effects are stronger". (p. 814) Stein and Dillingham (2004)- on the other hand- concluded that, of all political participation forms, there is a negative and significant relationship between city size, i.e. population density, and protesting only. (as cited in Carr and Taraves. 2014:270-271)

Yet, the same theoretical conclusion work for the difference between metropolitan cities with low population density when compared with their counterparts with high population density. In other words, the relationship between city size and political participation is inconclusive, rendering city size insufficient in itself to explain political participation.

In 2009, Kelleher and Lowery examined the relationship between three institutional traits of a context: jurisdiction size, fragmentation, and concentration; and two forms of political participation: voting and civic organization membership, and their findings contradicts Oliver's regarding the negative association between city size and political participation when conditioned on jurisdiction fragmentation. The analysis supports both small-is-beautiful and large-is-lively hypotheses equally, which renders the relationship between city size and political participation, one more time, inconclusive.

Speaking of formal political participation, Haspel and Knotts (2005) investigated how polls location and distance between one's residence and electoral polls might affect the propensity to turnout. Of their conclusion that the relationship is so evidence that the closer the electoral poll to individual's residence, the more likely they are to show up for participation. The explanation they provided is that the increase in distance is translated into the cost of voting, which rational voters would like to minimize.

On the other hand, relational approach came into the scene to overcome the static nature that was attributed to the city attributes perspective. The underlying argument is that urban protest and mobilization took place within specific territories because of the distinct nature of relations, processes and dynamics that develop in there. In this respect, John Agnew put forward structuration theory to argue that "the central processes in the production and reproduction of social relations and institutions occur through distinct territorial units". (Nicholls. 2009: 79)

In the same direction, Paul Routledge (2003) coined the concept of "converge space" to describe the process of stringing a number of places together through the relational dynamics, and the end result is the emergence of "social movements space" which is an aggregation of a number of places. Implicit to this argument is the presumption that the development of trust is place-dependent, which Routledge admits when he compared between virtual and face-to-face interaction and concluded that, among other things, trust cannot be reduced to technologies of communication. (Routledge. 2003: 339)

The merit of using the word "space", is that it allows for including physical and nonphysical aspects.(Martin. 2015) The latter, as a result, is an invitation to discuss culture, norms, and

rituals within a specific place and how it facilitates bridging relations between members and framing the political cause they are working on achieving (Melucci. 1994: 113-114). Related to this, identity politics emerge to the forefront when considering space-specific recruitment process. Herein, Miller (2000) mentioned how class and gender were the basis for recruitment in France in 1850 and similarly the role of gay bars and clubs in the emergence of gay movement in San Francisco. Relatedly is the concept of "social movement community" that also allows for the inclusion of cultural components (as space), and informal aspects (when compared with organization), but it is also used to indicate the social networks that might exhibit itself in the form of events, campaigns, alliances and coalitions.(Hassan and Staggenborg. 2015)

However, the relational approach faces criticism for the absence of a proper theorization of collective action from geopolitical perspective. Claiming that people in a specific place act in a given way because they share race, identity, culture, or history conceals any individual-based differences within the same place. Charles Tilly (2000) stated that "Spatial dynamics often stand out in descriptions of contentious politics, but rarely play a significant part in analysts' explanations of what is going on, much less in general formulations concerning social movements, industrial conflict, revolutions, democratization, or ethnic struggle." (P. 139) "As a consequence, the approach has difficulty addressing key questions: How is it that diverse actors come and stick together in the face of huge risks and uncertainties? What are the principal mechanisms binding these actors together? How do actors learn and innovate upon their activities? How does group cohesion augment the political power of actors? In what ways do the mechanisms binding actors together introduce new problems for achieving political goals? Thus, the absence of a theory of collective action deprives this approach from addressing how activist networks in particular places can become powerful and cohesive drivers of political change". (Nicholls. 2009: 82).

