Analyzing the Relationship between Macroeconomic Factors and Interpersonal Trust: A Multivariate Examination of Global Data

Minza Mudassar[1], Asif Shamim[2], Muzamir M. Mafabi[3], Nasir Aziz Kamboh[4]

Abstract
This research article delves into the intricate connection between socioeconomic variables and interpersonal trust, employing a robust logit analysis using WVS (wave 7) for 55 countries. Built upon established theories in the fields of sociology and economics, this study aims to explore the influence of a range of independent variables on interpersonal trust, including GDP per capita, the Human Development Index (HDI), the gender development index (DGI), population size, internet users, satisfaction, and income problems. Our findings support the resource-based theory of trust by demonstrating that GDP per capita and HDI have a significantly positive impact on interpersonal trust. The analysis indicates that a larger population size is associated with a decrease in trust, which aligns with theories that emphasize the challenges posed by increased population complexity. Moreover, the research identifies that internet users and satisfaction exert a moderate positive effect on trust, highlighting the role of information access and well-being in trust formation. Furthermore, income problems are shown to have a significant negative effect on interpersonal trust, aligning with the socio-economic stress theory. The results of this study offer valuable insights for policymakers and economists aiming to foster interpersonal trust in various social contexts. A comprehensive understanding of the multifaceted influence of these variables on trust can inform the development of more effective strategies.
Keywords: Interpersonal Trust, Socioeconomic variables, economic development.

1. Introduction

Policymakers, in their pursuit of fostering economic development, are faced with the formidable challenge of not only formulating the optimal policy mix but also comprehending the profound impact of human behavior on policy implementation. In this intricate landscape, behavioral economics assumes a pivotal role in realizing stable and elevated levels of economic development. Our focus is on the fundamental role of interpersonal trust in this context, a concept proposed by Borum in 2010. Towards the end of 20th century, with increasing globalization and socialization in organizations, the research on interpersonal trust entered a phase of speculative explosion. Scholars began to systematically study the influencing factors and effects of interpersonal trust, and put forward development stage theory, rational choice theory, associal system theory (social structure and social culture theory), etc., which laid a solid foundation for the following research. Since the beginning of 21st century, interpersonal trust at organizational level and social level has received increasing attention as people have been paying more concentration to trust between individuals, both within organizations and in society as a whole.

Interpersonal trusts play an important role in individual decisions at the micro level as well as economic performance at the macro level. Interpersonal trust determines not only individual incentives but the realization of macroeconomic policies. Nevertheless, it is imperative to acknowledge the relative paucity in economic literature when it comes to explaining the causal effects of interpersonal trust on development. What's intriguing is that higher economic growth doesn't always lead to increased interpersonal trust, as suggested by studies by Helliwell (1996), Inglehart (1997), and Olson (1982). One possible explanation for this is that interpersonal trust plays a more prominent role in developing and less developed countries, as indicated by Ji and Long in 2022. Existing literature has firmly established that interpersonal trust and trustworthiness are keystones for achieving higher economic development, with influential works from scholars like Banfield (1967), Coleman (1988), Dasgupta and Gambetta (1988), Fukuyama (1995), Greif (1993), and Putnam (2000). Without the presence of interpersonal trust, mobilizing the necessary reforms for growth becomes not only challenging but almost impossible to sustain in the long term. This underscores the need for an comprehensive exploration of the intricate relationship between economic development and interpersonal trust.

Our study aims to shed light on the causal effect of economic growth on interpersonal trust by considering factors including GDP per capita, the Human Development Index (HDI), the gender development index (GDI), population size, internet users, satisfaction, and income problems. Importantly, we look at how these factors evolve over time, spanning the years from 1999 to 2020. To achieve a comprehensive understanding of the dynamics involved, we use panel data instead of cross-sectional data on trust, enabling us to capture time-varying determinants of interpersonal trust. This approach puts us in a better position to grasp the successful implications of policy implementation. Our estimates of interpersonal trust are based on data from the World Values Survey, encompassing five waves, which allows us to trace the evolution and evaluation of interpersonal trust over decades for fourteen major nations across the globe, representing various regions.

