

DOKUZ EYLÜL UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
ECONOMICS PROGRAM
MASTER’S THESIS

MULTIDIMENSIONAL APPROACH TO TRUST:
A CASE STUDY ON TURKISH ECONOMY

Salih KUZUCU

Supervisor
Prof. Dr. Yeşim ÜÇDOĞRUK GÜREL

İZMİR – 2025

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DECLARATION

I hereby declare that this master's thesis/non-thesis master's term project titled as "Multidimensional Approach to Trust: A Case Study on Turkish Economy" has been written by myself in accordance with the academic rules and ethical conduct. I also declare that all materials benefited in this thesis consist of the mentioned resources in the reference list. I verify all these with my honour.

Date

06/03/2025

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Signature



ABSTRACT

Master's Thesis

Multidimensional Approach to Trust: A Case Study on Turkish Economy

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This study investigates, from an interdisciplinary viewpoint, how trust in economic systems becomes measurable and alterable, utilizing Structural Equation Modeling (SEM) on the databases of the, World Values Survey Wave 7, in Türkiye with 2,406 participants. A comparative analysis which assesses three latent constructs espousing self-trust, institutional trust, and interpersonal trust allows this work to depart from theoretical modeling through empirical refinement regarding reconceptualized aspects of trust. Literature recommended 57 indicators reduced into 21 revealing meaningful change: self-trust became more oriented toward social priorities (family, work, leisure) and not moral autonomy; institutional trust placed integrity and glory in democratic values, showing strong covariance with self-trust and interpersonal trust; while interpersonal trust according to varied dual attitudes toward diversities showed very strong negatives loadings for acceptance of immigrants and justification of violence. The findings suggest an integrated system of trust, specific to Türkiye, in which institutional performance, social cohesion, and individual values fortify economic coordination. While some tensions arise in modified modeling due to theoretic richness with a fairly acceptable CFI of 0.821 and RMSEA fit index of 0.072 underscores that trust reduces the accompanying transaction costs, while improving economic resilience to shocks. This reconceptualization may more effectively represent the lived experience of trust in contemporary Turkish culture; nevertheless, additional research is required to validate its generalizability and theoretical implications. To further understanding of

Türkiye's trust dynamics, additional cross-cultural and longitudinal studies are necessary to substantiate the redefined notions and their wider theoretical consequences.

Keywords: Trust, institutions, economic systems, SEM



ÖZET
Yüksek Lisans Tezi
Güvene Çok Boyutlu Yaklaşım: Türkiye Ekonomisi Örneği
Salih KUZUCU

Dokuz Eylül Üniversitesi
Sosyal Bilimler Enstitüsü
İngilizce İktisat Anabilim Dalı
İngilizce İktisat Programı

Bu çalışma, ekonomik sistemlere duyulan güvenin nasıl ölçülebilir ve değiştirilebilir olduğunu disiplinlerarası bir bakış açısıyla incelemektedir. Türkiye'de 2.406 katılımcıyla gerçekleştirilen Dünya Değerler Anketi 7. Dalgası verileri üzerinde Yapısal Eşitlik Modellemesi (SEM) kullanılmıştır. Öz-güven, kurumsal güven ve kişilerarası güven olmak üzere üç örtük yapıyı değerlendiren karşılaştırmalı bir analiz, güvenin yeniden kavramsallaştırılmış yönlerine dair teorik modellemeden ampirik iyileştirmeye olanak sağlamaktadır. Literatürde önerilen 57 gösterge, anlamlı bir değişim ortaya koyarak 21'e indirgenmiştir: Öz-güven, ahlaki özerklikten ziyade sosyal önceliklere (aile, iş, boş zaman) daha fazla yönelmiştir; kurumsal güven, demokratik değerlere bütünlük ve önem atfetmiş, öz-güven ve kişilerarası güven ile güçlü bir kovaryans göstermiştir; kişilerarası güven ise çeşitliliklere karşı farklı tutumlara göre göçmenlerin kabulü ve şiddetin meşrulaştırılması için çok güçlü negatif yüklemeler göstermiştir. Bulgular, Türkiye'ye özgü, kurumsal performans, sosyal uyum ve bireysel değerlerin ekonomik koordinasyonu güçlendirdiği bütünsel bir güven sistemi önermektedir. Teorik zenginlik nedeniyle ampirik modellemede bazı gerilimler ortaya çıkarken, oldukça kabul edilebilir bir CFI değeri olan 0,821 ve RMSEA uyum indeksi olan 0,072, güvenin işlem maliyetlerini azalttığını ve ekonomik şoklara karşı dayanıklılığı artırdığını vurgulamaktadır. Bu yeniden kavramsallaştırma, çağdaş Türk kültüründe güvenin yaşanan deneyimini daha etkili bir şekilde temsil edebilir; bununla birlikte, genellenabilirliğini ve teorik etkilerini doğrulamak için ek araştırmalar gereklidir. Türkiye'nin güven

dinamiklerini daha iyi anlamak için, yeniden tanımlanan kavramları ve bunların daha geniş teorik yansımalarını desteklemek amacıyla ek kültürler arası ve boylamsal çalışmalara ihtiyaç vardır.

Anahtar Kelimeler: Sosyal güven, ekonomik sistemler, kurumlar, yapısal eşitlik modeli



**MULTIDIMENSIONAL APPROACH TO TRUST:
A CASE STUDY ON TURKISH ECONOMY**

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ABBREVIATIONS

SEM	Structural Equation Model
WVS	World Values Survey
RMSEA	Root Mean Square Error of Approximation



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INTRODUCTION

Trust and cooperation are among the core principles in social and behavioral sciences, for which there is more than five decades of theoretical construction and empirical studies (Balliet & Van, 2013:1091). Trust is multi-faceted, and its different forms exist within many fields, each shedding light on its significance in human relations and the progress of civilization in its own way.

The study of trust begins at the individual level, where psychological research identifies it as a cornerstone of human development (Erikson, 1950). Trust is a basic need that is fulfilled from a caring mother, and emerges during the early stages of life and continues to evolve during new relationships and through varying stages of development. Klein (1975) argued that the absence or disruption of the trust during these important times establishes the basis for a host of serious mental illnesses. Therefore, it has long been established that trust plays an integral role on individual wellbeing.

Moving beyond individual psychology, sociological and political science perspectives illuminate trust's broader societal implications. Trust has been noted as the backbone to certain forms of social capital, and it enhances political participation, civic engagement, and social integration (Coleman, 1988:101; Putnam, 1993:102). But this social dynamic is rather problematic: trust as one of the means to keep the upper classes privileged and higher social strata, fostering and using these trust levels for their social supremacy may increase social disparity (Bourdieu, 1986:242).

The information from the economist point of view adds onto what we already know as it contextualizes trust at the individual and institutional levels. Trust is shown to be an essential factor in economic development by Zak & Knack (2001: 298) and testable theories are designed which seek to explain decisions of people using games' theory while paying attention to the cost of trusting and distrustful relationships in economic activities. This helps explain how trust affects the strategies and preferences of actors in market economies.

Borum (2010)'s approach enables to develop a more comprehensive understanding of trust through its triadic formulation as related to the trustor, current activity being undertaken and expectations of the trustee. This approach states how

trust is defined and how trust attitudes are derived from one's personality and core beliefs which are formed in a particular society. It also accounts for how perceptions of risk and willingness to engage in opportunistic behavior can make one less trusting, and most importantly serves as a link between various fields.

Building on this interdisciplinary foundation, our research examines the quantitative measurement of trust within the context of self, interpersonal, institutional characteristics. Using data from the World Values Survey Wave 7 and focusing on Türkiye as a case study, we investigate whether trust can be measured through other human values. Our research specifically examines three latent components of trust: self-trust, interpersonal trust, and institutional trust, offering a comprehensive approach that bridges theoretical understanding with practical measurement.

This study aims to create several unique contributions to the existing literature. First, implementing an innovative measurement approach by synthesizing multiple human values to quantify trust, with interdisciplinary perspective. Second, our methodology uniquely combines self, interpersonal, and institutional dimensions of trust, providing a more comprehensive measurement framework than previous single-dimension approaches. The significance of this research extends beyond academic contributions, as understanding trust mechanisms becomes crucial for policy design, welfare enhancement, and economic development (Zak & Knack, 2001: 298). Furthermore, our findings could inform strategies for building trust in social systems, particularly in developing economies where trust barriers often hinder social cohesion (Putnam, 1993: 102). As trust operates simultaneously as a social and economic mechanism, its measurement presents unique challenges, particularly when comparing trust levels across different cultural contexts. Following examination synthesizes diverse perspectives on trust, bridging theoretical foundations with tangible economic outcomes while acknowledging the cultural and institutional variables that shape trust's manifestation in various societies (Bourdieu, 1986: 242; Nooteboom, 2007: 37).

Trust emerges as a foundational element in economic systems, underpinning cooperation, reducing transaction costs, and enabling efficient exchanges in contexts marked by uncertainty and asymmetric information (Zanini & Musante, 2013; Tonkiss, 2009). The literature establishes trust as a multifaceted construct shaped by

institutional maturity (Giordano & Kostova, 2003), legal frameworks (Brenkert, 1998; Jiang et al., 2011), societal norms (Fukuyama, 1996), and interpersonal dynamics (De Ruijter et al., 2003; Burks et al., 2003). It highlights how trust facilitates problem-solving, lowers the need for punitive safeguards (Tonkiss, 2009), and fosters collaboration across households, businesses, and institutions. Theoretical perspectives—from Fukuyama’s (1996) distinction between high- and low-trust societies to Alesina and La Ferrara’s (2002) analysis of trust determinants—underscore trust’s role in mitigating risks, enhancing decision-making (Zuckerman, 2021), and driving collective economic outcomes. Key themes include the gendered distribution of trust within households (De Ruijter et al., 2003; Burks et al., 2003), the interplay between trust and inflation expectations (Jiang et al., 2011; Zuckerman, 2021), and the ethical imperatives of trust in organizational practices (Brenkert, 1998). This sets the stage for examining trust not merely as an abstract value but as a critical social capital that directly influences economic efficiency, stability, and growth (Whiteley, 2000).

The thesis is structured systematically: Chapter One explores the theoretical foundations of trust and presents empirical findings on human values and trust relations from the literature. Chapter Two details our methodology and empirical findings, followed by a conclusion synthesizing the model’s results. Throughout our analysis, we address the fundamental question: Can trust be effectively measured through the convergence of its latent components (self-trust, interpersonal trust, and institutional trust) using indirect indicators? This question emerges naturally from our theoretical framework and guides our empirical investigation.

CHAPTER ONE

TRUST IN ECONOMY

Understanding trust's role in economics requires first establishing a clear conceptual framework of what trust means across different disciplines. The following chapter examines key theoretical perspectives that help to build this foundation.

Trust serves as the basis for the formation and nurturing of interpersonal relations. Trust can facilitate the promotion of enduring s by reinforcing rules which encourage cooperation and enabling the integration of new members into existing social networks. It is true that trust knows no bounds when it comes to social relations. Trust is a central element in explaining the entirety of social phenomena, which includes the socio- biocognitive and socio-affective at the individual level, behavior in social dyads, group behavior, intergroup behavior, and the behavior of institutions and markets (Balliet & Van Lange, 2013:1090). This is the reason trust has garnered the interests of researchers from the biological and social sciences. From the perspective of this interdependence trust and, specifically the positive correlation between trust and their own cooperative behavior is, indeed, a complex fully.

The findings support the fact that trust, whose existence is limited to such great circumstances, should be valued more in social interactions and relationships, while some theoretical and social aspects are broad remains (Balliet & Van Lange, 2013:1090).

The multidimensionality of trust from a person's psychology to that of institutions raises the question of how various areas of study look at and deal with trust (Erikson, 1950; Coleman,1988:97; Putnam, 1995:64). Trust, as we shall see below, functions at various levels, from peripheral self-trust to center trust, and is one of the key ingredients in the functioning of economic systems.

The chapter goes on to describe three specific but related aspects of trust. The first is self-trust as the building block of personal economic decision making and behavior (Rotenberg, 1994: 168: 72). Next is interpersonal trust, which enables trade and other forms of market exchanges while minimizing market risk (Newcomb & Bagwell, 1995: 306). Last is the trust placed on institutions which serves as a basis for

seeking economic collaboration and ensures the steadiness of the market (Nooteboom, 2007: 37).

These dimensions of trust influence multiple areas of economic success through different channels of influence. Trust lowers transaction costs, increases efficiency in the market, and promotes economic growth as a result of better coordination and collaboration (Zanini & Musante, 2013: 490; Tonkiss, 2009: 199). These channels of influence need to be well established which requires thorough evaluation and analysis.

The chapter then moves on to the specific problems arising from trust in an economic system. It is known that trust affects inflation predictions (Zuckerman, 2021), influences the course of business (Brenkert, 1998: 197) and household actions (De Ruijter et al., 2003: 474). As Bjornskov (2021) reported, trust encourages the development of efficient institutions and better educational achievement, which enhances economic growth. Trust, however, can be a positive factor, but the absence of trust can lead to negative implications in situations, such as reducing the stability of an economy and increasing transaction costs (Giordano & Kostova, 2003: 90).

As trust is a key sub-component of economic activity, the accurate estimation of trust becomes paramount for both academic and public policy (Glaeser et al., 2000:842). Measurement of Public Trust estimates, as other social phenomena, rests on some basic assumptions that define the phenomena.

The chapter ends with measurement issues and methodological approaches to the analysis of trust. The radius of trust concept aids in explaining how cultural differences affect trust (Delhey et al., 2011: 798), while other tools have been designed to test trust in various societies (Van Hoorn, 2014: 1258). These measurement approaches currently help in defining, capturing, and statistically estimating trust in analysis of economic systems competitiveness.

The focus of this study is how trust matters in social contexts, which paves the way for the empirical analysis to examine relationships between trust of different genres through structural equation modeling with data from the World Values Survey.

1.1. WHAT IS TRUST?

Trust is an important component of relationships and social interactions that is somehow both fundamental and also a complex notion. Trust can be described as an expectation of vulnerable situations that are supposed to lead to desirable outcomes. However, its definition differs among different disciplines and theories.