Add to this, Andretta, Piazza and Subirats (2015) admitted that little research has been conducted on the conditions under which political mobilization occur in a city, which is the focus of the article at hand. They highlighted that there is a difference between studying social movements and urban social movements, and stated that "attempts to identify the mechanisms that connect local political processes with urban mobilization dynamics, by contrast, have been relatively scarce".

Despite this harsh critique, literature still offers some reasons why a specific place is candidate for collective action. A possible explanation is that some places have history of political mobilization which qualify them for present and future political action. Looking at the Egyptian cities we question, they all acted as a hub for resistance during the colonial era. On a second account, interaction within a specific space might constitute a node for social movement space, i.e. a place where social movement can mobilize resources, gain strength, and energize mobility. Hence, the question that should be posed is why these places- besides their shared historical resistance record- qualify for being social movement space. Uprising did not start in vacuum, and the present article is built on a firm believe that levels of trust can serve as an acceptable precondition for political mobilization, especially that it accumulates over a long period of time.

Speaking of developing collective identities, alliances, coalitions and solidarities entails that trust is the main driver of these processes. This article does not question how trust develops in urban setting or what are the factors that affected levels of trust in specific places rather than the other. Instead, it argues that the uprising-igniting-cities share the same relational dynamics and probes the question of which form of trust matters more: is it political trust, particularized trust, or the interaction between them?

Now, turning to Egypt, in January 25, 2011; nine Egyptian governorates, namely: Cairo, Dakahlia (with Mansoura is the Capital city), Alexandria, Suez, Port Said, Ismailia, Damietta, Luxor, and Gharbia (with Al-Mahalla Al-Kubra is the capital city), witnessed simultaneous mass mobilization, which ignited the Egyptian Uprising leading to bringing down Mubarak's regime that was there since 1981. Below is a map locating these uprising-igniting cities.

Figure 1. Map of Egypt's Cities Where Mass Protests Breakout between Jan.25-30, 2011
Source: Aljazeera, https://www.aljazeera.com/news/2011/1/28/mapping-egypts-day-of-wrath
(Downloaded:25. May.2021)

These cities are major urban governorates where movements like April 6th Youth Movement, and Tamarod Grassroot Movement, along with Kefaya ('Enough') expanded their branches and activities since 2004. These governorates vary in their area, population size and distance from Cairo- the Capital and the regime's centre of power; and thus, the question that the current article poses is about the common feature that these governorates/cities share that qualified them to host these movements since 2004 and become a centre for uprising eruption.

Table 6. Background Information of the Uprising Igniting Cities

Governorate	Population Size in 2008	Area (km^2)	Governorate has history of mobilization/resistance against foreign occupation
Alexandria	4195146	2679	Yes
Cairo	8052228	3085	Yes
Dakhlia	5089068	3500	Yes
Damietta	1123734	1029	Yes
Gharbia	4986316	1942	Yes
Giza	6422982	1580	Yes
Ismailia	976312	210	Yes
Luxor	465126	416	Yes
Port Said	580275	1351	Yes
Suez	532622	17840	Yes

Source: based on Egypt's Year Statistics Book 2008, P.(25-23) & (P.57-59). Available on the URL: https://www.capmas.gov.eg/Pages/Publications.aspx?page_id=5104&Year=23602

