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Across borders and time: Testing the competing perspectives of system justification

A thesis presented in partial fulfillment of the requirements for the degree of

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Statement of Authorship

The four empirical studies within four separate articles that comprise this thesis have all been written for publication. I am the primary author for each article, having conceptualized the ideas, conducted the analyses, interpreted the findings, and written the final articles. [Chapter 2](#) has been published at the Asian Journal of Social Psychology. [Chapter 3](#) has been published at the journal Political Psychology. [Chapter 4](#) is currently under review at the journal Political Psychology. [Chapter 5](#) is currently under review at the journal Collabra: Psychology.¹

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General Abstract

Why do people defend societal systems that perpetuate inequality and injustice? This question is increasingly relevant in today's geopolitical climate, amid growing tensions between calls for progressive social change and maintenance of a traditional, sometimes polarized, status quo. System Justification Theory (SJT) posits that individuals are motivated—due to both dispositional and situational factors—to defend and justify existing social, economic, and political systems, even when doing so may conflict with their self- or group-interests. Competing theories, however, argue that system justification is largely a reflection of those interests. This thesis tests these competing perspectives on system justification across countries and time through four studies, using a consistent four-item measure of general system justification for comparability.

[Study 1](#) examined SJT's status-legitimacy hypothesis in China and the United States, using both subjective and objective indicators of socioeconomic status (SES). Subjective SES consistently positively predicted system justification across cultures and time, aligning with self- and group-interest explanations. Objective SES, however, showed only weak and inconsistent support for SJT in China. [Study 2](#) expanded the scope cross-culturally, comparing SJT to the social identity perspectives and Social Dominance Theory, using data from 42 countries. Results largely favored self- and group-interest explanations over SJT across cultures. [Study 3](#) tested SJT's claim that system justification provides psychological benefits in the form of enhanced psychological wellbeing using four waves of longitudinal data. Bidirectional cross-lagged panel modeling showed that system justification predicted greater subjective SES via increased life satisfaction over time, but not vice versa, supporting SJT's claim that system-justifying beliefs can confer psychological benefits independent of materials self-interest. However, when assessing this model using more robust longitudinal techniques, no such effect was observed.

[Study 4](#) used a longitudinal quasi-experiment centered around New Zealand's 2023 general election to compare SJT with the Social Identity Model of System Attitudes (SIMSA). Results showed that system justification generally coincided with self- and group-interests among electoral winners and losers in line with SIMSA. However, among disadvantaged electoral losers, perceived system threat [of SJT] better explained continued system justification than did optimism about the future [of SIMSA], providing stronger support for SJT.

Overall, this thesis demonstrates that system justification arises from a complex interplay of individual, situational, ideological, and societal factors. While system justification often reflects self- and group-interests, under certain conditions it functions as an ideological mechanism that can conflict with these very interests to uphold societal structures – especially when those structures are perceived to be under threat. This supports the view of system justification as both an ideological disposition and a palliative mechanism, sustaining societal structures despite inequality. Such insights highlight the challenge of addressing systemic injustice and underscore the need to frame social change in ways that align with psychological motivation and a desire for stability.

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Table of Contents

Statement of Authorship	II
General Abstract	III
Acknowledgements	V
List of Tables.....	X
List of Figures.....	XI
Chapter 1: Introduction to Thesis and Literature Review.....	1
Early Theories of Hierarchy and System Justification	7
Theoretical Shifts in Intergroup Psychology	9
Social Identity Approach.....	11
Modern Interpretations of the Social Identity Approach	13
The Need for a Systemic Level of Analysis.....	15
Social Dominance Theory.....	18
Limitations of the Social Identity Approach and Social Dominance Theory from a System Justification Lens	21
System Justification Theory.....	25
The Status-Legitimacy Hypothesis and the Influence of Societal and Cultural Contexts....	31
Empirical Evidence of the Status-Legitimacy Hypothesis in the Global North	34
Empirical Evidence of the Status-Legitimacy Hypothesis in the Global South	36
The Psychological Benefits of System Justification.....	38
Social Identity Model of System Attitudes	40
From Social Identity to Ideological Influence: The Importance of Political Ideology	45
Emerging Gaps and Thesis Overview.....	49
Preface 1: Chapter 2	53
Chapter 2: Testing the Status-Legitimacy Hypothesis: Predicting System Justification Using Objective and Subjective Socioeconomic Status in China and the United States.....	55
System Justification	56
Empirical Study to be Replicated	62
Present Study	64
Aims and Hypotheses	66
Method	66
Instruments.....	69
Results.....	70
Discussion.....	80
Preface 2: Chapter 3	88

Chapter 3: A Cross-Cultural Test of Competing Hypotheses About System Justification Using Data From 42 Nations	90
Rationale for Hypotheses	93
Status, Freedom, and Culture	93
Political Ideology	96
Societal Inequality	97
Hypotheses	98
Individual-Level – Objective and Subjective SES	98
Individual-Level – Political Ideology	99
Country-Level – Economic (In)equality	100
Country-Level – Freedom/Civil Liberties	101
Method	102
Results	108
General Discussion	120
Preface 3: Chapter 4	128
Chapter 4: The Palliative Bidirectional Effects of System Justification and Subjective SES: Implications for Life Satisfaction Using Longitudinal Data in New Zealand	130
Palliative Function of System Justification	132
A Theory of Bidirectionality	134
Hypotheses	139
Method	139
Results	143
General Discussion	158
Preface 4: Chapter 5	165
Chapter 5: A longitudinal investigation of the effects of New Zealand’s 2023 election on System Justification	168
The ideology of system justification	171
The situational nature of system justification	173
Election outcomes and [dis]advantage	177
Present Research	178
Hypotheses	179
Method	183
Results	187
Discussion	203
Chapter 6: General Discussion and Conclusion	213
Aims of the Thesis	213

Summary of Findings and Empirical Contributions	214
Theoretical Contributions: Refining the cross-cultural and longitudinal framework for system justification processes	216
Societal Relevance, Practical Implications, and Action Recommendations	223
Addressing System-Justifying Beliefs in Public Discourse	225
Enhancing Political Legitimacy in Democratic Societies	226
Integrating Cross-Cultural Perspectives into Policy Design	226
Reflections on System Justification and Societal Change	226
Limitations and Directions for Future Research	227
Limitations of the Thesis	227
Directions for Future Research	229
Conclusion	232
References	234
Appendix 1: Supplementary Materials for Chapter 3	268
Appendix 2: Supplementary Materials for Chapter 4	273

List of Tables

Table 1.1 Results of a PsycInfo Search on the Number of References for “Political Ideology” only and then including “Cross-Cultural” (1935-2024)	46
Table 2.1 Descriptive Statistics and Bivariate Correlations of Key Variables in China Sample	72
Table 2.2 Descriptive Statistics and Bivariate Correlations of Key Variables in USA Sample	73
Table 2.3 Multiple Regression Analysis with Interaction Effects of System Justification	77
Table 3.1 H1A-H1B Random Effects Multilevel Model Predicting System Justification using Income and Education	111
Table 3.2 H2A-H2B Predicting System Justification using Political Orientation and Political Party in Power	115
Table 3.3 H3A-H3B Predicting System Justification using Inequality (GINI) and Social Mobility	118
Table 3.4 H4A-H4B Predicting System Justification using a Countries Level of Freedom	120
Table 4.1 Descriptive Statistics of Study Sample Compared to Population Benchmarks	141
Table 4.2 Means, Standard Deviations, and Correlations with 95% Confidence Intervals of Variables of Interest	144
Table 4.3 Indirect effects of interest for constrained bi-directional CLPM and RI-CLPM	156
Table 5.1 Descriptive Statistics of Study Sample Compared to Population Benchmarks	184
Table 5.2 Means, Standard Deviations, and Correlations with 95% Confidence Intervals between Variables of Interest	189
Table 5.3 Multilevel Models Predicting System Justification Over Time	200

List of Figures

Figure 1.1 Political Ideology as Motivated Cognition	48
Figure 2.1 Estimated Effect of Subjective and Objective SES on System Justification by Country (Cross-Sectionally)	78
Figure 2.2 Estimated Effect of Subjective and Objective SES on System Justification by Country (Longitudinally)	79
Figure 3.1 Multilevel Mediation of Subjective SES and System Justification Through Life Satisfaction	113
Figure 3.2 System Justification by Political Orientation and The Political Party in Power (H2B)	116
Figure 3.3 System Justification by a Country's Level of (In)equality (GINI) and Social Mobility (Low, Medium, High)	119
Figure 4.1 Conceptual Diagram of Cyclical Relationship Between Subjective SES, Life Satisfaction, and System Justification	137
Figure 4.2 Unstandardized Bidirectional Mediation CLPM (Constrained)	150
Figure 4.3 Standardized Bidirectional CLPM between Subjective SES and System Justification over time	152
Figure 4.4 Unstandardized Bidirectional Mediation RI-CLPM (Constrained)	157
Figure 5.1 System Justification Over Time	191
Figure 5.2 System Justification Over Time by Political Ideology	194
Figure 5.3 Moderating Effect of Optimism about the Future and Political Ideology on System Justification Over Time	196
Figure 5.4 Moderating Effect of System Threat and Political Ideology on System Justification Over Time	199

Chapter 1: Introduction to Thesis and Literature Review

Humans are motivated to make sense of the social world around them, interpreting and navigating societal structures, such as governing policies, institutions, and cultural traditions (Festinger, 1950, 1954; Sayer, 2011). In doing so, individuals often attempt to rationalize, justify, and legitimize these societal systems for the purpose of finding or creating meaning and certainty through their hierarchical organization and function (Weber, 1976, 1978; Sidanius & Pratto, 2001).² A *societal system*, in this thesis, refers to the networks of people and institutions that work together to sustain the societal structure and its corresponding status quo (Parsons, 2013). *Systems* range from large, flexible entities like cultures, societies, and national governments to smaller, more fixed units, such as families (Kay & Zanna, 2009). The system justification motive refers to the psychological tendency to defend, rationalize, and uphold existing societal arrangements—sometimes aligning with self- and group-interests for the advantaged but also emerging independently of these interests among disadvantaged individuals who perceive the system [regardless of accuracy] as fair and legitimate (Jost & Banaji, 1994). This motive fosters system-justifying beliefs, which frame societal systems as just, fair, and operating as they should (Jost et al., 2004; Lerner, 1977, 1980).

System-justifying beliefs are used consciously and sometimes unconsciously to defend the status quo from threat, change, criticism, or illegitimacy (Jost, 2020). Examples of system-justifying beliefs are: endorsing the belief that everyone in a given society has a fair shot at wealth and happiness, believing that a certain country's society is fair, believing that a country's

² As a point of terminology clarification, in the subsequent published Chapters 2 and 3, I refer to these societal systems as “social systems.”

political system operates in the way it should, or that a country's society is set up so that people get what they deserve (Kay & Jost, 2003).

The research literature on system-justifying processes highlights two competing perspectives on the roots of system justification, each offering distinct explanations for why individuals justify systems, even when they are pernicious. System Justification Theory posits that system justification is a motivated ideological process: for the advantaged, it is driven by self- and group-interest factors, while for the disadvantaged, it fulfills existential, epistemic, and relational needs through false or inaccurate beliefs (Jost, 2020; Jost & Banaji, 1994; Jost et al., 2013, 2023). In contrast, Social Identity Theory, Self-Categorization Theory, Social Dominance Theory, and the Social Identity Model of System Attitudes posit that there are limits to SJT's accuracy. These theorists instead argue that endorsing system justification requires a self- and group-interest belief system for both advantaged and disadvantaged individuals and groups (Tajfel & Turner, 1979; Turner et al., 1987; Sidanius & Pratto, 2001; Owuamalam et al., 2017, 2019), and therefore, system-justifying beliefs are unlikely to present themselves whenever self-interest is threatened by the system in question.

According to Social Identity Theory, Self-Categorization Theory, Social Dominance Theory, and Social Identity Model of System Attitudes, ego (i.e., self) and group justifications are paramount. From these theorists' perspective, system justification is merely a self- and group-interest-based desire—in other words, you or your group have benefitted [or expect to] from the *system*, and therefore become advantaged, making justifying the status quo align with your self- and group-interests.

From this self- and group-interest perspective, system justification can occur among those who are currently disadvantaged for several reasons. First, they may believe that the

system will eventually work in their favor since it is just and fair, allowing them to become advantaged in the future even though they are currently disadvantaged. Second, they may compare their social standing to more subordinate individuals or groups who are even lower on the social hierarchy, making the status quo seem relatively acceptable. Third, they may perceive that there is no viable alternative to the current system and that challenging the established status quo in hopes of creating a new one would be too costly for their personal or groups interests. As a result, they acquiesce in favor of the status quo—rather than resist it—out of fear (Owuamalam et al., 2019; Tajfel & Turner, 1979; Sidanius & Pratto, 2001).

In contrast to this self- and group-interest-focused perspective on intergroup relations, System Justification Theory (Jost & Banaji, 1994) argues that there exists a distinct system justification motive to system-justify, which can sometimes be at odds with and overrule ego justifications (desire to see the self in a positive light) and group justifications (the desire to see the group in a positive light) for the disadvantaged. The motive to system-justify is believed to stem from one's dependence on the system, and System Justification Theory argues that this dependence differs depending on whether an individual is advantaged or disadvantaged (Jost et al., 2004). The advantaged depend on the system and the status quo to maintain their advantageous position; accepting the social system as legitimate coincides with ego and group justification motives (Li, Wu, & Kou, 2020a).

Meanwhile, the disadvantaged also rely on the system to satisfy epistemic needs for certainty and structure, existential needs to manage anxieties in favor of security, and relational needs to avoid conflict, alienation, and marginalization (Jost & Hunyady, 2005; Van der Toorn et al., 2015). While these needs may be framed as self-interested in the sense that they reduce psychological distress, they often conflict with material and political self-interest by leading

individuals to accept and justify a system that partially perpetuates their disadvantage (Jost, 2019). In the absence of perceived self-control over their social status, disadvantaged individuals are particularly inclined to justify existing inequalities as inevitable or inescapable, reducing cognitive dissonance between their belief that they deserve fair treatment and their perception that the system is just (Jost, 2019; Jost et al., 2004). Jost and Banaji (1994) posit that by accepting the status quo as legitimate, they reduce psychological discomfort and reinforce a sense of stability and predictability in the social order, rather than experiencing uncertainty and existential threat that could arise from perceiving the system as arbitrary or unjust. This process aligns with broader existential motivations, as it provides a means of reducing anxiety and maintaining a coherent worldview (Jost & Hunyady, 2005; Van der Toorn et al., 2015).

Put simply, if the disadvantaged regard the system as just and fair, they should then blame themselves and their group for their disadvantaged situation; if they considered themselves and their group as worthy of being advantaged, then they ought to believe that the system is an illegitimate one that causes their disadvantageous situation (Jost, 2019; Jost et al., 2002). However, rather than directing blame inward or toward the system, an alternative resolution to this dilemma is scapegoating an outgroup—shifting blame onto external actors who are perceived as responsible for their disadvantaged position (Jolley et al., 2018; Mao et al., 2021, 2024). Disadvantaged individuals' ability to accede to the system goes against motives for self-enhancement, *long-term* psychological well-being, and ingroup favoritism (Godfrey et al., 2019; Jost et al., 2002; Jost & Thompson, 2000).

Such a dilemma between the ego, group, and system justification motives induces the disadvantaged to experience psychological conflict (Jost et al., 2003c). To resolve this psychological conflict, System Justification Theory postulates that disadvantaged individuals can

hold even greater beliefs that the social system is just and fair when compared to the advantaged, due to both societal and cultural factors as well as serving psychological functions (Jost & Banaji, 1994). This pattern may resemble escalating commitment, where disadvantaged individuals persist in system-justifying beliefs despite mounting personal or collective costs, reinforcing their attachment to the status quo. In extreme cases, such reinforcement can contribute to ideological polarization, further entrenching individuals in their justifying narratives. Brandt (2013) termed this postulate of System Justification Theory as the *status-legitimacy hypothesis*.³

According to System Justification Theory's societal theorization regarding the status-legitimacy hypothesis, several societal factors may lead disadvantaged individuals to perceive greater personal responsibility for their position, thereby increasing their tendency to system-justify (Jost et al., 2004). These factors include high levels of inequality, a societal emphasis on meritocracy, and democratic social and political systems with high civil liberties. In such contexts, inequality is often framed as a reflection of individual effort rather than structural barriers, while meritocratic ideology reinforces the belief that success and failure are based on personal ability and hard work (Kluegel & Smith, 2017). Additionally, democratic systems with high civil liberties provide the perception that individuals have meaningful opportunities to voice concerns and change their circumstances through legal and political channels. Together, these conditions create a societal narrative that disadvantaged individuals have significant control over their life outcomes (Brandt, 2013; Jost et al., 2003b). As a result, these individuals may experience heightened psychological pressure to rationalize their lower status as fair and

³ For a point of clarification, the status-legitimacy hypothesis was originally named the strong system justification hypothesis by Jost et al. (2003c).

deserved, leading to greater motivation to support, defend, and justify the existing social system compared to individuals from societies without such factors.

Furthermore, empirical research has found that endorsing system-justifying beliefs may provide psychological benefits in the form of enhanced positive affect, reduced negative affect, and increased overall life satisfaction, helping disadvantaged individuals cope with the negative aspects of their situation—but only in the *short-term* (Jost & Hunyady, 2005; Jost et al., 2003b, 2008; Rankin et al., 2009; Vargas-Salfate, 2017; Vargas-Salfate et al., 2018a). System Justification Theory explains that the immediate emotional benefits of system justification come with social and psychological costs for the disadvantaged in terms of negative *long-term* well-being, decreased potential for social change, and remediation of inequality (Jost et al., 2004; Wakslak et al., 2007). Previous experimental and longitudinal research has found that system justification tends to be negatively related with ingroup favoritism, long-term self-esteem, and psychological well-being—measured in terms of depression, neuroticism, ambivalence, and stigma internalization (Godfrey et al., 2019; Jost et al., 2002; Jost & Thompson, 2000; Pacilli et al., 2011).⁴

System Justification Theory also suggests that—beyond its situational flexibility—system justification can function as a relatively stable ideological tendency, particularly among individuals with a strong motivation for certainty, security, and existential reassurance (Jost & Banaji, 1994; Jost et al., 2003a). These psychological motivations are closely tied to broader

⁴From the perspectives of both the self/group-interest and System Justification Theory on intergroup relations, advantaged and disadvantaged in this thesis is used to capture a range individuals/groups using a variety of factors that can be mapped on a hierarchy of increasing/decreasing status. For example, economic factors (income, education, inequality, social mobility), social factors (race/ethnicity, gender, perceived status, career prestige), and political factors (ideological power, dominant ideology, ideological minority) where one can be advantaged on one factor but simultaneously disadvantaged on another.

ideological and political dispositions that shape how individuals perceive and justify societal systems over time (Jussim et al., 2016). Political identity, as a form of motivated social cognition (Jost et al., 2003b), plays a critical role in reinforcing consistent patterns of belief about the legitimacy of the status quo. For example, individuals with right-leaning ideological orientations—including social, economic, and political conservatism—tend to show greater motivation to justify and defend existing societal arrangements due to their preference for stability, order, and hierarchy (Adorno et al., 1950; Jost, 2021; Jost et al., 2003b). While system justification may fluctuate in response to immediate social and psychological situational pressures, these deeper dispositional ideological commitments to hierarchy and structure supposedly contribute to its longer-term consistency regardless of whether individuals are personally advantaged or disadvantaged by the system (Jost et al., 2003b, 2003c, 2009, 2011; Wojcik et al., 2015).

These claims made by System Justification Theory differentiate it as a theory of intergroup relations when compared to the dominant self- and group-interest perspectives of Social Identity Theory, Self-Categorization Theory, Social Dominance Theory, and the Social Identity Model of System Attitudes. The literature of intergroup relations has seen a rich debate between System Justification Theory and these other more self- and group-interest-based theoretical perspectives (Jost et al., 2002, 2004, 2013, 2023; Owuamalam & Spears, 2020; Owuamalam et al., 2018b, 2023a, 2023b; Pratto et al., 2006; Rubin & Hewstone, 2004; Rubin et al., 2023a, 2023b; Sidanius & Pratto, 2004; Sidanius et al., 2001, 2004).⁵

Early Theories of Hierarchy and System Justification

⁵ These theoretical frameworks on system justification processes and the ongoing debate between them will be discussed in greater detail starting with the section on the social identity approach and proceeding in chronological order of their development.

Intergroup relations refer to the ways in which people who belong to social groups or categories perceive, think about, feel about, and act towards and interact with people in other groups (Hogg, 2013; Yzerbyt & Demoulin, 2010). Brewer (2001) and Huddy (2004) explain that intergroup relations can occur at three levels: (1) the level of two (or more) persons interacting (the dyadic level), (2) the level of exchanges between groups (the intergroup level), and (3) the level of exchanges between a single individual and a group (the individual-group level).

Intergroup relations can describe interactions between national groups, racial groups, or political groups (amongst others), illustrating how the concept applies to diverse social categories. These levels are important to bear in mind because they provide a framework for understanding how individuals and groups navigate [dominance] social hierarchies—whether by reinforcing, challenging, or adapting to them. Theories that seek to explain system justification build upon these levels by examining why individuals, both advantaged and disadvantaged, justify existing social arrangements rather than resist them.

Dominance social hierarchies are defined as structured social organizations of ranked individuals or groups based on power, status, authority, or advantage, with dominant members exerting control or influence over subordinate members (Hearn, 1996; Rowell, 1974; Sidanius & Pratto, 2001). Dominant groups maintain their position through a disproportionate allocation of valued resources, such as prestige, wealth, power, food, and healthcare, while subordinate groups are more likely to experience system disadvantage, including exposure to undesirable conditions such as dangerous work, social disdain, poverty, imprisonment, and premature death (Sidanius et al., 2004). Understanding these hierarchies is crucial for explaining system justification, as they form the structural foundation that individuals—both dominant and subordinate—may seek to rationalize or legitimize. System Justification Theory suggests that

individuals are motivated to perceive these societal arrangements as fair, inevitable, or even necessary, which can contribute to the persistence of inequality by reducing resistance to social change (Jost, 2015; Jost & Banaji, 1994).

Theoretical Shifts in Intergroup Psychology

The study of intergroup relations within dominance hierarchies has long been a central concern in social psychology. Early perspectives, such as Gustave Le Bon's (2002/1895) *The Crowd: A Study of the Popular Mind*, depicted how collective behavior was driven by the influence of dominant leaders. In the wake of the 20th-century authoritarian regimes, mass propaganda, and the events of the holocaust, psychologists turned their focus on understanding the psychological and ideological underpinnings of intergroup dynamics (Monroe, 2004). This shift led to foundational research intent on answering a key question: What are the psychological and ideological differences that contribute to prejudice, stereotyping, discrimination, obedience, conformity, and authoritarianism (Adorno et al., 1950; Asch, 1952, 1956, 1959; Milgram, 1963, 1967)? Answers to this question helped shape the intellectual landscape from which investigations into system justification processes later emerged (Jost, 2019). It was relevant because it directed psychological research toward trying to understand not only intergroup conflict but also the cognitive and ideological mechanisms that sustain dominance social hierarchies and their perceived legitimacy.

The earliest attempts at understanding the ideological and psychological underpinnings of social hierarchy framed these phenomena (e.g., prejudice, stereotyping, discrimination, obedience, conformity, and authoritarianism) as irrational psychopathologies that resided within the individual. Scholars argued that they likely stemmed from unresolved frustration (Dollard et al., 1939), conflict with authoritarian parents (Adorno et al., 1950), a lack of positive contact

between groups (Allport, 1954), or competition over limited resources (Sherif, 1966; Sherif et al., 1961). These explanations focused on intrapsychic or interpersonal processes proposing that societal systems became unjust primarily through social influence and susceptibility to influence at the individual level (Elms, 1975). Later research recontextualized these processes as mechanisms that serve to sustain existing social arrangements through social identity (Tajfel, 1972).

By the mid-20th century, critics argued that these interpretations were overly reductionistic and individualistic, overlooking key group processes like social identification and broader structural factors that contribute to social injustice. For example, Israel and Tajfel (1972) argued that focusing solely on individual-level explanations obscured the importance of group processes, such as social identity and collective action, in shaping intergroup dynamics. This critique gained traction during the *crisis of confidence* in social psychology, where scholars highlighted the field's tendency toward reductionism and its failure to account for complex social phenomena (Elms, 1975; Hogg, 2001; Hogg & Williams, 2000). As Hornsey (2008) noted, throughout much of the post-war period heading into the 1970s, groups were often treated as mere aggregations of individual or interpersonal processes, with little consideration of their emergent properties or systemic implications, including system justification.

Starting in the 1970s leading into the turn of the century, a series of relatively new theories began to investigate individual- and group-based processes that contributed to stereotyping, discrimination, prejudice, conformity, and authoritarianism—such as history, legitimacy, categorization, and culture (Hornsey, 2008). These theories adopted a more situational lens on social psychological processes and outcomes. The first of these was Social

Identity Theory (Tajfel, 1981; Tajfel & Turner, 1979) and its extension Self-Categorization Theory (Turner et al., 1987) which in tandem are known as the *social identity approach*.

Social Identity Approach

Social Identity Theory (Tajfel & Turner, 1979) and its extension, Self-Categorization Theory (Turner et al., 1987), provided a framework for understanding intergroup behavior and social identification. Tajfel and Turner synthesized research on social categorization, ethnocentrism, and intergroup relations to explain how individuals derive their self-concept from group memberships and how this influences intergroup dynamics (Tajfel, 1972, 1981; Tajfel & Turner, 1979). Self-Categorization Theory further elaborated on these processes by explaining how people cognitively categorize themselves and others, leading to shifts in self-perception and group-based behavior (Turner, 1985; Turner et al., 1987).

A core principle of Social Identity Theory is that individuals seek positive distinctiveness for their groups, influencing intergroup attitudes and behaviors (Brewer, 1979, 1999, 2019; Carr, 2003; Tajfel, 1978b). When individuals identify with an advantaged group, Social Identity Theory argues they may justify existing social structures that maintain their status, reinforcing system-justifying beliefs that portray the hierarchy as legitimate and stable (Spears et al., 2001; Tajfel & Turner, 1979). In contrast, members of disadvantaged groups may challenge the status quo or seek social mobility when group boundaries appear permeable (Tajfel & Turner, 1979). However, in the absence of cognitive alternatives, the disadvantaged may also engage in system justification to maintain psychological stability and a coherent positive social identity through downward social comparisons (Hogg & Abrams, 1988; Major, 1994; Rubin & Hewstone, 2004).

Self-Categorization Theory (Turner et al., 1987) expands on these ideas by explaining how individuals shift between personal and social identities, leading them to internalize group

norms and behaviors. Through depersonalization, individuals see themselves as interchangeable group members, reinforcing shared beliefs and attitudes—including those that justify existing societal hierarchical arrangements (Turner, 1982). This process highlights how system-justifying beliefs can be shaped by group identification, as individuals align their views with those of their ingroup to maintain a stable and positive self-concept.

By integrating cognitive and motivational perspectives, the social identity approach offers insights into how group membership influences beliefs about societal hierarchy and stability. These processes ultimately reflect a self- and group-interest perspective on system-justifying processes, as individuals navigate the balance between maintaining a positive social identity and responding to structural constraints on social mobility.

Empirically, these processes have been tested through a range of experimental paradigms that examine how identity dynamics shape perceptions of legitimacy and hierarchy. Classic minimal group studies demonstrated that even arbitrary categorization can produce ingroup favoritism, laying the foundation for understanding how social identity motivates evaluations of fairness and hierarchy (Tajfel et al., 1971). Building on this, Social Identity Theory research often manipulates the stability, legitimacy, and permeability of intergroup status relations to assess when individuals uphold or challenge the status quo. For example, when group boundaries are presented as stable and legitimate, advantaged group members show stronger support in favor of hierarchy, while disadvantaged group members are more likely to acquiesce or engage in social creativity strategies; by contrast, when hierarchies are framed as unstable or illegitimate and boundaries are permeable, disadvantaged members are more included toward social mobility or direct collective action to change the status quo (Turner et al., 1979).

Self-Categorization Theory has been tested through manipulations of category salience—whether people’s social identity is made more (vs less) prominent in a given context—and prototypicality—the extent to which certain members are perceived as embodying defining group norms. These manipulations show that when category salience is heightened and ingroup prototypes are clear, individuals depersonalize and align with group norms, including those that reinforce hierarchical arrangements (Abrams & Hogg, 2006; Turner et al., 1987). Taken together, these studies demonstrate how the social identity approach has been empirically operationalized, illustrating how perceptions of legitimacy and stability are rooted in self- and group-interest dynamics.

Modern Interpretations of the Social Identity Approach

Recent interpretations and applications of the social identity approach have expanded on the original frameworks, offering nuanced perspectives on how individuals and groups navigate intergroup dynamics in contemporary contexts. These interpretations emphasize how disadvantaged groups may rationalize and justify legitimate systems, but modern research increasingly highlights how this process is shaped by broader sociopolitical and cultural factors, including perceptions of fairness, stability, and group norms (Caricati & Owuamalam, 2020).