In the field of social psychology, trust is often referred to as the potential risk an individual is ready to undertake regarding interpersonal relations. In their work, Evans and Krueger (2009: 1014) define trust as a level of risk that is taken in the hope of a positive outcome. From this viewpoint, the ability of an individual to manage harm and unpredictability is very important. Trust, on the other hand, is the Pavlovian response one's mind accepts when circumstances favor promising actions from others (Dunn & Schweitzer, 2005: 737). There is a great deal of emphasis on optimism concerning the behavior and intentions of other people and the balance against vulnerability.

Also, Erikson (1950) takes a developmental view of trust as an infant's dependence on a care giver to fulfill their needs as a building block of relationships and having a positive view of the world. It is a prominent psychological concept of trust that is developed in the earliest stages of life and influences the person's patterns of relationships and overall perspective.

According to political science, Uslander (2002) claims that trust is a moral duty that arises because it is assumed normatively that other people are trustworthy. Widening the definition of trust places attention on social and cultural ethical values instead of personal experiences.

Trust also encapsulates deeper philosophical undertones; for example, Baier's (1986: 232) description of trust as an accepted vulnerability of the lack of goodwill delves into the continuous risk individuals accept in the face of a lack of expectation. In this instance, the emphasis shifts towards the dynamics of interpersonal relationships.

When considering trust, economists pay more attention to systemic and relational aspects. Trust is defined by Nooteboom (2007: 44) as a form of awareness of relational risk merged with the expectation that negative consequences will not happen. Fukuyama (1996) further develops this understanding of trust, defining it as

active expectation of ‘good behavior’ accompanied by a necessary adherence to common rules within a community. His definition positions trust within the set of social and economic systems, particularizing the problem of trust circa collective action.

Table 1: Definition of Trust In Different Disciplines

Author(s)	Definition	Discipline
Evans and Krueger (2009:1003)	Acceptance of risk because person believe he can cope with negative outcomes	Social Psychology
Uslaner (2002)	Moral obligation to assume that others are trustworthy	Political Science
Baier (1986:232)	Accepted vulnerability to another’s possible not expected lack of good will to him	Philosophy
Dunn and Schweitzer (2005: 736)	Acceptance of vulnerability in response to favorable expectancies on another's actions	Social Psychology
Erikson (1950)	Parent’s ability to fulfill an infant's needs, forming the basis for healthy relationships and a positive view of the world.	Social Psychology
Nooteboom (2007: 37)	A consciousness of relational risk paired with a belief that no harm will take place	Economics
Fukuyama (1996)	An expectation that emerges within a community characterized by consistent, transparent, and collaborative conduct, rooted in collectively maintained norms	Economics

Source: This table is created by the author based on data from Evans and Krueger (2009:1003), Uslaner (2002), Baier (1986: 232), Dunn and Schweitzer (2005: 736), Erikson (1950), Nooteboom (2007: 37), Fukuyama (1996)

Every definition adds on to one's formulation of a trust with a deeper meaning. Social psychology takes an individually and developmental view of the phenomenon whereas political science and philosophy gives more focus to the ethical and relational dimension. Economics brings in the concept of trust into a systemic and collective level. These structural variations notwithstanding, there are some commonalities regarding themes such as vulnerability, expectations, and relations.

By synthesizing these perspectives, trust can be broadly understood as an acceptance of vulnerability predicated on the belief in the reliability, goodwill, or ethical conduct of others. This conceptual unity not only bridges disciplinary boundaries but also provides a robust framework for examining trust in diverse contexts, from interpersonal relationships to societal structures.

Baier (1986) states reliance vs. trust note that reliance often precedes trust. In other words, to trust someone, we must first rely on them. This view is challenged by Licht and Brülde (2021: 1992), trust and reliance are explained as distinct concepts and results that trust encompasses beliefs and expectations of future behavior, while reliance depends on someone's actions. Trust is a specific form of reliance, which they describe it is the neutral core of trust. Their accountability view of trust means trusting others and expecting accountability. In this view, we rely on someone when they have the competence, motivation, and opportunity to complete a task. Most of the time, we believe they are normatively responsible for the object of trust and blame them if they fail. Reliance refers to acting on the assumption that something or someone will behave in a certain way, and it can occur without conscious awareness, moral expectations, or belief (Uslaner, 2002).

Goldberg (2020: 101) differentiates reliance from trust, noting that reliance is a neutral idea that does not inherently include moral or epistemic expectations. Reliance can happen without being consciously aware, having moral expectations, or holding beliefs, and it does not suggest a claim to resentment if that dependence is unmet. Trust, conversely, entails a more intricate type of reliance that weaves together moral and epistemic aspects. The second-personal reliance account of trust highlights the normative connection between the trustor (X) and the trustee (Y), where X depends on Y to behave in a specific manner and expects Y to meet certain moral standards. Trust is set apart from simple reliance by the right to anticipate that Y will behave in

line with these standards. He delves into the concept of epistemic entitlement to trust, focusing on the rationale behind believing that Y will behave as anticipated. Trust may stem from observable patterns in an individual's previous actions, skills, or integrity, yet it can also arise from pragmatic considerations, like the desire to preserve a connection, even in the absence of strong rational foundations. This introduces the idea of therapeutic or aspirational trust, where an individual's trust in another can foster trustworthy actions, creating additional epistemic reasons to maintain that trust.

Thompson (2017: 646) presents a thought-provoking challenge to the conventional perspective that trust must involve reliance, proposing instead that trust can exist without direct reliance. This conceptual shift expands our comprehension of trust, moving beyond mere reliance to encompass expectations and beliefs regarding the actions of others.

Gunnthorsdottir et al. (2002: 54) use the Machiavellianism scale (Mach-IV) to study how personality influences behavior in trust-based games. They discover that, while Machiavellianism does not predict trustworthiness, it does predict reciprocity. Individuals with high Machiavellian traits are more likely to defect when the opportunity arises, whereas those with lower scores tend to reciprocate trust. In addition, the authors use trustworthiness and reciprocity interchangeably.

Isoni and Sugden (2019: 221) discuss the concept of paradox of trust by arguing that traditional models of reciprocity based on kindness are insufficient for explaining trust in the trust game. They argue that reciprocal cooperation, which motivates people to engage in mutually beneficial practices in exchange for others doing the same, is a better way to understand trust. This theory addresses the paradox of trust by emphasizing cooperation over simple kindness.

O'Hara (2012) provides a conceptual analysis of trust, connecting it to beliefs about other people's trustworthiness. He emphasizes that trust and trustworthiness are subjective and context-dependent and investigates how trust evolves through interactions. He defines trust as a belief in someone's trustworthiness. In other words, to trust someone/something is to believe that he/she/it is trustworthy.

Berg et al. (1995: 122) created an investment game experiment in which they eliminated any extraneous influences on pure trust behavior. This is because the researchers controlled factors such as reputation effects, contractual precommitments,

and punishment threats so as to isolate pure trust behavior. Their research therefore led to two major findings characterized by: first, that trust and reciprocity are basic components of human behavior even in anonymous one-time interactions; secondly, giving social history information about previous games caused consistent patterns in the relationship between trust and reciprocity. Thus a closer look into the social history treatment revealed stronger correlations between amounts sent by investors and amounts returned by trustees implying that knowledge on others' prior decisions affects how such behaviors of faithfulness or reciprocation manifest themselves in economic transactions.

The dynamics of trust and reliance are particularly important. Second-personal reliance account contributing a great deal to how reliance is socially constructed and moral and epistemic expectations affect ensuing trust relations. with (Goldberg, 2020: 98). The inclusion of social history and context as carried out by Berg et al. (1995: 122) in their investment game experiments suggests that trust behaviors may not be static, but instead, sensitive to cues in the environment and actions taken previously. This pliability of trust mechanisms in addition to the concept of reciprocal cooperation given by Isoni and Sugden (2019: 224) show that trust is a psychological phenomenon that can be considered a static social system and a social structure, simultaneously, that undergoes change due to integration processes over time within and among members of specific communities.

Glaeser et al. (2000: 841) conducted groundbreaking research combining experiments and surveys to examine trust and trustworthiness as components of social capital. Their findings reveal a crucial disconnect: while standard survey questions fail to predict trusting behavior, they effectively predict trustworthiness. The authors demonstrate that trust manifests as a stable individual characteristic best measured through past behaviors rather than attitudinal questions, including the widely-used General Social Survey's trust question. They discovered a nuanced relationship between social connections and trust - while closer social ties increase both trust and trustworthiness, racial and national differences significantly reduce trustworthy behavior. The study also introduces the novel concept of individual social capital that showing how personal characteristics like family status and social skills enable some individuals to elicit more trustworthy behavior from others.

This chapter has established that trust is more of a complex construct that goes beyond straightforward explanations and academic boundaries. The different theoretical angles that have been considered have shown trust as both a personal trait and a public activity, which forms part of our understanding of the functioning of trust in social relationships.

The different disciplines tackle the issue of trust from slightly differing angles but in a complementary manner. From the social psychological model of risk acceptance and vulnerability (Evans & Krueger, 2009:1003) from an economic interest in relational risk and collective norms (Nooteboom, 2007: 37; Fukuyama, 1996), to philosophical treatment of moral issues (Baier, 1986: 231), all provide different useful insights. Political science adds another dimension starting from Uslaner's (2002) description of trust as moral belief in other people. Developmental psychology, through Erikson's (1950) model, anchors trust in early childhood.

One of the main theoretical advances in trust research is the distinction made between trust and reliance. It has been discussed by de Licht and Brülde (2021: 1997) that even though reliance can be seen as a precursor to trust, trust itself has a wider scope that incorporates moral and epistemic features that exceed mental reliance. This distinction is useful in understanding why a certain relationships endure even when rational analysis would not suggest such outcomes.

The empirical studies have provided strong support for the importance of trust in an individual's behavior. The investment game experiments described in Berg et al. (1995: 142) evidence that trust and reciprocity occur even in anonymous, one-off, interactions. Further, Machiavellianism is researched by Gunnthorsdottir et al. (2002: 54) revealed more intricate relations between individual differences and trust behaviors, especially regarding the issue of reciprocity fostered rather than trustworthiness.

Through the combination of experimental methods with social surveys, Glaeser et al. (2000: 811) are the ones who introduced this analytical approach and significantly contributed to the understanding of trust as a social capital. Their argument that trust is better measured through behavioral observation rather than attitudinal surveys has very valuable implications for the future direction of research. In addition, this work of Glaeser and his colleagues properly identifies the importance

of social capital for both trust and trustworthiness whilst recognizing the moderating effect of demographic characteristics.

Trust as a phenomenon is something that can be studied from various angles such as psychological and sociological. As research in this domain deepens, it may be helpful to examine trust with these different approaches in mind. The assumption that trust can develop and morph over time depending on a multitude of environmental factors indicates that future research must also investigate the trust formation process which would focus on context-specific stimuli.

The analysis of the psychological and behavioral dynamics of trust can benefit by the integration of trust modeling from political science and sociology paradigms. This most recent form of work stipulates that even the most basic and apparent social relationships call for additional scrutiny in their formation and nurturance. Addressing the multi-faceted nature of trust would require sophisticated measures at the personal, social, and institutional levels. This is necessary so as to determine the underlying reason for the collapse and erosion of trust on a mass scale.

1.2. TYPES OF TRUST

Meta-analysis performed by Balliet and Van Lange (2013: 1092) gives essential information concerning the nature of trust in a social context and in cooperation. Their analysis established that institutional trust (situation-specific expectations) has a high correlation with cooperation, while dispositional trust (general tendency to trust) maintains a lower positive correlation. They deduce cooperation becomes more important than competition in conflict of self interests and collective interests, underlying their interdependence perspective of trust's influence versus conflict in cooperation situations. It is shown, then, that trust is not only to predict others' behavior, it is characterized by the expectation of participation of other parties' motives during conflicts of interests. This illustrates why trust is more important in multi-interests situations than in unified interest situations. More interestingly, they reveal what they refer to as the 'paradox of trust' – that in the context of a high conflict, trust is most needed, but most highly conflicted, a conclusion that has important

ramifications on how trust is viewed in relations, organizations and societies, especially in relation to conflict between single interests and shared interests.

The radius of trust means the number of people the circle of people trust or the width of it, which is a separate dimension from trust level (Fukuyama, 1996; Delhey et al., 2011: 171). While trust level means intensity of trust, the radius shows the persons with whom one is willing to cooperate, and this influences the scope of productive social exchange in society (van Hoorn, 2014: 1258). The trust radius differs across cultures as Delhey et al. (2011: 797) illustrates where it can be narrow, i.e. confined to family or close friends and wide which goes beyond family to strangers and out group, with great consequences for civic participation as well as social capital. Trust radius varies from culture to culture when people are asked what 'most people' means in regard to trust because some societies intend in-groups and others out-groups instead (Delhey et al., 2011: 801). In modernized and Protestant societies, this radius turns out to be wider as compared to collectivist cultures like Confucian societies where it is actually more narrower (Van Hoorn, 2014: 1257). The biggest reason understanding the radius of trust is so important is that it is possible for two competing societies to have similar trust levels and perform very different based solely on in or out groups (Fukuyama, 1996; Van Hoorn, 2014: 1257).

According to Delhey et al. (2011: 801), in the course of their research based on the World Values Survey, it can be seen that the term most people in the conventional trust question is interpreted in varied ways in different countries. In numerous nations, respondents imagine most people to be those who are not members of their primary social circle, that is, out-groups. They also noted that 'the richer nations tend to exhibit a wider trust radius than eastern nations which suggests that generalized trust is affected by socio-cultural factors to a large extent. Their method provides a clearer picture of civic attitudes by considering variation in trust radius which will otherwise not be accurate because such nations would assume to have lower levels of generalized trust. According to Uslaner (2002), for instance, generalized trust refers to a type of moralistic trust in unspecified others, which has its root in an optimistic worldview and confidence in the benevolence of general members of society.