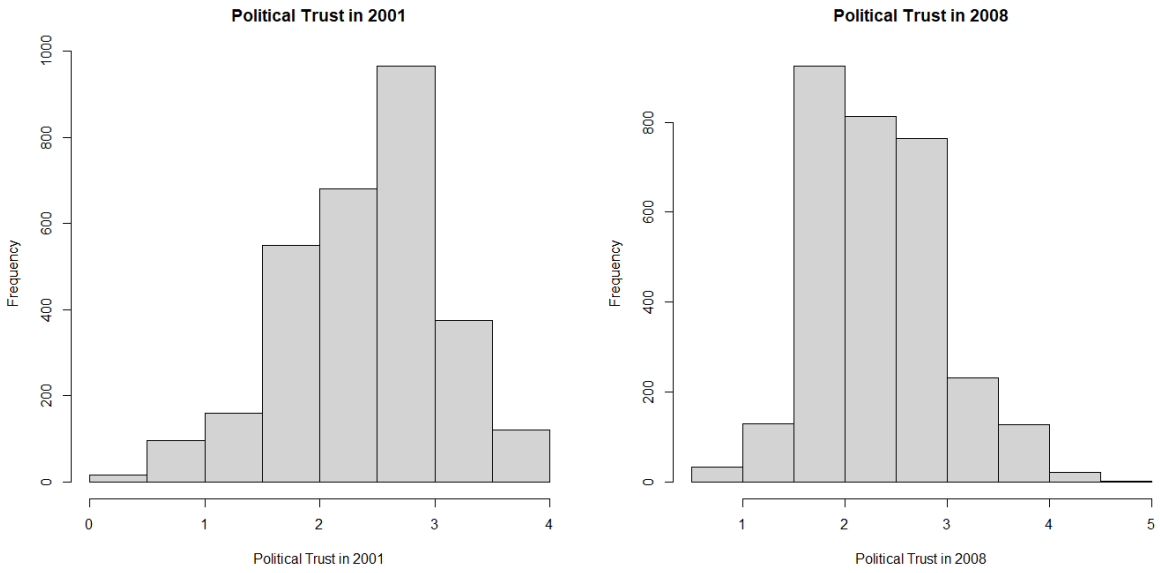

Figure 2: Political Trust in 2001 and 2008, World Values Survey

Although descriptive statistics show that there is a slight decline in average political trust between 2001 to 2008, from 2.44 to 2.3, the visual distribution of the responses around the mean reflects a switch in the direction of data skewness from 2001 to 2008.

a. Characteristics of Residents of Uprising-igniting Cities: Individual Level Analysis

Using dataset of 2008, to carry on this postdictive task, continuous variables like age, particularized trust and political trust were averaged based on the city and the observation's entry was replaced by the city-specific average. This external normalization was evidently necessarily after a number of cox models were fitted and it became evident that the linearity assumption is violated.[38] To tune down the inter-individuals' variation, the value that an individual has for political trust, for instance, was replaced by the average of the city this individual belongs to. In this sense, individuals were clustered into cities and the comparison became intra-cities comparisons. As well, dichotomous (and multi-level categorical variables) variables were centred (and factored and centred) on 0.5 for a reference classification and -0.5 for otherwise.

Models were fitted using event history (as it is called in sociology) or survival analysis (as it is called in biology). It allows for testing the hypothesis for binary outcome event retrospectively. Model is specified using Cox Proportional Hazard model that estimate the effect of the hazard ratio/ the probability of failure/ the non-occurrence of the event. The Cox Proportional Hazard model is based on the independence between survival times (or time to event) of individual observations, which is satisfied given that the data are time-series cross-sectional nature as aforementioned.

The model specification using Cox Proportional Hazard Model is as follows:

$$\text{Hazard}(\text{Being a Resident of an Uprising} - \text{Igniting City}) = \text{h}_{0(\text{Uprising})} \cdot e^{b_{1(age)} + b_{2(gender)} + b_{3(Education\ level)} + b_{4(Marital\ Status)} + b_{5(Social\ Class)} + b_{6(Political\ Trust * Particularized\ Trust)})}$$

Table 7 condenses the results of the fitted models. Model (0) is the base model with demographics where a unit increase in the average of the age of a city's respondents increases the probability of classifying the resident as of a city as non-uprising-igniting city. The increase in a city's inhabitants' ages make it less likely to be a source of uprising. The same interpretation can be extended to the level of education and social classes, but with different magnitudes. What is confusing is the results ascribed to subjective social classes. Numbers show that if individuals report themselves as upper, middle, or even working class in a city, it

[38] These models were fitted after centring the individual's score around the mean (X-Mean), but still the nonlinearity persisted. It disappeared when the city-based average was used.

increases the probability of failing to classify this city as an uprising-igniting city with almost equal large magnitudes.