As previously mentioned, the social identity approach argues that when disadvantaged individuals perceive social mobility as possible, they may adopt system-justifying beliefs to align with the dominant system. However, when mobility is blocked, they may instead seek alternative ways to maintain a positive group identity—such as making downward comparisons with less advantaged groups (Tajfel, 1974; Tajfel & Turner, 1979). When cognitive alternatives are absent, disadvantaged individuals may accept the status quo as a way to preserve a stable sense of identity and avoid the psychological discomfort associated with challenging entrenched

social hierarchies (Brewer, 1997; 2007; Hogg & Abrams, 1988; Rubin & Hewstone, 2004).

From this perspective, a key weakness in System Justification Theory is that it underestimates the role of identity-based motivations in explaining why disadvantaged individuals might continue to justify unequal systems, even when cognitive alternatives exist.

Modern research has extended these ideas by examining how perceptions of legitimacy and stability are not only a product of intergroup dynamics but also shaped by global trends, such as increasing economic inequality, political polarization, and digital media's influence on group identity formation (Jetten et al., 2021). Studies have shown that disadvantaged groups may be more likely to resist system change in contexts where system legitimacy is maintained through pervasive ideological narratives, such as meritocracy or fairness (Jost & Banaji, 1994; Jost et al., 2004; Owuamalam et al., 2018b, 2019). This research highlights the role of both self- and group-interest motivations in supporting intergroup hierarchies—particularly in systems that offer limited but visible pathways for upward social mobility. Furthermore, while the original social identity approach focused heavily on disadvantaged groups, modern interpretations also address how advantaged groups engage in system justification to protect their dominant position. Advantaged groups may support ideologies that naturalize or normalize existing hierarchies, framing them as inevitable or even desirable. Recent work has also explored how these dynamics are reinforced through cross-group consensus, where both advantaged and disadvantaged groups come to view the status quo as legitimate because it aligns with shared social norms or values (Owuamalam et al., 2023a, 2023b; Spears et al., 2001).

These modern interpretations underscore the flexibility of the social identity approach in addressing complex intergroup phenomena in a rapidly changing world. They also highlight the continuing relevance of Social Identity Theory and Self-Categorization Theory in explaining not

only how individuals navigate group dynamics, but also how collective identities shape broader societal outcomes, including political attitudes, group-based conflict, and resistance to social change (Zhang et al., 2024). However, the shortfall with respect to system justification is that these perspectives on the influence of social identity do not fully account for the ideological and motivational mechanisms that drive individuals—particularly those who are disadvantaged—to justify and defend unequal systems, even when doing so conflicts with their material self-interest or alternative identity-enhancing strategies. This critique, central to System Justification Theory, argues that such justification arises not only from intergroup dynamics but also from broader ideological and psychological needs (Jost et al., 2023).

The Need for a Systemic Level of Analysis

The social identity approach was ultimately a critical precursor for the theories to follow because it connected individual and collective levels of analysis—albeit often at a relatively small group level. For example, it sought to contextualize interpersonal and intergroup behavior by incorporating historical, cultural, and political factors. These include the legacy of colonialism in shaping national identities, cultural narratives about meritocracy influencing perceptions of inequality, and political partisanship reinforcing group boundaries, all of which affect how individuals define and respond to ingroups and outgroups (Henri, 2022; Tajfel, 1974; Tajfel & Turner, 1979). It considered how system-justifying behaviors are shaped by societal beliefs about intergroup relations and the historically specific, contextual representations of ingroups and outgroups (Hogg & Williams, 2000). Furthermore, the social identity approach adopted the minimal group paradigm as an experimental method to investigate how individuals perceive and behave toward others (i.e., ingroup and outgroup) in controlled settings. This paradigm, first introduced by Tajfel and colleagues (1971), demonstrated that even arbitrary and

meaningless group distinctions—like assigning participants to groups based on a coin toss—can elicit ingroup favoritism and outgroup discrimination. These findings highlighted the psychological mechanisms underpinning intergroup behavior and underscored the importance of understanding group dynamics beyond historical or meaningful divisions (Jost, 2001, 2004; Jost & Hunyady, 2003; Jost & Major, 2001). Lastly, the social identity approach introduced factors such as perceptions of the legitimacy and stability of the societal systems as potentially relevant to ingroup and outgroup favoritism (Brown, 2020a; Spears et al., 2001; Tajfel & Turner 1979). Simply put, the social identity approach identified constructs that are considered to be central to the understanding of relations within and between groups that differ in status and power, including system justification by those at either the top or bottom of a societal hierarchy (Jost, 2011).

However, according to other researchers interested in the psychology of intergroup relations (Jost et al., 2004; Sidanius et al., 2004), the social identity approach had clear limitations in its theoretical framework that other theories wanted to address. Firstly, the approach was criticized for minimizing real-world hierarchical arrangements between groups that differ in status and power by assessing group processes using arbitrary groups instead of using societally relevant group distinctions (Sidanius et al., 2001, 2004). Secondly, Social Identity Theory overlooks the possibility that hierarchically organized systems, often exploitative in nature, maintain legitimacy and stability through the active cooperation of both advantaged and disadvantaged groups. While disadvantaged groups may derive some benefits from their participation in systems, such as access to jobs or income that may be otherwise unavailable, these benefits are often disproportionately small compared to the advantages secured by dominant groups (Jost et al., 2004; Sidanius, 1993). For example, in global supply

chains, low-wage workers in countries like China, India, and Mexico provide essential labor for multinational corporations but remain confined to conditions that limit their socioeconomic mobility. Thirdly, the social identity approach has been criticized for its heavy emphasis on situationally contingent social identities—that is, identities that are activated only in specific contexts. This focus has led some to question the theory’s ability to fully explain intergroup behavior, such as system justification in real-world settings, where social dynamics are often shaped by enduring power and status differences across dimensions such as race, ethnicity, gender, social class, and political affiliation (Jost & Sidanius, 2004).

Fourthly, social identity theorists challenged the emphasis placed on relatively stable individual differences or predispositions, such as personality traits or ideological orientations, as primary drivers of support for hierarch and inequality. Instead, they emphasized the role of social categorization and group-based processes (Turner & Reynolds, 2003). This rejection has been criticized as a limitation of the social identity approach because it overlooks how these enduring individual differences can shape intergroup behavior, particularly in contexts where hierarchy and inequality are maintained over time through system justification (Jost & Sidanius, 2004). Lastly, the social identity approach posits that supporting the social and political status quo often fulfills the desire for positive group distinctiveness, ultimately enhancing individual self-esteem. However, the concept of positive group distinctiveness has been criticized for oversimplifying the motivations of disadvantaged groups in legitimizing oppressive systems (Pratto et al., 2006). From the perspectives of more modern intergroup relation theories on hierarchy and legitimacy, such as Social Dominance Theory (Pratto et al., 1994; Sidanius, 1993; Sidanius & Pratto, 2001) and System Justification Theory (Jost & Banaji, 1994), the social

identity approach does not fully capture the motivations behind system justification among disadvantaged groups.

Social Dominance Theory

Social Dominance Theory argues that human societal systems are ubiquitously structured as group-based social hierarchies, where there stands a dominant group at the top and a negative reference group at the bottom. According to Sidanius and Pratto (2001), group-based social hierarchies occur when dominant groups receive a disproportionate share of positive social value—material and symbolic resources that individuals strive for, such as political power, wealth, and high social status—while subordinate groups are disproportionately burdened with negative social value—including low social status, deprivation, and political powerlessness (Olson & Hafer, 2001). Pratto et al. (2013) posits that social hierarchies are maintained through hierarchy-enhancing policies and institutional structures that favor dominant groups, often at the expense of subordinates.

Social Dominance Theory predicts that dominant group members are more likely to recognize their material interests more clearly than subordinate group members, in turn producing and reproducing dominance hierarchies between the advantaged and disadvantaged (Pratto & Stewart, 2012; Sidanius & Pratto, 2001). Dominant groups are believed to have a clearer understanding and recognition of their material interests because the advantages provided by societies that maintain group dominance, such as policies and resource distributions that consistently favor them, reinforce their awareness of these benefits (Pratto et al., 2013).

Although Social Dominance Theory primarily focuses on structural and institutional mechanisms of group hierarchy, it aligns with System Justification Theory in explaining why individuals, including members of subordinate groups, may endorse these hierarchies. While

Social Dominance Theory argues there exists a dispositional preference for group-based dominance, System Justification Theory explains the psychological motivation to perceive the societal system as fair and legitimate, even when it disadvantages one's own group. Thus, Social Dominance Theory and System Justification Theory provide complementary explanations for how group-based inequalities persist—not only through the active reinforcement of dominance hierarchies by advantaged groups but also through the ideological support of these systems by both dominant and subordinate group members.

Sidanius and Pratto (2001) state, “everything else being equal, the social attitudes and policy preferences of dominants (i.e. *advantaged*) are more strongly driven by social dominance values than in the case among subordinates (i.e. *disadvantaged*)” (pg. 431). Social dominance values are beliefs that legitimize and perpetuate group structures within society, often manifesting in the endorsement of inequality and opposition to egalitarian efforts—for example, supporting group-based dominance through the belief in meritocracy or the acceptance of policies that disproportionately benefit more powerful groups while justifying the marginalization of others (Pratto & Stewart et al., 2012). The psychological component of social dominance is conceptualized using the individual difference variable, Social Dominance Orientation (SDO; Sidanius et al., 1994a), which reflects the degree to which a person is willing to tolerate or even support group-based dominance, versus supporting group-based equality and inclusion (Pratto et al., 1994; Sidanius et al., 1994b). Previous cross-cultural research has found SDO and system justification to be moderately correlated with one another (Vargas-Salfate et al., 2018b), reflecting their shared function in reinforcing social hierarchies. However, while SDO captures an individual's preference for group-based dominance, system justification serves a broader psychological function by legitimizing the status quo, including among those who may

not personally benefit from it. Although Social Dominance Theory allows for the possibility that members of disadvantaged groups can internalize hierarchy-enhancing beliefs (i.e., have high SDO), it predicts that such values are typically more prevalent among dominant groups, reflecting their position within the societal structure (Sidanius & Pratto, 1999; Jost & Sidanius, 2004). This distinction helps explain why system justification processes can be observed among disadvantaged groups, whereas SDO is typically higher among dominants (Jost & Sidanius, 2004).

Social Dominance Theory makes the case that those who possess greater levels of SDO would also be the same individuals that possess greater levels of legitimizing and justifying perspectives via system justification. Social Dominance Theory would therefore predict that SDO and legitimizing and justifying perspectives about systemic processes will be less strong among lower status and disadvantaged individuals and groups (Sidanius & Pratto, 2004). These postulates of Social Dominance Theory are what aligns it with the self- and group-interest arguments of the social identity approach, while extending our understanding of group and systemic processes. However, these predictions from Social Dominance Theory stand in contrast to System Justification Theory, which posits that system justification motives can be found among both advantaged and disadvantaged groups, sometimes leading lower-status individuals to justify the system even more than their advantaged counterparts (Jost et al., 2004). This theoretical divergence highlights the competing perspectives on whether system justification is primarily driven by self- and group- interest (as Social Dominance Theory suggests) or by a broader psychological motivation to perceive societal systems as fair and legitimate (as System Justification Theory argues).

Empirical research on Social Dominance Theory has consistently shown that individuals high in SDO are more likely to endorse hierarchy-enhancing legitimizing myths—such as meritocracy, racism, and sexism—and to oppose hierarchy-attenuating ideologies such as multiculturalism and egalitarianism (Pratto et al., 1994; Sidanius et al., 1996). These patterns are especially pronounced among advantaged group members, whose structural position aligns with the material benefits of supporting dominance hierarchies. For example, studies in the United States found that White participants and men scored higher in SDO than ethnic minority participants and women, and that these higher SDO levels predicted stronger opposition to policies aimed at reducing inequality, such as affirmative action or gender equity initiatives (Sidanius et al., 1994; Sidanius & Pratto, 1999). Cross-national research has replicated these findings by demonstrating that dominant groups across diverse cultural contexts are more likely to endorse hierarchy-enhancing beliefs, whereas disadvantaged groups tend to report lower SDO, consistent with their lack of structural benefit from group-based inequality (Pratto et al., 2006; Sidanius & Pratto, 2001). Together, this body of work illustrates how Social Dominance Theory has been tested through measurable orientations toward hierarchy and legitimizing myths, providing evidence that system justification among advantaged groups is closely tied to their higher endorsement of dominance-maintaining ideologies.

Limitations of the Social Identity Approach and Social Dominance Theory from a System Justification Lens

Jost (1995) argues that while Social Identity Theory places social behavior on a continuum ranging from “interpersonal” to “intergroup,” it does not adequately account for the fact that unequal societal systems are maintained because people continue to support them, even

when better options exist for their personal or group interests. This is a foundational claim of System Justification Theory, but it warrants further elaboration.

The observation that people support unequal systems is widely documented; for instance, research on outgroup favoritism demonstrates that members of disadvantaged groups often exhibit preference for dominant-group norms and values (Duckitt & Sibley, 2009; Jost et al., 2004; Osborne et al., 2019a, 2019b). The notion that better options exist refers to political, economic, or social alternatives that could directly improve the group's position, such as egalitarian redistribution policies or collective action aimed at restructuring hierarchies. For example, research has shown that lower status groups in stratified societies often resist policies aimed at improving redistribution (Feygina et al., 2010; Jost et al., 2003b), even when such policies would ostensibly improve their material well-being (Jost, 2020). Nevertheless, this raises an important question: what constitutes a “better” option, and how accessible or feasible are these alternatives? The very act of supporting the status quo may reflect the psychological appeal of system justification—which often prioritizes stability and predictability over change, especially when alternatives are perceived as risky or uncertain. These considerations point to a need for more empirical evidence and clarity in identifying what specific “better options” disadvantaged groups may be rejecting and under what conditions they might do so.

Jost and Thompson (2000) criticized that the conceptual and operational definitions of Social Dominance Theory confounded two concepts that System Justification Theory seeks to distinguish: (1) desire for ingroup superiority (group justification) and (2) desire to preserve existing hierarchical arrangements (system justification). Social Dominance Theory assumes that ingroup favoritism is inherently linked to a rejection of systemic hierarchies for the disadvantaged, but System Justification Theory challenges this assumption, arguing that

members of disadvantaged groups can maintain a positive view of their ingroup while simultaneously legitimizing the status quo (Jost et al., 2003a). For example, a member of a disadvantaged group might view their ingroup as deserving of dignity, respect, or equality without necessarily questioning the legitimacy of existing societal hierarchies (Jost, 2011). This suggests that ingroup favoritism does not always translate into efforts to challenge system inequality, as Social Dominance Theory might predict. Moreover, System Justification Theory provides a psychological explanation for why members of disadvantaged groups may continue to justify the system despite their lower status (Jost, 2011). By attributing their disadvantaged position to external factors such as bad luck, misfortune, or individual shortcomings—rather than structural inequality—individuals can maintain positive views of their ingroup while still perceiving the system as fair and legitimate.

More broadly, these critiques highlight a key theoretical distinction between System Justification Theory and Social Dominance Theory: while Social Dominance Theory views hierarchy-enhancing beliefs as held strongest by dominant groups, System Justification Theory emphasizes that system justification can occur across the social spectrum, including by the disadvantaged. This distinction has important implications for understanding the persistence of inequality, as it suggests that resistance to social change does not only come from those in power, but also from those who may, paradoxically, stand to benefit from systemic reform (Jost et al., 2017; Jost & Kramer, 2016).

According to Jost et al. (2004), the social identity approach and Social Dominance Theory fail to account for the degree to which psychological responses to the social and political status quo are characterized by active bolstering and system justification, especially among members of disadvantaged groups. Evidence for this claim comes from studies showing that

disadvantaged group members sometimes display higher levels of outgroup favoritism and system justification when compared to advantaged group members (Jost, 2020; Jost et al., 2003b, 2017; Li et al., 2020b). For example, women have been found to exhibit stronger explicit and implicit associations favoring men over women (Barron et al., 2024; Caricati et al., 2022; Ito & Bligh, 2024; Rudman et al., 2002; Stanziani et al., 2024), low-income individuals often endorse economic policies that likely contribute to their disadvantage (Jost, 2017; Jost et al., 2004), and Latin American and Black children believing that white dolls are more attractive and desirable than black dolls (Carlos et al., 2025; Clark & Clark, 1996/1947; Curtis, 2022; Parsons et al., 2021). However, it is important to acknowledge that this evidence is not without limitations. Critics have argued that such findings might reflect coping strategies or pragmatic adaptations to structural constraints, rather than genuine endorsement of the status quo (Becker & Wright, 2011). While evidence for system justification among disadvantaged groups is compelling, it remains an open question whether this phenomenon reflects an underlying motive to system-justify or simply just a strategic belief system motivated by self- and group-interests.

Taken together, these critiques underscore the fundamental question at the heart of this thesis: does system justification align more closely with self- and group-interest perspectives, as suggested by the social identity approach and Social Dominance Theory, or does it function as a distinct ideological process that can at times go against these interests, as proposed by System Justification Theory? While this section has focused on critiques of the social identity approach and Social Dominance Theory perspectives, the next sections will delve deeper into System Justification Theory (Jost & Banaji, 1994, Jost et al., 2023) and a modern competing explanation, known as the Social Identity Model of System Attitudes (Owuamalam et al., 2018b, 2019, 2023a, 2023b; Rubin et al., 2023a, 2023b), to further clarify the psychological and

ideological mechanisms that sustain inequality and influence system justification across different contexts and time points.

System Justification Theory

System Justification Theory was first proposed 30 years ago by Jost and Banaji (1994) as a response to the limitations of the prevailing theories of intergroup relations, which struggled to explain why individuals, including those who are disadvantaged, sometimes support and justify unequal societal systems (Jost, 2011). While the social identity approach and Social Dominance Theory emphasize self- and group-interests as key drivers of attitudes toward social hierarchy, neither fully accounts for the psychological mechanisms that lead [disadvantaged] individuals to defend and rationalize the status quo, even when alternatives exist that might better serve material or collective interests (Jost et al., 2017). Addressing this gap, System Justification Theory builds on historical and philosophical foundations dating back to the sixteenth century, when French thinker Etienne de la Boétie, in “Discourse of Voluntary Servitude” (de la Boétie, 2008, as cited in Jost, 2020) questioned why individuals and groups sometimes continue to support rulers who harm them.

The concept of system justification is loosely tied to the concept of false consciousness, which has its roots in the early humanistic, sociological work of Karl Marx, particularly *The German Ideology* and other writings from the 1840s and 1850s. Karl Marx and Friedrich Engels (1965/1845) argued that ideas favoring dominant groups in society prevail because these groups control the cultural and institutional means by which ideas are disseminated. False consciousness is defined as the holding of beliefs that contradict one’s personal or group interest, and which, consequently, perpetuate the disadvantaged position of the self or the group (Cunningham, 1987; Eagleton, 1991; Jost & Banaji, 1994; Meyerson, 1991). In this sense, false consciousness reflects

the internalization of systemic inequalities, as seen in beliefs that one's position in the social hierarchy reflects intrinsic worth (McMurtry, 1978) or that suffering is unavoidable and deserved (Wood, 1988). System Justification Theory extends this idea by specifying the cognitive and motivational processes through which individuals, including those from disadvantaged groups, come to view existing social arrangements as fair, legitimate, and even necessary—sometimes at the expense of their own interests (Jost, 1995).

While there are differing views in the literature about whether beliefs labeled as “false consciousness” are objectively false, System Justification Theory conceptualizes such beliefs as psychologically functional rationalizations that obscure structural inequalities and inhibit resistance to the status quo. From this perspective, individuals may internalize ideologies that justify their own disadvantage because doing so offers psychological comfort, reduces dissonance, or aligns with dominant societal narratives (Jost & Hunyady, 2005). For example, a disadvantaged individual might come to believe that their low status is the result of personal failings, rather than recognizing broader systemic barriers. Such beliefs are described as forms of false consciousness not because they are empirically falsifiable per se, but because they contribute to the legitimation of existing inequalities and deter challenges to the social order (Jost & Banaji, 1994; Jost et al., 2004).

System Justification Theory was developed to expand upon many of the already developed theories within intergroup relations, because Jost and Banaji (1994) identified that the idea of justification played a key role in social psychological theorizing but had yet to be well understood beyond ego- and group-justifications. Jost and Banaji (1994) argue that the motivation to rationalize or justify one's circumstances—to oneself and to others—has been a recurring theme across many foundational psychological theories. These include Psychoanalytic

Theory (Freud, 1946), Social Comparison Theory (Festinger, 1954; Suls & Wills, 1991), Cognitive Dissonance Theory (Festinger, 1957; Wicklund & Brehm, 2013/1976), Self-Perception Theory (Bem, 1972), Attribution Theory (Heider, 1958; Jones et al., 1972; Kelley, 1967), Self-Presentation Theory (Jones, 1964; Schlenker, 1980), theories of human reasoning (Nisbett & Ross, 1980; Tversky & Kahneman, 1974), Just World Theory (Lerner, 1980), Social Identity Theory (Hogg & Abrams, 1988; Tajfel, 1978a; Tajfel & Turner, 1979, 1986), and Self-Affirmation Theory (Steele, 1988). However, unlike System Justification Theory, these earlier frameworks primarily conceptualized justification processes as serving ego-defensive or group-protective functions without accounting for the tendency to justify broader societal systems—even when doing so may be contrary to one’s personal or collective interests.

According to System Justification Theory, ego-, group-, and system-justifying motives also help reinforce ingroup and outgroup stereotyping for the purpose of legitimizing justification processes. However, it is important to note that earlier theories, such as Adorno et al.’s (1950) work on *The Authoritarian Personality* and the social identity approach (Hogg & Abrams, 1988; Tajfel, 1981; Tajfel & Turner, 1979, 1986), do not explicitly theorize about stereotypes of ingroups and outgroups as tools of justification. Ego-justification refers to the notion that individuals may develop stereotypes to protect the position or behavior of the self. This idea is rooted in Adorno et al.’s (1950) work, which emphasized the psychological need to defend one’s self-concept. Similarly, group-justification motives, as articulated by the social identity approach (Hogg & Abrams, 1988; Tajfel, 1981), implicitly suggest that stereotyping emerges to protect not only the individual but also the collective status and conduct of one’s social group. System Justification Theory expands on these ideas by demonstrating that, for advantaged groups, self-, group-, and system-justifying motives can align to reinforce

stereotypes that rationalize and uphold existing social arrangements, ultimately serving to legitimize and maintain societal hierarchies. For disadvantaged groups, however, SJT posits that ego- and group-justifying motives often conflict with system-justifying ones, meaning that when disadvantaged individuals endorse ingroup stereotypes that uphold the status quo, such beliefs run counter to their self- and group-interest and therefore represent a motivational conflict (Jost et al., 2015).

While these previous perspectives implicitly highlight how ego- and group-justifications contribute to stereotyping, System Justification Theory expands on these ideas by explicitly theorizing how stereotypes function as a cognitive tool for legitimizing broader social, economic, and political arrangements. Specifically, System Justification Theory posits that stereotypes help individuals rationalize and legitimize societal inequalities in ways that preserve and stabilize the overarching system (Jost & Banaji, 1994). From this perspective, stereotypes may be more readily accepted if they help individuals make sense of societal inequalities in ways that align with and stabilize the current system. For instance, stereotypes that portray disadvantaged groups as inherently less competent or less industrious helps to explain why those groups occupy more disadvantaged positions. Similarly, stereotypes that characterize advantaged groups as naturally more capable or deserving support the perception that social disparities are legitimate or justifiable rather than stemming from unfair practices or structural inequities (Jost & Banaji, 1994).

System Justification Theory posits that individuals desire not only to hold favorable attitudes about themselves (ego justification) and the groups to which they belong (group justification) but also to hold positive attitudes about the overarching social structure in which they are embedded and to which they find themselves obligated (system justification, Jost,

2020). Moreover, System Justification Theory states that there is an ideological motive to justify the existing social order (Jost & Banaji, 1994; Kay et al., 2009) and that this motive is at least partially responsible for the internalization of inferiority among members of disadvantaged groups, making it [sometimes] at odds with the disadvantaged self- and group-interests (Jost, 2019). The system justification motive is thought to operate at an implicit, nonconscious level of awareness and is believed to contribute to the paradoxical finding that endorsement of system justification is sometimes strongest among those who occupy disadvantaged positions within the status quo (Jost, 2020). Within System Justification Theory, "disadvantage" is typically conceptualized in terms of structural or systemic inequalities, such as lower socioeconomic status, membership in marginalized racial or ethnic groups, or reduced access to power and privilege. These groups are often framed as disadvantaged relative to others within a given social, economic, or political system (Jost, 2019).

However, an important critique of this perspective by System Justification Theory is that occupying a disadvantaged position in the system (i.e., society) does not necessarily imply that one is disadvantaged *by* the system. For example, while individuals in lower socioeconomic positions may have fewer resources or opportunities compared to those in higher positions, they might still perceive the current system as preferable to plausible alternatives, such as feudalism or anarcho-capitalism, which could be perceived as even less favorable. This raises the question for System Justification Theory whether individuals' disadvantaged status results directly from the system or if their disadvantaged status is merely relative to other groups. System Justification Theory implicitly assumes that individuals who occupy disadvantaged positions are disadvantaged *by* the system [amongst other things], but this assumption is debatable and not always explicitly addressed in the literature.

As such, critiques have pointed out that System Justification Theory's claim about the "paradox" of system justification among disadvantaged groups may rest on a contested premise (Owuamalam et al., 2018a, 2018b, 2019). Specifically, some scholars question whether individuals who are systemically disadvantaged would genuinely adopt system-justifying beliefs if doing so directly undermined their self- and group-interests (Owuamalam et al., 2016a, 2016b; Rubin et al., 2023a, 2023b). Others argue that what appears to be a system justification motive may instead be explained by alternative mechanisms, such as epistemic uncertainty, pragmatic adaptation, cultural norms, or strategic acquiescence—all of which are rooted in self- and group-interests (Brandt, 2013; Brandt et al., 2020; Kay et al., 2009; Kesberg et al., 2024; Owuamalam et al., 2023b, 2025).

While this critique raises important questions about whether systemic disadvantage is an inherent feature of the system or a relative comparison, proponents of System Justification Theory argue that system justification serves key psychological functions. Jost (2020) and others have emphasized that individuals may justify the system not necessarily because it benefits them materially, but because it provides a sense of order, predictability, and stability—factors that may be valued even by those in disadvantaged positions. For instance, individuals may justify a system because it reduces uncertainty or provides security, even if it does not offer them direct advantages (Kay et al., 2009; van der Toorn et al., 2010). Moreover, the system justification motive may lead individuals to adopt ideologies or beliefs that rationalize their disadvantaged position as fair or inevitable, even when alternative systems might offer greater material benefits or equality (Jost, 2019).

To address these complexities, it is worth clarifying that System Justification Theory does not argue that individuals in disadvantaged positions would necessarily be better off in

alternative systems, nor does it deny the possibility of variation in system evaluations depending on situational and dispositional factors. Instead, System Justification Theory assumes that system justification tendencies are shaped by the perceived legitimacy and dependence on the existing system, regardless of whether it objectively benefits individuals or groups (Jost et al., 2004; Kay et al., 2009). This assumption underpins the broader theoretical claim that system justification tendencies may sometimes run counter to self- or group-interests, particularly among those in disadvantaged positions. Thus, the question of whether system justification tendencies are primarily driven by self- and group-interests, or whether they can sometimes conflict with these interests, remains a focal point of ongoing and vigorous debate in the literature. This issue is complicated by the variety of factors—such as individual and group perceptions of legitimacy, social context, and psychological motivations—that may shape the extent to which system justification aligns with or contradicts self- and group-interests (Jost, 2020; Jost et al., 2023; Rubin et al., 2023a, 2023b).

The Status-Legitimacy Hypothesis and the Influence of Societal and Cultural Contexts

At the heart of the disagreement between the more self- and group-interest-based theoretical frameworks (i.e., the social identity approach and Social Dominance Theory) and System Justification Theory, stands System Justification Theory's status-legitimacy hypothesis (Brandt et al., 2013; Jost et al., 2004). This hypothesis makes the paradoxical claim that members of low-status, disadvantaged, and marginalized groups (e.g., race, ethnicity, low social status, gender, ideological mismatch, etc.) may under certain circumstances system-justify to a greater degree than their high-status, advantaged counterparts (Jost et al., 2003b). This hypothesis elaborates on the system justification motive discussed earlier, emphasizing that such patterns of legitimacy perceptions may occur in part because members of disadvantaged groups

are more likely to depend on the existing system for security, stability, or access to essential resources (Kay et al., 2009; van der Toorn et al., 2010).

The status-legitimacy hypothesis challenges key predictions of self- and group-interest-based theories, such as the social identity approach and Social Dominance Theory, which generally suggest that perceptions of legitimacy align with individuals' positional interests within a system. For example, the social identity approach posits that individuals derive self-esteem and positive group distinctiveness by favoring their in-groups over out-groups, leading disadvantaged groups to be more likely to criticize or reject systems that partially contribute to their lower status and therefore do not contribute to a positive social identity (Tajfel & Turner, 1979). Similarly, Social Dominance Theory argues that members of dominant high-status groups are motivated to legitimize and maintain social hierarchies that benefit their own group, while disadvantaged groups are more likely to oppose such hierarchies in pursuit of greater equality (Sidanius & Pratto, 1999). Thus, the status-legitimacy hypothesis runs counter to these frameworks by suggesting that under certain conditions, disadvantaged groups may be more likely than their advantaged counterparts to legitimize the existing system, even when it potentially perpetuates their inequality.