The understanding of social capital has been studied by three key theorists who look at social relationships and the value that those relationships create at different

domains in the society. Bourdieu (1986: 243) considered social capital as resources which can be mobilized through social relationships over time stressing on the impact it has over sustaining the class system and the power relations. Coleman (1988:104) defined social capital from the perspective of rational choice theory describing it as elements of social structure that facilitate certain actions within that structure with emphasis on the role of trust, obligations between people, and the flow of information in networks. Putnam (1995: 64) expanded the concept to focus on its community level effects, and studied the consequences of social organization factors such as trust, common norms, and networks on the effectiveness of coordinated actions in society.

These three viewpoints have different focus areas of social analysis: Bourdieu (1986: 243) looks at people and class, Coleman (1988:103) focuses on people and families, and Putnam (1995: 64) studies community and regional aspects. Together, however, these views confirm that social capital is a complex phenomenon which serves simultaneously three different purposes: it is a means of social structures duplication, it is a force that enables people to act within given social arrangements and it is a base for social wellbeing.

The boundaries of social capital cannot be created without consideration of the social structures (networks and institutions) and cultural factors (trust and social norms), while bearing in mind the social power relations that affect people's access and use of social capital resources (Putnam, 1995: 66).

1.2.1. Self-Trust

Self-trust emerges as the key factor in building confident relationships with others as he or she gains trust in oneself first. Castelfranchi and Falcone (2010) note that trust is a product that incorporates cognitive and social processes and describe the processes of self-trust and the setting of values and patterns of behavior which the person will follow. In their work, they examine trust under few statements. Their first statement is that at the core of self-trust is the cognitive life of the person, one is able to have goals and beliefs, following statement is that these mental activities at the top begin with self-trust which underpins everything that individual does. In their seventh statement, self-trust is so powerful that it leads a person to engage in comprehensively

trusting traits alongside the possibility of having positive expectations toward outcome of actions (Falcone and Castelfranchi, 2001: 85).

The connection between self-trust and interpersonal trust is not so clear cut, however. Rotenberg (1994) found that people who feel lonely tend to trust other people less as well as trust the trust other people have in them, even when the feedback from their close peers does not support this perception. This implies that an individual's belief in oneself, referred to as self-trust, is susceptible to influences allayed within social interactions and emotions, demonstrating the intricacy between social and cognitive processes in trust-building.

In peer, and especially friendship, relationships, people learn and develop important trust-related traits such as trust, valuing, and loyalty (Rotenberg, 1994: 168: 72). These traits are results of increased reciprocity and cooperation brought about by new friendships, as suggested by Newcomb and Bagwell (1995: 306). Because such relationships are internalized, they enhance an individual's self-trust due to the fact that they learn how to be dependable in social relationships.

The relationship of self-trust and trust is further examined by Ben-Ner and Halldorsson (2010:65), who explore the relationship between trust and trustworthiness through a trust game. While the game casts light on an aspect of trust, the authors mention that it is insufficient to reflect the entire nature of trust because there are moral and societal dimensions to it. They also point out that personality characteristics such as agreeableness provide an estimation of trustworthiness in the case of trusters willing to invest (Ben-Ner & Halldorsson, 2010:68). Consequently, this finding at the same time illustrates the significance of self trust on the trustworthiness of a person since those who have high self trust are more likely to perform acts that can enhance trust in others.

In summary, self-trust is very important in fostering interpersonal trust, as it establishes the basis for an individual's trust values, actions, and anticipations. The cognitive and social processes which self-trust relies on as discussed by Falcone and Castelfranchi (2001:85) as well as Rotenberg (1994), Newcomb and Bagwell (1995: 306), Ben-Ner and Halldorsson (2010: 65) indicate the intricate relationship that exists between the concept of self and the ability of a person to trust others. As people learn to self-trust among other cognitive, social, and intimate factors, they acquire the values

and actions that support interpersonal trust, which enhances their interactions with other people.

1.2.2. Interpersonal Trust

The concepts of social capital and interpersonal trust are two sides of the same coin, as they influence and are influenced by social, economic, and cultural activities. Trust is one aspect of social capital, and also one of its results. Therefore, the link between these two phenomena is deep and wide. This part presents the major ideas that surround the connections between the social capital and interpersonal trust, the role that culture plays in the dynamics of trust, and how social capital leads to economic growth.

From the literature, a relationship exists between social capital and interpersonal trust, and three points ought to be noted. First, trust is a fundamental resource as well as a product of social capital, which goes through a self-induced cycle of formation (Putnam, 1995: 72). Second, trustful social relations and characteristics of individuals as well as the evidence base suggest that social relations and individual characteristics are important in creating both trust and social capital (Glaeser et al., 2000: 840). Finally, the trust and social capital relationship is viewed against more encompassing social structures and social institutions (Coleman, 1988:103; Fukuyama, 1996), which implies that both activities geared towards social capital enhancement and the strengthening of trust have facets of both a personal and structural nature. It is worth noting that social capital and trust ought to be viewed concurrently in a given community for the purpose for improving social integration and cooperation in the community.

Social capital includes networks, norms, and trust that allow participants to act together to benefit the group (Putnam, 1993: 102). Social capital, defined as trust among the individuals in the society, is a key explanation for the differences between countries in terms of the rates of economic growth. (Whiteley, 2000: 444) Indeed social capital, understood as interpersonal trust, is a significant factor in explaining the cross-national differences in economic performance (Whiteley, 2000: 444).

Cultural background has great impacts on interpersonal trust. New research indicates the Americans have a more diluted and general form of trust that is based on a person's honesty and kindness. In contrast, Japanese people value assurance-based trust more. In the USA, trust seems to come from people having common group affiliations, but in Japan it relies on existing relationships (Yamagishi & Yamagishi, 1994: 133). This difference categorization provides a deep insight of how various trust dynamics can impact interpersonal relations and business partnerships in every culture. These definitions should be embraced in order to enhance overall communication and interpersonal connections in the global context.

Friendships foster trust and trust-related values. Rotenberg (1994) found that when an individual is lonely, there is low trust toward others and a perception that others do not trust them, even when there is little to no evidence that the individual's close peers would assert such a claim. This happens because through friendship experiences, these individuals are provided with opportunities to develop core trust-related values including reliability, loyalty, and dependability (Rotenberg, 1994: 168: 72). Such gaps in perceived and actual trust development signifies the intricate process of working backward from personal life experiences to understanding how trust develops.

So is the complexity of the relationship between trust and friendship highlighted in Newcomb and Bagwell's (1995: 306) studies. Their research indicated that friendship is an important relationship because it is a source of more reciprocal exchange and cooperation than other peer relationships. Friendships are based on reciprocity and cooperation, and they tend to be more egalitarian than peer relations (Newcomb & Bagwell, 1995:306). There is conflict in friendships; friends compete and disagree and even fight, however, because of the importance of the relationship, competition and dominance is much less frequent than in peer relationships, and differences are much more readily reconciled. These characteristics about friendship help in building intimacy, loyalty, and trust which are vital in nurturing standards and values concerning trust. The heightened degree of involvement in friendships fosters a setting where values concerning trust can be developed and reinforced. (Newcomb & Bagwell, 1995:324).

The interplay between social capital and trust is intricate because of its multi-dimensional nature, which individual, cultural, and institutional factors influence. Trust is considered an element and an end product of social capital. It has a self-reinforcing nature which affects social cohesion, economic development, and interpersonal relations. Cultural backgrounds affect the way trust is defined and its prominence on individuals, thus shaping partnerships and cross cultural interactions. These relationships are essential in developing effective means of communication, strengthening relationships, and enhancing collective actions towards the social common good.

1.2.3. Institutional Trust

Building trust in both governmental and non-governmental institutions, as it is the basis for societal development (Nooteboom, 2007: 38). Trust in formal institutions shapes interpersonal relationships across different cultures, and understanding the role of modern institutions helps foster trust in citizens (Spadaro et al., 2020). In whatever way this trust develops, it expands beyond the boundaries of smaller community structures. This is more in zones that are still developing. However, without dependable legal systems, societies as a whole try to function within personal networks that are informal, like those of clans, families, or even local communities. Even though these informal setups offer a quick sanction against dilemmas, large scale sustainable development is next to impossible. Poor institutions will always increase the importance of personal and trust based ethical networks and will make it hard to develop strong networks that are essential for rapid economic growth in turn. Nooteboom (2007: 38) refers to this as a vicious development cycle.

In societies filled with ethnic, religious, and tribal divisions, the challenge heightens even more in which shared understanding among social members is very essential at which point makes this kind of reforming hard. Nooteboom (2007:38) further explains that maintaining social capital growth means expanding connections beyond local neighborhoods which will also require a lot of investment of time and effort.

Lastly, it is crucial to understand the most important element for development and growth of a society is institutional trust. The development of powerful, trustworthy institutions enable establishing a strong sense of security among society, which triggers the vast building of resilient networks that are necessary for economic growth. It transitions a society from having trust-based relationships to open, productive development (Nooteboom, 2007: 40).

1.3. WHY TRUST IS IT IMPORTANT FOR ECONOMY?

Trust acts as a cornerstone that facilitates trades in an economical and efficient manner by handling challenges such as asymmetric information and uncertainty. People can transact more often at lower costs in high trust atmospheres leading to better economic outcomes (Zanini & Musante, 2013: 490). The degree of trust found in an economy's interactions depends on factors such as the market system's maturity and development which affect expectations and dependability among the transacting parties. Trust enables parties to address intricate problems without requiring predetermined incentives or sanctions hence reducing costs associated with dispute resolution and improving interactions (Tonkiss, 2009: 199).

Trust promotes cooperation and reduces transaction costs within economic exchanges. Strong legal frameworks help maintain trust by enforcing agreements made between parties while also providing means for solving conflicts. However, the damage of trust is catastrophic resulting into disillusionment, skepticism, apathy or even rage as occurred during such societal transitions as from socialism to liberal democracy following the fall of Berlin Wall (Giordano and Kostova, 2003: 92; Zuckerman, 2021).

Trust is very important for the decision-making process within households especially in relation to outsourcing tasks. Challenges related to trust can deter households from using outsources resulting to either investing in safeguards or not seeking external assistance at all. Trust distribution and responsibility division within households depends on gender dynamics (De Ruijter et al., 2003: 474; Burks et al., 2003: 196).

Furthermore, research shows how trust shapes inflation expectations although not directly predicting inflation rates. Public perceptions of inflation are influenced by trust in institutions like central banks which have indirect impacts on consumer behavior and stability of economy (Zuckerman, 2021; Jiang et al., 2011: 322).

In business operations, trust is equally important for reducing transaction costs, enhancing information sharing on sensitive issues and working together on joint projects. Trust in organizations and among businesses lies at the base of ethical practices; it emphasizes that trust and ethics are interconnected (Brenkert, 1998: 197; Jiang et al., 2011: 322). In any case, even with downsizing or mergers or invasive marketing practices, trust is still a crucial ingredient to successful businesses (Zanini & Musante, 2013: 490).

Finally, trust within families affects communication processes in decision-making as well as the wellbeing of family members. According to prior research findings (Burks et al., 2003: 196), the significance of trust cannot be underestimated in the enhancement of cooperation and maintenance of healthy relationships both in personal lives and workplaces.

Bjørnskov (2021) explores the role of social trust as an essential driver of economic growth through multiple channels such as education and governance quality. He shows that institutions in societies with higher levels of social trust are more efficient and their educational outcomes are better, which supports economic development. This study is a continuation of a long line of investigation into trust as social capital.

Fukuyama's pioneering work introduces the concepts of low-trust and high-trust societies, thereby offering a theoretical framework for understanding how trust shapes development, both economically and socially. Fukuyama (1996) delineate trust as expectation that arises within communities about regular honest behaviour among people who share common norms and highlights the communal and normative aspects of trusts. From this definition, it can be inferred that trust develops out of shared societal values/practices and repeated positive interaction between members.

Alesina and La Ferrara (2002: 209) concentrate on who tends to place trust in others, why, while investigating determinants of trust at individual level and community level respectively. They thus show us in grasping circumstances like

income inequality, racial heterogeneity or personal experiences which impact formation of trust.

Whiteley (2000: 459) analyzed the connection between trust and growth within the context of a modified neoclassical economic growth model. The study uses a trust index as a social capital variable. The trust index is made up of three different components: trust in one's family, trust in relatives, and interpersonal trust. The study figures out that the trust index of the three indicators has a positive effect on economic growth, similar to what conditional convergence and human capital do. His results indicate that attitudinal values are essential for accurately specifying growth regressions.

1.4. HOW CAN WE MEASURE IT?

Trust can be understood more thoroughly when we examine its cultural, social, and cognitive dimensions. There is a new meaning to Delhey et al. (2011: 798) key understanding that the global interpretation of 'most people' is distinct in different countries, rich countries having wider trust radius, when seen through Castelfranchi and Falcone's (2010) cognitive perspective. The modern development of a society and its cultural context would shape the cognitive states which enable trust formation, implying that the very processes that underlie trust could vary across societies. Van Hoorn's (2014: 1257) most important differentiation between trust radius and trust level is also useful to make sense of this phenomenon the cognitive readiness to offer trust (trust level) could exist without the ability to put it to use (trust radius) - hence the explanation why trust levels are reported higher in more collectivist societies while the trust radii remain narrower.

The interplay becomes particularly pronounced in the consideration of Van Hoorn's (2014: 1258) remark that the trust radius has to do with the number of relationships and other situational variables that affect trust choices. The Castelfranchi and Falcone (2010) focus on trust as the mental correlate of delegation elucidate why these relationships are consequential - they are components of the mental structures which people use to evaluate risk and formulate expectations about the behavior of others. Thus, the belief that there are narrower trust radii in someone more collectivist

cultures may indicate not only cultural preferences, but certain ways of thinking needed to limit delegation and manage risk in different kinds of relationships.

In addition, other authors Delhey et al. (2011: 798)'s remark that trust radius leads to more precise measurement of citizen attitudes hint that the assumptions that are needed when constructing the model of trust may be much more general than earlier assumed. This understanding is consistent with Williamson's (1993: 473) distinction of calculative and personal trust while applying important cultural and cognitive factors in explaining how these forms of trust operate in various societies.