In model (1), when particularized trust is added to the base model, it shows that a one-unit increase in the average of a city's inhabitants' particularized trust decreases the probability that the individual is of an uprising-igniting city by three times. This entails that the higher level of trust an individual shares with his/her inner circle of family and friends, increases the average of particularized trust in the given city and make it a quiet city. In other words, the thicker relationship individuals develop with each other, the less likely they are to be engaged in collective action forms. This perfectly explains why Egypt's uprising in 2011 took place in urban cities rather than border cities (where tribal traditions prevail) and rural areas, to be in the Delta or Upper Egypt (where kinship and clan-based solidarity overshadow socio-political interactions). In these latter areas, family provides the cornerstone of interaction, decisions, and code of conduct. Furthermore, it acts as the individual's safety net. State institutions cannot impose its rules in these areas. An illustrative example is the revenge family killing tradition that the state did not manage to abolish till the moment. By contrast, urban areas and metropolitan cities like Cairo and Alexandria are more modernized compared to other cities, and individuals are more likely to have expectations from the state. Conservatism, family traditions and solidarity are rooted in the Egyptian society, but it is with lesser degree in urban areas than rural and border cities.

Table 7. Cox Proportional Hazard Models for Uprising-Igniting Cities using Micro-Data

	Dependent variable:				
	Time to Event				
	(0)	(1)	(2)	(3)	(4)
Age (City-specific Mean)	0.58***	0.64***	0.53***	0.54***	0.54***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Gender (centred, male =0.5)	-0.15***	-0.15***	-0.16***	-0.16***	-0.16***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Education Level					
Elementary School	0.11**	-0.01	0.01	-0.01	-0.002
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
University Degree	0.15***	0.04	0.04	0.03	0.03
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Subjective Social Class					
Middle Class	2.30***	2.22***	2.37***	2.35***	2.36***
	(0.58)	(0.58)	(0.58)	(0.58)	(0.58)
Upper Class	2.30***	2.13***	2.33***	2.28***	2.30***
	(0.61)	(0.61)	(0.61)	(0.61)	(0.61)
Working Class	2.46***	2.46***	2.58***	2.56***	2.57***
	(0.58)	(0.58)	(0.58)	(0.58)	(0.58)
Particularized Trust (City-specific Mean)		-3.03***		-0.58**	-3.57
		(0.20)		(0.25)	(2.35)
Political Trust (City-specific Mean)			3.52***	3.21***	-1.13
			(0.17)	(0.22)	(3.39)
Particularized Trust*Political Trust (Both are City-specific Mean)					1.22
					(0.95)
Observations	5,997	5,997	5,997	5,997	5,997
R^2	0.48	0.50	0.51	0.52	0.52
Max. Possible R^2	1.00	1.00	1.00	1.00	1.00
Log Likelihood	-18,411.38	-18,277.79	-18,177.82	-18,175.09	-18,174.26
Wald Test	3,274.03*** (df = 7)	3,220.06*** (df = 8)	4,160.37*** (df = 8)	4,019.04*** (df = 9)	4,066.03*** (df = 10)
LR Test	3,870.89*** (df = 7)	4,138.08*** (df = 8)	4,338.02*** (df = 8)	4,343.48*** (df = 9)	4,345.15*** (df = 10)
Score (Logrank) Test	3,646.37*** (df = 7)	4,292.92*** (df = 8)	4,232.43*** (df = 8)	4,390.94*** (df = 9)	4,402.81*** (df = 10)

Note: *p**p***p<0.01

Model (2) highlights that there is a positive correlation between political trust and the hazard of being an uprising-igniting city. In other words, whenever the average of a city's political trust increases by one unit over time, the probability that residents of this city will be a submissive/obedient/ non-troubling city increases three times and half- which speaks for the longstanding relationship between political trust and legitimacy and regime survival. Model (3) reflects the same patters for both variables, but the magnitude of particularized trust goes down tremendously. Model (4), the interactive combination of both political and particularized trust reasserts the fact that both variables are working in opposite direction to each other, which has been already highlighted in earlier model. However, within this model, this can be detected from the fact that the lower-order coefficients of each variable were flipped in the higher-order interaction term. Another conclusion is related to the higher-order coefficient of the interaction term, which bears a negative sign without any significance. This entails that interaction between both variables reduces the probability of hazard/failure to classify a resident to be of an uprising-igniting city. Thus, one unit increase in the impact of letting particularized trust interact with political trust will produce collective action with 100% probability and residents of that given city might be a source of political mobilization.