According to System Justification Theory, the key to understanding the status-legitimacy hypothesis lies in the concept of ideological dissonance (Festinger, 1957), a psychological tension that arises when disadvantaged individuals simultaneously hold two conflicting beliefs. The first belief is that they are deserving of better outcomes (self-deservingness). The second is that the system is just, fair, and legitimate, rewarding individuals according to their effort, ability, or merit (system legitimacy; Jost & Banaji, 1994). This tension between the two beliefs is believed to be particularly pronounced in societies and cultures with high levels of inequality,

strong meritocratic values, and democratic social and political systems with high civil liberties that emphasize individual responsibility (Jost et al., 2003b). These societal and cultural factors are thought to make disadvantaged individuals feel more responsible for their disadvantageous position.

To resolve this dissonance, System Justification Theory proposes that disadvantaged individuals may cope by increasing their endorsement of system-justifying beliefs. In doing so, they may reinterpret their disadvantage as deserved—attributing it to personal shortcomings or insufficient effort—which allows them to preserve their belief in a fair system and reduce psychological tension (Jost et al., 2004). Although this process may appear counterintuitive, it serves the function of restoring a coherent and stable worldview. This reinterpretation of their disadvantage allows them to harmonize the two beliefs: that the system is fair and just, and that their lower status is deserved, even though it contradicts their sense of self-worth.

Thus, the status-legitimacy hypothesis not only attempts to explain why disadvantaged groups may endorse the system that marginalizes them but also emphasizes the crucial role that societal and cultural contexts play in shaping perceptions of fairness and legitimacy. This hypothesis highlights how, in certain societal conditions, disadvantaged individuals may paradoxically embrace and support the very system that may perpetuate their inequality.

However, a notable critique concerns the coherence of System Justification Theory's dissonance-based explanation for the status-legitimacy hypothesis, particularly when it is assumed that system justification among the disadvantaged operates at a non-conscious level and is most likely when ingroup identification is weak (Jost et al., 2002, 2003c). As Owuamalam et al. (2016b, 2018a) argue, Festinger's (1957) original formulation of cognitive dissonance theory holds that dissonance should be strongest when individuals place greater importance and value

on the cognitions in conflict. From this perspective, it is high—not low—ingroup identification, combined with awareness of one’s group disadvantage and dependence on societal systems, that should produce the greatest tension and, consequently, the strongest motivation to justify those systems (Rubin et al., 2023a). According to this critique, if system justification were truly non-conscious, the awareness necessary for dissonance to arise would be absent, undermining the basis for System Justification Theory’s prediction that the disadvantaged, especially weak identifiers, will sometimes endorse inequality more strongly than the advantaged. Empirical tests using large-scale survey data have provided limited support for System Justification Theory’s strong dissonance-based prediction (e.g., Brandt, 2013; Caricati, 2017), whereas experimental evidence from Owuamalam and Spears (2020) indicates that dissonance-related cognitive effort is heightened when group identity is salient or strongly held and when the systems in question are ones on which individuals are highly dependent—patterns more consistent with the identity-based reformulation of the dissonance mechanism than with System Justification Theory’s account.

Empirical Evidence of the Status-Legitimacy Hypothesis in the Global North

Initial empirical support for the status-legitimacy hypothesis has largely been drawn from studies conducted in the Global North, particularly in Western societies characterized by relatively high levels of inequality and strong individualistic meritocratic ideologies. For example, Jost and colleagues (2003b) found that low-income individuals in the United States exhibited higher levels of general system justification compared to their high-income counterparts, despite their disadvantaged position. Similar patterns have been observed across other marginalized groups, including racial and ethnic minorities (Jost et al., 2003c, 2004; Henry & Saul, 2006), suggesting that under certain conditions, disadvantaged individuals may indeed

engage in stronger system-justifying tendencies than advantaged individuals. These findings are consistent with the idea that ideological dissonance is particularly salient in Global North contexts where beliefs about personal responsibility and meritocracy are deeply ingrained and where individuals may be more likely to internalize system-justifying beliefs as a means of coping with their perceived shortcomings.

However, not all studies conducted in Global North societies have consistently supported the status-legitimacy hypothesis. Several investigations have found either no evidence for a negative effect of status—that is, greater system justification among the disadvantaged—or have reported positive associations between higher social status and stronger system justification (e.g., Brandt, 2013; Caricati, 2017). An investigation by Brandt (2013) found that although there is some evidence for status-legitimacy effects, the general trend across samples was a positive relationship between objective measures of status and system justification, particularly when subjective perceptions of inequality were accounted for. Moreover, more recent studies using larger, more representative samples in the United States and Europe suggest that system justification may more often reflect group- and self-interest motives—in line with theories such as Social Identity Theory and Social Dominance Theory (Brandt et al., 2020). Hence, while the Global North has provided important empirical evidence in favor of the status-legitimacy hypothesis, the findings have been mixed, highlighting the importance of specifying the conditions under which disadvantaged individuals are more or less likely to engage in system-justifying beliefs. Moreover, these mixed findings have motivated researchers to extend tests of the status-legitimacy hypothesis to societies beyond the Global North, including those in the Global South, where different societal and cultural contexts may influence the operation of system justification processes (Owuamalam et al., 2023b, 2025).

Empirical Evidence of the Status-Legitimacy Hypothesis in the Global South

While the theorization surrounding System Justification Theory's status-legitimacy hypothesis makes the case for the societal and cultural factors that are likely to induce status-legitimacy effects through the process of cognitive dissonance (Festinger, 1957), its premise assumes a psychological tension that may be more pronounced in Western, independent self-construals than in interdependent ones.⁶ Empirical evidence suggests that individuals in interdependent cultures do not experience dissonance in the same way due to cultural norms that emphasize relational harmony over internal consistency (Hoshino-Browne et al., 2005; Kitayama et al., 2004; Wong, 2009).

Markus and Kitayama (1991) explain that in interdependent cultures, self-definition is primarily rooted in social relationships rather than individual attributes. In these cultural contexts, emotional regulation is guided by the demand of social situations, with a strong emphasis on maintaining relational harmony and fulfilling role-based obligations rather than resolving internal psychological contradictions (Kitayama & Markus, 1999). As a result, disadvantaged individuals in these settings may not experience cognitive dissonance from holding system-justifying beliefs in the same way as those with independent self-construals, where personal agency and internal consistency are prioritized (Owuamalam et al., 2023a). This cultural distinction suggests that alternative psychological mechanisms—such as relational obligation, deference to authority, or collective rationalization—may be more relevant in

⁶ An independent sense of self views the self as unique, separate, and emphasizes personal attributes and accomplishments, while an interdependent sense of self views the self as connected to others and emphasizes relationships, social roles, and group membership (Markus & Kitayama, 1991). The independent self is more common in Western societies, whereas the interdependent self is more common in the collectivistic Global South (Hoshino-Browne et al., 2005).

explaining status-legitimacy effects outside of Western contexts. This theoretical gap warrants further empirical exploration.

There have been several studies that have found evidence of status-legitimacy effects in countries that contradict Jost's (2011) societal theorizing for system justification. For example, studies have found a negative relationship between socioeconomic status (SES) and system justification in sociopolitical contexts where capitalist meritocratic discourse is weaker, civil liberties are restricted, and governance tends to be authoritarian, post-socialist, or collectivistic (Brandt, 2013; Cichocka & Jost, 2014; Kim et al., 2022; Li et al., 2020b; Owuamalam et al., 2023a, 2023b; Whyte & Maocan, 2010; Zhang et al., 2022; Zhou & Xie, 2016). These findings challenge Jost's (2011) societal-level theorizing on system justification, suggesting that the mechanisms underlying status-legitimacy effects may function differently in non-Western systems. Moreover, the dissonance-inspired status-legitimacy hypothesis set forth by Jost et al. (2004) makes slight cultural overgeneralizations that do not appear to translate to the Global South (Hoshino-Browne et al., 2005; Huntington, 1996; Kokkoris & Kühnen, 2013).

While system justification is a general psychological tendency, the specific motivations and mechanisms through which disadvantaged individuals in the Global South or non-Western, Educated, Industrialized, Rich, and Democratic (WEIRD; Henrich et al., 2010) justify the system may differ from those in WEIRD societies. Therefore, a cross-cultural theoretical framework is needed to explain these variations, particularly in contexts where system justification may be shaped more by acquiescence to authority and a lack of perceived cognitive alternatives rather than ideological dissonance. An acquiescence-based model would lend itself well to this endeavor by suggesting that disadvantaged individuals may submit to or accept a power system, particularly if it has historically benefitted its citizens and presents no apparent cognitive

alternatives for a better or more just status quo (Owuamalam et al., 2023a, 2023b). There is an objective reality for those from non-WEIRD societies to support, legitimize, and justify a system that has a recent history of reducing extreme poverty to point of elimination in select countries (Tiedao et al., 2004).⁷ Furthermore, objectively low-status and disadvantaged individuals with less access and experiences of conditions outside of their nations may see fewer cognitive alternatives to the current system and its status quo.

The Psychological Benefits of System Justification

According to System Justification Theory, disadvantaged individuals and groups may justify the system because doing so serves a palliative function—it helps protect or enhance their psychological well-being (Jost & Hunyady, 2005). While the status-legitimacy hypothesis emphasizes the role of dependence and cognitive dissonance in motivating disadvantaged individuals to legitimize the system that potentially perpetuates their own disadvantage, the palliative function complements this by highlighting the psychological benefits derived from system justification. From a dissonance-based perspective, individuals who perceive the system as legitimate are able to resolve the psychological tension that arises from recognizing their disadvantage within an inequitable system thereby achieving a sense of coherence between their social reality and their ideological beliefs (Jost, 2019). However, the palliative function extends this explanation by suggesting that system justification not only reduces dissonance but also alleviates negative emotions, such as anxiety, despair, or feelings of helplessness, which might otherwise arise from confronting systemic injustices and inequalities (Jost & Hunyady, 2005).

By framing the system as fair or just, individuals may avoid feelings of resentment or victimization, which could otherwise threaten their psychological and emotional well-being (Jost

⁷ <https://blogs.worldbank.org>

et al., 2003b). This process enables individuals to reframe disadvantage in a way that feels tolerable, if not outright positive, through mechanisms such as the illusion of control or a belief in a just world (Jost, 2020; Lerner, 1980, 2003; Lerner & Miller, 1978; Miller, 1977).

Importantly, system justification is not only associated with lower negative affect but also with greater positive affect. More broadly, system-justifying beliefs have been found to be correlated with greater life satisfaction, optimism, and happiness, even among disadvantaged individuals (Jost & Hunyady, 2003, 2005; Jost et al., 2003b; Vargas-Salfate et al., 2018b, 2024). In this way, the palliative function may help explain why system-justifying beliefs are psychologically rewarding, thereby complementing the dissonance-reduction explanation central to the status-legitimacy hypothesis.

Overall, system justification's palliative function as well as its cognitive dissonance reduction capabilities may help explain system-justifying beliefs among disadvantaged individuals. While the status-legitimacy hypothesis reflects one empirical prediction stemming from dissonance-based reasoning, the palliative account emphasizes the emotional relief and well-being benefits of system justification (Jost, 2020). This dual perspective underscores the resilience of system-justifying tendencies, even among those for whom the system is potentially harmful.

This perspective that system justification serves palliative effects is directly relevant to the broader question of whether system justification reflects self- and group-interests or whether it can override them. If system justification serves a palliative function by alleviating psychological distress and reinforcing subjective well-being, it may indicate that system justification is not solely driven by material self-interest but also by ideological motivations working at an implicit level, as suggested by System Justification Theory (Jost & Hunyady,

2005; Vargas-Salfate et al., 2024). This is important for understanding whether system justification fundamentally operates as an ideological tendency independent of self- and group-interests or whether it remains motivated by these interests, as proposed by competing theoretical perspectives.

Social Identity Model of System Attitudes

The Social Identity Model of System Attitudes (Owuamalam et al., 2018b, 2019, 2023a, 2023b; Owuamalam & Spears, 2020) is one of the most direct challenges to System Justification Theory. Rooted in the social identity approach (Tajfel & Turner, 1979; Turner et al., 1987), the Social Identity Model of System Attitudes argues that endorsing system-justifying beliefs are consistent with self- and group-interests for the (dis)advantaged and that it would be “*socially maladaptive*” (Owuamalam et al., 2019, pg. 394) for any individual to challenge societal systems that are stable and legitimate. Moreover, Owuamalam et al. (2019) posit that a separate system justification motive to explain system-justifying beliefs is not necessary since self- and group-interest motives fully account for why system justification occurs. Rubin et al. (2023a) explain “system justification represents (1) an accurate reflection of the existing status quo, or (2) a means of maintaining or improving ingroup status and, consequently, the positivity of an associated social identity” (pg. 4). This argument builds on Tajfel and Turner’s (1979) premise that when group boundaries are perceived to be permeable over time, it allows disadvantaged groups to believe they can move up the status hierarchy providing an easily accessible self- and group-interest motive to system justify (i.e. *hope for future ingroup advantage hypothesis* according to the Social Identity Model of System Attitudes, Owuamalam et al., 2021).⁸

⁸ Short-term stability refers to whether or not group members perceive intergroup status hierarchies to be changeable as a result of their current actions. Long-term stability refers to whether or not group members perceive the status system to be changeable at all, including over the long term (Owuamalam et al., 2018).

This contrasts sharply with System Justification Theory's assertion that system justification can sometimes override self- and group-interests. System Justification Theory theorists (Jost, 2019, 2020; Jost & Banaji, 1994; Jost et al., 2002, 2013, 2023) argue that system justification serves psychological and ideological functions, even when it disadvantages the individual. Jost (2020) further emphasizes that the strength of system justification varies depending on situational and dispositional factors such as: (1) system criticism or threat; (2) feelings of system dependence; (3) perceptions that the system is unavoidable; and (4) representations of the social system linked to a long standing and legitimized historical charter. These diverging perspectives frame an active debate in the literature: does system justification primarily serve self- and group-interests, as Social Identity Model of System Attitudes suggests, or does it sometimes function as an ideological tendency that overrides them, as System Justification Theory argues?

Empirical support for the Social Identity Model of System Attitudes began when social identity-based researchers found that the endorsement of system justification was primarily due to individuals wanting to protect group interests (Caricati & Sollami, 2017; Owuamalam et al., 2016a, 2016b, 2017). These findings challenged the theoretical arguments of System Justification Theory by suggesting that system justification may be primarily driven by individuals' motivation to protect group interests. This explanation contrasts with System Justification Theory's claim that while group-based motives can contribute to system justification, there is also a distinct system justification motive that operates beyond self- and group interest (Jost & Van der Toorn, 2012). Furthermore, Rubin and Hewstone (2004) found that disadvantaged individuals who system-justify acknowledge the superiority of high-status outgroups, reinforcing perceptions of legitimacy. The Social Identity Model of System Attitudes

explains this as a shift from a disadvantaged superordinate identity to a broader superordinate identity (Rubin, 2016). Iacoviello and Lorenzi-Cioldi (2017) provided additional support through minimal group experiments where individuals recognized the legitimacy of a perceived status hierarchy, aligning with the Social Identity Model of System Attitude's argument that system justification reflects acceptance of social reality rather than a distinct ideological motive.

A key argument of the Social Identity Model of System Attitude is its hope for future ingroup advantage hypothesis, which posits that disadvantaged individuals system-justify when they believe mobility is possible. Owuamalam et al. (2016a) found that university students who were primed to perceive their university as lower-ranked expressed stronger system justification for the ranking system when they believed the rankings were mutable in the long term. However, this effect did not occur when the rankings were perceived as stable in both the short and long term. Similarly, Sollami and Caricati (2018) demonstrated that healthcare professionals' hope for status improvement predicted greater system justification. Owuamalam et al. (2021) further tested this hypothesis in the context of gender relations, showing that women with high gender identification justified the system more when exposed to messages suggesting progress toward gender equality had been made. However, these effects were contingent on specific group identities, such as feminist identification.

The core disagreement between System Justification Theory and the Social Identity Model of System Attitudes is whether individuals are ever motivated to defend and justify the societal status quo even when doing so contradicts their self- and group-interests. This debate remains ongoing, with each research group contesting the validity of the other's empirical evidence (Jost et al., 2023; Rubin et al., 2023a, 2023b). Proponents of System Justification Theory have criticized the Social Identity Model of System Attitudes for drawing on minimal

group paradigm studies, arguing that such methods may oversimplify the dynamics of real-world disadvantage and thus fail to demonstrate that system justification can occur in absence of group-based self-interest (Jost et al., 2023). In the minimal group paradigm, individuals are randomly assigned to meaningless groups based on trivial criteria or the result of an ostensibly random task (Tajfel et al., 1971).

Studies have consistently found that individuals display in-group favoritism even when the group divisions are superficial and lack any real-world significance (Brown, 2020b; Hartstone & Augoustinos, 1995). Within the framework of the Social Identity Model of System Attitudes, the minimal group paradigm has been used to examine how group-based processes shape system attitudes, such as legitimacy beliefs and justification tendencies (Owuamalam et al., 2019). Specifically, researchers have employed the minimal group paradigm to explore whether individuals' endorsement of system-justifying beliefs varies depending on their group membership, hypothesizing that disadvantaged group members would be more likely to reject system justification, in line with self- and group-interest theories (Rubin et al., 2023a, 2023b).

However, the Social Identity Model of System Attitudes' reliance on arbitrary group distinctions raises concerns about its applicability in explaining system justification in real-world contexts. As Jost et al. (2023) note, arbitrary group assignments used in minimal group designs overlook the historical, political, and structural forces that shape exploitation, oppression, and ideological domination. Unlike real-world group memberships (e.g., race, ethnicity, social class, political ideology), minimal group assignments lack pre-existing power dynamics, material inequalities, and histories of privilege or disadvantage. As a result, findings from minimal group studies may not generalize to contexts where system justification involves rationalizing entrenched disparities between advantaged and disadvantaged groups. From the perspective of

System Justification Theory, this limitation is especially important because it underestimates the motivational force of ideological dissonance in defending inequality

That said, the Social Identity Model of System Attitudes' empirical base is not exclusively minimal group studies. Researchers aligned with the Social Identity Model of System Attitudes have also conducted studies in real-world, cross-cultural contexts that examine system justification among disadvantaged groups (Caricati et al., 2024; Caricati & Sollami, 2017; Owuamalam et al., 2023a). However, even with these empirical expansions, proponents of System Justification Theory argue that the Social Identity Model of System Attitudes' focus on shifting self- and group-interests risks overlooking cases where disadvantaged individuals defend unequal systems despite having no objective self- or group-interest to do so (e.g., no realistic pathway to future advantage)—precisely the phenomenon that System Justification Theory aims to explain (Jost, 2019; Jost et al., 2023).

A second critique raised by Jost et al. (2023) concerns the methodological limitations of early experiments within the Social Identity Model of System Attitudes framework, particularly those employing complex designs with small sample sizes, such as the 2x2x2 factorial design used by Owuamalam et al. (2016a). However, subsequent research has addressed some of these concerns by utilizing larger [cross-cultural] samples and more ecologically valid contexts. For instance, Owuamalam et al. (2023a) conducted studies with increased statistical power, while Caricati et al. (2021, 2024) and Owuamalam et al. (2023b) extended the Social Identity Model of System Attitude's applicability through investigations into gender dynamics and cross-cultural differences.

Building on this more recent work, the following chapters of this thesis—as well as future research more broadly—can further advance the debate between the Social Identity Model

of System Attitudes and System Justification Theory by adopting methodological approaches that maximize both statistical power and ecological validity. Large-scale, cross-cultural, and longitudinal designs would allow researchers to track how system justification operates across diverse sociopolitical contexts and over time. Testing theoretically grounded, competing hypotheses across national samples can help clarify whether system justification reflects self- and group-interests or operates as a distinct ideological motivation. Incorporating both subjective and objective measures of social status, as well as politically relevant group markers such as ideology, can provide a more comprehensive understanding of the factors shaping system-justifying tendencies. By continuing to build on these methodological advances, both this thesis and future studies will be better equipped to produce stronger evidence that speaks to the core theoretical differences between the Social Identity Model of System Attitudes and System Justification Theory.

From Social Identity to Ideological Influence: The Importance of Political Ideology

Ideology can be broadly defined as a set of beliefs, values, and ideas, that provide a framework for interpreting the world and guiding social, political, and economic actions (Lane, 1962; Lippmann, 2017). These systems of thought shape how individuals and groups understand their environment, define societal norms, and determine the legitimacy of social structures. In the context of political ideology, these beliefs are specifically concerned with the organization of society, including questions of power, authority, and justice, and can range from progressive to conservative viewpoints (Jost et al., 2021; Montada, 2002). Political ideology operates as a critical lens through which individuals interpret and respond to group membership, hierarchy, and systemic inequalities (Rubin et al., 2023a).

There has been a growing interest within the psychological sciences to understand how political ideology influences cognition and dominance-based hierarchies (Adorno et al., 1950; Jost, 2021). Over the past two decades, research on political ideology has grown exponentially (See table 1.1 below for results of a *PsycInfo* search on the keywords “political ideology”); of the 5,094 books, articles, and dissertations that appeared since 1935, 93% of them came out between 2005 and 2024. Much of the research done within this timeframe has shown that leftists and rightists differ in areas of (a) personality characteristics, (b) cognitive processing styles, (c) motivational interests, (d) and the prioritization of personal values. However, when you add “cross-cultural” to this search, there are only 334 potential sources between 1956 and 2024, identifying a striking gap in the literature on explicit cross-cultural comparisons regarding political ideology.

Table 1.1

Results of a PsycInfo Search on the Number of References for “Political Ideology” Only and Then Including “Cross-Cultural” (1935-2024)

Decade	Political Ideology	Political Ideology and Cross-Cultural
1935 – 1944	3	0
1945 – 1954	8	0
1955 – 1964	8	2
1965 – 1974	29	3
1975 – 1984	65	10
1985 – 1994	92	17
1995 – 2004	161	29
2005 – 2014	488	138
2015 – 2024	4240	135

Note. A PsycInfo search on the keywords of “political ideology” and “cross-cultural” was conducted on September 5, 2024.

While the Social Identity Model of System Attitudes highlights the influence of group dynamics and social identity (Owuamalam et al., 2018b), System Justification Theory offers an alternative perspective to explanations that prioritize group-based motivations for system support. Instead of focusing on social identity as the primary driver of system attitudes, System Justification Theory emphasizes how ideological beliefs—broad, organized systems of ideas and values that structure political and social preferences (Lippmann, 2017)—motivate individuals to legitimize or challenge the status quo.

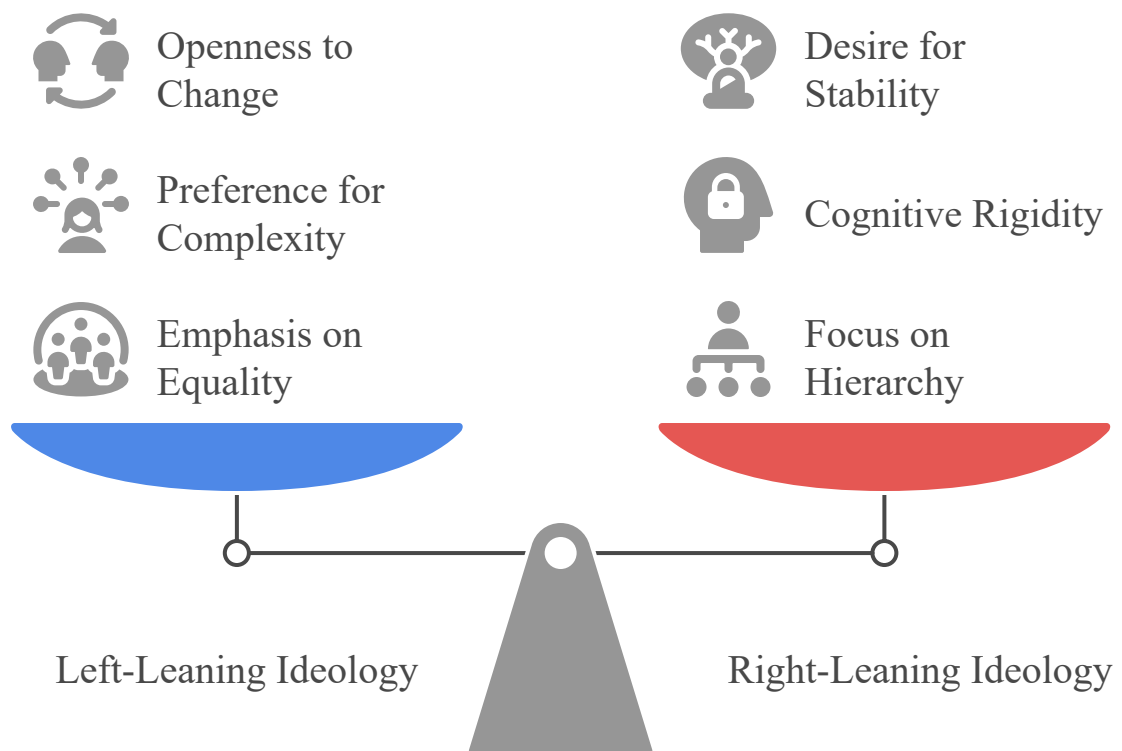
System Justification Theory underscores how deep-seated, value-driven ideologies—particularly right-wing conservatism—reinforce psychological needs for stability, order, and hierarchy (Jost et al., 2003b). Right-wing conservatism is especially relevant to system justification because it prioritizes tradition, resistance to social change, and acceptance of existing hierarchies, making it more likely to align with system-justifying attitudes (Jost 2021). While both left- and right-wing ideologies can contribute to system justification under certain conditions, conservatives tend to do so more consistently due to dispositional and situational factors that emphasize security, structure, and stability of the status quo (Jost et al., 2003b).

In the context of intergroup relations, political ideology has played a crucial role in shaping and differentiating individual- and group-based values, behaviors, and social judgements, influencing how individuals perceive and interact with others across ideological lines (Jussim et al., 2016). Consistent with this notion, System Justification Theory makes the argument that the left-right ideological distinction is influential in assessing who is more likely to appreciate dominance-based hierarchies or criticize the societal status quo (Jost, 2021; Wilson, 1973). Interest in the psychological and moral differences between the political left and right dates back to Adorno et al. (1950) and underpins System Justification Theory's claim that

political ideology, particularly conservatism, can be understood as a form of *motivated social cognition* (Jost et al., 2003a). According to System Justification Theory, the ideological core of conservatism emphasizes resistance to change and justification of inequality, serving psychological functions related to managing epistemic, existential, and relational needs. In contrast, liberal ideology tends to prioritize egalitarianism and progressive social change, which may reflect a different set of motivational and epistemic orientations (Jost, 2021; See Figure 1.1).

Figure 1.1

Political Ideology as Motivated Social Cognition between the Left and Right



A recent contribution by Friesen et al. (2019), however, identified how system and governmental legitimacy can change over time. They argue that the status quo is not a unitary, stable entity in relation to political ideology. For example, in many countries, there are regular intervals of governmental power due to elections which not only alter domestic policies but may also necessitate changes in geopolitical alliances to reflect the ideological priorities of the ruling party (Wilkinson, 2017). These shifts in alliances can have profound implications for how citizens perceive their nation's role on the global stage, influencing their own evaluations of systemic legitimacy and alignment with their government's ideology. This suggests that both left- and right-leaning individuals will justify the system when it aligns with their political ideological values, rather than purely as a function of conservatism (Brandt et al., 2020; Liu et al., 2008; Martorana et al., 2005; Szabó & Lönnqvist, 2021). To this end, Liekefett and Becker (2022) argue that both left- and right-leaning individuals will advocate for social change but in opposite directions.

This argument aligns with a key caveat in Jost et al. (2003b), who state, “we are not denying that liberals can be rigid defenders of the status quo or that conservatives can support change. We assume that historical and cultural variation in political systems affect both the meaning of conservatism and the strength of empirical associations between the psychological and ideological variables we investigate” (p. 343). Given these complexities, system justification appears to be a universal psychological process, yet its expression is shaped by political ideology, the government in power, and historical context. This underscores the need for further research to disentangle how political ideology interacts with system justification and whether these patterns evolve over time.

Emerging Gaps and Thesis Overview

System Justification Theory has drawn significant interdisciplinary interest, with researchers seeking to understand how justifying, rationalizing, legitimizing, or challenging a system is intertwined with the human experience (Badaan et al., 2020). This broad interest has generated a rich body of theoretical and empirical work examining the psychological and social mechanisms underpinning system-justifying beliefs (Jost, 2020). Within this literature, two primary perspectives have emerged regarding how these beliefs function for both advantaged and disadvantaged groups—perspectives that sometimes diverge and even directly contradict one another.

The first perspective—encompassing the social identity approach, Social Dominance Theory, and the Social Identity Model of System Attitudes—holds that system-justifying beliefs generally align with self- and group-interests for both the advantaged and disadvantaged. In contrast, System Justification Theory, argues that, for the disadvantaged, defending the status quo can conflict with these interests, yet still occurs because of a distinct system justification motive—an independent psychological need to view the system as legitimate, fair, and just, even at the expense of personal or collective advantage.