The study is structured as follows. Section I introduces the core objectives and the rationale behind our research, In Section II, we delve into an extensive review of existing literature, offering insights into the theoretical foundations and empirical findings, and section III shows the estimation strategy, and the data descriptions. In Section IV, where we investigate the impact of economic development, HDI, GDI, population size, internet usage, levels of satisfaction and income disparities on interpersonal trust. Section V provides the conclusion of the study that brings together our findings to provide a conclusive assessment of the implications and significance of our research.

---

[1] Department of Economics, The University of Lahore, Lahore, Pakistan, minzakhan10@gmail.com
[2] IQRA University Karachi, Pakistan, dr.asif@iqra.edu.pk
[3] Lahore Business School, The University of Lahore, Lahore, Pakistan, mafabimuzamil@iuiu.ac.ug
[4] Department of Economics, The University of Lahore, Lahore, Pakistan, nasiraziz712@gmail.com

2. Literature Review

Trust serves as a fundamental catalyst for economic growth, as demonstrated by various scholars (Knack & Keefer, 1997; Arrow, 1974). These studies underline the role of interpersonal trust in lubricating the social system and, more importantly, in substantially influencing economic growth. Zak and Knack (2001) assert that sufficient interpersonal trust is not only necessary for economic development but also has a substantial impact on economic growth. The relationship between trust, development, and education is explored by Collie et al. (2015), revealing how higher levels of education contribute to changes in interpersonal trust. Human capital, a pivotal element for a country's economic growth (Aslam, 2020), is identified by Coleman (1988) as a potential transmitter of interpersonal trust, further reinforcing the interconnectedness of these factors. The significant drop in both trust among people and trust in authorities highlights the importance of interpersonal trust. It's a crucial factor often overlooked but crucial for successfully implement policies (Simpson, 2007).

Fehr (2009) emphasizes the significant favorable influence of trust on macroeconomic variables such as GDP growth, inflation, investment, and international trade volume. Studies by Fukuyama (1995) and Zak and Knack (2001) argue for a positive association between GDP per capita, Human Development Index (HDI), and trust levels. The resource-based theory of trust, as proposed by Uslaner (2002) posits that economic prosperity lays the foundation for social cohesion, fostering trust. Newton and Zmerli (2011) extend this notion, highlighting the role of social fragmentation in eroding trust within larger communities. Pervaiz and Chaudhary (2018) contribute a comprehensive investigation into the relationship between trust, economic growth, and human development. Their findings suggest a positive and significant effect of trust on human development, emphasizing the indirect impact on economic growth. Shengelia (2017) explores the influence of interpersonal trust on the motivation of international company employees, showcasing the role of social capital in the growth of transnational companies. Knack and Zak (2003) present a formal model examining the impact of public policies on trust levels and their subsequent effect on economic growth. Policies promoting freedom, redistributive transfers, and education efficiently stimulate prosperity by strengthening the rule of law, reducing inequality, and facilitating interpersonal understanding. Rothstein (2001) presents conflicting results regarding the relationship between trust and economic growth, using panel data for various country groups. The study differentiates between interpersonal trust and systemic trust, revealing a negative relationship between economic growth and an increase in trust.

Aslam and Ghouse (2022) focus on the impact of social and macroeconomic determinants on interpersonal trust levels. Their findings highlight the significant contributions of rule of law, order, political stability, and human capital to interpersonal trust, revealing an indirect role of economic growth on trust levels. Szabo et al. (2013) investigate the role of interpersonal trust within the innovation versus prosperity relationship and finds that interpersonal trust is a more significant determinant of innovation development than prosperity. Bliek (2015) examines the development of interpersonal trust within countries and its relation to economic performance. The study reveals that societal modernization, fueled by economic growth, hampers trust development, with the positive elastic effect of trust on economic performance overshadowed by the modernization process. Efficiency in business operations and the facilitation of large enterprises are attributed to high levels of trust (Ahmad & Hall, 2017; Craig, 2007; Fahr & Irlenbusch, 2000; Olaisen & Revang, 2017; Osherenko, 2006; Peloso & Caldwell, 2011; Teraji, 2008). Korsgaard et al. (2018) widen a dynamic view on interpersonal trust, considering its stages of growth, breakdown and recovery. incorporating phases of development, dissolution, and restoration. The evidence from this study shows that various factors in our surroundings and our own actions influence how we trust others.