The blending of these perspectives indicates trust as a phenomenon that functions at the same time on several levels - the cognitive level, where beliefs, goals, and expectations are formed; the social level, where trust radius and cultural factors are in play; and the practical level, where trust gets delegated and relied upon. Van Hoorn (2014: 1258) focus on methods of measurement which pay attention to relational dynamics is important in this case, as it proposes ways to capture these different level of trust operation empirically.

To understand trust tends too much to focus on the individual cognitive processes that aid in the formation of trust as well as the construction of a development within a particular society that facilitates such processes. This is in fact most important because of the observation made by Delhey et al. (2011: 799) that suggests existence of wider trust radius in richer nations. This implies that economic development may indeed widen the scope of trust, but it may also strengthen the cognitive structures from which trust decisions are made.

There are several areas where empirical analysis is required, especially because of the nature of the statement above. This study aims to enlighten dark spots of trust and effects in order to figure out effects on the economy. Next section will provide insights on regional trust radius estimates, as well as measures on economic development and cognitive trust formation processes.

CHAPTER TWO

EMPIRICAL ANALYSIS

2.1. DATA AND METHODOLOGY

The World Values Survey Wave 7 (2017-2022) represents the latest iteration of one of the most extensive cross-national studies assessing human values and beliefs. This wave explores more than 70 countries with over 120,000 respondents, adding to decades of ongoing worldwide research tracking historical changes in social, political, economic, and cultural values. The complete questionnaire includes over 300 variables on which several items were rated on different types of Likert-type scales-whether 4-point scales for agreement or importance, or satisfaction and freedom of choice with 5- or 10-point scales. The variety of scales offers researchers a breadth of perspectives on matters relative to family, politics, religion, and economic issues. In Turkey, the module for 2018 was implemented in Turkish through PAPI, with face-to-face interviews to ensure an appropriate methodology within the culture. The Turkish dataset harbors the global thematic nature of the survey while illuminating various perspectives on religion, nationalism, and socio-economic status-the public sentiment, especially toward immigration. This dataset, as a strong design, with a lot of Likert-scale-sized measures, and over 300 variables, is used now for the purpose of cultural change and modernization in Turkey within trends in the world (Harpfer et. al,2024)

2.1.1. DATA

This research employs data from the World Values Survey (WVS) Wave 7, concentrating on answers from Türkiye. The dataset consists of 2,415 respondents and encompasses 388 variables, with 57 observed variables employed to assess three latent constructs: self-trust, institutional trust, and interpersonal trust. The constructs are examined by Structural Equation Modeling (SEM) to explore the links among individual, institutional, and social trust. All items are recoded in to 4 and 2 item

Likert scale and their direction is decided on literature, higher scores for each item is related with higher trust levels.

2.1.1.1. Self Trust (η_1)

The variables relevant to this study, personal values, values acquired at home, and personal goals, are interconnected with the multidisciplinary trust theories contained in the literature. Examining these aspects from a psychological, philosophical, economic, and political angle of trust focuses on how trust is created, sustained, and manifested in human behavior. The following describes in detail the interrelation of each category of variables and their corresponding theoretical and empirical bases to the trust research.

Table 2: Questions of Self Trust

<i>Question</i>	<i>Definition</i>
Q1	Important in life: Family
Q2	Important in life: Friends
Q3	Important in life: Leisure time
Q4	Important in life: Politics
Q5	Important in life: Work
Q7	Important child qualities: good manners
Q8	Important child qualities: independence
Q9	Important child qualities: hard work
Q10	Important child qualities: feeling of responsibility
Q11	Important child qualities: imagination
Q12	Important child qualities: tolerance and respect for other people
Q13	Important child qualities: thrift saving money and things
Q14	Important child qualities: determination perseverance
Q15	Important child qualities: religious faith
Q16	Important child qualities: unselfishness
Q27	One of main goals in life has been to make my parents proud
Q48	How much freedom of choice and control
Q49	Satisfaction with your life
Q110	Success: hard work vs luck
Q180	Justifiable: Cheating on taxes
Q177	Justifiable: Claiming government benefits to which you are not entitled

Source: World Values Survey Wave 17

The inclusion of Family (Q₁), Friends (Q₂), Work (Q₅), Politics (Q₄), and Leisure Time (Q₃) displays the interrelationship of trust as an individual cognitive function and a social system phenomenon. Friends and family are consistent with Erikson's (1950) developmental theory which states that the early caregiver interactions give rise to the basic sense of trust. These interactions create situations whereby people are able to accept dependence one of the basic ideas in social psychology (Evans & Krueger, 2009:1014) which fundamentally means depending on other people to meet emotional and physical needs. Similarly, the importance of friendships (Q₂) supports Rotenberg's (1994) findings that people who are lonely have lower levels of trust, illustrating the role of social relationships in combating isolation and fostering dependence.

Trust is also expanded through employment (Q₅) and governance (Q₄) at the systemic level. Fukuyama's (1996) definition of trust as compliance with communal standards is especially clear in workplaces, where trust expectations from others working in the group are high. Uslaner's (2002) definition of trust as a moral act that requires assuming the goodwill of others relates to Politics (Q₄) in the sense that one needs to have trust in a society to participate. Glaeser et al. (2000: 840) said that trust is built through many interactions and frequent social contact joins leisure activities with profession workers (Q₃). These variables work together to understand how trust operates within individual, organizational, and societal levels.

The trust-learned values listed above, along with good manners (Q₇), independence (Q₈), hard work (Q₉), accountability (Q₁₀), imagination (Q₁₁), tolerance and respect for other people (Q₁₂), thrift saving money and things(Q₁₃), perseverance(Q₁₄), religious faith(Q₁₅), and unselfishness(Q₁₆) construct the ethical and cognitive structure of trust. Good manners and tolerance (Q₇, Q₁₂) is in line with Baier's (1986: 231) view of trust as accepted vulnerability which suggests that people should go out in the world with good faith and manners. These principles counterbalance the perceived trust risks (Nooteboom, 2007:43) by assuring goodwill, which is central to Uslaner's (2002) moral obligation of trust. Independence (Q₈) and feeling of responsibility (Q₁₀) both create the self-reliance needed to have trust in other people.

Falcone and Castelfranchi (2001:85) suggest that self-trust stems from an individual's self-assurance in performing dependably, which is nurtured by first teachings regarding responsibility. The emphasis on hard work (Q₉) and perseverance illustrates this by demonstrating a typical trait onethere is a belief in economic trust where tasks are done systematically because of the expectation of return (Berg et al., 1995: 141). Religious belief fosters moral responsibility, illustrating Goldberg's (2020: 99) concept of second-personal reliance, which explains that trust is associated with normative presumptions about other people doing something. Imagination (Q₁₁) enables people to imagine positive results in unknown situations, a cognitive function which goes with Evans and Krueger's (2009: 1014) idea of risk acceptance. These are values taught at home that equip a person with ethical and cognitive resources to be trustfully engaged in different social contexts.

Making parents proud (Q₂₇), life satisfaction (Q₄₉), hard work (Q₁₁₀), are all objectives that demonstrate parental trust operationalized in specific outcomes. The wish to earn parental pride (Q₂₇) shows the acceptance of family trust which is based on Erikson's (1950) theory that early stability in relationships impacts subsequent patterns of relationships. This aim aligns with Glaeser et al.'s (2000: 824) individual social capital where familial bonds enhance one's social credibility.

Satisfaction in life (Q₄₉) and hard work (Q₁₁₀) signify the products of trust that is given and not earned. Life pleasure frequently arises from stable relationships that are fostered through shared risk and reciprocity (Berg et al., 1995: 122), whereas professional or financial success within economic frameworks requires meeting communal expectations of trust (Fukuyama, 1996). Cheating on taxes (Q₁₈₀) joins self-trust and interpersonal trust, which is indicative of Goldberg's (2020: 98) observation that to be trustworthy is to be normatively bound to being responsible. In the study of Ben-Ner and Halldorsson (2010:78), the most self-trusting people exhibited the most accountability proving the non-verbal aspect of trust as being its behavioral manifestation.

To reflect the cross-disciplinary nature of trust, these variables were added to the model as its multidimensional components. In questions 1 through 5, the domain of trust is defined within the intimate and systemic social relationships, which reflects psychological dependency (e.g., reliance on family), economic reciprocity (e.g.,

collaboration at work), and political ethical responsibility. Self-reliance, morality, and social sensitivity serve as the framework for trusting oneself, and questions seven to twelve elaborate the cognitive and moral aspects effectively. (Q₂₇-Q₁₈₀) regards trust as an outcome that is highly influenced by early relationships like pride within a family in addition to enduring accomplishments such as happiness in life and responsible contributions to the society.

The interaction of these variables reflects the fundamental topics of the literature: Self-trust begins as a cognitive phenomenon (e.g., self-governance, imagination) that enables risk-taking. It is enhanced through interpersonal relations (e.g., circles of friends, relatives) that foster mutuality. It is embedded in institutional values (e.g., professional conduct, civic engagement) that require participation by everyone. It evolves through life, where the early instruction of responsibility and compassion informs later drives.

In this framework meta-trust is conceptualized as a trust that is static in nature and at the same time, dynamic in practice, and is the product of the individual's action, social history, and cultural environment. This blend may be useful for future research on how self trust gained through family values impacts interactions with societal institutions, thereby linking micro psychology with social capital at macro level. Such an approach complements interdisciplinary thinking and offers ways for addressing social fragmentation and moral depth in the formation of trust.

2.1.1.2. Institutional Trust (η_2)

This construct is defined as the level of confidence individuals observed in organizational and political structures. This latent construct is measured using 24 observed variables:

- **Governance and Corruption:** Perceptions of corruption in state authorities (Q₁₁₂), business executives (Q₁₁₄), local authorities (Q₁₁₅) and civil service providers (Q₁₁₆), giving or receiving a bribe (Q₁₁₈, Q₁₂₀, Q₁₈₁)

- **Elections and Democracy:** Equitable elections (Q₂₂₄, Q₂₂₅, Q₂₂₉, Q₂₃₁, Q₂₃₄) and respect for human rights (Q₂₅₃)

• **Social Activism:** Encouragement of political action (Q₂₁₂, Q₂₁₅) and active participation in democratic processes (Q₂₃₈).

For this study, we selected Governance and Corruption, Elections and Democracy, and Social Activism as the variables of focus or interest. These variables are interwoven with the various interdisciplinary trust theories that have been previously studied within the literature as mentioned above. Furthermore, they can be understood from the psychological, philosophical, economic, and political perspectives on trust as portraying its frameworks at the level of social behavior. And now, I provide a detailed explanation about how each category of variables relates to the theoretical and empirical foundations of research on trust.

The addition of the variables such as perception of corruption by the Head of State and Government Q₁₁₂, Business Executives Q₁₁₄, Local Authorities Q₁₁₅, and Civil Service Providers Q₁₁₆, together with the incidence of bribery Q₁₁₈, Q₁₂₀, and the acceptability of bribery Q₁₈₁ turns the focus to the significant role of institutional integrity concerning trust. All these variables align with Nooteboom (2007 :37) claim that institutional trust is certainly one of the prerequisites for societal growth. Corruption decreases trust because of the belief inequitable and inefficient conditions which have been created. This severely undermines the legitimacy of governing structures.

Fukuyama (1996) stresses that confidence in institutions is based on shared norms and integrity of actions. When there is pervasive corruption, these expectations are violated leading to a decline in trust and increasing risk in relationships (Nooteboom, 2007: 43). Bjørnskov (2021) puts forth that social trust leads to the creation of strong institutions while corruption is a major obstacle for institutional functionality. These measures gauge perceptions of corruption and capture how far people regard institutions as operating with integrity which is vital for institutional trust.

The focus is on respect for democratic procedures (Q₂₂₄, Q₂₂₉), barring of opposition candidates (Q₂₂₅), and intimidation of voters (Q₂₃₁), as well as the importance given to honesty in elections (Q₂₃₄).

Table 3: Questions of Institutional Trust

<i>Question</i>	<i>Definition</i>
Q ₁₇	Important child qualities: obedience
Q ₄₅	Future changes: Greater respect for authority
Q ₁₀₇	Private vs state ownership of business
Q ₁₀₈	Government's vs individual's responsibility
Q ₁₁₂	Perceptions of corruption in the country
Q ₁₁₃	Involved in corruption: State authorities
Q ₁₁₄	Involved in corruption: Business executives
Q ₁₁₅	Involved in corruption: Local authorities
Q ₁₁₆	Involved in corruption: Civil service providers
Q ₁₁₇	Involved in corruption: Journalists and media
Q ₁₁₈	Frequency ordinary people pay a bribe, give a gift or do a favor to local officials/service providers in order to get services
Q ₁₂₀	Risk to be held accountable for giving or receiving a bribe
Q ₁₃₄	Frequency in your neighborhood: Police or military interfere with people's private life
Q ₁₈₁	Justifiable: Someone accepting a bribe in the course of their duties
Q ₂₁₂	Political action: Joining unofficial strikes
Q ₂₁₅	Social activism: Encouraging others to take action about political issues
Q ₂₂₄	How often in country's elections: Votes are counted fairly
Q ₂₂₅	How often in country's elections: Opposition candidates are prevented from running
Q ₂₂₉	How often in country's elections: Election officials are fair
Q ₂₃₁	How often in country's elections: Voters are threatened with violence at the polls
Q ₂₃₄	Some people think that having honest elections makes a lot of difference in their lives; other people think that it doesn't matter much
Q ₂₃₈	Political system: Having a democratic political system
Q ₂₅₁	How democratically is this country being governed today
Q ₂₅₃	Respect for individual human rights nowadays

Source: World Values Survey Wave 17

These elements are consistent with Putnam's (1993:103) observation about the importance of a social capital which fosters trust towards democratic institutions and puts it to use for economic development.