Although prior research has explored many critical aspects of system justification, several key questions remain unanswered. This thesis seeks to address these gaps by examining when and how system justification aligns with or diverges from self- and group-interests across cultures and over time. Much of the existing literature has focused on single-cultural settings or small subsets of WEIRD societies (Henrich et al., 2010), leaving open questions about the applicability and accuracy of these theories predictions across diverse cultural contexts. Furthermore, most research on system justification has relied on cross-sectional designs, limiting our ability to determine whether system-justifying beliefs shift in response to changing self- and

group-interests or whether they remain stable over time. A longitudinal approach can provide insights into whether system justification adapts to evolving political and social circumstances or persists even when it contradicts self- and group-benefit. By investigating these questions through cross-cultural and longitudinal methods, this thesis aims to clarify the stability and adaptability of system justification.

This thesis contributes to the literature on system justification and intergroup relations in three fundamental ways. First, it evaluates competing theoretical frameworks—the self- and group-interest perspective (e.g., social identity approach, Social Dominance Theory, and the Social Identity Model of System Attitudes) versus the more dispositional, situational, and ideologically motivated perspective (e.g., System Justification Theory)—to determine which perspective most accurately predicts when, why, and how system justification occurs. This is achieved through large-scale, cross-cultural assessments using observational data to test these competing frameworks and examine how cultural variation influences system justification processes.

Second, it addresses a long-standing theoretical and empirical tension within System Justification Theory concerning the relationship between subjective SES and system justification. Specially, while the status-legitimacy hypothesis predicts that lower-status individuals may sometimes endorse system-justifying beliefs more strongly than their higher-status counterparts, empirical findings based on subjective SES consistent show a positive association with system justification. By investigating the [bidirectional] psychological benefits associated with subjective socioeconomic status—such as increased life satisfaction—this thesis provides an explanation for why subjective socioeconomic status and system justification are positively related across cultures and over time.

Third, it employs a quasi-experimental longitudinal design to test the competing predictions of System Justification Theory and the Social Identity Model of System Attitudes. This approach allows for an empirical test of how system-justifying beliefs change during a national election cycle, specifically examining how systemic beliefs change depending on whether individuals find themselves on the winning or losing side of an election (e.g., voting for a left-leaning party but living under a right-leaning government).

By integrating cross-cultural and longitudinal perspectives, this thesis not only evaluates the predictive power of competing theories but also contributes to a more comprehensive understanding of when and why individuals justify the systems that (mis)govern their lives.

Preface 1: Chapter 2

In the first study of my thesis, I sought to replicate and extend the work of Li et al. (2020b), which tested the status-legitimacy hypothesis (Brandt, 2013) in the context of China. The status-legitimacy hypothesis suggests that individuals who are most disadvantaged by unequal societal systems are, paradoxically, more likely to provide ideological support for these systems than individuals from more advantaged groups. Li et al. expanded the framework by proposing that status should be conceptualized through both objective markers (e.g., income and education) and subjective perceptions (e.g., subjective social status), which may differently influence system-justifying tendencies.

To build on this foundation, my study incorporated a cross-cultural comparison between the United States, representing a Western cultural context, and China, representing an Eastern cultural context. This comparative approach allowed for a deeper exploration of how System Justification Theory's assumptions and predictions hold across societies with distinct social, political, and cultural systems. This study aimed to provide a nuanced test of the status-legitimacy hypothesis while evaluating the relative contributions of objective and subjective SES to system justification in these two diverse settings.

STATEMENT OF CONTRIBUTION DOCTORATE WITH PUBLICATIONS/MANUSCRIPTS

We, the student and the student's main supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the student's contribution as indicated below in the Statement of Originality.			
Student name:	Evan Armando Valdes		
Name and title of main supervisor:	Associate Professor Matt Williams		
In which chapter is the manuscript/published work?	2		
Describe the contribution that the student and members of the supervisory team have made to the manuscript/published work: ¹ The student conceptualized the paper and wrote the original draft and later revisions. He also was the one who performed the analysis. James Liu and Matt Williams both supervised the process. Provided feedback on subsequent revisions of the manuscript.			
Please select one of the following three options:			
<input checked="" type="radio"/>	The manuscript/published work is published or in press Please provide the full reference of the research output: Valdes, E.A., Liu, J.H., & Williams, M. (2023). Testing the status-legitimacy hypothesis: predicting system justification using objective and subjective socioeconomic status in China and the United States. <i>Asian Journal of Social Psychology</i> , 26(2), 238-253. https://doi.org/10.1111/ajsp.12555		
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Chapter 2: Testing the Status-Legitimacy Hypothesis: Predicting System Justification Using Objective and Subjective Socioeconomic Status in China and the United States

Abstract

The status-legitimacy hypothesis proposes that those who are most disadvantaged by unequal social systems are even more likely than members of more advantaged groups to provide ideological support for the very social system that is responsible for their disadvantages. Li, Yang, Wu, and Kou (2020b) sought to expand the generalizability of this hypothesis by testing it in China, addressing inconsistencies surrounding the empirical support for this hypothesis by postulating that the construct of status should be separated into an objective and subjective status marker. They reported that objective SES (income & education) negatively predicted system justification, while subjective SES positively predicted system justification. In the present study we attempt to replicate and extend the work of Li et al. in a cross-cultural comparison of demographic stratified quota online samples in China and the United States. We test the status-legitimacy hypothesis using objective and subjective SES to predict system justification using cross-sectional and cross-lagged regression analyses. We received partial support for Li et al.'s findings. Specifically, subjective SES positively predicted system justification for both societies during cross-sectional and cross-lagged longitudinal analyses. However, we failed to replicate Li et al.'s findings surrounding objective SES in China during cross-sectional and cross-lagged analyses.

Keywords: Cross-Cultural Psychology, Liberal Choice Producing Dissonance Model, Self-Interest Acquiescence Model, Status-Legitimacy Hypothesis, System Justification

System Justification

System Justification Theory (SJT) proposes that individuals are motivated to see the systems that they live in as legitimate, fair, and just (Jost & Banaji, 1994). This is in part because of their dependence on these systems (Kay et al., 2009; van der Toorn et al., 2010; Jost, 2020) to fulfill various needs—from abstract needs such as providing order and structure in their world, to simple needs like providing a welfare check to pay one’s rent (Valdes, 2022). According to SJT, the degree to which a person is dependent on a given social system inadvertently induces system-justifying motives. Both high- and low-status individuals justify the status quo for systems they depend on—but for different reasons.

High-status individuals depend on the system and the status quo to maintain their high-status position; accepting the social system as legitimate coincides with ego and group justification motives (Li, Wu, & Kou, 2020a). Low-status individuals rely on the system for specific system-based survival benefits (like affordable health care or unemployment insurance). If they regard the social system as fair, then they should blame themselves and/or their ingroup for their disadvantaged situation; if they consider themselves and their ingroup as worthy, then they ought to believe there is an illegitimate system that causes their disadvantageous situation (Jost et al., 2001). Low-status individuals’ ability to accede to the system goes against motives for self-enhancement and ingroup favoritism. Such a dilemma between the self, the ingroup, and system justification motives induces low-status individuals to experience psychological conflict.

To resolve these conflicts, low-status individuals may hold even greater beliefs that the social system is fair when compared to individuals with high status (Jost et al., 2003b).

According to Jost et al. (2003b), those who are most disadvantaged by unequal social systems are even more likely than members of higher advantaged groups to provide ideological support

for the same social system that is responsible for their disadvantages under certain circumstances. He further postulated that societies that have high levels of inequality, value meritocracy, and possess a democratic social and political system with high civil liberties would make low-status individuals feel more responsible for their disadvantaged positions (Jost et al., 2003b); Brandt (2013) termed this the *status-legitimacy hypothesis* (see also Jost, 2004; 2019; 2020, for criticisms and exceptions to the status-legitimacy hypothesis), that low-status individuals are more likely to system justify when compared to high-status individuals.

These claims made by the status-legitimacy hypothesis differentiate SJT from relative competing theories like SDT (Sidanius & Pratto, 2001) and SIT (Tajfel & Turner, 1979). SDT and SIT propose that [low-status] individuals/groups would not justify a system that places them at a disadvantage to higher-status individuals/groups (Jost, 2011; Brandt, 2013). Historically, the status-legitimacy hypothesis has simply referred to an empirical correlation between system justification and status; however, it has proven to be controversial due to mixed empirical support (see Buchel et al., 2020; Vargas-Salfate et al., 2018b). Several researchers have demonstrated that low socioeconomic status (SES) individuals are more likely to justify the status quo as fair and legitimate than high SES individuals (Henry & Saul, 2006; Jost et al., 2003b; Kim et al., 2022; Sengupta et al., 2015; Whyte & Maocan, 2010; Zhang et al., 2022). Other work has challenged the validity of the status-legitimacy hypothesis by revealing a positive or no relationship between SES and system justification (Brandt, 2013, 2020; Caricati, 2017; Davidai, 2018).

Similarly to Li et al. (2020b), we believe that the mixed empirical support vis-à-vis the status-legitimacy hypothesis is due to a lack of differentiation between a subjective (perceived social status) and objective (income and education) SES. By separating them, we can refine our

understanding of how different types of SES relate to system justification and the status-legitimacy hypothesis. The most salient finding contradicting the status-legitimacy hypothesis is that higher subjective SES is consistently associated with greater system justification (Brandt, 2013; Brandt et al., 2020, Davidai, 2018; Vargas-Salfate et al., 2018b; Yang et al., 2016; Zimmerman & Reyna, 2013). Such consistent findings surrounding subjective SES suggest that its positive relationship to system justification is due to the psychological processes of self/ingroup interest and social comparison that can be generalized cross-culturally (i.e., self-interest hypothesis). Perhaps the exercise of placing oneself on a subjective status hierarchy highlights awareness of social comparisons with others. This activates an individual's status-maintenance motivation, leading to justification of the status quo if it serves one's own interests or group interests, which is exactly what Social Dominance Theory (SDT, Sidanius & Pratto, 2001) predicts and what is found relatively consistently when the relationship between subjective SES and system justification is examined (see also Owuamalam et al., 2018b).

When it comes to the presence of status-legitimacy effects (i.e. the negative relationship between SES and system justification) within previous research (Brandt, 2013; Henry & Saul, 2006; Jost et al., 2003b; Jost, 2019, 2020; Li et al., 2020b; Sengupta et al., 2015; Whyte & Maocan, 2010), it has almost exclusively occurred within democratic societies when an objective measure of SES was used. This is in part because objective SES has consistently led to more variability when investigating status-legitimacy effects, especially during cross-cultural research. For instance, Brandt (2013) and Vargas-Salfate et al. (2018b), who both conducted large cross-cultural tests of the status-legitimacy hypothesis, had access to participants' subjective and objective SES—but it was only objective SES that provided slight, qualified support for the status-legitimacy hypothesis. Furthermore, both these research programs found contextual social

factors such as inequality and civil liberties as explanations for these findings cross-culturally (Brandt, 2013; Vargas-Salfate et al., 2018b).

The status-legitimacy hypothesis, or what we will call the *liberal choice producing dissonance model (LCDM)*, theorizes that three specific characteristics of a social system predispose a low objective SES individual to system justify more than a high objective SES individual due to psychological conflict (Jost et al., 2003b). The first characteristic is the presence of civil liberty; nations that provide their citizens with greater freedom to voice their (dis)agreement of its current societal structure may inadvertently be putting individuals on the lower end of the status hierarchy in a conundrum (Brandt, 2013). In this case, low-status individuals face an uncomfortable choice of whether to protest (or struggle) against the system—or to accept it and be complicit in their own oppression. The second characteristic Jost et al. (2013) theorizes to enhance a state of conflict between self/group interests and system justification is the level of inequality in a given society (Brandt, 2013; Jost et al., 2003b). Brandt et al., (2020) postulated that inequality creates a reality for low-status individuals that their place in society is not within their control. In order to combat this reality for those of low-status, Jost (2020, pg. 141) claims that “when people feel extremely dependent on a given social system – and therefore experience their world as unpredictable and uncontrollable – they should be more strongly motivated to defend and justify it.” The third societal characteristic is the belief in meritocracy, a type of culture that provides an easily accessible system-justifying motive for why a group is low-status and hope that the individual may rise through their meritocratic efforts above low group status (Jost et al., 2003b).

Contrary to this model, SDT (Sidanius & Pratto, 2001) and Social Identity Theory (SIT, Owuamalam et al., 2018b) argue that societal characteristics of meritocracy, high civil liberty,

and individualism first proposed by Jost et al. (2003) and tested by Brandt (2013) are insufficient to provide enough motive to system justify for objectively low-status Americans, because this would go against their objective self-interests. At the root of this counter-claim lies the facade of meritocracy in the USA—a belief that ignores the objective reality that economic success and future wealth in the USA can be attributed to familial status (Chetty et al., 2018). In an unequal society like the USA, which has had relatively little economic growth compared to China in recent decades,⁹ believing in meritocracy shrouds the reality that the top 1% has accrued far more wealth than the bottom 90% in recent decades.¹⁰ According to Newman et al. (2015), the awareness of such social inequalities in the USA has led low objective SES individuals to reject the ideology of meritocracy; hence, these low-status Americans see less legitimacy in the status quo.

Furthermore, while status-legitimacy effects have been found in China (Li et al., 2020b; Whyte & Maocan, 2010), we do not believe they result from the macro-level societal characteristics theorized by the LCDM. China has fewer civil liberties, does not subscribe to a capitalist discourse on meritocracy, and is authoritarian, socialistic, and collectivistic (Hofstede, 2021; Li & Hu, 2021; Walder, 1996; World Bank, 2019; Wu & Li, 2017; Zhou and Xie, 2016).¹¹ In order to address this shortcoming, we propose a novel socio-contextual macro-level model that explains the relationship between objective SES and system justification in authoritarian

⁹ <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=US>

¹⁰ <https://www.federalreserve.gov/releases/z1/dataviz/dfa/distribute/table/>

¹¹ According to Hofstede's cultural dimension indices (2021) which show the effects of a society's culture on the values of its citizens, and how these values contribute to behavior, using factor analysis. China's individualism score is 20 during time of data collection, implying that it is considered to still be a highly collectivist culture. On the other hand, the US individualism score is a 91 during the time of data collection, indicating that the US is one of the most individualist societies. Furthermore, according to The World Bank's (2019) meritocracy index where higher rankings indicate less meritocracy in a given society, we find that China (Rank = 76 out of 141 countries) which places them above the country wide median for meritocratic opportunities and beliefs. Just for comparison, the US (Rank = 1) during the time of data collection exemplifies this cultural difference in meritocracy.

countries, which we will call the *self-interest acquiescence model* (SIAM). An alternative perspective to understanding status-legitimacy effects, the SIAM postulates that [low objective SES] individuals will submit to/accept a powerful system that has a history of benefitting its citizens and has no apparent cognitive alternatives (Tajfel & Turner, 1979).

Zhou and Xie (2016) found that for low-status individuals in China, the two most important factors that affected citizens' personal and economic well-being were the central and local government—in other words, “the system.” In a rising economy like China (where there was 10% per annum growth from 1979 to 2018¹²), there are objectively more opportunities to improve one's socioeconomic status; so there should also be more ego-based reasons for a person with objectively lower status to system-justify over time (Liu et al., 2010). China also possesses an authoritarian government that has tight controls over the state bureaucracy, mass media, online speech, businesses, universities, and civil society associations that attempt to undermine their authority. This has led to some discontent among Chinese elites within and outside the Chinese Communist Party (CCP) (Kennedy, 2009; Li et al., 2020b). Lower status people, with less access and experiences of conditions outside China, may see less cognitive alternatives to the current system. For those in China without social and financial capital, it is within their self-interest to system justify. As an example, the Chinese government delivered on its promises to lift people out of poverty (765 million, or $\frac{3}{4}$ of all human beings lifted out of extreme poverty in the last 4 decades, see Ana Lugo et al., 2022) and made further poverty alleviation a centerpiece of their latest 5-year plan. The motivation for the low-status Chinese to system justify could be regarded as an economically rational decision: to acquiesce and submit to a higher power that aligns with personal/group interests—what we term the SIAM.

¹² See <https://www.everyersreport.com/reports/RL33534.html>

Conversely, in a mature economy like the USA (where 1-2% growth is typical), there would be fewer ego-based benefits for an objectively low-status person to system justify (Van Ark, O'Mahoney, & Timmer, 2008), so status-legitimizing for low objective status persons depends on the societal characteristics that are most likely to produce dissonance as postulated by the status-legitimacy hypothesis (Brandt, 2013)—what we term the LCDM.

Empirical Study to be Replicated

Since empirical evidence on the status-legitimacy hypothesis has been inconsistent, an important recent study by Li et al. (2020b) theorized that a reason for the inconsistencies surrounding the relationship between SES and system justification is that the construct of SES has been simplified in many of the previous studies. Li et al. postulated that researchers should separate an individual's status into an objective and subjective experience. They theorized that objective and subjective SES may relate to system justification differently; they highlighted that educational level, income, and vocational stature are all potential measures of objective SES (Kraus et al., 2009) and also that subjective SES is measured by an individual's self-perceived status when compared to others (Anderson et al., 2012). For example, a person who makes the equivalent of \$25,000 USD annually and has only completed a few college courses may be on the lower end of the objective SES spectrum in the USA; however, they may perceive their subjective SES to be higher if their social circle is filled with people who have lesser prospects than themselves. Li et al. performed a total of five studies using both adult and adolescent Chinese samples to explore how objective and subjective SES relate to system justification differently. Our focus here is on studies 1a and 1b that used correlational and regression analysis to test the divergent effects of objective and subjective SES on system justification.

Li et al (2020b) used nationally representative data from the 2012 and 2013 Chinese General Social Survey of 10,585 participants in study 1a and 10,189 participants in study 1b.¹³ They examined how objective and subjective SES are separately related to system justification in China. Objective SES was operationalized as the responses to the items surrounding ones' educational level (1 = *lower than elementary school* to 7 = *master's degree or higher*) and total income in the previous year (in Chinese Yuan, CN¥1 = US\$0.15 when the survey was conducted). Subjective SES was measured using the MacArthur Scale of subjective SES (Adler et al., 2000). Participants were shown a visual of a 10-rung ladder representing social status and were asked to indicate their position on the ladder (1 = *the lowest*, 10 = *the highest*). Lastly, system justification was assessed using one item ("*Generally speaking, do you think Chinese society is fair?*") on a 5-point scale (1 = *completely unfair* to 5 = *completely fair*).

Li et al. (2020b) found in correlational analyses for both studies (1a & 1b) that system justification was negatively correlated with participants' education level and income, while being positively correlated with subjective SES. They then ran multiple linear regressions on system justification with participants' educational attainment, income, and subjective SES as predictors, while controlling for gender and age. They found during these analyses that educational attainment and income negatively predicted system justification; while subjective SES positively predicted system justification (Study 1a: $R^2 = .06$, $p < .001$ and Study 1b: $R^2 = .05$, $p < .001$).

While they did not explicitly refer to it as such, these results are in accord with our proposed SIAM. Furthermore, their study has provided a novel approach to testing the status-legitimacy hypothesis, many researchers (Brandt et al., 2020; Jost, 2020) have sought to explore

¹³ <http://cgss.ruc.edu.cn/>

the complexities of system justification—but not using these different SES markers in China and the USA. Though the authors' findings surrounding subjective SES are consistent with many previous studies, it is the relationship between objective SES and system justification that needs further verification. Because of the empirical inconsistencies associated with the status-legitimacy hypothesis, we look to replicate and extend Li et al. by re-testing their hypotheses using longitudinal data from both China and the USA. We can further test different macro-level explanation for why the status-legitimacy hypothesis does or does not occur for objective SES in the USA (LCDM) and China (SIAM).

Present Study

In this study, we aimed to conceptually replicate the cross-sectional findings of Li et al.'s (2020b) studies 1 and 2. We further aimed to extend their work by conducting a longitudinal analysis of the divergent effects of objective and subjective SES on system justification over time. Data was similarly collected online, but we had access to two longitudinal samples from China and the USA. Our reasoning behind analyzing data from China was to replicate Li et al.'s findings surrounding objective and subjective SES in relation to system justification with a demographically representative stratified quota sample. Analyzing data collected from the USA allows us to test their finding that the positive relationship between subjective SES and system justification is generalizable cross-culturally, while simultaneously testing if objective SES holds a different relationship with system justification in these countries.

In contrast to Li et al.'s (2020b) cross-sectional approach, we decided to use longitudinal data to establish a richer perspective on how objective and subjective SES relate to system justification and the status-legitimacy hypothesis over time. The literature on system justification and the divergent effects of subjective and objective SES has implied the effect of SES on

system justification is causal but lacks longitudinal exploration and therefore has relied heavily on cross-sectional correlational studies. Blasi and Jost (2006) theorize that system justification motives are constantly competing against other self/group motives that can take precedence—indicating changes over time—making cross-sectional studies insufficient. They should be augmented by longitudinal analysis.

The status-legitimacy hypothesis (Brandt, 2013) claims that there is a causal effect of SES on system justification. However, correlational studies provide only tentative evidence of such causal effects (Maxwell, et al., 2011). Longitudinal studies on the other hand can provide more reliable evidence of causal effects between objective and subjective status and system justification by allowing us to measure system justification at two distinct points in time. We can observe whether objective or subjective SES predict system justification cross-sectionally during wave 1.

During wave 2 analyses, we can control for wave 1 system justification scores, allowing us to invoke a chronological precedence between our status variables and wave 2 system justification scores. This process would also help rule out other stable individual difference variables as confounds since their effects would be absorbed during wave 1 and eliminated when controlling for system justification at wave 1 during longitudinal analysis. We opted for the use of a 6-month time interval between waves 1 and 2, because research on memory for life events (see Jenkins et al., 1979; Monroe, 1982) reports that a 4-to-6-month interval is the longest time period over which individuals can accurately recall life events. The literature on system justifying effects has yet to uncover over what time period an individual may shift ideological allegiances, but logically, it would be safe to assume that a 2-wave study should encompass the longest time period over which individuals can accurately remember life events that might be

responsible for their allegiance shifts. Secondly, longitudinal designs implicitly relies on the presence of variance over time for effects to be detectable, and using a relatively long time period increases the chances of such variance being observed.

Aims and Hypotheses

In this study, we aim to conceptually replicate Li et al.'s (2020b) studies 1a and 1b cross-sectionally and extend their work by using longitudinal data to compare how objective and subjective SES predict levels of system justification differently among American citizens versus Chinese citizens. Comparing two nations that are fundamentally different socially, economically, and politically is a critical extension of both the system justification literature and the status-legitimacy hypothesis. Given the presented theoretical and empirical antecedents in this paper, and in accord with the SIAM, we hypothesize that in the sample from China, greater levels of education and income (higher objective SES) will negatively predict system justification. Within the sample of participants from the USA, we test the status-legitimacy hypothesis and its LCDM, noting a high degree of controversy around its predictions and hypothesize that greater levels of education and income (higher objective SES) will positively predict system justification. However, we anticipate that a positive relationship between subjective SES and system justification will be generalizable across the two cultures, because we believe the psychological process of attending to self-interests through a process of social comparisons will generalize cross-culturally (see Brandt et al., 2020; Davidai, 2018; Li et al., 2020b; Vargas-Salfate et al., 2018b), These hypotheses are tested cross-sectionally and longitudinally.

Method

Participants and Procedures

An a priori power analysis was conducted using the pwr package in r statistical software which revealed a required sample of 640 participants from both countries to have adequate

power ($1 - \beta = .80$) to detect a small effect of $f^2 = .02$ for our regression analyses during both waves (Champely et al., 2018). Participants were recruited through online samples curated by Nielsen, an international polling firm tasked with stratifying samples according to age, gender, and region, from September 2015 to March 2016. Wave 1 was a stratified quota sample in both USA and China that was designed to be demographically representative in regards to age, gender, and region and was collected in September 2015 as part of a large 19 nation international project (for details, Gil de Zúñiga & Liu, 2017).¹⁴ The same participants were invited to Wave 2 six months later. We re-analyzed Chinese and American participant data presented by Vargas-Salfate et al. (2018b), albeit with missing data multiply imputed. In contrast to Vargas-Salfate et al., decision to analyze China and the USA as part of a larger multi-country study, whereas in the present study they were selected for theoretical purposes following Li et al. (2020b).

Furthermore Vargas-Salfate et al. (2018b) controlled for objective SES (income) and explored the role subjective SES played in relation to social dominance and system justification, we directly test status-legitimacy effects using both objective (education and income) and subjective SES. The final sample of participants for China and the USA were, respectively 1004 ($M_{age}=38.7$ years, $SD = 12$; 55.2% female, $M_{region}=.91$, $SD = .29$) and 1161 participants ($M_{age}=49.7$ years, $SD = 16.4$; 58.9% male, $M_{region} = .37$, $SD = .48$) during waves 1 and 2. We compared our samples to available census data in each country, which we found that average age, gender, and living region (urban vs rural) for the adult population in China (38.4 years, 51% male, 64% urban) and in the USA (38.5 years, 52% female, 80% urban). Our sample in China falls within this average range for age and region but slightly more female representation. Our sample from

¹⁴ For a list of publications from this dataset, see – <https://www.dropbox.com/s/oko40j9uzzh1i8j/Digital%20Influence%20World%20Project%20Research%20Output.docx?dl=0>

the USA's living region falls within the average range, however our samples average age is 11 years above the national average, with slightly more male representation.

Missing Data Analysis

The combined percentage of missing values across the ten variables of interest within the analyses for both waves 1 and 2 varied from 0 to 59%. During waves 1 and 2 total of 999 and 1290 out of 2165 total cases were considered incomplete respectively. Education (46%), wave 2 system justification scores (59%), and income (8%) were the only variables whose missingness was greater than .8 percent. The percentage of total missing data for all variables during both waves was 11%, which is quite normal for longitudinal designs (Wang et al., 2017). Since many participants during data collection failed to report their education level or failed to re-enter the study during the second wave of data collection (i.e., attrition rate = 59%), we used multiple imputation to create and analyze 40 multiple imputed datasets. Methodologists currently regard multiple imputation as a state-of-the-art technique because it improves accuracy and statistical power relative to other missing data techniques (Manly & Wells, 2015). Incomplete variables were multiply imputed under fully conditional specification, using the linear regression with bootstrap method of the mice 3.13 package (Van Buuren and Groothuis-Oudshoorn, 2011). Results for both cross-sectional and longitudinal analyses were then pooled across the multiply imputed datasets. The same design and materials were used for measuring objective and subjective SES. However, the entire brief version of the system justification scale was administered as opposed to Li et al.'s decision to only use the first item.

Ethical Statement

The present study was approved by the Human Ethics Committee at Massey University (Protocol MUHECN 15/053) and was conducted with informed consent from all participants.

Instruments

System Justification scale

A brief version of the System Justification Scale (Kay & Jost, 2003) was used. This included the following four items: “In general, I find society to be fair;” “In general, (my country’s) political system operates as it should,” “Everyone in my country has a fair shot at wealth and happiness,” and “(My country’s) society is set up so that people usually get what they deserve,” where each country name was inserted into the parentheses. Responses were given on a range of 1 (Disagree completely) to 7 (Agree completely). A mean system justification score was calculated for each participant by collapsing across the four items, which formed a highly reliable scale ($\alpha = .85$) that ranged from 1 (low system justification) to 7 (high system justification). We chose this over Li et al.’s single item measure, because we believed these four items more holistically captured system justifying beliefs.

Objective and Subjective SES

Similarly to Li et al. (2020b), subjective SES was assessed with the following: “On a scale of 1 to 10, with 10 being people who are the most well off in society, and 1 being the people who are the least well off, where would you describe your position?” Objective SES was assessed with the following two questions: “What is the highest level of education you have completed?” where responses ranged from 1 (Elementary school) to 6 (Graduate school or higher) and “Last year, what was your family’s total household income, before taxes?” We then transformed household income into percentile ranks from 0 to 100% to address severe univariate outliers (e.g., incomes over a million, Skewness = $-.01$, kurtosis = $-.1.2$).

Control variables

Similarly to Li et al. (2020b) we controlled for the effects of age and gender (1 = male, 0 = female) in order to isolate the associations between objective and subjective SES and system justification.

Results

Measurement Invariance

For this study, a series of multigroup imputed CFAs were used to detect measurement invariance across 40 multiply imputed datasets for three factors that make up the measurement model: system justification, objective, and subjective SES. The first was the configural model, where we simply fit a three-factor model in both groups, without constraining parameters to equality across countries. This model displayed equivocal fit, with a CFI of 0.96 (above the .95 cut-off for good-fit in Hu & Bentler, 1999), an SRMR of 0.03 (well below Hu and Bentler's 0.08 cut-off), an RMSEA of 0.07 (just above Hu and Bentler's cut-off of 0.06), and a significant chi-square, $\chi^2(24) = 162.87, p < .001$. This indicated that a three-factor model fit reasonably well (but not perfectly) across both groups. We then tested a *metric invariance* model where factor loadings were constrained to equality. This resulted in a small but significant deterioration in absolute fit, $\chi^2_{\text{diff}}(4) = 65.91, p < .001$, albeit without deterioration to the approximate fit statistics (CFI = .96; RMSEA = .07; SRMR = .04).