The importance of trust in supporting economic growth is reiterated by Ahmad & Hall (2017), Aslam (2020), and Roth (2006). Trade, a cornerstone of economic activities, involves trust in goods, services, and suppliers, as highlighted by studies such as Castaldo et al. (2009), Chusseau et al. (2008), and Kowalski et al. (2021). Establishing trust and embodying trustworthiness can pose significant challenges, and defining or measuring these qualities can prove to be even more intricate (Chen, Yang, & Chen, 2020; Chita-Tegmark, Law, Rabb & Scheutz, 2021; Ullah & Ali, 2024; Hergeth, Lorenz, Vilimek & Krems, 2016; Platt, Walker, Verwey, & Martens 2018; Jacobson & Kardia, 2018; Ullman & Malle, 2018; Somu, Kirthivasan, & Shankar Sriram, 2017; Mainous, Smith, Geesey & Tilley, 2006).

In conclusion, this literature review provides a chronological and detailed exploration of the complex interplay between macroeconomic factors and interpersonal trust, laying the groundwork for a comprehensive analysis in the context of global data.

3. Data and Methodology

To investigate the impact of macroeconomic variables on interpersonal trust we employ a robust logit analysis. Logit regression is ideal for analyzing interpersonal trust due to its suitability for binary outcomes and ability to accommodate diverse predictor variables. Leveraging data from the credible World Values Survey allows for longitudinal analysis, unveiling temporal trends and socio-economic influences on trust evolution, thereby providing valuable insights.

Our dataset comprises observations from 55 countries. The selection of these countries is based on data availability, ensuring that we include as many nations as possible to enhance the comprehensiveness and coherence of our analysis. While the countries in our study exhibit mixed data based on data availability, our focus on 14 countries with similar characteristics facilitates meaningful comparisons and results. We use dependent variable, interpersonal trust, and a range of independent variables including GDP per capita, the Human Development Index (HDI), the Gender Development Index (GDI), population size, internet users, satisfaction, and income problems.

To intricate the connection between socioeconomic variables and interpersonal trust, this study employ a robust logit analysis in which we estimate the following equation:

$$\text{Logit}(P(\text{trust})) = \beta_0 + \beta_1 GDPpercap + \beta_2 hdi + \beta_3 gdi + \beta_4 pop + \beta_5 internetusers + \beta_6 satisfaction + \beta_7 income\_problem + e$$

Where , the variable "Trust" measures the responses of the variable "trust" of individuals , GDP percap stands for Gross Domestic Product (GDP) per capita, hdi represent human development index (HDI), gdi represent gender development index that measures gender gap, pop stands for population, internetusers represent internet user, satisfaction and income_problem represents satisfaction and income problem.

Interpersonal trust, our dependent variable, is measured through a question posed to survey respondents: "Generally speaking, would you say that most people can be trusted, or that you need to be very careful in dealing with people?" Respondents can choose from the options "Most people can be trusted," "Can't be too careful," or "Depends." An average indicator for interpersonal trust is constructed based on the proportion of respondents who selected "Most people can be trusted." This data is obtained from the World Values Survey (WVS) database, a respected source for attitudinal and values-related information. The selection of interpersonal trust is based on the studies of (Aslam & Ghouse 2022; Jalan, Matkovskyy, Urquhart, & Yarovaya, 2022; Sohlberg, 2022; Fang & Zhu, 2022; Ibrahim & Rasheed, 2024; Rath, 2024).