Uslaner (2002) claims that generalized trust, which incorporates trust on institutions, rests on moralistic theory and an overly optimistic perception of the fairness of social structures. People begin to trust institutions more when elections are deemed fair and when human rights are respected (Q₂₅₃) since these factors demonstrate a commitment to equity and justice. Alesina and La Ferrara (2002: 234) show that people's trust in institutions is shaped by their perception of justice and equity, which relates directly to the existence of credible elections. These variables operationalize trust in the democratic system, signifying the belief that institutions uphold the tenets of democracy and human rights.

The participation in unofficial strikes (Q₂₁₂) and the encouragement of the political action (Q₂₁₅) variables measure the degree of social activism, which denotes trust in responsiveness of institutions to citizen's demands. These variables resonate with Coleman's (1988:99) account of social capital where trust in institutions is a condition for collective action. Social activity rebuilds trust in the system's responsiveness because people are willing to engage in political action when they believe that institutions will address their issues.

Putnam (1995: 66) argues that trust in institutions and civic engagement strengthens one another. Increased levels of activism signal an optimistic attitude towards the system's ability to tackle societal issues. Conversely, low levels of activism may present some disenchantment. Spadaro et al. (2020) point out that institutional trust is a prerequisite to participation in civic activities, which is important for the development of society. These social action measures gauge the extent to which citizens perceive institutions as being responsive and accountable to their needs.

Factors such as respect for authority (Q₄₅) private versus state ownership of enterprise (Q₁₀₇), and government versus individual responsibility (Q₁₀₈) exemplify broad attitudes concerning authority and the performance of institutions. These factors illustrate Erikson's (1950) developmental theory which links confidence in authority figures—parents, institutions—to early childhood developmental stages. Trust in authority precedes trust in institutions; it denotes a belief in the validity of the governing frameworks.

Fukuyama (1996) argues that the level of trust in institutions revolves around the economic and social activities of the state. "State ownership" (Q₁₀₇) corresponds

to trust in state management. On the other hand, attitudes on human responsibility (Q₁₀₈) represent the balance of self-responsibility and institutional responsibility. These elements contribute further to understanding people's attitudes about the role of institutions in determining the results in the society.

The trust concerning social capital and other domains of institutional economics provides the basis for the selected factors of Measuring Trust in Institutions (η_2). They form the constituents of institutional trust, which include governance and corruption attitudinal perceptions of fairness and efficiency in the performance of institutions, electoral processes and democracy, trust in the democratic system and other fundamental freedoms, social Activism, trust in the responsiveness of the system to the people's demands and broader attitudes, trust in institutions is influenced subtly by factors such as the willingness to obey, submissiveness, and attitudes towards government.

These variables align with the broad thinking of Fukuyama's 1996 analysis, Putnam's 1995:66 study, Nooteboom's 2007 work, and Bjørnskov's study in 2021. They provide a complete operationalization of trust within institutions, ensuring that the measurement captures both theoretical and empirical dimensions. This paradigm includes these elements to define trust as a multifaceted attribute — one that is shaped by subjective aspects and personal opinions as well as societal conventions and institutional behaviors.

This approach engages with and formulates responses to socio-ethical challenges of contemporary social disintegration, providing interdisciplinary perspectives. These elements can be explored in future studies to understand how trust in institutions facilitates engagements with societal processes, thereby integrating individual-scale psychology with broader social capital on a community level.

2.1.1.3. Interpersonal Trust (η_3)

Aspects such as trust in neighbors who are immigrants or foreign workers (Q₂₁), trust in people of different religions (Q₂₃), and trust in individuals who speak another language (Q₂₆) highlight the importance of trust within distinct cultural and social groups. These factors correlate with Yamagishi & Yamagishi's (1994: 136)

distinction between assurance-based trust (which is based on close relationships) and generalized or outgroup trust (given to strangers). In societies with a limited radius of trust (like collectivist ones), Delhey et al. (2011: 801) noted that people from out-groups are extremely hard to trust.

Table 4: Questions of Interpersonal Trust

<i>Question</i>	<i>Definition</i>
Q ₂₁	Neighbors: Immigrants/foreign workers
Q ₂₃	Neighbors: People of a different religion
Q ₂₆	Neighbors: People who speak a different language
Q ₂₇	One of main goals in life has been to make my parents proud
Q ₁₂₁	Impact of immigrants on the development of the country
Q ₁₂₂	Immigration in your country: Fills useful jobs in the workforce
Q ₁₂₃	Immigration in your country: Strengthens cultural diversity
Q ₁₂₄	Immigration in your country: Increases the crime rate
Q ₁₂₉	Immigration in your country: Leads to social conflict
Q ₁₃₁	Secure in neighborhood
Q ₁₃₇	Frequency in your neighborhood: Street violence and fights
Q ₁₈₁	Justifiable: Someone accepting a bribe in the course of their duties
Q ₁₉₁	Justifiable: Violence against other people

Source: World Values Survey Wave 17

Culturally diverse societies are argued by Putnam (1993: 102) to be less cohesive and trustful compared to more homogeneous ones. Fukuyama (1996) argues that the lesser the trust in the society, the harder it is to foster collaboration between different groups. This explains where society is culturally homogeneous and diverse, and how these factors tend to unlock trust, affecting attitudes toward the society.

“Perceived effect of immigrants on economic growth” Q₁₂₁, “Perceived contribution to the labor market” Q₁₂₂, “Cultural diversity” Q₁₂₃, “Crime” Q₁₂₄, and “Social conflict” Q₁₂₉ encompasses one’s aggregate trust in immigrants. All these socio beliefs are encompassed in Bjørnskov (2021) who advocated that social trust enable economic growth by increasing cooperation among people. Negative perceptions, such as increased violence or conflict, suggest a lower level of trust in immigrants, rooted in preconceived notions, lack of exposure, or insufficient contact, as explored in Alesina & La Ferrara (2002: 208) on factors that affect trust.

As Brenkert (1998:201) points out, trust in the marketplace, as well as in the social sphere, requires ethical behavior. The other side of the coin is that the discrimination against immigrants does erode these trust levels. Positive beliefs (like culture diversity being an asset) bolster Putnam's (1995: 66) statement that diverse ties, though challenging at the start, facilitates social capital in the long run.

Encouragement of parents to feel pride (Q₂₇) demonstrates the dynamic between trust within help and interpersonal trust. Erikson (1950) states that the bond forged with caregivers serves as the basis of trust and thus shapes social relationships. Proud family members further propels cultures such as protection and responsibility, which Rotenberg (1994) describes as a trust based peer phenomenon.

Falcone and Castelfranchi (2001: 85) assert that the self-trust gained through familial expectations enables social participation. This variable integrates developmental psychology and interpersonal trust demonstrating how family systems shape relational dynamics.

The perception of safety regarding the respondent's locality (Q₁₃₁) and level of street violence or fighting (Q₁₃₇) operationalize the trust one has in the local social context. Glaeser et al. (2000: 841) demonstrate that the level of trust in a neighborhood correlates with its safety, as safe neighborhoods reduce the potential risks associated with joining together. Tonkiss (2009) claims that lower crime rates reduce the costs of social interaction, thus increasing trust.

These variables operationalize Coleman's (1988:95) social capital theory, where safe neighborhoods serve as areas forming networks of interdependence. Increased aggression (Q₁₃₇) leads to distrust and counter trust with suspicion fostering spirals as seen in Giordano & Kostova (2003: 92) study on post-socialist disillusionment.

The acceptance of bribes (Q₁₈₁) and committing violence against fellow human beings (Q₁₉₁) indicate the moral limits of affection which can be easily counterfeited. Trust, as defined by Uslaner (2002), is an obligation to expect good of other people. Under such a framework, rationalizing unethical conduct erodes this obligation and, subsequently, trust. In Baier's (1986: 232) words, trust is "accepted vulnerability" which disintegrates the moment any form of bribery or assault is permitted and made commonplace.

Nooteboom (2007: 37) links trust with the management of relational risk, claiming that accepting violence as a justification shows extreme untrustworthiness and prohibits collaboration. This is in line with Goldberg's (2020: 98) distinction between reliance (neutral dependence) and trust (normative expectation of responsibility).

In our judgment, trust on a personal level develops as a consequence of several of our selected variables working together. Trust in different societal groups (Q₂₁, Q₂₃, Q₂₆) demonstrates the degree to which people are willing to cross trust boundaries concerning cultures and societies (Delhey et al., 2011: 801). Attitudes towards immigration (Q₁₂₁–Q₁₂₄, Q₁₂₉) explain the impact of out group trust on community cohesion (Putnam, 1995:66). The family based trust (Q₂₇) attempts to link early feelings of security with social behavior in later life (Erikson, 1950). Trust in the neighborhood (Q₁₃₁, Q₁₃₇) is associated with social capital and environmental trust (Glaeser et al., 2000: 824). Compliance with moral standards (Q₁₈₁, Q₁₉₁) depicts the Uslaner and Baier debate on ethics and trust and reveals moral foundation of trust decisions (Uslaner, 2002; Baier, 1986: 232). Further investigation is needed on the effects of neighborhood safeness on the ability to trust immigrants and the role of family trust relations in either fostering or opposing response to breaches of moral conduct. The bonds of culture are likely to mediate the relationship between strong individual disposition to trust and the collective trust behavior of a group. Our framework offers the striking combination of insights from the psychology of development, sociology, and ethics, providing fresh perspectives for further research aimed at the problem of fostering trust in increasingly diverse and fractured societies.

2.1.2.STRUCTURAL EQUATION MODEL

Structural Equation Modeling (SEM) is a complex multivariate statistical method that integrates path analysis and factor analysis to evaluate the relations of observed (measured) variables) and latent (unobserved) constructs, including causal relationships among the latent variables themselves (Schumacker & Lomax, 2016: 13; Kline, 2023:4). In this study, SEM was applied to assess the latent constructs of Self Trust, Institutional Trust, and Interpersonal Trust that were measured through

structured survey instruments. This research also has specific reasons to apply Structural Equation Modeling (SEM), as it simultaneously assesses a measurement model which validates the ways in which observed variables represent their latent constructs, and a structural model which analyzes proposed relationships among constructs and their direct and indirect interactions.

According to the literature, Structural Equation Modeling (SEM) is more effective in analyzing complex theories which include multiple latent variables and their interactions than simpler techniques like regression, which do not adequately address the problem (Hair et al., 2018: 48). The suggested relationships among Self Trust, Institutional Trust, and Interpersonal Trust contain both direct and indirect impacts requiring an explanatory approach that deals with measurement error.

Unlike classical regression, SEM tends to measurement error with greater sophistication, thus enhancing construct reliability and validity (Bollen, 1989, pp. 71). This is particularly important in survey-based research because observable variables (e.g. questionnaire items) may poorly capture the latent traits. Institutional Trust, for example, can be measured using, confidence in public services or, perceived governmental transparency, which SEM scrutinizes for both consistency and discriminant validity.

Structural Equation Modeling (SEM) supports multigroup comparisons, including assessing model invariance across demographic variables, while supporting hierarchically structured subdivisions, thereby enabling sophisticated hypothesis testing (Byrne, 2016: 102). This research might further examine socio-cultural aspects of trust relationships, which SEM could easily adapt to study.

Structural Equation Modeling (SEM) assists achieving the aim of the study which is to refine the theoretical models through revision based on various fit measures like CFI and RMSEA (calculated), (scores). This broadens the scope of sociology by, namely social exchange theory, trust processes empirically as the blends data develop the theories (Hooper et al., 2008, 55).

2.1.2.1. Measurement Model

The measurement model specifies the relationship between the latent constructs and their observed variables. (Bollen, 1989:180; Kline, 2023: 142). For each observed variable y_{ij} , the model is expressed as:

$$Y_{ij} = \lambda_{ij}\eta_i + \varepsilon_{ij}$$

where:

y_{ij} : Observed variable j for latent construct i

λ_{ij} : Factor loading

η_i : Latent construct

ε_{ij} : Measurement error (Bollen, 1989: 71, p. 180; Kline, 2023, 142).

The equations for derived from the literature for each construct are:

- Self Trust (η_1): $y_{1j} = \lambda_{1j}\eta_1 + \varepsilon_{1j}$, $j = \{1, 2, \dots, 22\}$
- Institutional Trust (η_2): $y_{2j} = \lambda_{2j}\eta_2 + \varepsilon_{2j}$, $j = \{1, 2, \dots, 24\}$
- Interpersonal Trust (η_3): $y_{3j} = \lambda_{3j}\eta_3 + \varepsilon_{3j}$, $j = \{1, 2, \dots, 11\}$

This method allows for covering considerations for measurement errors to observe variables without losing accuracy representing the underlying construct, exemplifying the advantages of SEM when compared with classical regression (Hair et al. 2018, p. 46).

2.1.2.2. Analytical Framework

The analytical framework utilizes SEM in analyzing Self Trust and Interpersonal Trust as well as Institutional Trust and their relationships. The first step is defining the framework encompassing the model specification where the measurement model is specified to relate observable variables with structural latent constructs and vice versa for the causal structural model (Byrne, 2016: 103). The

method of Maximum Likelihood with Missing Values (MLMV) is applied to limit the negative effects of missing information on the parameter estimates (Enders, 2010, p. 15). Subsequently, the measuring model can be validated with CFA to guarantee the construct's reliability and validity. A prime model for construct's relationships which are hypothesized to have direct or indirect paths is created and tested using path analysis, while model fit is assessed by fitting indices such as CFI, RMSEA, and Chi-Square (Hu & Bentler, 1999: 27.). This highly technical approach generates vast data about the interactions and hierarchies existing between the trust models and brings them together in a single powerful analytical model.

2.1.2.3. Structural Model

The structural model captures the relationships among the latent constructs. The hypothesized causal paths are represented as:

Institutional Trust as influenced by Self Trust:

$$\eta_2 = \beta_{21}\eta_1 + \zeta_2$$

Interpersonal Trust as influenced by Self Trust and Institutional Trust:

$$\eta_3 = \beta_{31}\eta_1 + \beta_{32}\eta_2 + \zeta_3$$

where β_{ij} denotes to path coefficients and ζ_i refers structural error term (Bollen, 1989 :74).