Table 8. The Postdictive Power of Fitted Cox Models

	Model (0)	Model (1)	Model (2)	Model (3)	Model (4)
Concordance Score	0.87	0.877	0.888	0.886	0.887

To reiterate, p-value of a correlation serves a different purpose than checking the predictive performance of the model. Table 8 illustrates that, using the proposed proxies for constructing political trust and particularized trust in datasets 2001 and 2008, is able to predict the uprising-igniting cities with accuracy (measured by the concordance- another concept for describing the area under the curve) about 89% , which means the models performs very well. In addition, it shows that the average of a city's political trust in model (2) is the best predictor for the residents' classification as of one of the Uprising-igniting cities. Yet, if one to compare between additive combination or multiplicative, numbers show- once more time- that the difference is so slight, but favours the interaction between models.

b. Postdiction of the Exact Cities: Aggregate Level Analysis

To claim that the proxies used are able to retrospectively determine which cities in Egypt were at the forefront of the Egyptian Uprising on January, 25th, 2011; data were aggregated by

averaging across city and year. In other words, micro-data for 2001 and 2008 were aggregated separately for each variable around the city-specific mean (CSM) with the addition of a new variable indicating "TimetoEvent" and then both year-based datasets were combined in one new dataset "Aggregate Data". The "Aggregate Data" consists of 24 observation (city) and 6 variables: "CSM_Age" for age, "CSM_ParTrust" for city specific mean for particularized trust, "CSM_PolTrust" for political trust, "Year" for the year where the entries are either 2001 or 2008, "TimetoEvent" where the entries are either 10- if it is the mean of 2001- or 3- of it is the mean of 2008), and finally "Uprising" which is a dummy variable to indicate whether the city was one of those Uprising-igniting cities or not with 1 or zero, respectively.

It should be noted that, in this aggregate dataset, some cities have two entries if they were surveyed in 2001 and 2008; while others have only one entry which means they appeared either in 2001 or 2008, but not both. Table 9 summaries the results of Cox Proportional Hazard Models for the aggregated data, while table 7 provides the predictive power of each of these models.

Table 9. Cox Proportional Hazard Models for Uprising-Igniting Cities: Aggregate Level Analysis

	Dependent variable:				
	Time to Event				
	(1)	(2)	(3)	(4)	(5)
Age (City-Specific Mean)	0.19*	0.20*	0.20*	0.18*	0.03
	(0.12)	(0.12)	(0.12)	(0.11)	(0.13)

Particularized Trust (City-Specific Mean)		0.86	0.86	2.48	-90.10*
		(1.99)	(1.99)	(2.43)	(53.29)
Political Trust (City-Specific Mean)				2.81	-134.28*
				(1.99)	(77.97)
Political Trust * Particularized Trust (City-Specific Means)					37.99*
					(21.78)
Observations	24	24	24	24	24
R^2	0.11	0.12	0.12	0.19	0.34
Max. Possible R^2	0.90	0.90	0.90	0.90	0.90
Log Likelihood	-25.90	-25.80	-25.80	-24.74	-22.35
Wald Test	2.72* (df = 1)	2.90 (df = 2)	2.90 (df = 2)	6.12 (df = 3)	7.43 (df = 4)
LR Test	2.78* (df = 1)	2.98 (df = 2)	2.98 (df = 2)	5.09 (df = 3)	9.88** (df = 4)
Score (Logrank) Test	2.76* (df = 1)	2.87 (df = 2)	2.87 (df = 2)	6.14 (df = 3)	9.10* (df = 4)
Note:			*p**p***p<0.01		