For exploratory purposes, we also tested a strong invariance model where intercepts and measurement error terms were also held to equality across groups. This model displayed a large reduction in fit relative to the metric invariance model, $\chi^2_{\text{diff}}(4) = 1121.48, p < .001$. However, strong (or scalar) invariance was not crucial for the current study, given that our substantive analyses do not focus on comparing mean levels of system justification across countries but rather on relationships between system justification and other variables. Overall, these tests of

measurement invariance provide some evidence against metric invariance, and therefore raise the possibility that differences in estimated parameters between groups in our substantive analyses might be biased due to this lack of invariance. However, the relatively small difference in fit between the configural invariance and metric invariance models suggests that if such bias exists, it is unlikely to be large.

Descriptive Analysis

Descriptive statistics and bivariate correlations are provided in Tables 2.1 and 2.2. Correlational analysis for China and the USA revealed that system justification was consistently significantly positively correlated with participants' subjective SES for both countries across waves 1 and 2. This coincides with Li et al.'s correlational findings for subjective SES in China. However, our findings with respect to objective SES (income and education) contradicted Li et al.'s correlational findings in China. Education was significantly positively correlated with system justification during both waves, while income was only significantly positively correlated during wave 2. In the USA, system justification was significantly positively correlated with objective SES (income and education) across waves 1 and 2, therefore providing no support for the status-legitimacy hypothesis (i.e. LCDM).

Table 2.1

*Descriptive Statistics and Bivariate Correlations of Key Variables in China Sample
Means, standard deviations, and correlations with confidence intervals (N = 1004)*

Variable	Mean	SD	Median	Range	1	2	3	4	5	6
1. System Justification	4.23	1.29	4.25	6.00						
2. System Justification (Wave 2)	4.20	1.31	4.25	8.51	.76** [.73, .79]					
3. Subjective SES	5.05	1.77	5.00	9.00	.31** [.25, .36]	.34** [.28, .39]				
4. Education	3.38	0.79	3.54	7.81	.11** [.05, .17]	.15** [.09, .21]	.10** [.04, .17]			
5. House Income	59.71	24.85	61.96	92.56	.06 [-.00, .12]	.13** [.06, .19]	.37** [.32, .43]	.10** [.04, .17]		
6. Age	38.69	12.02	37.00	56.00	-.02 [-.08, .04]	-.04 [-.10, .02]	-.07* [-.13, -.01]	-.01 [-.07, .06]	-.08* [-.14, -.02]	
7. Gender	0.44	0.50	0.00	1.92	.10** [.04, .16]	.13** [.07, .19]	.07* [.01, .13]	.07* [.01, .14]	.08* [.01, .14]	-.16** [-.22, -.10]

Note. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$

Table 2.2

*Descriptive Statistics and Bivariate Correlations of Key Variables in US Sample
Means, standard deviations, and correlations with confidence intervals (N = 1161)*

Variable	Mean	SD	Median	Range	1	2	3	4	5	6
1. System Justification	3.43	1.29	3.50	6.00						
2. System Justification (Wave 2)	3.53	1.24	3.50	7.56	.76** [.74, .78]					
3. Subjective SES	5.46	1.93	6.00	9.00	.30** [.25, .35]	.32** [.26, .37]				
4. Education	4.22	0.56	4.00	5.14	.10** [.04, .16]	.11** [.05, .17]	.25** [.19, .30]			
5. House Income	41.65	29.48	35.57	99.63	.08** [.02, .14]	.13** [.07, .18]	.31** [.26, .36]	.17** [.11, .22]		
6. Age	49.84	16.43	51.00	71.00	.09** [.03, .14]	.08** [.03, .14]	.01 [-.05, .07]	.07* [.01, .12]	-.07* [-.13, -.01]	
7. Gender	0.60	0.49	1.00	2.56	-.13** [-.19, -.07]	-.05 [-.10, .01]	-.13** [-.19, -.07]	-.13** [-.18, -.07]	-.03 [-.09, .02]	-.16** [-.22, -.11]

Note. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$

Cross-Sectional Analysis

We then moved towards regression analysis, similarly to Li et al. (2020b), and opted to first conduct a cross-sectional regression to attempt to more closely replicate their cross-sectional findings before subjecting them to a more severe longitudinal test. Our cross-sectional and cross-lagged multiple regression models do not assume that the independent or dependent variables are normally distributed, just the errors (Williams et al., 2013). We centered our continuous interaction terms (system justification, age, education, and subjective SES during waves 1 and 2) to make the main effects for these coefficients more interpretable in the presence of interaction terms. In addition, we chose to plot our interactions in accordance with Rosnow and Rosenthal (1989) to observe the marginal (simple) effects of objective and subjective SES by country on system justification (See Figures 1.1 and 1.2). While there is no real evidence for many of the interactions across countries in either of our cross-sectional or longitudinal models, these figures provide a tentative and exploratory approach to visualize differences between the countries that should not go unreported.

A cross-sectional multiple linear regression was run to predict system justification using participants' objective and subjective SES, age, and gender as predictors in wave 1. Interaction terms were included within this model to test the invariance of the scales across cultural contexts. A significant regression equation was seen within this model (see Table 2.3). In line with our hypothesis and Li et al.'s findings, this analysis indicated that for both the USA and China, the main effect of subjective SES positively and significantly predicted system justification while not being moderated by country. Further support was seen when we plotted the marginal effects of subjective SES by country on system justification (see Figure 2.1). For China, income negatively and significantly predicted system justification, while education was

seen to have a non-significant positive relationship with system justification (see Table 2.3 and Figure 2.1). On the other hand, in the USA, both education and income (objective SES) were found to have inconsistent non-significant relationships with system justification (see Table 2.3 and Figure 2.1). While we found partial support for both Li et al.'s findings and our SIAM hypotheses surrounding objective SES (income only) in China, the findings for objective SES in the USA do not support the status-legitimacy hypothesis (i.e., LCDM).

Longitudinal Analysis

During wave 2 analyses, we opted for a cross-lagged multiple regression analysis to predict system justification (wave 2) using participants' objective and subjective SES, age, and gender as predictors in wave 2. Each one of the predictors during these analyses were from wave 1 to help establish temporal precedence of cause before effect. We further controlled for participants' system justification scores during wave 1. Once again, interaction terms were included within the model to test for equivalence of the scales across cultural contexts. A significant regression equation was seen within this model (see Table 2.3). This cross-lagged analysis supported both Li et al.'s and our previous cross-sectional findings for China and the USA: subjective SES was a positively significant predictor of system justification over time (see Figure 2.2 for marginal effects).

For objective SES, education and income as predictors were seen to have non-significant cross-lagged relationships with system justification in both societies (See Table 2.3). We plotted the interaction (marginal) effects of objective SES (education and income) between the two societies on system justification. For China, we found that education but not income positively predicted system justification (See Figure 2.2). These results go against Li et al.'s (2020b) findings and what we hypothesized about the SIAM for objective SES in China. For the USA,

we found that income but not education positively predicted system justification. That said, the interactions between country and objective SES (education and income) were not significant. This means that there is no strong evidence of differences in the effects of education and income across the two countries.

Table 2.3*Multiple Regression Analysis with Interaction Effects of System Justification*

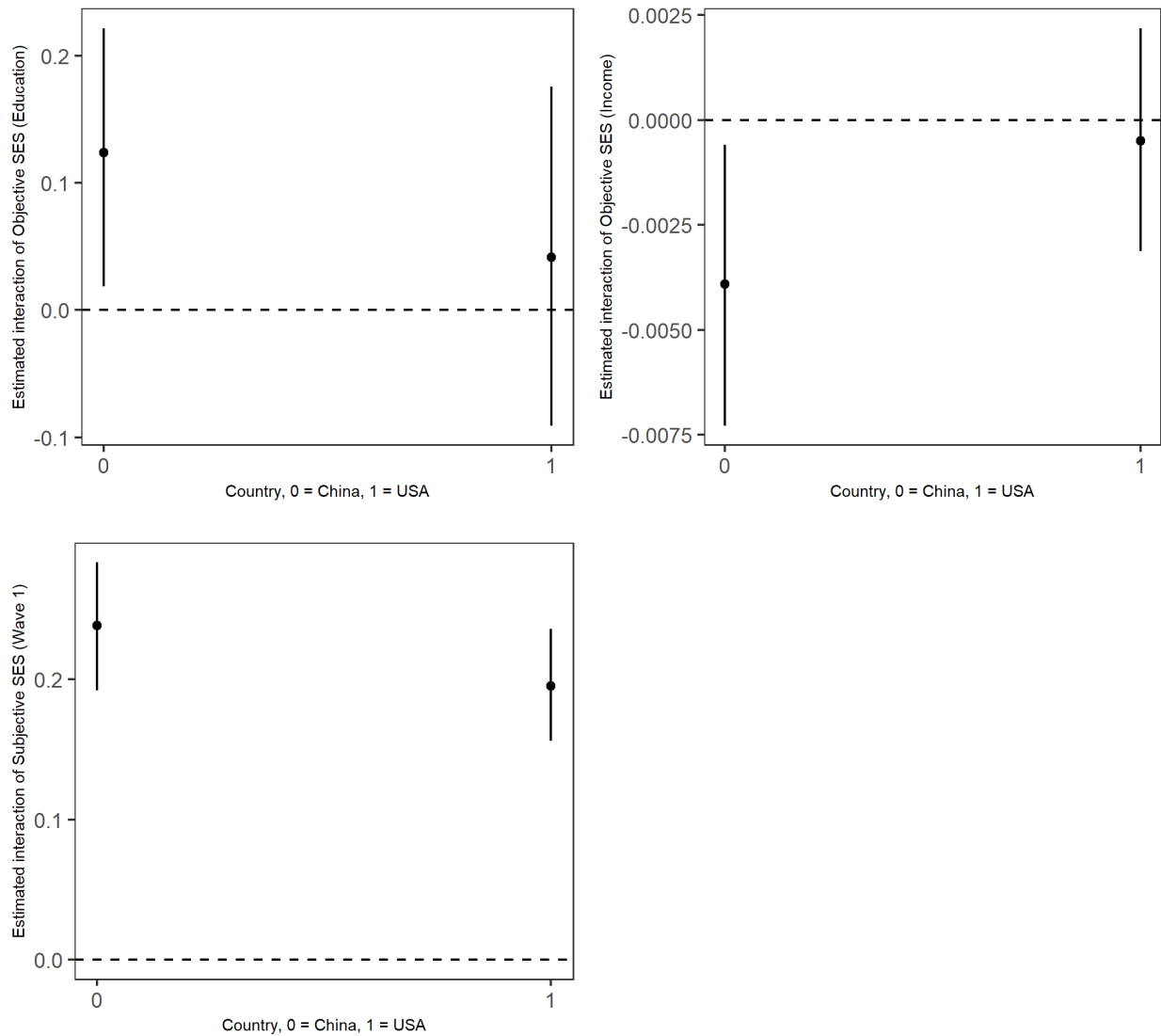
	<i>Dependent variable:</i>	
	System Justification Wave 1	System Justification Wave 2
	(Cross-Sectional)	(Longitudinal)
Age	0.001 (-0.01, 0.01)	0.001 (-0.01, 0.01)
Gender	0.22*** (0.05, 0.36)	0.14 (-0.004, 0.20)
Country	-0.69*** (-1.28, -0.71)	0.35 (-0.02, 0.54)
Education	-0.004 (-0.003, 0.09)	0.11 (-0.03, 0.16)
House Income	-0.004** (-0.005, -0.001)	0.002 (-0.0002, 0.004)
Subjective SES	0.24*** (0.19, 0.28)	0.09*** (0.05, 0.13)
System Justification (Wave 1)		0.68*** (0.64, 0.73)
Country x Age	0.004 (-0.003, 0.01)	0.003 (-0.002, 0.01)
Country x Gender	-0.44*** (-0.63, -0.20)	-0.001 (-0.002, 0.06)
Country x Education	-0.04 (-0.24, 0.08)	-0.06 (-0.17, 0.05)
Country x House Income	0.003 (-0.001, 0.01)	-0.0002 (-0.003, 0.003)
Country x Subjective SES	-0.04 (-0.10, 0.02)	-0.01 (-0.06, 0.03)
Country x System Justification (Wave 1)		-0.02 (-0.08, 0.04)
Constant	0.69*** (0.45, 0.92)	0.07*** (0.02, 0.27)
Observations	2,165	2,165
R ²	0.19	0.58
Adjusted R ²	0.18	0.56
Residual Std. Error	1.22 (df = 2153)	0.81 (df = 2151)
F Statistic	44.68*** (df = 11; 2153)	273.18*** (df = 13; 2151)

Note: Wave 1: R² = .19; F(11, 2153) = 44.98, p < .001; Wave 2: R² = .58; F(15, 2149) = 210.83, p < .001. Country is coded as China = 0 and USA = 1. Main unstandardized effects within the table estimated effects for participants, while interactions represent the difference between the estimated effects for Chinese participants and those for US participants. Regression coefficients can be seen in the table. 95% confidence intervals are in parentheses.

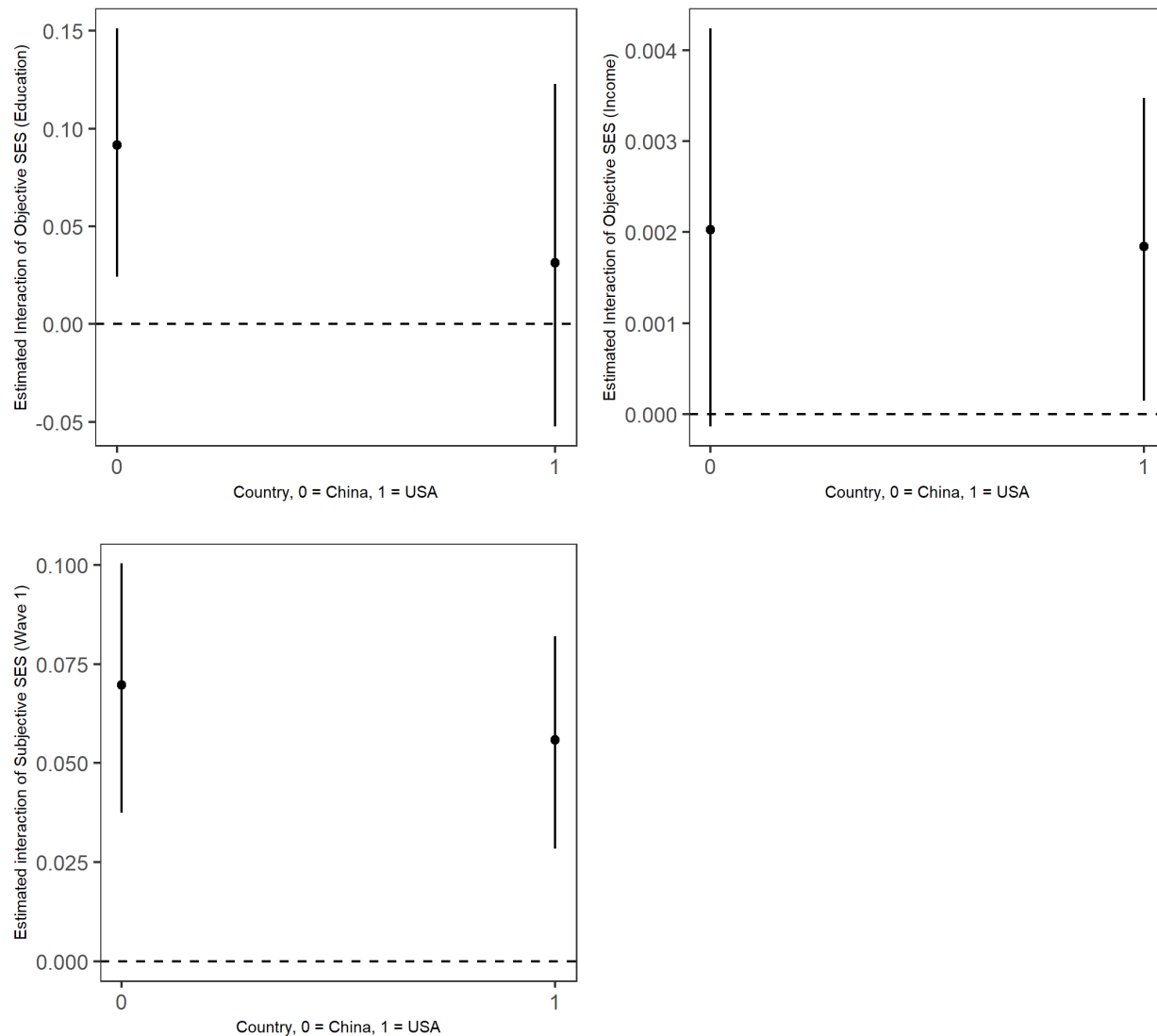
Figure 2.1

Estimated Effect of Subjective and Objective SES on System Justification by Country (Cross-Sectionally)

Conditional Coefficient of Subjective and Objective SES on SJ by Country



Note: whiskers on either side of points captures the 95% CI interval of effect. Dotted line at 0 indicates null hypothesis. Whiskers crossing 0 indicates ($P > .05$). Conditional coefficients are unstandardized

Figure 2.2*Estimated Effect of Subjective and Objective SES on System Justification by Country (Longitudinally)***Conditional Coefficient of Subjective and Objective SES on SJ by Country**

Note: whiskers on either side of points captures the 95% CI interval of effect. Dotted line at 0 indicates null hypothesis. Whiskers crossing 0 indicates ($P > .05$). Conditional coefficients are unstandardized

To check whether our non-significant results were due to a lack of statistical power after multiple imputation, we conducted a sensitivity power analysis using the `pwr` package in `r` statistical software (Champely et al., 2018) on participants who completed all measures of interest. Power ($1 - \beta$) set at 0.8 and $\alpha = 0.05$ showed us that our samples in China (wave 1 and 2

n = 336) prior to imputation were adequate to have 80% power to detect true effect sizes of $f^2 = .023$. In the USA, (wave 1 n = 830 and wave 2 n = 489) our samples prior to imputation were adequate to have 80% power to detect true effect sizes of $f^2 = .009$ and $f^2 = .016$, respectively. Many participants (n = 999) failed to report one of our objective SES indicators (education), leading to an overall smaller sample size prior to imputation. This could have contributed to biased estimates during imputation and overall null findings surrounding education for both countries.

Discussion

The purpose of this study was to provide a replication of studies 1a and 1b of Li et al. (2020b) and an extension via longitudinal data to test how status-legitimacy effects vary over time. SJT and its status-legitimacy hypothesis propose that under certain circumstances, lower-status individuals are more likely to justify the social system than high status persons (Brandt, 2013; Jost & van der Toorn., 2012). We failed to replicate Li et al.'s (2020) correlational finding of a negative relationship between objective SES (income and education) and system justification; these instead showed significant small positive correlations with system justification during waves 1 and 2 in China. Similarly in the USA, objective SES (income and education) was seen to have small positive significant correlations with system justification during waves 1 and 2 but no support for the status-legitimacy hypothesis.

The most robust relationship we found across cross-sectional and cross-lagged multiple regression and correlational analyses was that higher subjective SES was associated with greater system justification in China and the USA (see Table 2.3 and Figures 1.1 and 1.2), which coincides with the results seen by Li et al (2020b) in China and supports what we had hypothesized for the USA. The psychological process of attending to self-interests via social

comparisons necessary for judging subjective status generalizes cross-culturally in both societies when it comes to system justification. In accord with Owuamalam et al. (2018), and Sidanius and Pratto (2001), an individual's subjective advantaged experience compared to their social circle provides them with a greater tendency to defend and legitimize the system. Evidence for this can be seen in both the present study and world-wide research that found a consistent positive relationship between subjective SES and system justification (Brandt, 2013; Brandt et al., 2020, Davidai, 2018; Vargas-Salfate et al., 2018b; Yang et al., 2016; Zimmerman & Reyna, 2013). We did not find empirical support for the status-legitimacy hypothesis (LCDM) where subjective SES was concerned. However, this does not imply that individuals with low subjective SES do not system justify; according to Brandt et al. (2020), group identification, self-esteem, and perceived social mobility are associated with a system-justifying motive for those with low subjective SES—all potential underlying mechanisms that future researchers could use to better understand the relationship between subjective SES and system justification.

The results are more complicated for objective SES. Cross-sectional regression analyses revealed objective SES (education and income) was found to have a non-significant relationship with system justification in the USA. This finding provides no support for the postulates of the LCDM nor what we had hypothesized in the USA cross-sectionally. In China, though, we found a negative significant relationship for income but not for education on system justification, which provides partial support for Li et al.'s (2020b) cross-sectional findings of a negative relationship between objective SES and system justification and what we had hypothesized in China (the SIAM). This unexpected divergent cross-sectional finding for objective (income) and subjective SES is theoretically intriguing for researchers interested in further testing status-legitimacy effects. It provides evidence that measuring a construct like status in either objective

or subjective terms can convolute the interpretation of the validity of status-legitimacy effects. Researchers who have defined status in subjective terms rarely find support for status-legitimacy effects, while others who have used objective SES have found support (Brandt, 2013; Brandt et al., 2020, Davidai, 2018; Henry & Saul, 2006; Jost et al., 2003b; Li et al., 2020b; Sengupta et al., 2015; Vargas-Salfate et al., 2018b; Whyte & Maocan, 2010; Yang et al., 2016; Zimmerman & Reyna, 2013). Three recent studies found evidence of status-legitimacy effects when differentiating objective and subjective SES in both large cross-cultural and single country tests (Kim et al 2022; Owuamalam et al., 2023b; Zhang et al., 2022). Consistent with our SIAM postulates, Owuamalam et al. (2023b) argue that cultural group norms surrounding social identity, such as the harmony creed, help to explain the relationship between objective SES and system justification. In China, cultural norms create a sense of obligation [for low objective status individuals] to accept the hierarchical authority and the system – it is prudent to accept their disadvantaged position and acquiesce to the status quo.

In longitudinal cross-lagged analyses, objective SES (education and income) at wave 1 had no significant relationship with system justification at wave 2 after we controlled for wave 1 SJ in China and the USA. These cross-lagged findings largely go against what Li et al (2020b) had found in their study and contradicts our SIAM hypothesis about objective SES (income and education) and its relationship to system justification in China. Once again, this finding provides no support for LCDM postulates in the USA for education during cross-lagged analyses, as no longitudinal relationship with system justification was revealed. It is possible the null findings during our longitudinal cross-lagged analysis may be attributed to the 6-month time lag between waves; but as 6 months is the longest period over which most participants have accurate memory for life events (Jenkins et al., 1979), it was a good starting point for a longitudinal test. Future

research could use multiple waves or other time intervals to extend the initial findings reported here (see Orth et al., 2021).

Social, Economic, and Political Differences

Interestingly, when comparing the level of system justification between the USA and China cross-sectionally, we found that system justifying beliefs were much greater in the Chinese sample than in the USA sample (see Table 2.3).¹⁵ This coincides with our theorizing about the SIAM; in a rising economy such as China, Chinese citizens may be more likely to perceive that there are more opportunities to improve one's socioeconomic status; therefore, there should also be more ego-based reasons for an individual to system-justify over time regardless of the socioeconomic status position. It also aligns with Brandt's findings (2013) that individuals from countries with low levels of civil liberties system-justified to a greater extent than those with more civil liberties. Another possible explanation is many Chinese citizens feel a sense of dependence on the Chinese Communist Party to continue improving societal circumstances, hence allowing them to translate their dependence into a justified legitimacy of the status quo in China.

The USA, a nominally meritocratic culture with a great deal of civility liberties yet high inequality and low or no economic growth for the middle and lower classes, is the ideal society according to Jost et al. (2003a, 2003b) and the LCDM to test for status-legitimacy effects. A country with all of these qualities should possess the stronger system-justifying motive; however, the present research shows otherwise for both subjective and objective measures of status. Deciding to system justify as an American is a complex decision, because, unlike in

¹⁵ It should be noted that in the absence of scalar invariance, differences in measurement properties of the scales across the two samples could partially or fully explain the mean difference between samples.

China, the USA is a democratic society where the idea of individual, pluralistic beliefs are encouraged—debate and disagreement is looked upon more favorably over justifying the status quo. We found no support for the *status-legitimacy hypothesis* (i.e., LCDM). Perhaps the fact that the data used here were collected during and after the 2016 USA presidential election, a time when trust in the American political system hit a low (Dyck et al., 2018), contributed to the null findings.

Longitudinal Failure to Replicate Cross-Sectional Results

There are several potential explanations for why we failed to find support for our hypotheses surrounding objective SES in the USA as well as Li et al.'s (2020b) findings of a negative relationship between objective SES and system justification in China. We used a cross-lagged panel model (CLPM) during our longitudinal analysis, which has been shown to have some limitations on temporal indications surrounding within-person and between-person variance and stability (Hamaker et al., 2015). Additionally, we used a time lag of six months between waves, which was a consequence of using secondary data. When using a CLPM, time lags can have severe implications for hypothesis testing of longitudinal data (Orth et al., 2021).

We see the fluidity of status-legitimacy effects over time as a theoretical explanation for why we failed to find support for our hypotheses and replicate Li et al (2020b) longitudinally. This fluidity may be an implicit contributing factor to the long-standing debate about the validity of the status-legitimacy hypothesis (Brandt, 2013). Blasi and Jost (2006) postulate that an individual's want or need to system justify continuously competes with other individual/group motivations that may take precedence over system justification. Because these motivations are constantly competing, a person may legitimize or justify a system at one point in time but be less inclined to do so at a different point in time; this was supported in our findings of variation

between the cross-sectional and longitudinal analyses in both the USA and China (see figures 1.1 and 1.2) regarding the relationship between objective SES (income) and system justification. Longitudinal designs provide a more critical test of the underlying mechanisms of status on system justification. They also directly test the fluidity in system justifying motives postulated by Blasi and Jost (2006), which benefits the system justification literature by incorporating how status-legitimacy effects vary over time—how people change over time.

Li et al. (2020b) chose to use a single item (“*Generally speaking, do you think Chinese society is fair?*”) to measure system justification, which may have over-simplified system-justifying motivations within their sample. We tested this hypothesis cross-sectionally using the same single item to measure system justification for both societies.¹⁶ Similarly to our cross-sectional and cross-lagged longitudinal analyses, this single-item system justification analysis failed to replicate Li et al.’s findings.

With respect to one of our indicators of objective SES, a large number of participants failed to report their education level (46%) during data collection, which could have caused inaccurate approximations of this parameter during multiple imputation. It might have introduced error into the measurements of education, leading to biased estimates of its effect (Westfall & Yarkoni, 2016).

Strengths, Limitations, and Directions for Future Research

We extended previous research on system justification by exploring this phenomenon with Chinese participants—who are an under-studied population in psychological research on

¹⁶ Subjective SES significantly positively predicted the single item system justification (SJ) for both countries. Further support was seen when we plotted the marginal effects of subjective SES between the two countries on the single item SJ. Objective SES was found to have no relationship with the single item SJ in the USA, while in China, income but not education had a slight negative relationship with the single item SJ. When we plotted the marginal effects of objective SES (income and education) on the single item SJ between the two countries, education had a slight positive interaction, while income had a slight negative interaction with the single item SJ in China only.

status-related issues—compared to a Western society that differs economically, socially, and politically (Li et al., 2020b). As a replication and extension, our study had some small differences from the original. We used participants from an additional country (the USA) rather than just China, and our sample sizes for each country were small in comparison to Li et al. (2020b). However, our study was able to secure sufficient statistical power to detect small effects by using a relatively large multiply imputed adult demographic stratified quota sample for both countries during cross-sectional and cross-lagged analyses ($f^2 = .02$). Regarding the relation between objective SES and system justification, Li et al. (2020b, Study 3-5) revealed that the indirect effect of objective SES and system justification through the mediating role of conservatism was more robust. As the present study did not measure political ideology, the hypothesis of whether the indirect effect holds could not be tested. Our study was not preregistered, and hypotheses were formed during the process of data analysis. However, our hypotheses were not designed to accommodate the final results (see Rubin, 2017) and indeed were contradicted by several aspects of our findings. Nevertheless, future preregistered tests of the SIAM and status-legitimacy hypotheses would be useful.

This research attempted to highlight the divergent roles of objective and subjective SES in predicting system justification cross-culturally. Previous research has implied system justification motives are produced by objective and subjective SES (Jost et al., 2003b); however, the fact that we get consistent findings in relation to subjective SES and system legitimacy and completely inconsistent findings between objective SES and system justification suggests that these relationships could easily be bidirectional instead of unidirectional. Therefore, we believe the palliative effects of system justification (Blasi and Jost, 2006) could feed into an individual's social comparison process to compute subjective status. We argue that perceiving oneself

(subjective SES) as higher [than others] on a social hierarchy could act as a rationalization for why an individual views a system as legitimate, fair, and just. It is important to note that cross-lagged panel designs that are based on only two time points, such as the present study, do not establish causality unequivocally (Hamaker et al., 2015). We suggest more extensive use of longitudinal data to test this theoretical reconceptualization of the directionality of the relationship between SES and system justification, with multiple observation points.