2.1.2.4 Application of SEM

The reason why SEM is appropriate for this study rests on the existence of latent and measurable variables, and the fact that this model encompasses them within one working model. Therefore, one of the advantages of SEM is that it estimates the measurement and the structural models simultaneously. This is crucial when analyzing complex relationships among constructs. In the process of validation, MLMV and

CFA are applied to ensure the estimations of Self Trust, Institutional Trust, and Interpersonal Trust are reliable and informative. SEM follows the following steps:

1. Model Specification: The relationships between Self, Institutional, and Interpersonal constructs were specified based on previously existing theoretical frameworks or researches. To ascertain both direct and indirect effects in a particular model, a hypothesize path model was developed.

2. Estimation Method: As far as MLMV is concerned for the model, it helps in handling inadequate data without affecting the robustness of parameter estimates (Enders, 2010: 22).

3. Path Analysis: The constructed relationships were answered through the analysis of structural paths of the latent constructs (Bollen, 1989: 74). The analysis targets identifying how Self, Institutional, and Interpersonal variables are related to one another.

4. Model Fit evaluation: Fit parameters including the Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA), Chi-Square values, among other indices, were employed to gauge the goodness of fit for the model and test the validity of the SEM framework. The model's goodness-of-fit was assessed using widely accepted indices Comparative Fit Index ($CFI > 0.95$), Root Mean Square Error of Approximation ($RMSEA < 0.06$), Standardized Chi-Square ($\chi^2/df < 3$) (Hu & Bentler, 1999: 27).

CHAPTER THREE

RESULTS

The self, institutional, and interpersonal dimensions, which are latent variables in this case, are measured against 57 observable indicators. The SEM selected for the study was executed using maximum likelihood married with linear model of missing value data MLMV which employs maximum likelihood estimation techniques to deal with missing information (MLMV) on a sample of 2,406 people. Following SEM reporting protocols we evaluate the model's parameters that include variances and covariances of latent variables as well as those related to model fit.

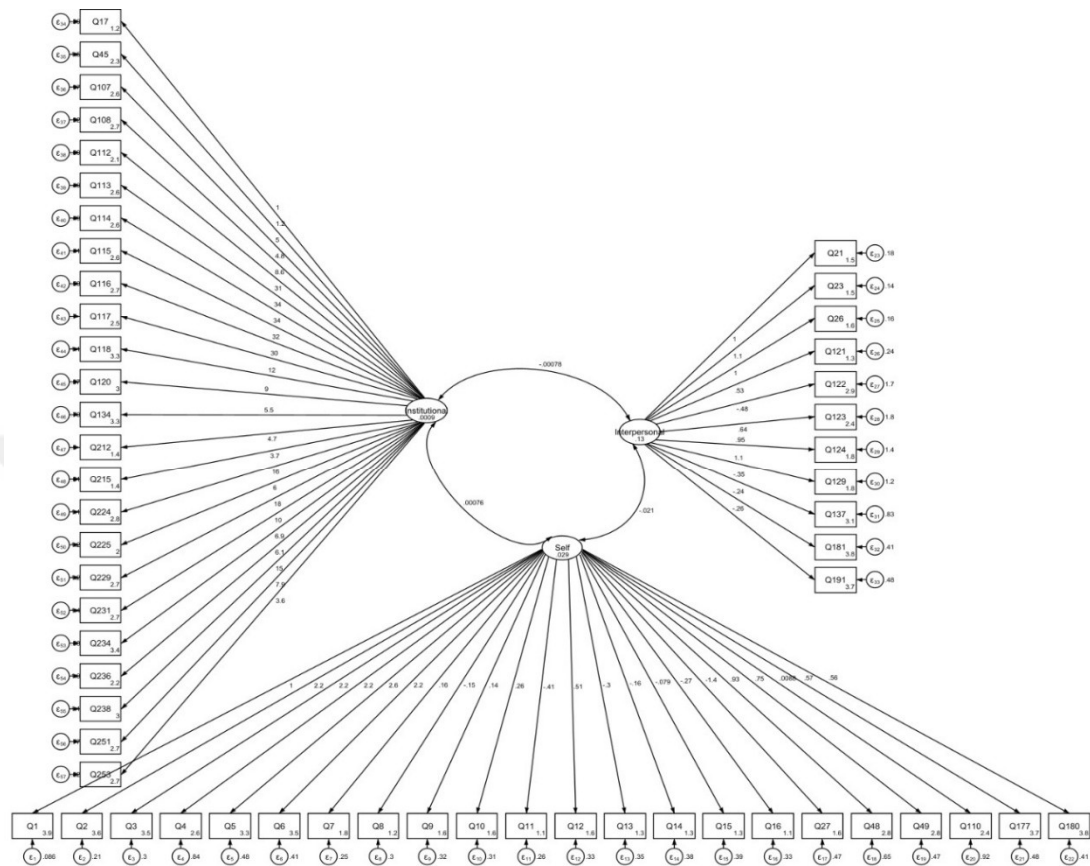
Table 5: Latent Variables of Base Model

Latent Variable	Measured by	Number of Items
Self	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q ₅ , Q ₆ , Q ₇ , Q ₈ , Q ₉ , Q ₁₀ , Q ₁₁ , Q ₁₂ , Q ₁₃ , Q ₁₄ , Q ₁₅ , Q ₁₆ , Q ₂₇ , Q ₄₈ , Q ₄₉ , Q ₁₁₀ , Q ₁₇₇ , Q ₁₈₀	22
Institutional	Q ₁₇ , Q ₄₅ , Q ₁₀₇ , Q ₁₀₈ , Q ₁₁₂ - Q ₁₁₈ , Q ₁₂₀ , Q ₁₃₄ , Q ₂₁₂ , Q ₂₁₅ , Q ₂₂₄ , Q ₂₂₅ , Q ₂₂₉ , Q ₂₃₁ , Q ₂₃₄ , Q ₂₃₆ , Q ₂₃₈ , Q ₂₅₁ , Q ₂₅₃	24
Interpersonal	Q ₂₁ , Q ₂₃ , Q ₂₆ , Q ₁₂₁ -Q ₁₂₄ , Q ₁₂₉ , Q ₁₃₇ , Q ₁₈₁ , Q ₁₉₁	11

Source: Author's own calculations using Stata MP 17.0 software

The measuring model clearly illustrates the relationships between the three latent constructs. In Table6, regarding the Self factor, its positive loadings for Q₂-Q₆ are all above 2.15 (2.15 – 2.67), signifying that these items contain the most important Self elements, and maximally embody the Self construct. Some indicators do not load at all, such as Q₇, Q₁₄, Q₁₆ and some load negatively, like Q₈, Q₁₁, Q₁₃, and Q₂₇, which load significantly. Load -1.63 is remarkably important because Q₂₇ has this significant negative loading. This value implies that this item evaluates the opposite of what the fundamental Self indicators measure. This loading pattern suggests that the Self construct also has a complicated, perhaps multi-faceted nature.

Figure 1: Visual form of Base SEM Model



Source: Author's own calculations using Stata MP 17.0 software

The measurement issues concerning the Institutional component appear to be more severe. Most indicators have quite high negative loadings (from -6 to -57) and large standard errors, while a few have quite high positive loadings. These coefficients tend to be non-significant ($p > 0.05$), hence the large magnitude of these coefficients poses substantial estimating problems. Bollen (1989, pp. 257-259) claims that large, volatile parameter estimates can suggest severe empirical underidentification or significant misspecification of the measurement model.

Table 6: Key Factor Loading Patterns by Latent Variable for Base Model

Latent Variable	Strong Positive Loadings	Non-significant Loadings	Negative Loadings
Self	Q ₂ (2.15), Q ₃ (2.26), Q ₄ (2.27), Q ₅ (2.67), Q ₆ (2.46)	Q ₇ (0.08), Q ₁₄ (0.07), Q ₁₆ (-0.04), Q ₁₁₀ (-0.07)	Q ₈ (-0.13), Q ₁₁ (-0.18), Q ₁₃ (-0.21), Q ₂₇ (-1.63)
Institutional	Q ₄₅ (10.69), Q ₂₁₂ (1.08), Q ₂₁₅ (1.68), Q ₂₂₅ (11.45), Q ₂₃₆ (8.27)	Q ₁₀₇ (-0.23), Q ₁₀₈ (-1.23)	Q ₁₁₂ -Q ₁₁₇ (-47.81 to -56.69), Q ₁₁₈ (-14.16), Q ₁₂₀ -Q ₁₃₄ (-14.09), Q ₂₂₄ (-32.04), Q ₂₂₉ -Q ₂₃₁ (-30.04 to -12.73), Q ₂₃₄ (-6.45), Q ₂₃₈ -Q ₂₅₃ (-15.35 to -10.62)
Interpersonal	Q ₂₃ (1.09), Q ₂₆ (1.06), Q ₁₂₁ (0.49), Q ₁₂₃ (0.54), Q ₁₂₄ (0.89), Q ₁₂₉ (1.06)		Q ₁₂₂ (-0.51), Q ₁₃₇ (-0.52), Q ₁₈₁ (-0.31), Q ₁₉₁ (-0.35)

Source: Author's own calculations using Stata MP 17.0 software

The interpersonal factor displays a somewhat more integrated pattern as it has considerable positive loadings for Q₂₃, Q₂₆, Q₁₂₁, Q₁₂₃, Q₁₂₄ and Q₁₂₉, along with significant negative loadings for Q₁₂₂, Q₁₃₇, Q₁₈₁, and Q₁₉₁. The balance suggests that the interpersonal element contains potentially opposing aspects of interpersonal relations, in harmony with the systems of frameworks on interpersonal trust proposed by Yamagishi & Yamagishi (1994: 136). Table 7 shows that these variances shed more light on the construct's discriminant validity and other forms of explainable variation in the dependent variable. A latent self variable showed relatively small positive changes to a variance of 0.0258(95% CI|0.0215, 0.0310). The changes made were marked as significant in which the self variable showed some base value beyond error of measurement .

The Institutional latent variable was shown to have the least variance comparable to other constructs at 0.0002(0.0000, 0.0046). Likelihood ratio suggests that range of such possibilities also pass across zero which raises questions on discriminant validity because the construct might not capture adequate measure of

overlap variance among its 24 variables (Hair et al., 2018: 48). This being said, Interpersonal latent variable demonstrated the highest variance at 0.1228 (95 % CI [0.1099 0, 0.1373]) indicating stronger cohesion among the 11 components.

Table 7: Variance of Latent Variables of Base Model

Latent Variable	Variance	Std. Err.	[95% Conf. Interval]
Self	0.0258	0.0024	[0.0215, 0.0310]
Institutional	0.0002	0.0003	[0.0000, 0.0046]
Interpersonal	0.1228	0.0070	[0.1099, 0.1373]

Source: Author's own calculations using Stata MP 17.0 software

The covariances of latent variables as shown in Table 8 were analyzed to theorize their relationships. There was a striking negative covariance between Self and Interpersonal. This means that greater Self perceptions are associated with lesser Interpersonal functioning, or vice versa. Self concept and social life as dynamic resources serving in competition are founded in Bandura's (1997) theories. However, the Institutional construct had low relationship with Self (-0.0005 , $z = -1.23$, $p = .218$) and Interpersonal (0.0012 , $z = 1.24$, $p = .216$) raising concerns about the validity of the institutional construct's originality within the model.

After 38 iterations, the model converged, although several fit difficulties were noted. The likelihood ratio (LR) test had not been done for the model against a saturated model because the model did not have full rank, which means that it was either overparameterized or there was insufficient data to justify all the predicted parameters (West et al. 2012: 216). The observation "there seems to be one more parameter fitted than the data can justify" points to some local identification issues, which could mean that there are latent variables which are underidentified or unnecessary paths defined (Kline, 2023: 270). Through these errors, confidence in the model's fit is lost, yet the need for respecification is made evident.

Table 8: Covariance Between Latent Variables for Base Model

Variables	Covariance	Std.Err.	Z	P> z	[95% Conf. Interval]
Self, Institutional	-0.0005	.0004	-1.23	0.218	[-0.0013, 0.0003]
Self, Interpersonal	-0.0208	0.0019	-10.92	0.000	[-0.0245, -0.0171]
Institutional, Interpersonal	0.0012	0.0010	1.24	0.216	[-0.0007, 0.0031]

Source: Author's own calculations using Stata MP 17.0 software

The variance of the Institutional latent variable and its covariances being non-zero and nonsignificant imply that its indicators do not sufficiently encapsulate a singular construct. This suggests a lack of appropriate items, multicollinearity of the items with each other, or overlap with other concepts (Brown, 2015). This factor modification by removing low loading items or merging it with similar constructs should be considered by researchers. The prominent Self-Interpersonal correlation makes it necessary to further explore the relationship between the self and social behavior.

One of the chief limitations of this study is the absence of traditional fit indices (CFI, RMSEA) which are fundamental for evaluating the model's adequacy (Hu & Bentler, 1999: 27). Also rank inadequacy of the model obstructs interpretation since the parameter estimates may be unstable or biased. Addressing identification issues, considering other models, and developing reliable fit indices should be the focus of subsequent work.

As this SEM model suggests, latent variable variance and covariance assessment must be performed to maintain theory consistency, which is an essential focus area of this analysis. While the Self and Interpersonal categories show clear validity, the Institutional variable requires reconceptualization. There is a trade-off between the complexity of a model and its statistical identifiability, which renders the model useful and leads to important findings.

Table 9 shows goodness of fit results of Base Model. In terms of evaluation, the structural equation model (SEM) exhibited saturation on a just-identified configuration with exact fit, as evidenced by a perfect comparative fit index (CFI = 1.000), with no Tucker–Lewis index (TLI) or root mean square error of approximation (RMSEA) values, and an incomplete likelihood ratio test for the hypothesized versus saturated model (χ^2_{ms} = missing) implies lack of freedom and a priori equilibrium of the covariance matrix (Kline, 2023:316 ; Hu & Bentler, 1999: 27).