Table 10. The Predictive Power of Cox Proportional Models: Aggregate Level Analysis

	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)
Concordance Score	0.603	0.634	0.634	0.802	0.855

Data aggregation and its ensued analysis was essential if we are to answer the question whether a specific city by name can be classified as one of the uprising-igniting cities, which is answers and exact cities where the Uprising started became retroactively predicted with accuracy that is almost 80% in the additive model, and up to 85% if both variables are modelled with interaction, as shown in table (10). Thematical wise, table (9) shows that only results of model (5) where political trust interacts with particularized trust are statistically significant.

The results remain robust to the inclusion of governorate's area, and population size to the analysis. They also stand their ground when running the analysis using (CLogLog) that fits better with skewed data, which is the case with the "time to uprising" variable.

Conclusion

Acknowledging that the predictability of such event has been marred with challenges of data unavailability, this article offers a systematic procedure using machine learning techniques

where datasets are separated into training and testing datasets and used to cross check on the reliability of the proposed proxies. Shall there have been other survey data from different source(s) on Egypt or any other Arab country prior to the uprisings that started in 2011, the author could have proceeded with consistency checks to verify the results. The article's core contribution remains that it showcases- through the tri-tiered checks-how machine learning techniques can be integrated in research methods to manage survey data in a more reliable way and to solve the problem of data unavailability at large. The results may be debatable and questioned, but yet offer a promising start for embedding machine learning techniques to compensate for unavailable data. Further research with practices and cases that highlight how it can be applied in order to develop a better understanding of the opportunities and limitations of embedding machine learning techniques in research methods for various purposes needs to be done. One caveat is that the whole procedure is built on a necessary condition, i.e. there is a question in the survey that can be rhetorically linked to the variable of interest. Unless this condition is satisfied, the systematic procedure with the tri-tiered checks in the second step will be both meaningless and unattainable.

A weakness that should be acknowledged in the analysis is linked to the large standard errors reported in table (9) where the exact uprising-igniting cities are predicted. In this respect, two notes are worth mentioning. First, the reason behind the reported large standard errors is that, after aggregating the individual data by city, the sample size shrinks to N=23; which of course results in large standard errors. Second, as our main concern is the predictive power of the model that has its own measures, the size of the standard error should not be bothersome.

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Thesis Conclusion

Acknowledging that literature is so rich on the linkage between trust and political behavior, the current thesis introduces a neat and systematic way of organizing the existing literature in a way that contributes to a better understanding as to how individuals make their decisions to participate in collective action.

The theoretical underpinning starts by unpacking the concept of "trust" to categorize trust based on the domain and the subject of the concept. Next, the thesis formulates typologies of both social and political trust to relate it to the extent to which individuals might be engaged in collective action. The result is four possible scenarios. In the first scenario, an individual with high political trust and high social trust is definitely going to participate in protests (or counter-

protests), and similarly in the fourth scenario where both levels of trust is low, the individual is a complete apathetic towards politics.

		Political Trust	
Social Trust		High	Low
	High	Sure Participant (I)	Potential Participant/Abstainer (II)
	Low	Potential Participant/Abstainer (III)	Sure Abstainer (IV)

What is interesting about this reformulation is that it assumes that changes in the resultant political behavior is endogenous to the independent variable (trust) and the interaction between both forms of trust, which shrugs spuriousness off the inquiry. And as the study of trust is contextually and culturally bound, it was important to test these relationships in two contexts: democratic and undemocratic one.