However our independent variable, Gross Domestic Product (GDP) per capita expressed in US dollars as a measure of economic growth. Numerous studies have confirmed a positive association between GDP per capita and interpersonal trust (Uslaner, 2002; Zak & Knack, 2001; Aydemir, 2024). Population measures the number of people in a country. Larger populations can lead to higher levels of trust, particularly when these populations are diverse and well-managed (Uslaner, 2002; Iqbal & Abbas, 2024). Human development index (HDI) is indices developed by UNDP. It comprises of three dimensions of development which are income, education and health. The GDI measures gender gap in human development achievements in three basic dimensions of human development: health, education, and command over economic resources. Internet user is the total individual using internet percent of population. The increased access to information and communication tools may foster greater interpersonal trust, as people become more informed and connected (Putnam, 2000; Quader, 2024). Satisfaction encompasses the overall contentment with societal conditions, can also influence interpersonal trust (Helliwell & Putnam, 2004; Farhadi & Zhao, 2024). Income problem is obtained from the World Values Survey (WVS) database through a question posed to survey dependents: Women have the same rights as men". The socio-economic stress theory suggests that financial hardships and income problems can erode interpersonal trust. Economic difficulties may increase individuals' anxiety and reduce their willingness to trust others (Alesina & La Ferrara, 2002).

4. Results and Discussion

This section document the association between interpersonal trust and its relation with macroeconomic variables. Models 2, 3, 4, 5, 6, 7 showcased in Table 1, undergo regression to perform a sensitivity analysis, thereby affirming the credibility of the outcomes observed in the final model (1). The research employs a logit model to estimate the relationship between interpersonal trust and the selected macroeconomic variables by running individual regressions on the trust question and found that they share a significant relation. The results provide a basis for informed policy decisions aimed at cultivating trust in global and national contexts, ultimately contributing to more cohesive and resilient societies.

Table 1: Results

VARIABLES	(1) Final World (Logit)	(2) without income (Logit)	(3) without satisfaction (Logit)	(4) without internet (Logit)	(5) without population (Logit)	(6) without GDI (Logit)	(7) without HDI (Logit)
GDPpercap	1.31e-05***	1.30e-05***	1.30e-05***	1.29e-05***	1.29e-05***	1.42e-05***	1.97e-05***
	(1.11e-06)	(1.11e-06)	(1.11e-06)	(1.10e-06)	(1.11e-06)	(1.11e-06)	(8.55e-07)
hdi	3.571***	3.715***	3.627***	4.002***	3.583***	2.613***	
	(0.389)	(0.388)	(0.387)	(0.261)	(0.389)	(0.373)	
gdi	-2.790***	-2.847***	-2.534***	-2.803***	-2.811***		-1.983***
	(0.309)	(0.308)	(0.307)	(0.308)	(0.309)		(0.298)
pop	-5.01e-10**	-4.95e-10**	-4.35e-10**	-5.19e-10***		-5.42e-10***	-5.21e-10***
	(1.95e-10)	(1.94e-10)	(1.94e-10)	(1.94e-10)		(1.94e-10)	(1.95e-10)
internetusers	0.00218	0.00184	0.00152		0.00245*	0.00269*	0.0123***
	(0.00147)	(0.00146)	(0.00147)		(0.00147)	(0.00145)	(0.000997)
satisfaction	0.0569***	0.0591***		0.0564***	0.0562***	0.0512***	0.0580***
	(0.00675)	(0.00673)		(0.00673)	(0.00674)	(0.00669)	(0.00671)
income_problem	0.0227***		0.0265***	0.0222***	0.0226***	0.0247***	0.0273***
	(0.00565)		(0.00564)	(0.00564)	(0.00565)	(0.00562)	(0.00563)
Constant	-2.595***	-2.463***	-2.463***	-2.764***	-2.618***	-4.538***	-1.443***
	(0.300)	(0.299)	(0.298)	(0.278)	(0.300)	(0.215)	(0.271)
Observations	35,012	35,012	35,012	35,012	35,012	35,012	35,012

Standard errors in parentheses   *** p<0.01, ** p<0.05, * p<0.1

The results from table 1, provide support the resource-based theory of trust as proposed by Uslaner (2002), posits that economic prosperity provides a foundation for social cohesion, fostering trust among individuals. The coefficients for GDP per capita and HDI are positive and statistically significant in all models. Higher GDP per capita and HDI levels are associated with increased interpersonal trust. Knack and Keefer (1997) also affirm the conclusion that nations with higher levels of interpersonal trust are also equipped with better-educated populations. In other words, increase human capital can escort to an enhance in trust among individuals. Human capital and population growth go hand in hand when it comes to encouraging the trust process among individuals. Another important implication of results is that having trust between people might help explain growth better. The

negative and significant coefficient for population size suggests that larger populations are associated with decreased trust. This aligns with theories emphasizing the challenges posed by increased population complexity. Internet users and satisfaction exhibit positive coefficients in the models, indicating a moderate positive effect on trust. This underscores the role of information access and well-being in shaping trust dynamics. Lastly, the negative and significant coefficient for income problems supports the socio-economic stress theory. Higher levels of income problems are associated with lower interpersonal trust.