Table 9: Goodness of Fit Test Results of Base Model

Fit Index	Value	Description
Model vs. Baseline Fit		
χ^2 (1596)	38292.717	Chi-square (baseline vs. saturated)
p-value	0.000	Probability > chi-square
Population Error		
RMSEA	.	Root mean squared error of approximation
90% CI	[0.000, .]	RMSEA confidence interval
pclose	.	Probability RMSEA $\leq$ 0.05
Information Criteria		
AIC	268266.883	Akaike's information criterion
BIC	269267.813	Bayesian information criterion
Baseline Comparison		
CFI	1.000	Comparative fit index
TLI	.	Tucker-Lewis index
Size of Residuals		
CD	0.995	Coefficient of determination

Source: Author's own calculations using Stata MP 17.0 software

On the other hand, the baseline model comparison ($\chi^2_{bs}[1596] = 38,292.717$, $p < .001$) showed significant results which supported the structured covariation of the data, and the outcome CD coefficient (CD = 0.995), despite suggesting excellent explained variance, raises concerns of overfitting rather than theoretical validity Schermelleh-Engel et al., (2003: 53). For relative model comparisons, the Akaike and Bayesian information criteria (AIC = 268,266.883; BIC = 269,267.813) were set benchmarks, not because of inherent interpretability (Burnham & Anderson, 2004 :

270). While these criteria highlight the statistical adequacy of the model, they restrain its scope for theoretical applicability as, typically, saturated models lack parsimony and hypothesis testing bound by an excessive fit instead of generalizability, need substantial constraints on respecification to improve balance (West et al., 2012: 216).

Table 10: Structural Equation Model Specification

Component	Description
Estimation method)	Maximum likelihood with missing values (MLMV)
Sample size	2,406 participants
Latent variables	Self, Institutional, Interpersonal
Number of indicators	Self (6), Institutional (11), Interpersonal (4)
Model specification	sem (Self -> Q ₁ ,) (Self -> Q ₂ ,) (Self -> Q ₃ ,) (Self -> Q ₅ ,) (Self -> Q ₇ ,) (Self -> Q ₉ ,) (Institutional -> Q ₁₁₃ ,) (Institutional -> Q ₁₁₄ ,) (Institutional -> Q ₁₁₅ ,) (Institutional -> Q ₁₁₆ ,) (Institutional -> Q ₁₁₇ ,) (Institutional -> Q ₁₃₁ ,) (Institutional -> Q ₂₂₄ ,) (Institutional -> Q ₂₂₅ ,) (Institutional -> Q ₂₂₉ ,) (Institutional -> Q ₂₃₆ ,) (Institutional -> Q ₂₅₁ ,) (Interpersonal -> Q ₁₉₁ ,) (Interpersonal -> Q ₂₁ ,) (Interpersonal -> Q ₂₃ ,) (Interpersonal -> Q ₂₆ ,), method(mlmv))l

Source: Author's own calculations using Stata MP 17.0 software

Using a modified measurement approach, the structural equation model assesses the relationships of the three latent constructs: Self, Institutional, and Interpersonal variables. The model specification is given in Table 10.

Various standards as identified by Kline (2023: 316) were used to assess fit for the model. Fit Statistics can be found in Table 11.

Table 11: Modified Model and Factor Loadings

Indicator	Coefficient	Std. Err.	z	p-value	95% CI
Self Factor					
Q ₁	1.000*	-	-	-	-
Q ₂	2.510	0.144	17.44	<0.001	[2.228, 2.792]
Q ₃	2.569	0.160	16.03	<0.001	[2.255, 2.883]
Q ₅	2.290	0.163	14.02	<0.001	[1.970, 2.611]
Q ₇	0.353	0.060	5.89	<0.001	[0.236, 0.471]
Q ₉	0.266	0.076	3.50	<0.001	[0.117, 0.415]
Institutional Factor					
Q ₁₁₃	1.000*	-	-	-	-
Q ₁₁₄	0.957	0.023	41.68	<0.001	[0.912, 1.002]
Q ₁₁₅	1.014	0.021	47.86	<0.001	[0.973, 1.056]
Q ₁₁₆	0.909	0.023	40.23	<0.001	[0.865, 0.953]
Q ₁₁₇	0.855	0.023	36.67	<0.001	[0.809, 0.901]
Q ₁₃₁	0.132	0.017	7.82	<0.001	[0.099, 0.165]
Q ₂₂₄	0.530	0.026	20.65	<0.001	[0.479, 0.580]
Q ₂₂₅	-0.161	0.027	-5.96	<0.001	[-0.214, -0.108]
Q ₂₂₉	0.497	0.025	19.51	<0.001	[0.447, 0.547]
Q ₂₃₆	-0.136	0.026	-5.15	<0.001	[-0.188, -0.084]
Q ₂₅₁	0.229	0.022	10.50	<0.001	[0.187, 0.272]
Interpersonal Factor					
Q ₁₉₁	1.000*	-	-	-	-
Q ₂₁	-5.002	1.081	-4.63	<0.001	[-7.120, -2.883]
Q ₂₃	-5.843	1.258	-4.65	<0.001	[-8.309, -3.378]
Q ₂₆	-5.788	1.251	-4.63	<0.001	[-8.240, -3.337]

Source: Author's own calculations using Stata MP 17.0 software

Each latent variable's factor loadings, reflecting the relationship's strength between the indicator and its corresponding construct, are presented in Table 11.

Through factor loadings, Table 11 demonstrates that each latent construct is measured in a distinct way. The Self factor shows strong positive loadings for Q₂, Q₃ and Q₅ (coefficients between 2.290 and 2.569), and moderately strong for Q₇ and Q₉.

This indicates that Q₂, Q₃, and Q₅ serve as key indicators of the Self construct. The fact that all indicators are moving in the same direction, suggests a more sophisticated measurement model than past evaluations.

The Institutional Factor suggests a more cumulative structure. It is characterized by predominantly positive loadings with pronounced negative loadings for items Q₂₂₅ (-0.161) and Q₂₃₆ (-0.136). The strongest positive loadings are from Q₁₁₃ (reference indication), Q₁₁₄ (0.957), and Q₁₁₅ (1.014). This uneven combination of positive and negative loadings implies that the Institutional factor is comprised of a multi-dimensional construct with potentially competing features, consistent with the work on institutional trust that recognizes its complexity (Spadaro et al., 2020).

Unlike the Interpersonal factor, the other factors provide a relatively constant series of strong negative loadings for items Q₂₁, Q₂₃, and Q₂₆ (coefficients ranging from -5.002 to -5.843) together with a positive Q₁₉₁ reference mark. The strong negative loadings capture the idea that these questions measure the opposite side of the Interpersonal construct in relation to Q₁₉₁. Yamagishi & Yamagishi (1994: 133) argue that these marked opposing patterns can be interpreted as different dimensions of trust and caution or general interpersonal trust.

Understanding the structure of the latent variables is critical in knowing their relationships. In relation to this, Table 12 shows the variances and covariances between the latent elements.

The differences across the three latent components starkly stand out within the variance estimates presented in Table 12. The Self component as expected demonstrates a variance of 0.0252, which is low and consistent with results from earlier models. This finding is indicative of individual differences in self-perception having a rather consistent tendency. The self-concept stability aligns with expectations from the theory developed by Erikson (1950, pp. 247-251).

Unlike earlier models, the variance for the Institutional factor now has a meaningful value of 0.6338. This is significant because it suggests that the updated measurement model incorporates meaningful individual differences regarding trust in the institution. The results suggest that the current set of parameters captures the institutional trust construct more appropriately, which is inconsistent with research that

shows such trust often diverges among individuals based on their experience and perception of institutions (Zuckerman, 2021, pp. 52-54).

Table 12: Covariance Between Latent Variables for Modified Model

Variables	Estimate	Std.Err.	Z	P> z	[95% Interval] Conf.
Variances					
Self	0.0252	0.0025			[0.0208, 0.0306]
Institutional	0.6338	0.0267			[0.5836, 0.6884]
Interpersonal	0.0046	0.0020			[0.0020, 0.0107]
Covariances					
Self, Institutional	0.0225	.0036	6.25	<0.001	[0.0154, 0.0295]
Self, Interpersonal	0.0025	0.0006	3.99	<0.001	[0.0013, 0.0037]
Institutional, Interpersonal	0.0114	0.0028	4.07	<0.001	[0.0059, 0.0169]

Source: Author's own calculations using Stata MP 17.0 software

The Interpersonal component has the lowest value of variability at 0.0046 which suggests that there are low individual differences for this construct within the sample. This pattern is different from earlier models and may allow for the interpretation that the revision of the assessment strategy measures a single dimension of interpersonal trust. Delhey et al. (2011: 801) note that some elements of trust may be less variable within certain populations or contexts

All covariances among latent components are positive and statistically significant which indicates strong relationships between these constructs. The greatest correlation of all is calculated for Self and Institutional variables (0.0225). This indicates that an individual with a well-developed self-concept is likely to have a high level of trust in institutions. This finding is in line with the research conducted by Spadaro et al. (2020) which demonstrates the connections between institutional trust and various psychological factors. The correlation of Institutional and Interpersonal components yields a value of 0.0114 which supports the theoretical ideas on the reinforcing relationship between two domains of trust (van Hoorn, 2014:1258). The Self and Interpersonal components show a small but noteworthy covariance of 0.0025 which indicates a moderate association between self-concept and interpersonal trust attitudes.

Table 13: Goodness of Fit Test Results of Modified Model

Fit statistic	Value	Description
Likelihood ratio		
chi2_ms(186)	2532.440	model vs. saturated
p > chi2	0.000	
chi2_bs(210)	13318.353	baseline vs. saturated
p > chi2	0.000	
Population error		
RMSEA	0.072	Root mean squared error of approximation
90% CI, lower bound	0.070	
upper bound	0.075	
pclose	0.000	Probability RMSEA ≤ 0.05
Information criteria		
AIC	89034.128	Akaike's information criterion
BIC	89415.958	Bayesian information criterion
Baseline comparison		
CFI	0.821	Comparative fit index
TLI	0.798	Tucker–Lewis index

Source: Author's own calculations using Stata MP 17.0 software

The model fit statistics as shown in Table 13 offer essential insights into the adequacy of the designated three-factor model (Self, Institutional, and Interpersonal) in relation to the observed data. Each category of fit indices provides distinct insights into various dimensions of model fit. The chi-square test assessing the model against

a saturated model is significant ($\chi^2(186) = 2532.440$, $p < 0.001$), revealing inconsistencies between the observed covariance matrix and the model-implied covariance matrix. The elevated chi-square value in relation to the degrees of freedom indicates significant misalignment. Browne and Cudeck (1993, p. 237) observe that the chi-square test is influenced by sample size and frequently rejects models with big samples, even when the model well fits the data. The baseline comparison chi-square ($\chi^2(210) = 13318.353$, $p < 0.001$) demonstrates that the current model significantly outperforms a null model that posits no correlations among variables.

The Root Mean Square Error of Approximation (RMSEA = 0.072) is categorized within the mediocre fit range based on established criteria. Browne and Cudeck (1993, 246:) propose that RMSEA values under 0.05 signify a good fit, values ranging from 0.05 to 0.08 denote acceptable errors of approximation, while values beyond 0.10 reflect a bad match. The narrow 90% confidence interval [0.070, 0.075] indicates precision in the RMSEA estimate. The substantial p-value ($p = 0.000$) signifies that the likelihood of the RMSEA being less than or equal to the acceptable fit level of 0.05 is exceedingly low. Hu and Bentler (1999: 27) assert that this pattern indicates the model fails to attain a close fit to the data.

The Akaike Information Criterion (AIC = 89034.128) and Bayesian Information Criterion (BIC = 89415.958) offer comparative assessments of model adequacy, weighing goodness of fit against simplicity. According to Burnham and Anderson (2004: 270), these values are chiefly beneficial for contrasting alternative models rather than offering absolute evaluations of an individual model's suitability. Reduced values signify superior fit when evaluating nested or non-nested models. These numbers may function as a benchmark for subsequent model comparisons.

The Comparative Fit Index (CFI = 0.821) and Tucker-Lewis Index (TLI = 0.798) are both below the standard cutoff of 0.90 for acceptable fit and far below the more rigorous barrier of 0.95 suggested by Hu and Bentler (1999: 27). These incremental fit indices evaluate the designated model against a baseline model in which all observed variables are uncorrelated. Hooper et al. (2008: 55) assert that values beneath 0.90 signify significant model misspecification. The comparable values of CFI and TLI indicate insufficient incremental fit.

The Coefficient of Determination ($CD = 0.994$) signifies that roughly 99.4% of the variance in the endogenous variables is explained by the model. Kline (2023: 271) warns that although this number seems advantageous, global fit indices such as CD may obscure specific areas of mismatch. The lack of the Standardized Root Mean Square Residual (SRMR) owing to absent data restricts thorough evaluation, as the SRMR would offer supplementary insights into the average deviation between observed and model-implied correlations.

Collectively, these fit data demonstrate a coherent pattern signifying subpar to inadequate overall model fit. The substantial chi-square, RMSEA above the acceptable threshold for excellent fit, and incremental fit indices (CFI and TLI) falling below standard cutoffs all indicate notable disparities between the proposed model and the observed data. The significant enhancement over the baseline model, as evidenced by the disparity between the model and baseline chi-square values, along with the acceptable RMSEA value, indicates that the model effectively represents key elements of the data structure.

According to Schermelleh-Engel et al. (2003: 53), these findings must be understood within the framework of the model's theoretical underpinnings and practical applicability. Parameter estimations (factor loadings, variances, and covariances) can nevertheless yield significant insights despite unsatisfactory overall fit. Kline (2023: 316) recommends analyzing modification indices to pinpoint possible causes of mismatch and evaluating alternative theoretical models that may more accurately depict the underlying structures.