The first paper tests and compares two specifications of modeling the relationship between social trusts, political trust, and collective action: additive vs interactive. As well, two main mechanisms are hypothesized: a) amplification effect where both political trust and social trust push in the same direction, and b) substitution effect where one form of trust works in a different direction of the other or discourages the impact of the other. It provides a number of conclusions. First, individually, social trust has a negative impact on the likelihood of participating in collective action, while political trust exhibits a positive impact on the likelihood of participating in collective action. Second, when interaction between both forms of trusts is considered, results are context-dependent: in a less democratic context like Egypt, Libya, and Yemen, the substitution effect expresses itself while in a more democratic context like Tunisia, the amplification effect is so pronounced. State it differently, in a less democratic context, with the increase in levels of particularized trust, when political trust drops below its half, individuals are more likely to participate in collective action. Whilst, in Tunisia, with the increase in particularized trust, individuals are more likely to partake in collective action when political trust scores higher than its half (threshold of 2). Findings of the first paper are limited to the cases the survey data represents.

Yet, the first paper's findings are eye-opening and invite further expansion of the interaction between political and particularized trust. What if the individual receives contradictory input from both domains toward which he/she holds various levels of trust? Will he/she participate in collective action still? Will the individual's compliance with one domain rather than the

other speak to its correspondence level of trust? Or the interaction between both domains' trusts? Or another competing explanation like effectiveness and efficiency? These questions are the core of the second paper which I approached with a survey experiment in the United Kingdom. Results show that trust in parents and political trust are the underlying mechanisms for one's compliance with either family approval or political approval, respectively. In treatments where family and authorities express similar stances, participants responses were in line with the reinforcing effect. However, when family and authorities' stances diverge, political trust explains why individuals tend to follow in authorities' stances.

The main difference between the first and second paper is that the first paper puts trust's typologies at the forefront to be the main driver of individual's behavior, while the second paper examines one of the manifestations through which this driver expresses itself, i.e. family/ authorities approval/ support and moderates individual's participatory decision. This places the inquiry at the heart of social network literature that examine how social interaction encourages or discourages political participation. In addition, while the first paper allows for correlation, the second paper establishes a ground for causality. Yet, these results cannot be generalized to non-democratic or less modernized context and the survey experiment could not be fielded in Egypt as it was planned for security reasons.

In the third paper, I tried to examine whether the interaction between particularized and political trust can have formal correspondence with historical data. Not only is the aim to examine whether the model specification can reproduce a reasonable fit to historically observed data, but also whether the relationship might be spatially contained and can be tested for within sub-national levels. For this, the urban perspective was invited to test whether political and particularized trust are the core relational variables for explaining why the uprising breakout in one place rather than the other. One hinderance to the investigation is lack of survey data. Literature shows that lack of relevant data on political and social trust as key predictors of political unrest is the main challenge over which research attempts stumped. To overcome such a challenge, relevant proxies should be identified and for this, the article puts forward two conditions to constitute a ground for the proxy's reliability: a) the model's in-sample predictive power of the training dataset (2001 and 2008 datasets combined) increases by the addition of the proxy AND the in-sample predictive power is as good as the out-sample predictive power for the test dataset of 2012, b) using the test dataset, proxies has to perform at least as good as

the original indicators, which is tested by contrasting the in-sample predictive power of models with the original indicators with its counterpart using the proxies instead. The paper's second part puts these proxies into action and analyses data of 2008 on the individual and aggregate levels, and successes to predict that the uprising with 80% accuracy for the additive model and 85% using the interaction between particularized trust and political trust.

Although the thesis tries to contribute to understanding the Arab Uprising, lack of data on Arab countries prior to these major events will remain the main weak spot. It is true that I managed to go around this problem using machine learning technique in the third paper, but the same cannot be said for the first paper. World Values Survey (2010-2014) was fielded over four years that witnessed a lot of events that might have affected levels of political trust. Egypt's data were fielded in May 2013 when Muslim Brotherhood (MB) were in power, Egyptians were split over themselves between supporters of MB and opponents and the military decided to overthrow Mohamed Morsi, the MB-backed president, then. Reported levels of political trust are highly expected to be affected by these events. It is not known when exactly the survey was fielded in Yemen and Libya, but both countries witnessed the intervention of foreign troops on their lands and high volatile political environment, which is expected to saturate the reported levels of political trust.