5. Conclusion and Policy Implication

This study contributes to the understanding of the intricate relationship between macroeconomic variables and interpersonal trust. Drawing upon a comprehensive review of existing literature, our analysis confirms the significant impact of economic factors such as GDP per capita and HDI on trust levels. Higher levels of economic prosperity and human development are associated with increased interpersonal trust. Furthermore, findings suggest that while internet access and satisfaction positively influence trust, larger population sizes and income problems are associated with decreased trust levels. These results underscore the multifaceted nature of trust dynamics and emphasize the importance of addressing socio-economic challenges in fostering trust within societies. The findings of this study have significant implications for policymakers aiming to cultivate trust in both national and global context. Policymakers should prioritize policies that address socio-economic inequalities, promote human development, and enhance transparency and accountability to foster trust and create more cohesive and resilient societies. By understanding the complex interplay between macroeconomic factors and interpersonal trust, policymakers can design targeted interventions to promote trust and facilitate inclusive growth and development.

References

Ahmad, M., & Hall, S. G. (2017). Trust-based social capital, economic growth and property rights: explaining the relationship. *International Journal of Social Economics.*

Aslam, A. (2020). The hotly debate of human capital and economic growth: why institutions may matter? Quality & Quantity, 54(4), 1351-1362.

Aslam, A., & Farooq, A. (2019). In Pursuit of Inclusive Institutional Growth: A Comparative Pattern of Selected Asian Countries. *European Online Journal of Natural and Social Sciences,* 8(3), pp. 495-511.

Aslam, A., & Shabbir, G. (2019). Socio-Digital Inclusion for Inclusive Growth: Evidences from World Level Data. *Pakistan Journal of Social Sciences* (PJSS), 39(2).

Aslam, A., & Zulfiqar, K. (2016). Policy framework for inclusive growth: a case study of selected Asian countries. *Forman J. Econ. Stud*, 12, 21-40.

Aslam, A., Ghouse, G., (2022). The Socio-Economic Determinants of Interpersonal Trust Levels. *International Journal of Management Research and Emerging Sciences* , 12(3),155-165.

Aslam, A., Naveed, A., & Shabbir, G. (2021). Is it an institution, digital or social inclusion that matters for inclusive growth? A panel data analysis. *Quality & Quantity*, 55(1), 333-355.

Aslam. A., & Ghouse, G., (2023). Comparative Analysis of Trust in Financial Institutions Across four Provinces in Pakistan. *Audit and Accounting Review* (AAR), 3(2).

Atkinson, A. B. (1999). The economic consequences of rolling back the welfare state. MIT press

Aydemir, R. (2024). Examining the Cluster Life Cycle in the Process of Economic Development. *Journal of Policy Options*, 7(1), 18-26.

Banfield, E. C. (1967). The moral basis of a backward society.

Blind, P. K. (2007, June 26–29). Building trust in government in the twenty-first century: Review of literature and emerging issues. 7th global forum on reinventing government building trust in government, Expert Associate UNDESA Vienna, Austria.

Borum, R. (2010). The science of interpersonal trust. University of South Florida.

Castaldo, S., Perrini, F., Misani, N., & Tencati, A. (2009). The missing link between corporate social responsibility and consumer trust: The case of fair trade products. *Journal of business ethics,* 84(1), 1-15.

Chen, G., Yang, Z., & Chen, S. (2020). Measurement and convergence analysis of inclusive green growth in the Yangtze river economic belt cities. Sustainability, 12(6), 2356.