The brief system justification scale in the current research has been used in a variety of studies to capture general perceptions of social fairness and justice (Jost, 2019). It is possible, though, that this measure may not always capture the psychological motivation to legitimize the status quo. Future research may wish to use experimental and implicit methods to more fully detail the extent to which the measure predicts support for the status quo, rather than just being an index by which society is perceived as fair (Jost, 2020). Contextual factors should also be addressed in future research to help explain the impact of group identification (Brandt et al., 2020) and political orientation as it relates to status and system justification. Cross-cultural research exploring the association between status and system justification could investigate how a country's level of (in)equality or freedom moderates the relationship between objective and subjective SES and system justification.¹⁷

¹⁷ References will be provided in a consolidated reference list at the end of the thesis

Preface 2: Chapter 3

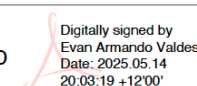
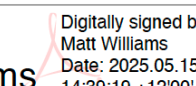
In the second study of my thesis, I intended to test four specific hypotheses about socioeconomic status (objective and subjective SES), political ideology, inequality, and civil liberties made by System Justification Theory in comparison to some of the theoretical counterclaims made by theorists who approach system-justifying beliefs from the perspective of the social identity approach and Social Dominance Theory cross-culturally.

Building on the finding of Study 1, which tested the status-legitimacy hypothesis in China and the United States, this study was inspired by larger questions regarding the accuracy of several of System Justification Theory's assumptions when juxtaposed with competing self- and group-interest theories. Study 1 revealed mixed evidence for the predictions of the status-legitimacy hypothesis, particularly concerning the differential roles of objective and subjective SES in explain system-justifying tendencies. These findings underscored the need to retest the status-legitimacy hypothesis while simultaneously expanding the scope to examine additional system-justifying processes with a larger and more diverse cross-cultural sample.

By doing so, I aimed to assess how well the predictions of System Justification Theory hold up against alternative frameworks in explain ideological support for societal systems across different cultural contexts. Through this comparative lens, I evaluated whether cultural moderation influences how objective and subjective SES, political ideology, inequality, and civil liberties predict system justification.

STATEMENT OF CONTRIBUTION

DOCTORATE WITH PUBLICATIONS/MANUSCRIPTS

<p>We, the student and the student's main supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the student's contribution as indicated below in the Statement of Originality.</p>			
Student name:	Evan Armando Valdes		
Name and title of main supervisor:	Associate Professor Matt Williams		
In which chapter is the manuscript/published work?	3		
<p>Describe the contribution that the student and members of the supervisory team have made to the manuscript/published work:¹</p> <p>The student conceptualized the project, preregistered the study using the Open Science Framework, drafted the original draft of the manuscript, analyzed the data, and made subsequent revisions during the peer review process. James Liu, Matt Williams, and Stuart Carr supervised the process and guided the student during the revision process. Matt provided feedback during certain components of the preregistration and analysis.</p>			
Please select one of the following three options:			
<input checked="" type="radio"/>	<p>The manuscript/published work is published or in press</p> <p>Please provide the full reference of the research output:</p> <p>Valdes, E. A., Liu, J. H., Williams, M., & Carr, S. (2024). A cross-cultural test of competing hypotheses about system justification using data from 42 nations. <i>Political Psychology</i>, 00, 1-25. https://doi.org/10.1111/pops.13039</p>		
<input type="radio"/>	<p>The manuscript is currently under review for publication</p> <p>Please provide the name of the journal:</p>		
<input type="radio"/>	<p>It is intended that the manuscript will be published, but it has not yet been submitted to a journal</p>		
Student's signature:	Evan Armando Valdes	 <small>Digitally signed by Evan Armando Valdes Date: 2025.05.14 20:03:19 +12'00'</small>	Main supervisor's signature: Matt Williams
			 <small>Digitally signed by Matt Williams Date: 2025.05.15 14:39:19 +12'00'</small>
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Chapter 3: A Cross-Cultural Test of Competing Hypotheses About System Justification Using Data From 42 Nations

Abstract

System Justification Theory (SJT) is a thriving field of research, wherein the primary questions revolve around why individuals and groups are motivated to see the systems they depend on as just, fair, and legitimate. This article seeks to answer how accurate the postulates of SJT are when compared to competing self-interest claims of Social Identity and Social Dominance Theory. We addressed the ongoing debates among proponents of each theory by identifying who, when, and why individuals decide to system-justify. We used data comprised of 24,009 participants nested within 42 countries. Multilevel models largely supported the competing claims of Social Dominance and Social Identity Theories over SJT. The most robust findings were: (1) greater objective SES was associated with greater system justification; (2) the consistent positive relationship between subjective SES and system justification was partially mediated by life satisfaction; and (3) both ends of the political spectrum were willing to system-justify more when the political party they favored was in power. The results presented are used to discuss both the current state and future directions for system justification research.

Keywords: System Justification Theory, Social Dominance Theory, Social Identity Theory, Social Psychology, Political Psychology

System Justification Theory (SJT) proposes that individuals are motivated to see the systems in which they belong (societal, political, economic) and the corresponding status quo, as just, fair, and legitimate (Jost & Banaji, 1994). In stark contrast to many of the already developed self-interest based intergroup relational theories, SJT (Jost, 2019, 2020; Jost & Banaji, 1994; Jost et al., 2002, 2003a, 2013, 2023) argues that the motive to system-justify can sometimes be at odds with other self- and group-interest justifying motivations, such as ego- and group-justifications [for the disadvantaged]. To this end, SJT posits that individuals have a desire not only to hold favorable attitudes about themselves (ego-justification) and the group to which they belong (group-justification) but also to hold positive attitudes about the overarching social structure in which they are embedded and to which they may find themselves obligated (system-justification, Jost, 2019).

SJT was developed to build on and integrate existing intergroup relations theoretical frameworks, including Social Identity Theory, Self-Categorization Theory (SIT & SCT, Tajfel & Turner, 1979; Turner et al., 1987), and Social Dominance Theory (SDT, Sidanius & Pratto, 2001), while also incorporating Cognitive Dissonance Theory and just-world theorizing (Jost et al., 2004; Jost & Hunyady, 2005). SJT puts forth various postulates identifying circumstances when individuals would be most likely motivated to system-justify. Uniquely, SJT differentiates itself from the ego/group-interest claims of SIT and SDT proposing that system-justifying motivations may not always align with personal or group interests, particularly for the disadvantaged. Jost (2020) explains that for modern-day dominance hierarchies, this leads to a majority of individuals/groups (near the bottom) having to consciously, and at times unconsciously, seek stronger justifying narratives that inadvertently perpetuate their own

subjugation—“including narratives about the legitimacy of hierarchy, inequality, and exploitation” (p. 3).

Comparatively, SIT and its extension SCT were proposed as an alternative to individualistic and reductionistic theories of intergroup relations (Turner et al., 1987). SIT emphasizes the psychological motivations and consequences of group membership in a social system, while SCT explains how and why individuals identify and act as part of a group, as opposed to focusing on individual and group-level characteristics. SIT’s premise is that individuals support systems if they are perceived to be permeable, stable, and ultimately supports their ego/group interests (Caricati & Owuamalam, 2020). SDT claims that social systems are structured as group-based hierarchies with a dominant group at the top and a negative reference group at the bottom. SDT argues that dominant group members recognize their material interests faster and more clearly than subordinate group members, (re)producing dominance hierarchies that align with their ego and group interests. SDT aligns with some of SIT’s postulates that self- and group-interests are prioritized over the system-justifying motive.¹⁸ Both contrast with the more counter-intuitive claims of SJT that are the focus of this study (Pratto & Stewart, 2012; Pratto et al., 2013).

Our study aims to test the accuracy of four hypotheses made by SJT focusing on the influences of individual and societal differences in status, political ideology, economic inequality, and civil liberties on system justification. We will compare these hypotheses to counterclaims made by the competing intergroup theories of SIT/SCT and SDT. By doing so, we can extend our understanding of system-justifying motivations and explore where support for the

¹⁸ But they differ with respect to the importance and stability of Social Dominance Orientation, a stable measure of individual differences according to SDT (Pratto et al., 2006), versus an epiphenomenal aspect of social identity according to SIT/SCT (Schmitt et al., 2003).

status quo is strongest (Friesen et al., 2019; Jost & Burgess, 2000). Our study will investigate these competing hypotheses using a large, diverse dataset, aiming to descriptively map out how and when system justification varies across cultures. This cross-cultural test will be the first of its kind to investigate the proposed associations between these three intergroup theories and system justification.

Rationale for Hypotheses

Status, Freedom, and Culture

Central to SJT's counter-intuitive claims stands the status-legitimacy hypothesis (Brandt et al., 2013; Jost et al., 2003b), which argues that members of low-status and disadvantaged groups are more likely to perceive their social systems as legitimate and fair compared to high-status and advantaged counterparts under certain circumstances. To this end, Jost et al. (2004) state "people who are the most disadvantaged by the status quo ... are the most likely to support, defend, and justify existing social systems, authorities, and outcomes" (p. 13). This argument builds on Cognitive Dissonance Theory (Festinger, 1957): the more disadvantaged people are by a system, the harsher their experience of being disadvantaged contrasts with their motivation to believe that the system is just, and the more they therefore engage in system justification (Jost et al., 2004). However, this cognitive dissonance-based mechanism of system justification has been a point of contention based upon theoretical objections of Owuamalam et al. (2016b).

Jost et al. (2003b) argues that three specific social conditions will predispose disadvantaged individuals to most likely experience cognitive dissonance (the authors refer to these factors as the *Liberal Choice Producing Dissonance Model*). According to Jost, these three factors are: (1) high levels of inequality, (2) belief in meritocracy, and (3) a democratic social and political system with high civil liberties that would make low-status disadvantaged

individuals feel more responsible for their disadvantageous position (see Jost, 2019, 2020 for exceptions). The Liberal Choice Producing Dissonance Model and its status-legitimacy hypothesis have sparked considerable debate within the system justification literature over the years due to mixed results. Some studies have found supporting evidence (Henry & Saul, 2006; Jost et al., 2003b), others have found contradictory evidence (Brandt et al., 2020; Owuamalam & Spears, 2020), and some have reported a combination of the two (Brandt, 2013; Buchel et al., 2020; Kesberg et al., 2024).¹⁹

Li et al (2020b) posited that a contributing factor to the empirical inconsistencies surrounding the status-legitimacy hypothesis was a failure to separate status into an objective and subjective measure. Objective indicators of status include educational level and income (Kraus et al., 2009). Subjective SES is measured by an individual's self-perceived status compared to others (Anderson et al., 2012). These have been found to relate to system justification differently in that subjective SES has a positive relationship and objective SES sometimes has a negative relationship (Li et al., 2020b).

The most robust finding contradicting the Liberal Choice Producing Dissonance Model is that greater subjective SES is consistently positively associated with greater system justification (Brandt et al., 2020; Davidai, 2018; Li et al., 2020b; Vargas-Salfate et al., 2018b; Yang et al., 2016; Zimmerman & Reyna, 2013). We theorize that this is due to the social comparisons that are embedded within subjective SES influencing one's psychological well-being about their positionality, in turn influencing one's perception of system legitimacy. On the other hand, status-legitimacy effects (i.e., a negative relationship between SES and system justification) have almost exclusively occurred when an objective measure of SES was used (Henry & Saul, 2006;

¹⁹ See Jost, 2019, 2020 and Jost et al. 2023 for rebuttals

Jost et al., 2003b; Jost, 2020, Li et al., 2020b; Sengupta et al., 2015; Whyte & Maocan, 2010), albeit inconsistently. This highlights how measuring SES in either objective or subjective terms can complexify status-legitimacy effects.

While the Liberal Choice Producing Dissonance Model attempts to explain the societal factors that are likely to induce status-legitimacy effects through the process of cognitive dissonance, its premise focuses on a form of dissonance largely experienced by Westernized independent selves but not for those with interdependent selves (Hoshino-Browne et al., 2005; Kitayama et al., 2004; Kokkoris & Kühnen, 2013). There have been several research programs that have found evidence of status-legitimacy effects in countries that contradicted Jost's (2015) societal theorizing for SJT. For example, status-legitimacy effects have been found in countries that do not subscribe to a capitalist discourse on meritocracy, have few civil liberties, are authoritarian, [post]-socialistic, and collectivistic (Cichocka & Jost, 2014; Kim et al., 2022; Li et al., 2020b; Whyte & Maocan, 2010; Zhang et al., 2022; Zou & Xie, 2016).

An alternative perspective to understanding the system-justifying motivation for the disadvantaged within non-Western, Educated, Industrialized, Rich, and Democratic (WEIRD, Henrich et al., 2010) societies, is the Self-Interest Acquiescence Model which the present authors use to argue that [low objective SES] individuals will submit to/accept a powerful system that has a history of benefitting its citizens and providing them with no apparent cognitive alternatives. Objective self-interest may sometimes push people from majority world societies to support, legitimize, and justify their home country's system if it has a recent history of reducing extreme poverty, as is the case for China, India, and Vietnam, for example (Asai et al., 2019). Consistent with our Self-Interest Acquiescence postulates, Owuamalam et al. (2023b) argue that cultural group norms relating to social identity help to explain the relationship

between objective SES and system justification. They state that cultural norms in non-WEIRD collectivistic nations (compared to individualistic ones) create a sense of obligation for objectively low SES individuals who strongly identify with their national ingroup to accept the hierarchical arrangement and therefore acquiesce in favor of the status quo (See Owuamalam et al., 2018b, 2019; Rubin et al., 2023a, 2023b for further group-level disadvantage arguments).

Political Ideology

Within intergroup relations, political ideology has been critical in categorizing and understanding individual and group-based differences in values and behaviors (Jussim et al., 2016). Interest within the psychological literature on the moral and psychological differences between the left and right dates back to Adorno et al. (1950) and is the basis for SJT's argument that political ideologies are a form of *motivated social cognition* (Jost, 2021). SJT posits that the left-right ideological distinction is influential in assessing who is more likely to support dominance-based hierarchies versus criticize the societal status quo. From SJT's perspective, the left has been associated with system criticism and embracing social change, while the right rejects such things. The system-justifying motivation is believed to coincide with those who hold more conservative social, political, and economic values (Jost, 2021).

Conversely, SDT argues that there is a dynamic relationship between one's political ideological beliefs and a willingness to support the status quo (Sidanius & Pratto, 2004). Simply put, SDT posits the left is capable of supporting the system but only if that system coincides with their political/social group interests. Liu et al. (2008) showed that Social Dominance Orientation (SDO) increased among supporters of a previously subordinate (and more progressive) opposition group after winning a national election, whereas supporters of the formerly dominant party did not experience a significant decrease in SDO, suggesting support for the self-interest

hypothesis of SDT and SIT for the previous subordinate group gaining power but dissonance processes for the previously high-status group trying to come to terms with losing power.

Friesen et al. (2019) note that in many countries, there are frequent shifts of governmental power between rival political parties, sometimes punctuated by violent overthrows. This type of situation makes the ideologies of both the system and those that are motivated to either legitimize it or challenge it highly dynamic (Liu et al., 2014; Martorana et al., 2005; Szabó & Lönnqvist, 2021). Moreover, recent research has identified that the relationship between [political] ideology and system justification is dependent on perceptions about the ideological beliefs of the status quo (leftwing vs. rightwing political status quo). This implies that those who are willing to system justify at one point in time may not at another (Beattie et al., 2022; Langer et al., 2020). This dynamic position is consistent with previous researchers who argue that both left- and right-leaning individuals will advocate for social change but in directions that coincide with their individual and group interests (Liekfett & Becker, 2022).

Societal Inequality

While extreme poverty has been declining globally in recent decades (Hasell, 2022), economic inequality—broadly defined as the wealth gap between the richest and poorest parts of a national population—has been on the rise (Farhat, 2020; Messerli et al., 2019; OECD, 2020). SJT argues that inequality can produce or exacerbate the system justification motivation (Jost et al., 2003b, 2004) for the [dis]advantaged, while simultaneously increasing the conflict between ego/group motivations for the disadvantaged. Therefore, the motive to system justify is assumed to be strongest in contexts in which “inequality in the system is made especially salient” (Jost et al., 2015, p. 322). According to Brandt et al. (2020), inequality creates an impression for the disadvantaged that their place in society is not within their control. In order to combat this

impression, Jost (2020) claims “when people feel extremely dependent on a given social system—and therefore experience their world as unpredictable and uncontrollable—they should be more strongly motivated to defend and justify it” (pg. 141).

Tajfel and Turner (1979) would disagree with the mechanisms put forward by SJT and argue that inequality is likely to be perceived as unfair when boundaries between wealth groups are impermeable, the social system is unstable, and the wealth gap reflects illegitimate differences. Therefore, SIT’s Social Identity Model of System Attitudes (Owuamalam et al., 2018b, 2019, 2023a, 2023b) posits individuals will support and justify an [un]equal social system because they hope to maintain their (advantaged) status or improve upon their (disadvantaged) status through social mobility. Similarly, SDT argues that individuals from unequal systems have a desire to maintain a hierarchy that favors their own group. SDT posits that there is an ideological asymmetry between status groups, where high-status individuals/groups would be more likely to support unequal systems since it aligns with self/group interests when compared to low-status individuals/groups (Sidanius & Pratto, 2004).

Hypotheses

Individual-Level – Objective and Subjective SES

(H1A). According to the status-legitimacy hypothesis and its Liberal Choice Producing Dissonance Model postulates (Jost et al., 2003b; Brandt, 2013), SJT predicts that the disadvantaged will system-justify to a greater extent than the advantaged in a society due to experiencing psychological conflict (i.e., dissonance) that they wish to implicitly or explicitly combat. Therefore, H1A hypothesize that objectively low SES individuals are more likely to system-justify than the objectively high SES individuals.

(H1B). Conversely, SDT and SIT predict that objectively high SES individuals are far less likely to reject the status quo and system-justify more than the objectively low SES because justifying a system is more in line with high status individuals' personal and group interest (Sidanius & Pratto, 2001; Tajfel & Turner, 1979). Therefore, H1B counter-hypothesizes that objectively high SES individuals will be more likely to system-justify more than objectively low SES individuals.

(H1C). Finally, for subjective SES, we postulate that the positive relationship between subjective SES and system justification seen consistently throughout the literature is due to the psychological process of self/ingroup interests and social comparisons (Valdes et al., 2023) and not status-legitimacy effects. We believe perceiving oneself (subjective SES) as higher [than others] on a social hierarchy may enhance one's feeling of perceived life-satisfaction and well-being, which then acts as a rationalization for the individual to view the system as legitimate, just, and fair. Therefore, we hypothesize that the relationship between subjective SES and system justification will be mediated by life satisfaction.

Individual-Level – Political Ideology

(H2A). SJT predicts that the system-justifying motive aligns more with conservative values, and that individuals who hold more conservative social, economic, and political beliefs will be more likely to system-justify (Jost, 2021). Therefore, H2A hypothesizes that those who are more conservative (right-leaning) would system-justify more than those who are more liberal (left-leaning).

(H2B). Conversely, SDT and SIT argue that the system-justifying motive from a political ideological standpoint is a dynamic construct, influenced by who is in power at the time when an individual is asked to legitimize/justify a system (Liekfett & Becker, 2022; Liu et al., 2008;

Martorana et al., 2005; Szabó & Lönnqvist, 2021). Therefore, the relationship between system justification and political ideology is ultimately tied to self/group interests. According to this perspective, liberals will system-justify more when liberals (left-leaning) are in control of the system and conservatives (right-leaning) will system-justify more when conservatives are running the system. Therefore, H3B hypothesizes that both conservatives and liberals will system-justify more in a country only when the political party in power aligns with their interests. Specifically, the relationship between political ideology and system justification is positive in societies where a right-leaning party is in power but negative in those where a left-leaning party is in power.

Country-Level – Economic (In)equality

(H3A). According to SJT when low-status individuals/groups are exposed to unequal environments, they come to realize that they are unlikely to have substantial influence over economic redistribution (Henry & Saul, 2006). As a result, they seek rationalizations that attribute economic inequalities to fair and justifiable reasons. This process leads them to develop a sense of dependence on a system that is permeable and likely to be their primary avenue for transcending their disadvantageous position. To this end, Jost (2020) claims “when people feel extremely dependent on a given social system – and therefore experience their world as unpredictable and uncontrollable – they should be more strongly motivated to defend and justify it” (pg. 141). Therefore, H3A hypothesizes that societies with greater levels of inequality will possess greater levels of system justification when compared to countries that are more equal.

(H3B). Conversely, SIT postulates that inequality is likely to be perceived as unfair when (1) boundaries between wealth groups are impermeable, (2) the social system is unstable, and (3) the wealth gap reflects illegitimate differences. This framework of SIT has been expanded to

include the social identity model of system attitudes (Owuamalam et al., 2018b, 2019, 2023a, 2023b) which argues that the willingness to system-justify is almost always coinciding with self/group interests for both disadvantaged and advantaged individuals. The Social Identity Model of System Attitudes claims that individuals will support and justify an [un]equal social system because they hope to maintain (advantaged) or improve (disadvantaged) their status through existing channels in the long run. Therefore, both the disadvantaged and advantaged will system-justify only if the system is considered to be permeable and stable (e.g. hope for future ingroup status according to the Social Identity Model of System Attitudes). Therefore, H3B hypothesizes that the relationship between system justification and inequality will be moderated by a country's level of social mobility. According to the Social Identity Model of System Attitudes (and consistent with SIT), the relationship between inequality and system justification will be more positive for nations with higher levels of social mobility and vice versa for those with lesser levels of social mobility.

Country-Level – Freedom/Civil Liberties

(H4A). Jost et al. (2003) theorizes that in societies with more civil liberties, protesting against the status quo when it is not serving your interests is not as risky as it would be in societies with less civil liberties. According to the Liberal Choice Producing Dissonance Model (Valdes et al., 2023), dissonance would most likely be elicited when individuals feel that they have a say in how the system is constituted. In countries with high civil liberties, the act of not protesting can be even more dissonance-producing, because individuals have the freedom to reject the status quo and thus more personal responsibility. Jost and Hunyady (2005) argue that people aim to reduce psychological conflict, and the system-justifying motive acts as a method to reduce ideological and psychological conflict in countries with high civil liberties. Therefore,

H4A hypothesizes that there will be greater levels of system justification in countries with greater civil liberties.

(H4B). Conversely, Brandt (2013) found that individuals from societies whose governments tended to be more restrictive and possessed low levels of civil liberties were more likely to system-justify. This coincides with the Self-Interest Acquiesce Model (Valdes et al., 2023) which postulates that individuals will submit/accept a powerful system, especially when there are no apparent alternatives. Therefore, H4B counter-hypothesizes that societies with more authoritarian and restrictive governments that provide their citizens with few civil liberties will possess greater levels of system justification when compared to societies with greater civil liberties.

Method

Participants and Procedure

As we are using an existing data source, the sample size was determined prior to the conceptualization of this study. The rationale for the sample size via power analysis and specific details on the sampling process can be found in Romano et al. (2021). Researchers recruited 24,009 participants from 42 nations using stratified quota sampling for age and gender with the intention for each nation to be demographically representative ($M_{\text{age}} = 36.5$ years, $SD_{\text{age}} = 12.3$; 50% female, Argentina, Australia, Bolivia, Brazil, Canada, China, Columbia, Egypt, Finland, Germany, Greece, Hong Kong, Hungary, India, Indonesia, Italy, Japan, Kenya, Mexico, Malaysia, Morocco, Netherlands, New Zealand, Nigeria, Pakistan, Panama, Peru, Philippines, Poland, Portugal, Russia, Serbia, Singapore, South Africa, South Korea, Spain, Sweden, Taiwan, Turkey, Venezuela, United Kingdom, and United States). Each country contained between 427

to 1126 participants (an average of 571.6 per country). See Table S1 in [Appendix 1](#) for demographics per country.

Participants were recruited through the Harris Panel, a global panel curated by the international polling firm Nielsen, that encompasses >10 million individuals. Participants were invited by email or were given access to the survey link through the local panel provider portal, where surveys were completed from Dec 6, 2018 to Jan 24, 2019. Surveys were given in the dominant language of each country, except for three African countries by the recommendations of local collaborators, where it was advised that English would be most appropriate. Non-English translations of the survey were performed by a coalition of different researchers through the committee method (Brislin, 1980) or back-translation (Behlin & Law, 2000).

Preregistration

In order to restrict researcher degrees of freedom and improve transparency and study planning using secondary data (van den Akker et al., 2021), hypotheses, design, methods, analysis plan, inference criteria, and data exclusion were preregistered at <https://osf.io/dr5sg>. Doing so prevented authors from making data-driven researcher decisions and hypothesizing after the results are known (HARKing, Rubin, 2017).

Instruments

System Justification Scale

In accordance with the recommendations of previous research investigating the interpretability and generalizability of the General System Justification Scale cross-culturally (Vesper et al., 2022), the present research used a brief version of the System Justification Scale (Kay & Jost, 2003) in which items that tapped national attachment, and two reverse-coded items

were excluded. The Brief System Justification Scale included the four items: “In general, I find society to be fair,” “In general (my country’s) political system operates as it should,” “Everyone in my country has a fair shot at wealth and happiness,” and “(My country’s) society is set up so that people usually get what they deserve;” where each country name was inserted into the parentheses. Responses were given on a range of 1 (*Disagree completely*) to 7 (*Agree completely*). A mean system justification score was calculated for each participant, which formed a highly reliable scale ($\alpha = .85$). This brief measure has been consistently used in several recent cross-cultural research domains that have been interested in understanding system justifying beliefs across cultures (Valdes, Delos Santos et al., Under Review; Vargas-Salfate et al., 2018a, 2018b).

Subjective SES

Subjective SES was assessed using the MacArthur Scale of Subjective SES (Adler et al., 2000): “On a scale of 1 to 10, with 10 being people who are the most well off in society, and 1 being the people who are the least well off, where would you describe your position?” This validated indicator of perceived status has been used in both large-scale cross-cultural and single country tests of status-legitimacy effects (Brandt, 2013; Brandt et al., 2020; Davidai, 2018; Li et al., 2020b; Vargas-Salfate et al., 2018b; Yang et al., 2016; Zimmerman & Reyna, 2013).

Objective SES

Objective SES was assessed with the following two empirically distinct items²⁰: “What is your highest level of education you have completed?” where responses ranged from 1

²⁰ We found that income and education have a small significant positive correlation ($r = .02$, $p < .01$) across the 42 countries, indicating that the two constructs are distinct (See Table S3 in [Appendix 1](#)).

(*Elementary school*) to 6 (*Graduate school or higher*), and “If you don’t mind us asking, what is your approximate household income (before tax)? Please complete whichever box you find easiest to answer” where participants entered a value in one or more of the following: daily income, weekly income, monthly income, and annual income (see preregistration for more details on data cleaning and preparation). A variety of previous research has used both education and income (as well as a combination of the two) as objective indicators of status when assessing the diverse relationship between objective SES and system justification (Brandt, 2013; Henry & Saul, 2006; Jost, 2020, Jost et al., 2003b; Li et al., 2020; Sengupta et al., 2015; Valdes et al., 2023; Whyte & Maocan, 2010).

Political Ideology

Political ideology was assessed with the following single item: “On political issues, where would you place yourself on a scale of 1-11, where 1 = Strong conservative (*right-leaning*) and 11 = Strong liberal (*left-leaning*)?” A single item of political ideology has been used quite consistently in the system justification literature and has been found to correlate strongly with other related indicators of political ideological beliefs (i.e., social and economic, Jost, 2021; Jost, Glaser, Sulloway, & Kruglanski, 2003).

Life Satisfaction

Life satisfaction was assessed with the following two items (Diener et al., 1985): “All things considered, how satisfied are you these days with your life as a whole?” and “All things considered, how satisfied are you these days with your standard of living?” Responses were given on a scale from 1 (*Completely dissatisfied*) to 7 (*Completely satisfied*). A mean life satisfaction score was calculated for each participant, which formed a highly reliable scale ($\alpha =$

.84). These indicators of life satisfaction have been used previously in large-scale and single country assessing the palliative effects of system justification on quality of life (Harding & Sibley, 2013; Li, Wu, & Kou, 2020a; Rankin et al., 2009; Vargas-Salfate et al., 2018a)

Inequality

A nation's level of (in)equality at the time of data collection in 2018 was assessed using the World Bank's GINI index/coefficient, a measure of statistical dispersion intended to represent the income inequality or wealth inequality within a nation. Scores range from 0 (0%) indicating perfect equality, where everyone receives an equal share, to 100 (100%) indicating perfect inequality, where only one recipient or group of recipients receives the share (World Bank, 2018a). The GINI index has been used in a range of previous research interested in understanding simple main effects as well as cultural moderation via inequality on system justification (Brandt, 2013; Brandt et al., 2020; Napier & Jost, 2008; Vargas-Salfate et al., 2018b)

Social Mobility

A nation's level of social mobility at the time of data collection in 2018 was assessed using the World Economic Forum's Global Social Mobility Index (WEF, 2018), a measure of the movement in aggregated personal circumstances either upwards or downwards in comparison to current and previous generations within a given nation. In other words, it assesses a nation's ability to provide opportunities for citizens to improve their social and economic status compared to previous generations. It looks at policies, practices, and institutions, enabling effective comparisons throughout regions and generations. The scores are broken down into determinants of social mobility within a nation: health, education, technology access, work

opportunities, working conditions and fair wages, and lastly, social protection and inclusive institutions. Scores range from 0 (*no social mobility*) to 100 (*high social mobility*). To our knowledge, this is the first assessment within the system justification literature to use national-level objective social mobility instead of individual-level perceived social mobility.