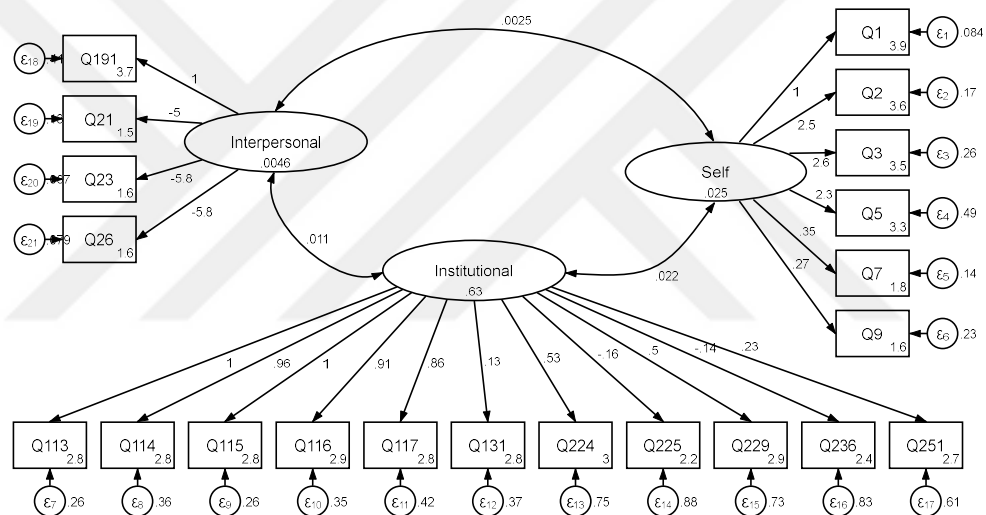
The updated model has notable improvements over previous versions, but some issues remain. The variance and loadings of the Institutional component has changed markedly for the better, suggesting that this construct is now measured more accurately. All three latent components are now positively and strongly covaried, an indicator that these domains of trust and self-concept are deeply interrelated instead of disparate, neutral, or negatively correlated.

The measurement patterns for each latent variable are distinct within their own right: The Self factor is defined by the presence of strong and consistent loadings on Q₂, Q₃, and Q₅ which portray an integrated self-concept assessment.

The Institutional component displays a blend of strong positive loadings (Q₁₁₃-Q₁₁₇) and moderate negative loadings (Q₂₂₅, Q₂₃₆) which illustrate the complex nature of institutional trust as scholars point out (Fukuyama, 1996, pages. 26-33; Zuckerman, 2021, pp. 45-47).

The Interpersonal factor has strong negative loadings on Q₂₁, Q₂₃, and Q₂₆ relative to the reference indicator, potentially pointing toward opposing aspects of interpersonal trust orientations. This is in accordance with studies distinguishing various forms of interpersonal trust (Yamagishi & Yamagishi, 1994: 137).

Figure 2: Visual form of Modified SEM Model



Source: Author's own calculations using Stata MP 17.0 software

Despite these improvements, the overall chi-square test suggests persistent problems with the model fit. Kline (2023: 271) comments that these fit deficiencies are likely to be important measurement theory problems or significant technical measurement issues. The findings suggest that while the evaluation of individual constructs has improved, the assessment at the comprehensive structural model level might still need some adjustments.

The findings of the enhanced model pose several additional concerns. The positive covariances among the three categories suggest that self-construct,

institutional trust, and interpersonal trust have the potential to enhance each other and therefore support some integrated theories of trust (Balliet & Van Lange, 2013, pp. 1092-1093; Spadaro et al., 2020).

The differing measurement patterns, especially for the Institutional component, demonstrate the complexity of the trust constructs and the need for more advanced measuring techniques, as trust researchers would argue (Delhey et al., 2011: 788).



CONCLUSION

This research aims to examine the idea of measurability of trust through different values, using data from the World Values Survey Wave 7 with an emphasis on Türkiye. Numerous significant results emerged from rigorous structural equation modeling analysis of self-trust, institutional trust, and interpersonal trust which have implications for understanding trust measurements and in relation to economic analysis.

The modified SEM model formulated in this study considerably diverges from the theoretical model proposed in the literature. Such divergence, although compelled by methodology, carries significant theoretical implications that are deserving of serious scrutiny. The process of respecification that brought down the indicators from 57 to 21 transformed the conceptualization and measurement of the three latent constructs—Self, Institutional, and Interpersonal in a dramatic way.

The Self structure was drastically reduced, from 22 items in the theory model to only 6 in the modified model (Q₁, Q₂, Q₃, Q₅, Q₇, Q₉). This reduction was a conceptual purification, with a main emphasis on life values (friendships, family, leisure, work) and child-rearing traits (diligence, courtesy). Of interest, items concerning moral judgments (Q₁₇₇, Q₁₈₀), success perceptions (Q₁₁₀), happiness in life (Q₄₉), and several kid traits were not included.

Large loadings for Q₂ (2.510, Important in life: Friends), Q₃ (2.569, Important in life: Leisure time), and Q₅ (2.290, Important in life: Work) indicate that the empirical Self construct has become changed to scale social relationships and life priorities as compared to the extended self-concept used in the literature. Exclusion of such variables as Q₂₇ (One of my principal life goals has been to please my parents) is significant since this scale shifted to the Interpersonal construct in the theoretical model but was ultimately excluded from the modified model entirely.

This limited conceptualization is as opposed to Castelfranchi and Falcone (2010) broad cognitive model of self-trust that focuses on trust as a construct that involves cognition and social processes. The empirical approach seems to prefer Erikson's (1950) developmental dimensions of trust, focusing on a consolidated identity by continued value preferences.

Institutional design change was perhaps most remarkable, in both composition and fit statistics. By the Base Model, this scale had minimal variance (0.0002) and insignificant covariances with other latent variables, which clearly called its discriminant validity into question. The modified model lost only 11 of its 24 indicators but greatly reduced their variance (0.6338) while manifesting good positive covariances with Self and Interpersonal scales.

Choice variables highlighted in particular corruption perceptions (Q₁₁₃-Q₁₁₇), election fairness (Q₂₂₄, Q₂₂₅, Q₂₂₉), governance quality (Q₂₃₆, Q₂₅₁), and safety of people at the community level (Q₁₃₁). Such selections offer a wider picture of institutionalized trust that is about perceptions of governance integrity and democratic values.

The revised assessment model is more in line with Nooteboom's (2007: 37) focus on trust in formal institutions as the foundation for societal advancement, and Spadaro et al.'s (2020) research on institutional trust's influence on interpersonal relations. The inclusion of Q₁₃₁ (Secure in neighborhood) does make a difference, as it connects the institutional and interpersonal realms, indicating that feelings of security influence the interaction between faith in systems of governance and trust in individuals.

Exclusion of variables such as Q₁₀₇ (State versus private ownership of business) and Q₁₀₈ (Individual versus government responsibility) eliminates institutional trust's ideological aspects, therefore centering the construct on measuring performance rather than philosophical outlook. This can establish a stark distinction between political ideology and institutional trust.

The Interpersonal construct was significantly enhanced, keeping only 4 out of the initial 11 indications (Q₁₉₁, Q₂₁, Q₂₃, Q₂₆). Despite having the lowest variance (0.0046) out of the three categories, its covariances with Self and Institutional components were significant and positive, in contrast to the negative Self-Interpersonal covariance exhibited in the Base Model.

The repeated high negative loadings of Q₂₁ (-5.002, Neighbors: Immigrants/foreign workers), Q₂₃ (-5.843, Neighbors: People of a different religion), and Q₂₆ (-5.788, Neighbors: People who speak a different language) on Q₁₉₁ (Justifiable: Violence against other people) present a multifaceted pattern. This

indicates that the Interpersonal construct is mainly assessing attitudes against outgroup individuals, with a high negative relationship between accepting different neighbors and justifying violence.

This empirical construct coincides with Yamagishi & Yamagishi's (1994: 131) division between assurance-based trust and generic interpersonal trust, picking up aspects of what Delhey et al. (2011: 801) describe as the "radius of trust." Removal of variables concerning immigration impact (Q₁₂₁-Q₁₂₄, Q₁₂₉) redirects attention from perceived outgroup consequences to clean beliefs in diversity.

The modified model deliberately omits Q₁₃₇ (Frequency in the neighborhood: Street violence and fighting), which conceptually corresponds with Q₁₉₁ but necessitated special consideration of the security variable. This omission assists in ensuring conceptual congruence through emphasis on underlying attitudes rather than experience variables.

The modifications on the base model have a number of theoretical implications going beyond statistical refinement. First of all, study points out significance of integration rather than differentiation. The three latent variables of the modified model are positively correlated and, hence, reinforce one another in contrast to being competitive constructs. This contradicts earlier conceptualizations that argued that both realms were likely to be oppositional because of the negative Self-Interpersonal covariance in the Base Model. This result supports the integrated trust theories proposed by Balliet and Van Lange (2013: 1090) and Spadaro et al. (2020), which suggest reciprocally improving interactions between multiple dimensions of trust.

The modified model displays consistent trends in each construct (e.g., comparable high loadings within the Self domain, comparable negative loadings within the Interpersonal domain), mirroring cultural similarity in the structuring of trust. This may be indicative of what Fukuyama (1996) refers to as the cultural embeddedness of patterns of trust; his high-trust/low-trust distinction, however, may be oversimplistic in the light of the intricate patterns uncovered.

The empiricist viewpoint attempts to prefer value orientations of importance—most important to people—over the characteristics of experience like happiness or their own experience with corruption. That is to say, Turkish citizens' trust will be more universally normative than Uslaner's (2002) moral accounting of trust.

Secondly, shows importance of reconceptualizing Self-Trust. The modified model reconfigures self-trust as more than confidence in one's skill or moral decision-making, and instead as correspondence among the value orientations that refer to social connections (family and friends) and productivity (job). This postulates a conception of self-trust more deeply integrated into the social, and thus more normally studied in cultural theory outside Western psychology.

The extreme discrepancies with modified models call out significant methodological concerns. The identification and convergence issues of the original Base Model obviously necessitated respecification. The extreme decrease in indicators calls into question content validity, whether the shrunk set of variables best represents the conceptual space of each construct.

The fit statistics for the modified model (CFI = 0.821, TLI = 0.798, RMSEA = 0.072) are not good by normal standards (Hu & Bentler, 1999: 47), indicating that further work is needed to refine it. The large chi-square value with respect to degrees of freedom points towards a substantial discrepancy between observed and model-specified covariance matrices, though the statistic is dependent on sample size.

Lack of SRMR due to missing data restricts complete assessment. Lack of modification indices in the data set makes it hard to ascertain whether specific causes of mismatch are present, which could be used to respecify theory.

Large discrepancies between theoretical and real results indicate a number of areas to pursue in future research:

- Cross-Cultural Comparison: Implementing the modified model structure in other cultural contexts may ascertain whether patterns that emerge are country-specific for Turkey or more globally applicable trust mechanisms.

- Longitudinal Analysis: Examination of how these trust relations evolve over time may offer insight into whether positive covariances between constructs represent stable patterns or context-dependent reactions to social milieus.

- Multi-Method Validation: The use of survey measures to complement experimental measures, as presented by Glaeser et al. (2000: 840), would establish whether value priorities on self-report were an effective measure to predict trusting behavior.

- Theoretical Integration: Constructing a synthesized theoretical structure of the interdependence of areas of self, institutional, and interpersonal trust will expand conceptualizations of trust as an integrated social phenomenon.

- Alternative Model Approaches: Testing bifactor or higher-order factor models may more accurately model the hierarchical structure of trust measures, potentially extracting universal trust factors that cut across particular domains.

The modified model's deviation from theoretical assumptions indicates that trust in Turkish society may be organized differently than Western theory predicts. The positive covariances between the three dimensions of trust indicate a coherent system of trust in which individual values, institutional trust, and acceptance of diversity support one another mutually.

The selection of corruption perceptions (Q113–Q117) as key indicators of institutional trust highlights how deeply public confidence hinges on credible, transparent governance. In the economy enhancing the mandate and independence of anti-corruption agencies introducing digital procurement platforms to make public spending fully traceable and mandating regular public reporting of asset declarations by senior officials.

On the other hand variables measuring election fairness (Q224, Q225, Q229) showed significant loadings on institutional trust, indicating that electoral integrity is central to citizens' trust in the system. Bolstering the impartiality of electoral commissions through legal safeguards on appointments and expanding both domestic and international election observation missions may have positive impact on trust.

In addition, the inclusion of neighbourhood security (Q131) among institutional trust indicators signals the importance of a sense of safety for reinforcing trust in both institutions and fellow citizens. Expanding community-policing initiatives that partner local officers with neighbourhood associations and policies aim to strengthen social welfare programs to buffer households against economic shocks, thereby reinforcing social cohesion.

Self-trust loaded most strongly on life values such as family (Q1), friends (Q2), work (Q5), and leisure (Q3), underscoring that policies which support these core social priorities will also build individual confidence and, by extension, broader social trust

The modified model's strong negative loadings on acceptance of immigrants and justification of violence reveal a pressing need to address out-group biases and reduce social fracture. In order to achieve this, government should integrate intercultural and anti-prejudice education into school curricula, support non governmental organizations led community dialogues and language-exchange programs that bring majority and minority groups together and enact and enforce hate-crime legislation, paired with public awareness campaigns against xenophobia.

Since trust demonstrably lowers transaction costs and enhances resilience to shocks, it should be treated as both an input and an outcome in policy design. Solution can be regularly fielding representative surveys (e.g., adapted WVS modules) to measure self-trust, interpersonal trust, and institutional trust and embedding trust indicators in the key performance metrics of economic and social programmes (e.g., "Trust-Adjusted" GDP growth targets).

By pursuing these interconnected strategies—targeting institutional integrity, social inclusion, and the nurturing of core individual values—policymakers can reinforce the mutually reinforcing dimensions of trust that underpin both social cohesion and economic vitality in contemporary Türkiye.

The better variable selection delivers a more coherent and statistically better assessment of the trust factors but with a constricted conceptual horizons. There exists a conflict between theoretical richness and statistical validity due to the immanent measurement difficulties in disclosing complex social phenomena like trust. The movement from theoretical to modified model is indicative, if not the only one explainable, of not merely methodological evolution but also of conceptual evolution: from viewing trust as a complicated yet incomplete phenomenon to an integrated social capability encompassing personal, institutional, and interpersonal dimensions. Such a reconceptualization comes much closer to taking account of the everyday reality of trust in contemporary Turkish society; further study, nonetheless, is needed to establish generalizability and theoretical implications.

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