Chita-Tegmark, M., Law, T., Rabb, N., & Scheutz, M. (2021). Can you trust your trust measure? *Proceedings of ACM/IEEE International Conference on Human-Robot Interaction.*

Choi, N. (2005). Self-efficacy and self-concept as predictors of college students' academic performance. *Psychology in the Schools*, 42(2), 197-205.

Chusseau, N., Dumont, M., & Hellier, J. (2008). Explaining rising inequality: Skill-biased technical change and north–south trade. *Journal of Economic Surveys*, 22(3), 409-457.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American journal of sociology*, 94, S95-S120.

Collie, R. J., Shapka, J. D., Perry, N. E., & Martin, A. J. (2015). Teachers' beliefs about social-emotional learning: Identifying teacher profiles and their relations with job stress and satisfaction. *Learning and Instruction*, 39, 148-157.

Craig, R. K. (2007). A comparative guide to the eastern public trust doctrines: classifications of states, property rights, and state summaries. Penn St. Envtl. L. Rev., 16, 1.

Dalcher, D. (2018). It starts with trust: People, perspectives and relationships as the building blocks for sustainable success. In Managing Projects in a World of People, Strategy and Change (pp. 13-19). *Routledge.*

Dasgupta, P., & Gambetta, D. (1988). Trust: Making and breaking cooperative relations. Department of Sociology, *University of Oxford: Basil Blackwell*, 49-72.

Dyer, J. H., & Chu, W. (2003). The role of trustworthiness in reducing transaction costs and improving performance: Empirical evidence from the United States, Japan, and Korea. *Organization science,* 14(1), 57-68.

Elahi, G., & Yu, E. (2009). Trust trade-off analysis for security requirements engineering. 17th IEEE *International Requirements Engineering Conference*,

Epstein, S. (1980). The self-concept. Personality: Basic issues and current research. *NJ: Prentice-HalL*.

Fahr, R., & Irlenbusch, B. (2000). Fairness as a constraint on trust in reciprocity: earned property rights in a reciprocal exchange experiment. *Economics Letters, 66*(3), 275-282.

Fang, G., & Zhu, Y. (2022). The Social Scar of the Pandemic: Impacts of COVID-19 Exposure on Interpersonal Trust. *Available at SSRN* 4067592.

Farhadi, M., & Zhao, L. (2024). Exploring the Impact of Iran-China Trade on Environmental Sustainability. *Journal of Energy and Environmental Policy Options*, 7(1), 1-8.

Filipiak, U. (2016). Trusting financial institutions: Out of reach, out of trust? The Quarterly Review of Economics and Finance, 59(C). 200– 214.

Fukuyama, F. (1995). Social capital and the global economy. *Foreign Aff.*, 74, 89.

Gecas, V. (1982). The self-concept. *Annual review of sociology*, 1-33.

Goldsmith, R. E., Moore, M. A., & Beaudoin, P. (1999). Fashion innovativeness and self-concept: a replication. *Journal of Product & Brand Management*, 8(1), 7-18.

Greif, A. (1993). Contract enforceability and economic institutions in early trade: The Maghribi traders' coalition. *The American economic review*, 525-548.

Grootaert, C. (2001). Does social capital help the poor?-a synthesis of findings from the local level institutions studies in Bolivia, Burkina Faso, and Indonesia. *The World Bank*.

Hassan, J., Muhammad, N., Sarwar, B., & Zaman, N. U. (2020). Sustainable development through financial inclusion: The use of financial services and barriers in Quetta-Pakistan. European Online Journal of Natural and Social Sciences, 9(4), 691–707

Helliwell, J. F. (1996). Economic growth and social capital in Asia. In: *National Bureau of Economic Research Cambridge*, Mass., USA.

Hergeth, S., Lorenz, L., Vilimek, R., & Krems, J. F. (2016). Keep your scanners peeled: Gaze behavior as a measure of automation trust during highly automated driving. *Human factors*, 58(3), 509-519.

Heyert, A., & Weill, L. (2023). The gender gap in trust in banks. Research in International Business and Finance, 66, Article e102032.