Civil Liberties

A nation's level of civil liberties at the time of data collection in 2018 was assessed using the Freedom House's Freedom in the World report where scores range from 1 (*Not free*) to 100 (*Free*). Freedom House rates people's access to political rights and civil liberties in 210 countries and territories through its annual Freedom in the World Report (Freedom House, 2018). Several research programs have used civil liberties when assessing the impact, a country's level of freedom has on system justification for both simple main effects and cultural moderation (Brandt, 2013; Brandt et al., 2020; Caricati, 2017).

Political Party in Power

A nation's political party in power at the time of data collection in 2018 was assessed using the World Bank's database of political institutions, which is a measure of each country's presidential election from 1975-2020. Scores were 0 (*right*), 1 (*center*), 2 (*left*). Right indicates a conservative political party, while left indicates a liberal political party. Center indicates a neutral political party (World Bank, 2018b). Amongst the 42 nations, 19 of them had a left leaning political party in power, 15 had a right leaning political party in power, and 8 had a political party in power that was in the center at the time of data collection. Previous research have used similar methods to assess the political makeup of those in power in a given country at different points in time (Badaan et al., 2018; Beattie et al., 2022; Langer et al., 2020; Szabó &

Lönnqvist, 2021) and its influence on who is willing to rationalize, justify and legitimize that nations status quo.

Demographic Variables

Age was assessed using the single item, “What is your age?” Gender was assessed using the single item, “What is your gender?” with two responses (*1 = male, 2 = female*).

Data Analysis

We use multilevel models to test hypotheses 1A-4B with participants nested within 42 countries. Directly observed predictor, mediating, moderating, and outcome variables are analyzed, controlling for age and gender in each model. Random variations in slopes for age and gender are allowed across countries in all models. Our approach examines individual variables within each country and how country-level features moderate these relationships. Cases were excluded that did not have valid data for all variables for a given analysis.

Results

Exploratory Preliminary Analyses

Descriptive statistics and bivariate correlations at both individual and country level are presented in Tables S2 and S3, respectively (see supplementary materials). Subjective SES and life satisfaction were both significantly positively correlated with system justification across all countries at the individual level. Objective SES (education and income) and political orientation had significant, yet diverse relationships with system justification, indicating cultural context influenced the linkage. At country-level, objective social mobility and the political party in power were significantly positively correlated with system justification. Conversely, inequality

had a significant negative correlation with system justification. The relationship between a country's level of civil liberties and system justification was found to be nonsignificant.

In accord with our preregistration, prior to performing multilevel models, both individual (level 1) and country-level predictors (level 2) were grand-mean centered. Appropriate centering of individual-level predictors is crucial for the interpretation of the results and should be linked to substantive research questions (Gelman & Hill, 2006). It is worth noting that centering of our level 2 predictors/moderators (e.g. inequality, social mobility, civil liberties, and political party in power) is far less complex than the centering decisions at level 1, as it is only necessary to choose between the raw metric and grand-mean centering; group-mean centering is not a viable strategy because everyone of a given country shares the same value on the level 2 predictor/moderator, which would ultimately remove any cultural variation from these estimates.

Because all our questions are focused on individual (level 1) and cross-cultural differences (level 2) regarding the legitimacy of the status quo, grand-mean centering was more appropriate than group-mean centering. Furthermore, as Enders & Tofighi (2007) highlight when researchers are interesting in examining a predictor's influence at two levels (individual and country), "it is necessary to decompose the predictor into a within- and a between-level component" (Pg. 130). They argue that the use of grand-mean centering is easiest for this intention since the centered scores under the grand-mean contain both within- and between-cluster variation, resulting in a regression slope that has a mixture of level 1 and level 2 association between X and Y (See Enders & Tofighi, 2007 for a more detailed account).

Confirmatory Multilevel Analyses

Multilevel linear regressions to test hypotheses H1A – H4B were performed using the lme4 (Bates et al., 2015) package within R statistical software (R Core Team, 2022). Models are shown in tables 1-4. All tables presented below use the following Greek notation: level 1 residual variance (error variance) denoted with σ^2 , level-two residual variance (variance of random intercepts) with τ_{00} , variance of level-1 residuals (variance of random slopes) with τ_{11} , and the correlation between the random intercept and slope with ρ_{01} (Snijders, 2005). Multilevel modelers recommend not ignoring the hierarchical structure within data by using OLS regressions even when ICCs for independent variables are low, as this would severely bias the estimates (Gelman & Hill, 2006).

Due to the preregistered nature of multilevel confirmatory hypothesis testing, we followed the recommendations of Barr et al (2013). They suggest avoiding adhering to norms of non-confirmatory standards of multilevel modeling, since the focus of confirmatory hypothesis testing is on the maximal random effects-structure justified by the theoretical basis and preregistered design. This strategy allowed us to focus our analytical resources on directly testing our preregistered models. If modifications were necessary for a given preregistered multilevel model (i.e. nonconvergence), these were dealt with by progressively simplifying the random effects structure until convergence was reached. Any modifications to a model were reported in its respective subsection below.

Objective SES (H1A – H1B)

Table 3.1 presents the results of our multilevel model in which we included the introduction of level 1 predictors: objective SES (income and education) and covariates (age and gender). We allowed income and education to have random intercepts and slopes across countries for the linear effects, while simultaneously allowing our covariates age and gender to

vary randomly across countries. The fixed effects of income ($\beta = .06$, $SE = .03$, $t = 2.20$, $p = .03$) and education ($\beta = .06$, $SE = .02$, $t = 3.32$, $p = .001$) were found to be positive and significant. These results indicate that greater levels of income and education are positively associated with system justification, providing support for H1B (See Table 3.1).

Table 3.1

H1A-H1B Random Effects Multilevel Model Predicting System Justification using Income and Education

<i>Predictors</i>	H1A and H1B		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	3.56 ***	3.39 – 3.73	< 0.001
Income	0.06 *	0.01 – 0.11	0.028
Education	0.06 ***	0.02 – 0.09	0.001
Gender	-0.25 ***	-0.30 – -0.19	< 0.001
Age	0.03	-0.01 – 0.06	0.089
Random Effects			
σ^2	1.65		
τ_{00} Country	0.27		
τ_{11} Country.Income	0.02		
τ_{11} Country.Education	0.01		
τ_{11} Country.Gender	0.02		
τ_{11} Country.Age	0.01		
ρ_{01}	0.41		
	0.60		
	0.24		
	-0.07		
ICC	0.17		
N Country	42		
Observations	18848		
Marginal R ² / Conditional R ²	0.012 / 0.180		

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Subjective SES (H1C)

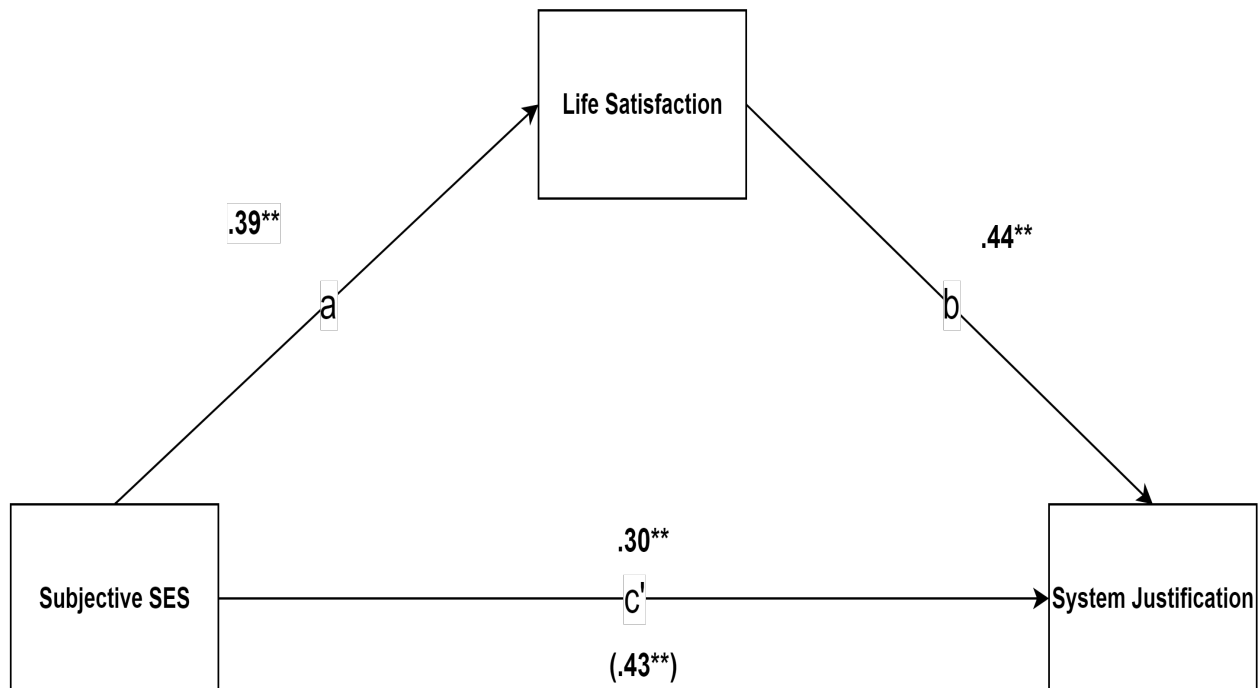
A multilevel mediation model was conducted using the mediation package (Tingley et al., 2014) to examine the mediating role of life satisfaction on the relationship between subjective SES and system justification across 42 countries. The analysis consisted of three paths: (a) the association between subjective SES and life satisfaction, (b) the association between life satisfaction and system justification, and (c') the indirect effect of subjective SES on system justification through life satisfaction.

First, a multilevel regression model was run to examine the association between subjective SES and life satisfaction, while controlling for age and gender (path a). We also allowed subjective SES, age, and gender to vary randomly across all countries. The results indicated that subjective SES was positively associated with life satisfaction ($\beta = 0.39$, $SE = 0.02$, $t = 23.04$, $p < .001$). Second, a multilevel regression model was run to examine the association between life satisfaction and system justification, once again controlling for age and gender and allowing subjective SES, age, and gender to vary randomly across all countries (path b). The results indicated that life satisfaction was positively associated with system justification ($\beta = 0.43$, $SE = 0.01$, $t = 54.59$, $p < .001$). Third, the mediation package in R was used to test the indirect effect of subjective SES on system justification through life satisfaction with 1000 simulated samples (paths c and c'). The results indicated that subjective SES had a significant positive total effect on system justification when not accounting for life satisfaction (Total Effect = .43, 95% CI = [.39, .46], $p < .001$), which was then reduced via the net effect of subjective SES on system justification by subtracting life satisfactions mediator effect (ADE = 0.30, 95% CI = [.27, .34], $p < .001$). Lastly, the average causal mediation effect was positive, indicating a significant indirect effect of subjective SES on system justification through life satisfaction

(ACME = 0.12, 95% CI = [.11, .13], $p < .001$), providing support for H1C. The proportion of the effect of subjective SES on system justification that was mediated by life satisfaction was approximately 28% (Prop. Mediated = 0.28, 95% CI = [.25, .32], $p < .001$) (See Figure 3.1).

Figure 3.1

Multilevel Mediation of Subjective SES and System Justification Through Life Satisfaction



Note. All coefficients have been standardized.

Political Orientation (H2A – H2B)

Table 3.2 presents the results of multilevel models testing the relationship between political orientation and system justification (H2A) and the moderating role of a country's political party in power (H2B). Model H2A includes political orientation and covariates, age and gender as level 1 predictors with random intercepts and slopes for political orientation, age and gender across countries. We found that the effect of political orientation on system justification was not statistically significant ($\beta = .01$, $SE = .03$, $t = .40$, $p = .69$), providing no support for H2A.

In model H2B, we then tested the moderating role of a country's political party in power on the relationship between political orientation and system justification. Results indicated that in countries where a right-leaning party is in power (reference category), the estimated effect of political orientation on system justification was negative and significant ($\beta = -.08$, $SE = .03$, $t = -1.88$, $p = .04$). Conversely, in countries with a left-leaning party in power, the estimated effect of political orientation (simple slope) on system justification was positive and significant ($\beta = .08$, $SE = .03$, $t = 2.50$, 95% CI = [.02, .15], $p = .03$). Taken together, these findings provide support for H2B.²¹ A significant interaction effect was found between political orientation and left-leaning governments ($\beta = .16$, $SE = .05$, $t = 3.10$, $p < .001$). Simple slopes are depicted in Figure 3.2.

²¹ During preregistration, our inference criteria for H2B was reversely coded. A positive fixed effect would imply that when right-leaning parties are in power, those who are more liberal would exhibit greater system justification, which was the opposite of what we were theorizing.

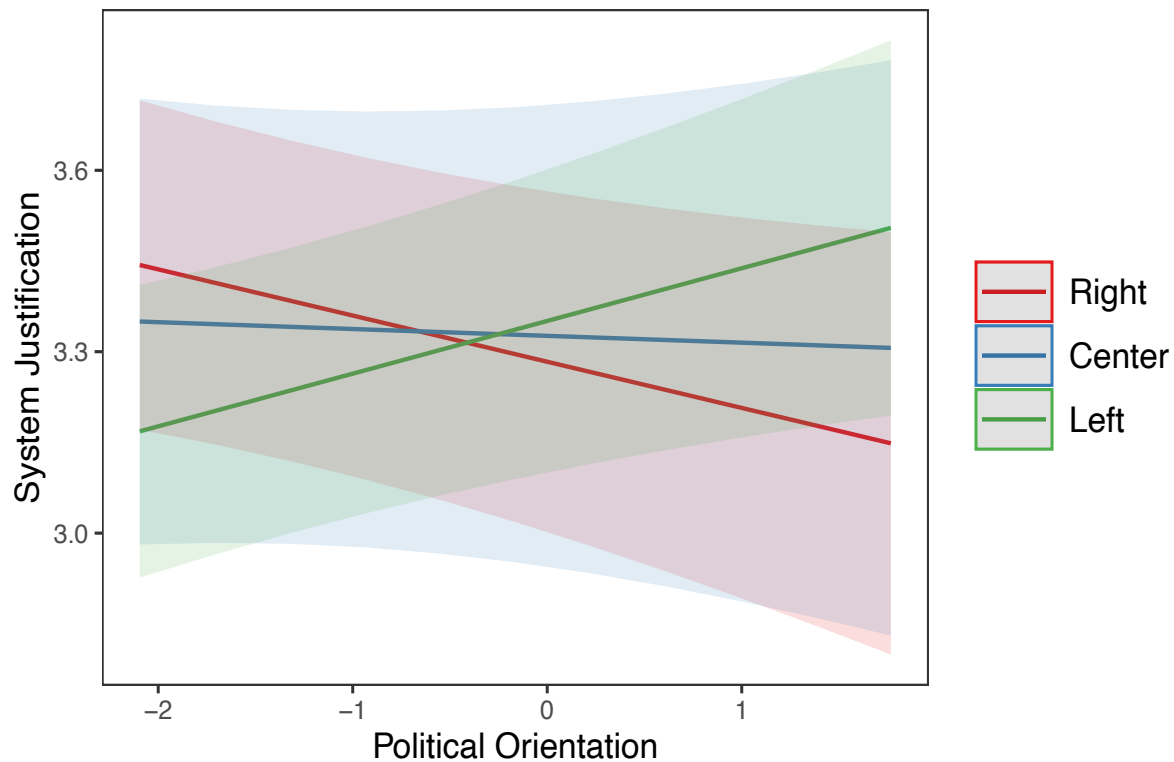
Table 3.2
H2A-H2B Predicting System Justification using Political Orientation and Political Party in Power

<i>Predictors</i>	H2A			H2B		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	3.56 ***	3.38 – 3.73	< 0.001	3.52 ***	3.23 – 3.81	< 0.001
Political Orientation	0.01	-0.04 – 0.06	0.698	-0.08 *	-0.15 – -0.01	0.044
Age	0.02	-0.01 – 0.06	0.130	0.02	-0.01 – 0.06	0.140
Gender	-0.23 ***	-0.29 – -0.18	< 0.001	-0.23 ***	-0.29 – -0.18	< 0.001
Political Party in Power: Center				0.03	-0.44 – 0.50	0.890
Political Party in Power: Left				0.06	-0.31 – 0.43	0.755
Political Orientation:Center Political Party				0.06	-0.07 – 0.18	0.374
Political Orientation:Left Political Party				0.16 **	0.06 – 0.26	0.002
Random Effects						
σ^2	1.63			1.63		
τ_{00}	0.31 Country			0.30 Country		
τ_{11}	0.02 Country.Political Orientation			0.02 Country.Political Orientation		
	0.01 Country.Age			0.01 Country.Age		
	0.02 Country.Gender			0.02 Country.Gender		
ρ_{01}	0.40			0.40		
	0.23			0.22		
	-0.19			-0.19		
ICC	0.19			0.18		
N	42 Country			42 Country		
Observations	23833			23833		
Marginal R ² / Conditional R ²	0.007 / 0.191			0.010 / 0.191		

Note: Greater scores of political orientation indicate higher liberalism (left-leaning)
 * p<0.05 ** p<0.01 *** p<0.001

Figure 3.2

System Justification by Political Orientation and The Political Party in Power (H2B)



Note. Shaded areas indicate 95% confidence intervals

Inequality (H3A – H3B)

Table 3.3 presents the results of multilevel models testing the relationship between a country's level of inequality and system justification (H3A), and then the moderating role of a country's level of social mobility (H3B, Figure 3.3). Model H3A included a random intercept across countries, level one covariates (age and gender) and a level 2 predictor, national inequality using the GINI coefficient. National inequality was seen to have a negative albeit non-significant ($\beta = -.14$, $SE = .08$, $t = -1.65$, $p = .098$) relationship with system justification, providing no support for H3A.

In model H3B, we introduced a level-2 moderator, a country's social mobility level (low, medium, high) and set the reference level to low national levels of social mobility, with an

interaction term between inequality and social mobility. Inequality ($\beta = -.07$, $SE = .13$, $t = -.53$, $p = .59$), and medium (in comparison to low) levels of social mobility ($\beta = .03$, $SE = .21$, $t = .13$, $p = .86$) were not related to system justification. However, high (in comparison to low) levels of social mobility were significantly associated with greater levels of system justification ($\beta = .56$, $SE = .28$, $t = 2.04$, $p = .04$). The interaction between inequality and having medium social mobility (rather than low) were not significant ($\beta = .22$, $p = .27$). The interaction between inequality and high (rather than low) social mobility was likewise not significant ($\beta = .15$, $p = .62$). Our preregistered inferential criteria for H3B inadvertently did not account for the nominal nature of the social mobility variable, but these findings clearly do not support H3B.

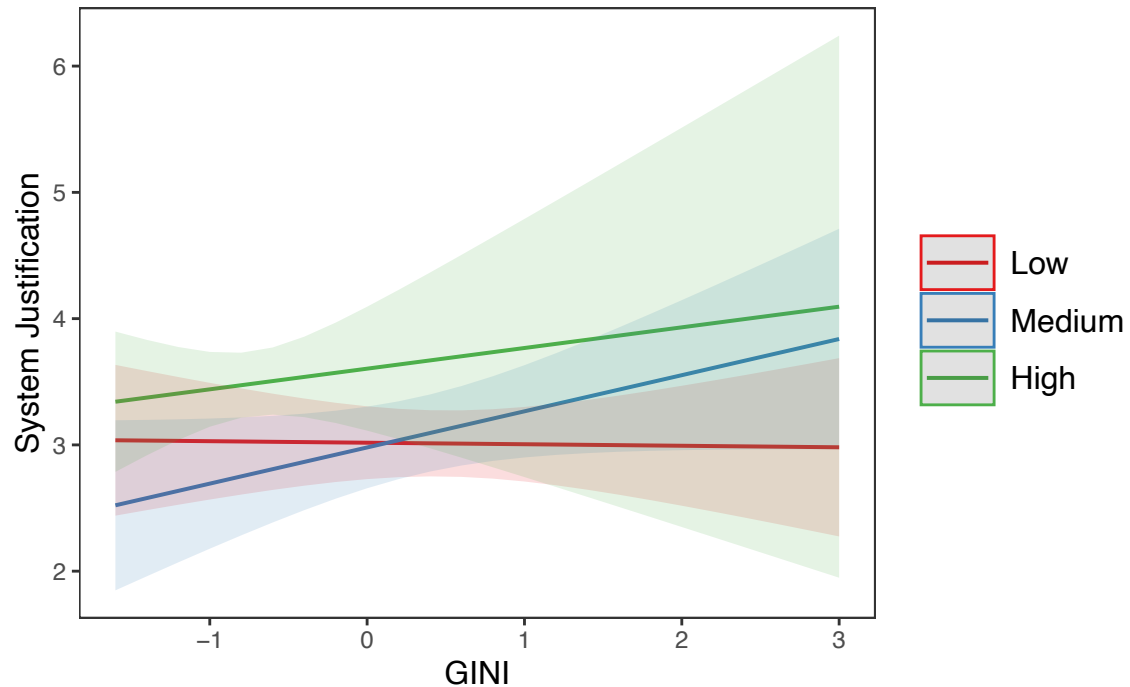
Table 3.3
H3A-H3B Predicting System Justification using Inequality (GINI) and Social Mobility

<i>Predictors</i>	H3A			H3B		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	3.56 ***	3.39 – 3.74	<0.001	3.36 ***	3.08 – 3.64	<0.001
GINI	-0.14	-0.30 – 0.03	0.098	-0.07	-0.31 – 0.18	0.598
Age	0.02	-0.01 – 0.06	0.164	0.02	-0.01 – 0.06	0.157
Gender	-0.24 ***	-0.29 – -0.18	<0.001	-0.24 ***	-0.29 – -0.18	<0.001
Social Mobility:Medium				0.03	-0.38 – 0.44	0.897
Social Mobility:High				0.56 *	0.02 – 1.10	0.041
GINI:Social Mobility Medium				0.22	-0.17 – 0.60	0.267
GINI:Social Mobility High				0.15	-0.45 – 0.75	0.620
Random Effects						
σ^2	1.65			1.65		
τ_{00}	0.35 Country			0.26 Country		
τ_{11}	0.01 Country.Age			0.01 Country.Age		
	0.02 Country.Gender			0.02 Country.Gender		
ρ_{01}	0.37			0.35		
	-0.16			-0.10		
ICC	0.18			0.15		
N	42 Country			42 Country		
Observations	23885			23885		
Marginal R ² / Conditional R ²	0.017 / 0.194			0.040 / 0.188		

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Figure 3.3

System Justification by a Country's Level of (In)equality (GINI) and Social Mobility (Low, Medium, High)



Note. Shaded areas indicate 95% confidence intervals

Civil Liberties (H4A – H4B)

Table 3.4 presents our multilevel model testing H4A and H4B. The model included a random intercept across countries, level two predictor (civil liberties), and level one covariates (age and gender) which were also allowed to vary randomly across countries. We found a positive, albeit nonsignificant relationship between a country's level of civil liberties and system justification ($\beta = .09$, $SE = .08$, $t = 1.05$, $p = .29$), therefore providing no support for either H4A or H4B.

Table 3.4
H4A-H4B Predicting System Justification using a Countries Level of Freedom

<i>Predictors</i>	H4A and H4B		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	3.56 ***	3.38 – 3.74	< 0.001
Freedom	0.09	-0.07 – 0.25	0.294
Age	0.02	-0.01 – 0.06	0.158
Gender	-0.24 ***	-0.29 – -0.18	< 0.001
Random Effects			
σ^2	1.65		
τ_{00} Country	0.32		
τ_{11} Country.Age	0.01		
τ_{11} Country.Gender	0.02		
ρ_{01}	0.31		
	-0.08		
ICC	0.18		
N Country	42		
Observations	23885		
Marginal R ² / Conditional R ²	0.011 / 0.187		

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

General Discussion

The purpose of this study was to test SJT, SIT, and SDT's competing claims. These theories address questions about the circumstances that influence who is more likely to system-justify in a given society. In general, SDT and SIT assert that individuals tend to endorse systems that coincide with their ego/group interests, while SJT suggests that individuals may sometimes have conflicting motivations between their ego/group interest and their desire to

system-justify. We set out to test the theoretical constructs behind these competing claims of system-justifying motivations.

We first tested the status-legitimacy hypothesis to see if low objective SES individuals were greater system-justifiers than those with high objective SES, due to cognitive dissonance processes hypothesized by SJT (Jost et al., 2004). This SJT postulate is the cornerstone that differentiates the system-justifying motive from that of the ego- and group-justifying motives of SDT and SIT. Our findings ultimately contradicted SJT (H1A) and supported SIT/SDT (H1B), in that objective SES positively predicted system justification. Results supported the general belief that individuals with greater objective SES have more reason to justify, rationalize, and legitimize the status quo because of personal/group interests. Although the fixed (i.e., average) effects showed no evidence of a negative effect of objective SES on system justification (meaning that the preregistered inferential criteria were not met), there was nevertheless variability to the demonstrated main effect across countries. Negative relationships between objective SES and system justification were found in some countries (see Table S2 in [Appendix 1](#)). The country-level diversity regarding this effect only occurred in non-WEIRD nations (e.g. Peru, Panama, Venezuela, Pakistan, Morocco, South Africa, and Kenya) which is consistent with the theorization of the Self-Interest Acquiescence Model (Valdes et al., 2023), recent research from the Social Identity Model of System Attitudes (Owuamalam et al., 2023a, 2023b), and SJT's status-legitimacy hypothesis (Brandt, 2013; Jost 2020).

The most robust relationship was found for subjective SES (H1C)—it significantly and positively predicted system justification across all countries, before introducing the life satisfaction mediator. This finding is consistent with previous research that explored the relationship between perceived status and system justification in cross-cultural samples (Brandt

et al., 2020; Vargas-Salfate et al., 2018b). Additionally, we found that the positive relationship between subjective SES and the motive to system-justify is likely due to the palliative effects of perceiving oneself as higher on a status hierarchy through the partial mediation of life satisfaction. This finding coincides with previous research: that endorsing system-justifying beliefs is influenced by a sense of increased psychological well-being (Vargas-Salfate, Paez, Khan et al., 2018a). Our mediator of life satisfaction is a proxy for psychological well-being, but there could be other indicators worth further investigation. While these results are consistent with our theorizing that higher subjective SES leads to higher life satisfaction and, in turn, to more system justification, the cross-sectional design means we cannot make confident causal inferences.

One of the grounding claims of SJT is that the motive to system-justify coincides with those who hold more conservative political and social ideologies (Jost & Banaji, 1994; Jost, 2021). We directly test this tenet of SJT cross-culturally, in which fixed effects of multilevel analysis indicated that political orientation was a statistically insignificant predictor of system justification, providing no support for H2A. In hopes of further elucidating the relationship between political orientation and system justification, alongside previous researchers (Liekefett & Becker, 2022; Martorana et al., 2005; Szabó & Lönnqvist, 2021), H2B theorized that this relationship could be influenced by the political party in power. Consistent with previous research on the dynamism of legitimacy, political ideology, and prevalence of political polarization globally, we found support for H2B. Both right- and left-leaning individuals' system-justified to a greater extent when the political party in power in their country coincided with their own political ideology leanings. This finding supports the theorization of SDT/SIT that systemic and political legitimacy, or lack thereof, is ultimately tied to self and group

interests and is consistent with recent research that has identified that the relationship between political ideology and system justification is dependent on the congruence between ideological beliefs of the status quo (left-leaning vs. right-leaning political status quo) and the ideological beliefs of those willing to system justify (Beattie et al., 2022; Langer et al., 2020; Owuamalam et al., 2019; Szabó & Lönnqvist, 2021). While this contradicts SJT's H2A, we believe it provides evidence for the more general claim that political ideology is a form of motivated social cognition (Jost et al., 2003a). Systemic/social values (i.e., traditional resistance to social change vs embracing of progressive values) propagated by politicians/political parties that align with one's political identity can motivate individuals to provide political system legitimacy.

While testing the relationship between inequality and system justification, we found that a country's level of inequality was not a significant predictor of system justification. The claim of H3A that more unequal countries would have greater levels of system justification than their unequal counterparts was not supported. We then tested the arguments of the Social Identity Model of System Attitudes (Owuamalam et al., 2018b, 2019, 2023b) that [dis]advantaged individuals will system-justify when the system is considered permeable in the long run. Our results once again provided no support for the claims of the Social Identity Model of System Attitudes (H3B). While our fixed effects did not support either of the postulates of SJT or SIT's Social Identity Model of System Attitudes (i.e., our preregistered inference criteria were not met), there was once again variability across countries. In countries with medium social mobility levels, increasing inequality led to higher levels of system justification, aligning with SJT's claim that inequality is positively related to system justification (see Figure 3.3). On the other hand, the country-level bivariate correlational relationship indicated a statistically significant

negative association between system justification and inequality, indicating that system justification was greater in countries with greater equality (See Table S3 in [Appendix 1](#))

Lastly, we tested whether there was a relationship at the country-level between a country's level of civil liberties and system justification. As this relates to SJT, the disagreement based upon empirical evidence between Jost et al (2003c) and Brandt (2013) stimulated the theoretical contributions by Valdes et al. (2023) in crafting two societal models aimed at explaining why individuals from either democratic/pluralistic (Liberal Choice Producing Dissonance Model) or authoritarian (Self-Interest Acquiesce Model) nations would system-justify. Among the 42 countries we found a positive, albeit nonsignificant, relationship between civil liberties and system justification. There was insufficient support for both the claims of SJT's Liberal Choice Producing Dissonance Model (H4A) and the Self-Interest Acquiesce Model (H4B).