Hofstede, G. J., Jonker, C. M., Meijer, S., & Verwaart, T. (2006). Modelling trade and trust across cultures. *International Conference on Trust Management,*

Ibrahim, M., & Rasheed, A. (2024). Exploring the Link Between Customer Relationship Management and Hotel Performance. *Journal of Policy Options*, 7(1), 1-10.

Inglehart, R. (1997). Modernization and postmodernization in 43 societies. *Princeton university press.*

Iqbal, M., & Abbas, W. (2024). Determinants of Expected Service Quality: A Comparative Study in Pakistani Banking Sector. *Journal of Policy Options*, 7(1), 27-35.

Jalan, A., Matkovskyy, R., Urquhart, A., & Yarovaya, L. (2022). The role of interpersonal trust in cryptocurrency adoption. *Available at SSRN*: https://ssrn.com/abstract=4099518 or http://dx.doi.org/10.2139/ssrn.4099518

Ji, B., & Long, R. (2022). International Research Progress and Evolution Trend of Interpersonal Trust—Prospects under COVID-19 Pandemic. *Sustainability, 14*(2), 987.

Judge, T. A., Erez, A., & Bono, J. E. (1998). The power of being positive: The relation between positive self-concept and job performance. *Human performance*, 11(2-3), 167-187

Kelly, M. (2005). The Seven Levels of Intimacy: The Art of Loving and the Joy of Being Loved. *Simon and Schuster*.

Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff? A cross-country investigation. *The Quarterly journal of economics*, 112(4), 1251-1288.

Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff? A cross-country investigation. *The Quarterly journal of economics*, 112(4), 1251-1288.

Komarraju, M., Musulkin, S., & Bhattacharya, G. (2010). Role of student–faculty interactions in developing college students' academic self-concept, motivation, and achievement. *Journal of college student development, 51*(3), 332-342.

Kowalski, M., Lee, Z. W., & Chan, T. K. (2021). Blockchain technology and trust relationships in trade finance. *Technological forecasting and social change*, 166, 120641.

Krugman, P. (2015). Trade and trust. *The New York Times*, A27 (L)-A27 (L).

Lau, D. C., Lam, L. W., & Wen, S. S. (2014). Examining the effects of feeling trusted by supervisors in the workplace: A self-evaluative perspective. *Journal of Organizational Behavior, 35*(1), 112-127.

Li, S., & Wu, J. (2010). Why some countries thrive despite corruption: The role of trust in the corruption–efficiency relationship. *Review of International Political Economy*, 17(1), 129-154.

Luhmann, N. (1986). Love as passion: The codification of intimacy. *Harvard University Press*.

Lyeonov, S., Vasilyeva, T., Bilan, Y., & Bagmet, K. (2021). Convergence of the institutional quality of the social sector: The path to inclusive growth. *International Journal of Trade and Global Markets, 14*(3), 272-291.

Lynch, K. (2013). Why Love, Care, and Solidarity Are Political Matters: Aff ective Equality and Fraser's Model of Social Justice. In Love (pp. 187-204). *Routledge.*

Mainous, A. G., Smith, D. W., Geesey, M. E., & Tilley, B. C. (2006). Development of a measure to assess patient trust in medical researchers. *The Annals of Family Medicine*, 4(3), 247-252.

Marsh, H. W., Parada, R. H., & Ayotte, V. (2004). A multidimensional perspective of relations between self-concept (Self-Description Questionnaire II) and adolescent mental health (Youth Self-Report). *Psychological Assessment*, 16(1), 27.

Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of marketing research,* 45(6), 633-644.

McAllister, D. J. (1995). Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of management journal,* 38(1), 24-59.

Morris, S. D., & Klesner, J. L. (2010). Corruption and trust: Theoretical considerations and evidence from Mexico. *Comparative political studies*, 43(10), 1258-1285.

Osherenko, G. (2006). New discourses on ocean governance: understanding property rights and the public trust. *J. Envtl. L. & Litig.*, 21, 317.

Peloso, M. E., & Caldwell, M. R. (2011). Dynamic property rights: the public trust doctrine and takings in a changing climate. *Stan. Envtl. LJ,* 30, 51.

Platt, J. E., Jacobson, P. D., & Kardia, S. L. (2018). Public trust in health information sharing: a measure of system trust. *Health services research*, 53(2), 824-845.

Putnam, R. D. (1995). Tuning in, tuning out: The strange disappearance of social capital in America. *PS: Political science & politics*, 28(4), 664-683.

Putnam, R. D. (2000). Bowling alone: The collapse and revival of American community. *Simon and schuster*.

Qamar, A., Ashraf, M. S., Ghouse, G., & Aslam, A. (2020). Probing Real Economic Growth through Institutional Quality and Fiscal Policy in Pakistan. *Ilkogretim Online,* 19(3), 2378-2385.

Quader, M. (2024). Exploring Human Resource Management Practices and Employee Satisfaction in Bangladesh's Private Banking Sector. *Journal of Policy Options*, 7(1), 36-45.

Rath, N. (2024). Perceived Advantages and Challenges of Internet Marketing: A Study of Small Entrepreneurs in Punjab, India. *Journal of Policy Options*, 7(1), 11-17.

Rempel, J. K., Holmes, J. G., & Zanna, M. P. (1985). Trust in close relationships. *Journal of personality and social psychology*, 49(1), 95.

Rose-Ackerman, S. (2001). Trust, honesty and corruption: Reflection on the state-building process. *European Journal of Sociology*/Archives Européennes de Sociologie, 42(3), 526-570.

Roth, F. (2006). Trust and economic growth: Conflicting results between cross-sectional and panel analysis. *Ratio Working Papers*, 102.

Rothstein, B. (2001). Social capital in the social democratic welfare state. *Politics & Society*, 29(2).

Rothstein, B., & Eek, D. (2009). Political corruption and social trust: An experimental approach. *Rationality and society*, 21(1), 81-112.

Serritzlew, S., Sønderskov, K. M., & Svendsen, G. T. (2014). Do corruption and social trust affect economic growth? A review. *Journal of Comparative Policy Analysis: Research and Practice*, 16(2), 121-139

Sias, P. M. (2008). Organizing relationships: Traditional and emerging perspectives on workplace relationships.

Simpson, J. A. (2007). Foundations of interpersonal trust.

Skovlund, H. (2014). Inclusive and exclusive aspects of diagnosed children's self-concepts in special needs institutions. *International Journal of Inclusive Education*, 18(4), 392-410.

Sohlberg, J., Agerberg, M., & Esaiasson, P. (2022). Waiting for Asylum: Reduced Institutional and Interpersonal Trust. *Political Studies*, 00323217221103728.

Sullivan, J. L., & Transue, J. E. (1999). The psychological underpinnings of democracy: A selective review of research on political tolerance, interpersonal trust, and social capital. *Annual review of psychology*, 50(1), 625-650. .

Teraji, S. (2008). Property rights, trust, and economic performance. *The Journal of Socio-Economics*, 37(4), 1584-1596.

Tschannen-Moran, M. (2007). Becoming a trustworthy leader. *The Jossey Bass reader on educational leadership*, 99-113.

Ullah, A., & Ali, A. (2024). Investigating Corruption, Income Inequality, and Environmental Degradation in Pakistan: A Time Series Analysis. *Journal of Energy and Environmental Policy Options*, 7(1), 9-18.

Ullman, D., & Malle, B. F. (2018). What does it mean to trust a robot? Step toward a multidimensional measure of trust. *Companion of the 2018 acm/ieee international conference on human-robot interaction*

Uslaner, E. M. (2004). Trust and corruption. In The new institutional economics of corruption (pp. 90-106). *Routledge*.

Uslaner, E. M. (2013). Trust and corruption revisited: How and why trust and corruption shape each other. *Quality & Quantity,* 47(6), 3603-3608.

Usman, H., Tjiptoherijanto, P., Balqiah, T. E., & Agung, I. G. N. (2017). The role of religious norms, trust, importance of attributes and information sources in the relationship between religiosity and selection of the Islamic bank. Journal of Islamic Marketing, 8(2), 158–186.

Zeffane, R., & Connell, J. (2003). Trust and HRM in the new millennium. *International Journal of Human Resource Management*, 14(1), 3-11.