The multilevel modeling technique used to analyze data across a range of countries allowed us to identify the economic, political, and social circumstances that influence system justification cross-culturally. These analyses found that the postulates of SIT and SDT garnered a greater amount of support compared to the claims of SJT. We also identified a novel mediational relationship regarding the palliative effects that can be attributed to subjective SES, life satisfaction, and system justification. We believe this is due to the psycho-social comparison process that may be instinctual and is likely to be bidirectional.

Although our omnibus tests of significance yielded no significant moderators of these effects across cultures, this research takes a fundamental step forward, increasing the maturity of SJT, so future work can make country-specific predictions with social context in mind (Cikara et al., 2022; Yarkoni, 2022). To this end, country-level differences and cultural group norms

(Owuamalam et al., 2023b) clearly merit future investigation, as our random effects provide evidence of country-specific system-justifying motivational variation.

Strengths, Limitations and Future Directions

We advanced the study of system justification by testing the competing claims of SJT, SIT, and SDT using large-scale cross-cultural data providing a high level of statistical power. This approach is rare in the literature and represents a critical theoretical expansion for intergroup relations and system justification. Previous research on system justification has largely relied on WEIRD samples (Henrich et al., 2010), neglecting cross-cultural variation. Lastly, an important strength is the use of large-scale archival data. This enhanced the statistical power and precision of our estimates. The pre-existing nature of the data also limited our capacity to (consciously or unconsciously) make decisions that might favor one theory over another regarding SJT, SIT/SCT, and SDT.

Moving forward, researchers should consider bidirectional effects of SJT's palliative impact through subjective SES. While our findings suggest that social comparisons based on subjective SES led to enhanced life satisfaction, which then influences greater perceptions of system justification, it is plausible that the reverse is also true. Perceiving society as just and fair may enhance life satisfaction, in turn potentially creating a rationale/motivation to perceive that one's place on a subjective SES hierarchy is higher than others. Such investigations would provide valuable longitudinal applications and theory development for SJT. Future research should also investigate how election outcomes influence normative and nonnormative collective action strategies to garner political system [il]legitimacy.

There are a few limitations of this research worth noting. First, we only used one item to assess political ideology across 42 countries. Although this may limit the complexity and

variation of political ideology around the globe (e.g. the possibility to distinguish between the social versus economic dimensions), previous cross-cultural research finds evidence for the recurrence of a continuum from left to right across cultures (Jost, 2021; Sorrentino et al., 2005). Second, it is possible that the timing of data collection mirrored particular politicized events (natural disasters, elections, etc.), influencing participants willingness to system-justify. Lastly, we have been able to examine the degree to which the data collected is [in]consistent with theories that make causal assertions, even if the data do not permit conclusive causal inferences. We used a brief version of the general system justification scale in which the two reverse-coded items were excluded. This exclusion may have inadvertently induced acquiescence bias to these scores. That being said, previous cross-cultural research has relied on the usage of the same 4-item brief system justification scale (Vargas-Salfate et al., 2018a, 2018b), due to interpretability, generalizability, and measurement equivalence issues (Vesper et al., 2022). Furthermore, the use of a detailed preregistration with clear and rigid inferential criteria means that the theories were subjected to a severe test. Future research could leverage longitudinal designs to mitigate this limitation.

Data Accessibility Statement

The data, research materials, code, and preregistration with analysis plan that the support the findings of this study are available can be located at the following links:

Preregistration - <https://osf.io/dr5sg> Data - <https://osf.io/6s5ua>

Ethics Consent

The research and procedure were approved by the Massey University Human Ethics Committee, application number: 4000019960 and by the board for Ethical Questions in Science of the University of Innsbruck, application number 37/2018.

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Declaration of Conflicting Interests:

The author(s) declared no potential conflicts of interests with respect to the research, authorship, and/or publication of this article.

Preface 3: Chapter 4

The study presented in Chapters 2 and 3 paved the way for further investigations specifically focused on whether the mediational relationship indicating that greater subjective SES leads to greater life satisfaction which then leads to greater system justification replicates using longitudinal data. Secondly, is this mediational relationship potentially bidirectional? More specifically, does greater system justification lead to greater life satisfaction, which in turn leads to greater subjective SES?

Previous cross-cultural research interested in investigating status-legitimacy effects using subjective SES have consistently found that greater subjective SES is related to greater system justification (Brandt et al., 2020; Li et al., 2020b; Vargas-Salfate et al., 2018b; Valdes et al., 2023). While these findings contradict the LCDM, to my knowledge, research interested in finding out why such a consistent finding exists is lacking. I believe the palliative effects of ideology as proposed by System Justification Theory (Jost & Hunyady, 2003; 2005) are likely to be a contributing factor to this consistent positive relationship between subjective SES and system justification. More specifically, it is quite plausible that the palliative effects of ideology (Blasi & Jost, 2006) more broadly allow for a bidirectional cyclical relationship between the two variables. Simply put, both subjective SES and system justification possess palliative properties that provide a pathway for an individual to feel more satisfied both with their situation and with the societal status quo due to the social comparison process that is embedded when an individual computes these perceived constructs.

STATEMENT OF CONTRIBUTION DOCTORATE WITH PUBLICATIONS/MANUSCRIPTS

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Name and title of main supervisor:	Associate Professor Matt Williams		
In which chapter is the manuscript/published work?	4		
Describe the contribution that the student and members of the supervisory team have made to the manuscript/published work: ¹ The student conceptualized the project, drafted the original draft, analyzed the data, made revisions during peer review. James Liu reviewed and commented upon the original draft of the manuscript. Matt Williams assisted the student in the process of analyzing the data and provided feedback and guidance during the revision process.			
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**Chapter 4: The Palliative Bidirectional Effects of System Justification and Subjective SES:
Implications for Life Satisfaction Using Longitudinal Data in New Zealand**

Abstract

System Justification Theory (SJT) states that the act of system-justifying can instill psychological benefits to one's well-being by reducing anxiety, guilt, dissonance, discomfort, and uncertainty, while enhancing positive affect, leading individuals to assess their life in a more positive light. The present article used four waves of longitudinal data, comprised of 339 New Zealanders, totaling 1,167 observations over time to investigate whether the relationship between subjective socioeconomic status (SES) and system justification is potentially bidirectional due to enhanced life satisfaction. While a traditional Cross-Lagged Panel Model suggested a small indirect effect of system justification on subjective SES via life satisfaction, a more robust Random-Intercept Cross-Lagged Panel Model revealed these associations were largely attributable to stable between-person differences. At the within-person level—where changes over time can be interpreted as closer to causal effects—there was no evidence of reciprocal effects between subjective SES and system justification, either directly or via life satisfaction. Implications for theory and the future of longitudinal modeling in system justification research are discussed.

Keywords: System Justification Theory, Palliative Effects, Subjective SES, Life Satisfaction, Bidirectionality, Longitudinal Data

Previous scholars have sought to answer the question why we so often defend the very social systems that are responsible for injustice and exploitation (Jost & Banaji, 1994). System Justification Theory (SJT) claims individuals have a desire to not only hold favorable attitudes about themselves (ego-justification) and the groups to which they belong (group-justification) but also hold positive attitudes about the overarching social structure in which they are entrenched and to which they find themselves obligated (system-justification, Jost, 2019, 2020). One of the more controversial tenets of this theory is the status-legitimacy hypothesis (as termed by Brandt, 2013; Jost, Banaji, & Nosek, 2004; Jost & Hunyady, 2003; Jost et al., 2003c). This hypothesis predicts that during specific circumstances, individuals with lower status may hold even greater beliefs that the social system is fair and just when compared to individuals with high status (Jost et al., 2003a, 2003b).

Interestingly, previous research has found that the validity of the status-legitimacy hypothesis is impacted differently depending on whether status is operationalized using objective or subjective measures (Li, Yang et al., 2020b; Valdes et al., 2023). Objective socioeconomic status (SES) refers to measurable indicators such as income, education, and occupational prestige (Kraus et al., 2009), whereas subjective SES captures an individual's self-perceived standing relative to others (Anderson et al., 2012). Importantly, these two forms of SES do not always align. For example, a person who is objective low in SES—earning an income near the working poor threshold (Carr & Sloan, 2003) and having completed only some college coursework—may nonetheless perceive their subjective SES as relatively high if they compare themselves to others with even fewer prospects, such as those without any postsecondary education (Valdes et al., 2023). Thus, depending on the comparison targets individuals use, subjective perceptions of status can diverge from objective socioeconomic realities.

Research on status-legitimacy effects (i.e., the negative relationship between SES and system justification) has primarily found evidence for these effects when objective measures of SES are used. However, this evidence has been inconsistent and a point of contention across studies (Brandt, 2013; Henry & Saul, 2006; Jost et al., 2003b; Jost, 2019, 2020; Kesberg et al., 2024; Kim et al., 2022; Li, et al., 2020b; Owuamalam et al., 2023b; Sengupta et al., 2015; Whyte & Maocan, 2010; Zhang et al., 2022). In contrast, studies using subjective SES measures consistently contradict the status-legitimacy hypothesis. Across cultural contexts, greater subjective SES has been reliably associated with greater system justification (Brandt, 2013; Brandt et al., 2020; Davidai, 2018; Valdes et al., 2023, 2024b; Vargas-Salfate et al., 2018b; Yang et al., 2016; Zimmerman & Reyna, 2013). It is this contradictory evidence surrounding subjective SES and system justification that requires further theorization and investigation—and hence will be the focus of the current research.

Subjective SES has remained a focal point within the system justification literature to uncover the complex relationship between status and legitimization of the status quo (Kay et al., 2009). The current research seeks to advance a plausible bidirectional hypothesis, grounded in the palliative effects framework of SJT (Jost & Hunyady, 2003), to explain the consistent positive relationship between subjective SES and system justification.

Palliative Function of System Justification

The palliative function of system justification, according to SJT (Jost & Hunyady, 2003, 2005), suggests that individuals justify the societal status quo in part because doing so provides psychological benefits, such as increased positive affect, reduced negative affect, and increased overall life satisfaction. This framework offers insights into why individuals who perceive themselves as higher in status tend to legitimize the societal status quo: feeling advantaged

within a system may lead to greater life satisfaction, thereby reinforcing the belief that the system is just and fair. In contrast, disadvantaged individuals may experience distress about their position, which system justification can help to mitigate by offering a sense of stability, order, and perceived fairness even amidst inequality. In this way, the palliative function complements the status-legitimacy hypothesis: while the status-legitimacy hypothesis focuses on the role of cognitive dissonance in motivating disadvantaged individuals to legitimize an unequal system, the palliative function highlights how system justification yields further psychological benefits across status groups. For disadvantaged individuals, these palliative benefits may operate alongside the need to reduce cognitive dissonance, offering immediate psychological relief in the face of systemic disadvantage. Furthermore, the psychological rewards from system justification may partially explain the robust positive association between subjective SES and system justification observed across diverse cultural and economic contexts (Brandt, 2013; Brandt et al., 2020).

Recent cross-cultural empirical evidence supports the idea that system justification is linked to psychological benefits, showing that the positive association between subjective SES and system justification is mediated by greater life satisfaction (Valdes et al., 2024b). Brandt et al. (2020) found that individuals with greater subjective SES tend to see social systems as more legitimate than those with lower subjective SES across 30 countries. The findings from Valdes et al. (2024b) help explain this pattern in Brandt et al. (2020) by suggesting that individuals who perceive themselves as higher on a status hierarchy are more likely to justify the rewarding system because they feel more satisfied with their lives within it.

Other work has found that the act of supporting the status quo (i.e. system-justifying) is positively related to greater psychological well-being (Blasi & Jost, 2006; Hadarics et al., 2021;

Li et al., 2020b; Napier & Jost, 2008; Sengupta et al., 2017). Jost et al. (2015) argue that perceiving the status quo as just, fair, and legitimate combats the negative consequences of societal inequalities and injustices, providing a palliative function—that is, offering psychological relief without addressing the root causes of disadvantage. Jost and colleagues theorize that when individuals engage in system justification, they may experience psychological benefits such as reduced anxiety, guilt, dissonance, discomfort, and uncertainty, along with increased positive affect, which in turn leads them to evaluate their lives more positively (Jost & Hunyady, 2003, 2005). The palliative effects of system justification are thought to help explain why [disadvantaged] individuals system-justify, especially when doing so sometimes goes against their self-interests (Jost, 2020). Several meta-analyses have found that supporting the status quo appears to be weakly positively associated with greater psychological well-being across time and cultural contexts (Onraet et al., 2013; Stavrova & Luhmann, 2016; Vargas-Salfate et al., 2024). This weak meta-analytical evidence is thought to be partly due to the inconsistent use of measures for system justification and its related ideologies within the palliative effects literature (Vargas-Salfate et al., 2024).

A Theory of Bidirectionality

The present research posits that this mediational relationship is likely bidirectional, as system justification and subjective SES mutually reinforce each other through the intermediary role of life satisfaction. According to SJT, system justification can enhance psychological well-being by providing a sense of order, stability, and legitimacy, leading to greater positive affect in the form of life satisfaction (Jost & Hunyady, 2003; Osborne & Sibley, 2013; Vargas-Salfate et al., 2018a). In turn, life satisfaction may shape subjective SES through mechanisms of self-perceptions about deservingness, social comparisons, and a sense of personal control.

Individuals with higher life satisfaction may attribute their well-being to personal effort, reinforcing a belief in their own success and perceived status (Lerner, 1980; McCoy & Major, 2007). Moreover, life satisfaction is associated with greater engagement in downward social comparisons (Wills, 1981), which may lead individuals to perceive themselves as relatively better off compared to others (Stewart et al., 2013; Suls et al., 2002). Additionally, a strong sense of life satisfaction fosters a sense of personal control (Lachman & Weaver, 1998), which can be linked to perceptions of economic security and upward social mobility (Kraus & Tan, 2015). Such comparisons may serve to affirm a sense of relative advantage, reinforcing feelings of deservingness and bolstering perceptions of higher subjective SES. This, in turn, may further strengthen system justification tendencies, as individuals who see themselves as better off are more likely to endorse the legitimacy of the existing system (Nielsen et al., 2015).

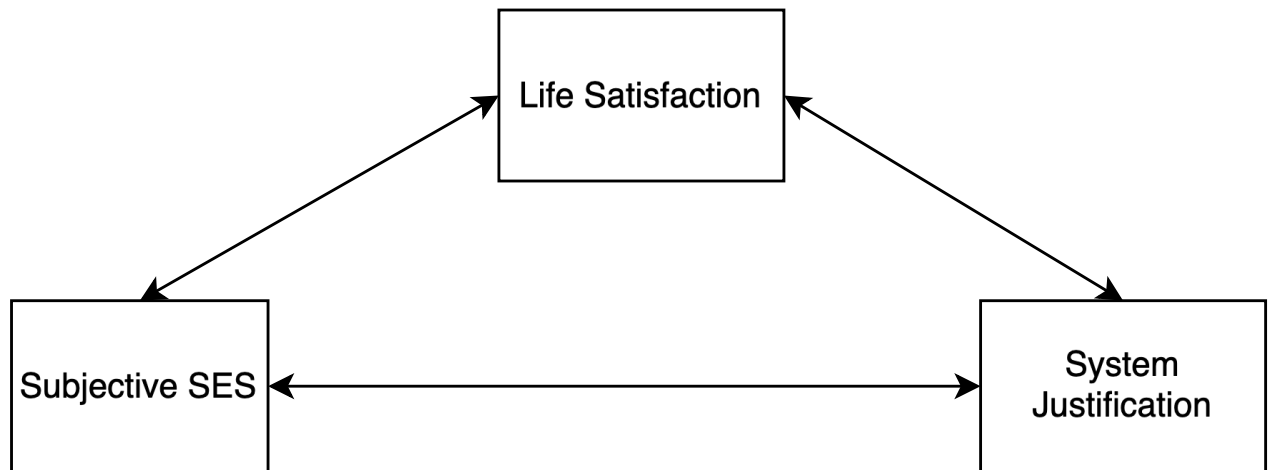
Beyond attributions to effort, social comparisons, and enhanced personal control, higher life satisfaction may also cultivate broader psychological and social resources that shape perceptions of socioeconomic standing. Positive affect, which is closely tied to life satisfaction, tends to broaden cognitive repertoires and promote flexible thinking (Isen, 2001). This broadened outlook may allow individuals to interpret ambiguous economic circumstances in a more favorable light, thereby reinforcing the perception of relative advantage. Additionally, greater life satisfaction has been linked to increased trust in institutions and optimism about societal fairness (Oishi & Diener, 2014). Such institutional trust may feed into subjective SES by fostering the belief that one's social position is secure within a stable system. Another pathway may lie in the strengthening of social bonds: individuals with higher well-being often report stronger social networks and greater perceived social support (Diener & Seligman, 2002), which can indirectly elevate their perceived standing through reflected appraisals ("if my community

values me, I must be doing well”). Finally, life satisfaction can reduce status anxiety (Layte & Whelan, 2014), freeing individuals from preoccupations with potential downward mobility and allowing them to more confidently anchor their identity in higher subjective SES. Taken together, these mechanisms suggest that life satisfaction could be associated with self-perceptions not only via individual-level processes like effort attribution and control, but also via relational and systemic orientations that may help stabilize and potentially amplify perceptions of relative socioeconomic advantage.

Conversely, perceptions of higher subjective SES may also contribute to greater life satisfaction, which in turn reinforces system justification. Individuals who perceive themselves as economically better off tend to experience greater security, access to resources, and a sense of control over their lives, all of which have been found to enhance overall life satisfaction (Camfield & Esposito, 2014; Guisan, 2022; Ucar et al., 2019). This sense of well-being may further reinforce beliefs that the system is fair and meritocratic, as those who feel advantaged are more likely to attribute their status to personal effort and deservingness rather than structural inequalities. Moreover, life satisfaction itself can serve a legitimizing function by reducing discontent and the motivation to question societal structures (Smith, 2007). As individuals who are satisfied with their lives become more invested in maintaining their perceived advantages, they may engage in system-justifying reasoning to protect their positive outlook, further reinforcing the belief that existing social arrangements are just and stable. Together, these processes suggest a cyclical relationship in which subjective SES and system justification mutually sustain one another through the mediating role of life satisfaction (See Figure 4.1 for a conceptual diagram).

Figure 4.1

Conceptual Diagram of Cyclical Relationship between Subjective SES, Life Satisfaction, and System Justification



Importantly, this bidirectional framework highlights how subjective SES and system justification sustain each other through life satisfaction. Life satisfaction likely fosters an internal narrative of personal achievement and deservingness, reinforcing one's perceived status within the social hierarchy. This process is not solely driven by external social comparisons but also by an internal sense of congruence between personal contentment and societal success (Adler et al., 2000). Higher subjective SES enhances life satisfaction by fostering a sense of security, stability, and perceived control, which in turn strengthens system-justifying beliefs. These beliefs then contribute to greater psychological well-being, reinforcing subjective SES through feelings of deservingness and relative advantage. The interplay of these factors suggests a self-reinforcing dynamic that maintains individuals' perceptions of their own status and the legitimacy of the broader social system over time.

This bidirectional model aligns with previous research that finds that the legitimization of existing social hierarchies serves both to justify and maintain these hierarchies, contributing to individual psychological benefits (Sidanius & Pratto, 2001). Furthermore, the model resonates

with previous research on the psychological study of social class (Evans & Kelley, 2004), suggesting that subjective perceptions of SES are not only a product of material conditions but are also shaped and reinforced by one's psychological alignment with the societal status quo. Thus, this bidirectional framework offers a more comprehensive account of the interplay between system justification, life satisfaction, and subjective SES than traditional unidirectional models that conceptualize system justification as merely a consequence of social position (Jost et al., 2015). By emphasizing reciprocal influences, this framework contributes to the broader theoretical discourse on the role of ideology in maintaining social hierarchies.

The overarching gap in these literatures (i.e., the palliative effects of system justification and the relationship between subjective SES and system justification) is the predominant reliance on cross-sectional designs, which have often been interpreted as implying causality (Brandt, 2013; Jost et al., 2003a; Li et al., 2020a, 2020b). While prior studies have examined these relationships separately, no research has tested their bidirectionality or assessed them longitudinally. However, correlational studies provide only tentative evidence of such causal effects with limited inference on directionality (Maxwell & Cole, 2007; Maxwell et al., 2011). Longitudinal assessments where we can observe how these effects unfold over time are clearly needed to tease apart the directionality and move closer toward the causality of these relationships between subjective SES, system justification, and life satisfaction. Longitudinal data allows researchers to track changes and examine the temporal ordering of variables, providing a more robust understanding of observed associations (Elliot et al., 2008). This is particularly critical for mediation models that propose bidirectional relationships, as it allows for the examination of feedback loops and reciprocal effects (Schuurman et al., 2016). The present study leverages longitudinal data that can provide a more nuanced understanding of how

subjective SES, life satisfaction, and system justification relate to one another over time. This approach is instrumental in addressing the lacunae in the literature and in shedding light on the mediational and bidirectional associations of these relationships over time.

Hypotheses

Based upon these theoretical and empirical arguments, the following hypotheses are proposed:

H1: Higher subjective SES will lead to greater system justification, and this relationship will be mediated by life satisfaction over time.

H2: Greater system justification will lead to higher subjective SES, and this relationship will be mediated by life satisfaction over time.

Method

Participants and Procedures

Because the present research is using an existing data source, the sample size was determined for the purpose of a different project examining how system-justifying, and conspiratorial beliefs change over time. The rationale for the sample size via power analysis can be found in Valdes et al. (2024a).²² A four-wave online study was conducted in New Zealand using the opt-in online panel provider Prolific, which has been found to facilitate high retention rates in longitudinal research (Kothe & Ling, 2019). Participants were pre-screened on Prolific to ensure both their country of residence and nationality were listed as New Zealand. Participants were excluded from the study if they were under the age of 18 or had a study duration (recorded by Qualtrics) of less than the sum of the number of items in the survey at Wave 1 (81) multiplied

²² The pre-registration also contains all variables collected that were a part of the larger project (most of which are not discussed/analyzed in the current paper).

by two (< 2.7 minutes; See Huang et al., 2012). Participants were compensated for each completed survey (approximately £9.00/hour). Each wave remained open for 10 days. The first wave was recruited in September 2023 ($N = 339$), the second wave in October 2023 ($N = 295$), the third wave in November 2023 ($N = 268$), and the fourth wave in December 2023 ($N = 265$), resulting in a total of 1167 observations. Due to sampling constraints of Prolific with the New Zealand participant pool, the present research sample is limited in size. However, to mitigate this shortcoming the fourth Wave of data was collected to enhance statistical accuracy and power.²³

To address selection and nonresponse biases, we compared the final sample to the initial sample as well as to population statistics (See Table 4.1). Participants were slightly more likely to be female, younger at Wave 1, and less educated according to New Zealand census data.²⁴ Notably, we found no significant differences in the sociodemographic characteristics of participants who remained in the Study at Wave 4 compared to those in Wave 1.

²³ The analyses in the present research indicate that the study had sufficient statistical power, as reflected in the narrow confidence intervals and small standard errors, which were estimated using robust estimators.

²⁴ <https://www.stats.govt.nz/2023-census/>

Table 4.1*Descriptive Statistics of Study Sample Compared to Population Benchmarks*

	Wave 1 (N = 339)	Wave 2 (n = 295)	Wave 3 (n = 268)	Wave 4 (n = 265)	Population Benchmarks
Gender (Female)	52.2%	54.1%	52.4%	53.3%	50.1%
University educated	62.1%	63.4%	63.2%	62.2%	65.2%
Mean age (years)	36.5	38.3	39.1	39.4	38.1
Political Ideology					
Left	52.8%	51.2%	54.7%	54.2%	NA
Right	47.2%	48.8%	45.3%	45.8%	NA

Ethics

This study was deemed to be low risk according to the criteria of Massey University's IRB. A low-risk notification was therefore lodged and accepted (4000027804). The study was conducted in accordance with the Massey University code of ethical conduct for research, teaching and evaluations involving human participants. All participants provided informed consent by reading an information sheet and then answering a consent item. Participants had the right to withdraw from the study at any time.

Measures***System justification (Wave 1 – 4)***

System justification was measured using a brief version of the System Justification Scale (Kay & Jost, 2003) in which items that tapped national attachment, and two reverse-coded items were excluded. The Brief System Justification Scale included the four following items: "In general, I find New Zealand society to be fair," "In general, New Zealand's political system

operates as it should,” “Everyone in New Zealand has a fair shot at wealth and happiness,” and “New Zealand’s society is set up so that people usually get what they deserve.” Responses were given on a range from 1 (*Disagree completely*) to 7 (*Agree completely*). A mean system justification score was calculated for each participant, which formed a highly reliable scale ($\alpha = .82$).

Subjective SES (Wave 1 – 4)

Subjective SES was assessed using the MacArthur Scale of Subjective SES (Adler et al., 2000): “On a scale of 1 to 10, with 10 being people who are the most well off in society, and 1 being the people who are the least well off, where would you describe your position?”

Life Satisfaction (Wave 1 – 4)

Life satisfaction was assessed with the following two items (Diener et al., 1985): “All things considered, how satisfied are you these days with your life as a whole?” and “All things considered, how satisfied are you these days with your standard of living?” Responses were given on a scale from 1 (*Completely dissatisfied*) to 7 (*Completely satisfied*). A mean life satisfaction score was calculated for each participant, which formed a highly reliable scale ($\alpha = .84$).

Demographic Variables (Wave 1)

Age was assessed using the single item, “What is your age?” Gender was assessed using the single item, “What is your gender?” with three responses (*1 = male, 2 = female, 3 = non-binary*). Education was measured using the single item, “what is the highest level of education you have completed” with responses ranging from 1 (*Primary School*) to 7 (*Doctorate Degree*). Political ideology was assessed with the following single item: “On political issues, where would

you place yourself on a scale of 1-11, where 1 = Strong conservative (*right-leaning*) and 11 = Strong liberal (*left-leaning*)?”

Results

Preliminary Analyses

Descriptive statistics and bivariate correlations for all variables of interest over time are presented in Table 4.2. We first wanted to assess the reliability of all measures of interest over time by calculating the correlations for each of the scales across the four waves. The results demonstrated adequate test-retest reliability for all variables of interest over time. Specifically, system justification from wave 1 to wave 4 had correlations ranging from $r = .66 - .84$, $p < .01$, life satisfaction from wave 1 to wave 4 had correlations ranging from $r = .68 - .76$, $p < .01$, and subjective SES from wave 1 to wave 4 had correlations ranging from $r = .71 - .84$, $p < .01$. Furthermore, all three variables of interest were also consistently significantly positively correlated with one another across all four time points.

Table 4.2*Means, Standard Deviations, and Correlations with 95% Confidence Intervals of Variables of Interest*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. System Justification W1	3.79	1.31											
2. System Justification W2	3.90	1.36	.78** [.74, .82]										
3. System Justification W3	3.99	1.36	.66** [.59, .72]	.80** [.75, .84]									
4. System Justification W4	4.11	1.41	.68** [.61, .74]	.80** [.75, .84]	.84** [.80, .87]								
5. Life Satisfaction W1	4.61	1.31	.33** [.23, .42]	.26** [.15, .36]	.31** [.20, .41]	.26** [.15, .37]							
6. Life Satisfaction W2	4.68	1.23	.28** [.17, .38]	.31** [.21, .41]	.31** [.20, .42]	.31** [.20, .41]	.71** [.64, .76]						
7. Life Satisfaction W3	4.67	1.28	.28** [.17, .38]	.32** [.20, .42]	.39** [.29, .49]	.39** [.28, .49]	.69** [.62, .75]	.73** [.67, .78]					
8. Life Satisfaction W4	4.78	1.23	.30** [.18, .40]	.31** [.20, .42]	.35** [.23, .45]	.35** [.24, .45]	.68** [.61, .74]	.73** [.67, .78]	.76** [.70, .81]				
9. Subjective SES W1	5.74	1.63	.27** [.17, .37]	.21** [.09, .31]	.23** [.12, .34]	.18** [.07, .30]	.47** [.38, .55]	.37** [.27, .47]	.36** [.25, .46]	.35** [.24, .45]			
10. Subjective SES W2	5.81	1.64	.21** [.10, .31]	.28** [.17, .38]	.22** [.10, .33]	.24** [.12, .35]	.44** [.34, .53]	.46** [.36, .54]	.42** [.32, .51]	.40** [.29, .50]	.73** [.67, .78]		
11. Subjective SES W3	5.92	1.69	.25** [.13, .35]	.30** [.19, .41]	.33** [.22, .43]	.36** [.25, .46]	.44** [.35, .53]	.46** [.36, .55]	.51** [.42, .59]	.47** [.37, .56]	.71** [.65, .77]	.72** [.65, .77]	
12. Subjective SES W4	5.94	1.63	.26** [.14, .36]	.27** [.16, .38]	.25** [.14, .37]	.29** [.18, .40]	.50** [.40, .58]	.47** [.37, .56]	.47** [.37, .56]	.49** [.39, .57]	.74** [.68, .79]	.78** [.73, .82]	.84** [.80, .87]

Note. * Indicates $p < .05$. ** indicates $p < .01$.

Bidirectional Cross-Lagged Panel Model

To test the current study's hypotheses, first a Cross-Lagged Panel Model (CLPM; Selig & Little, 2012) was estimated using the lavaan package in R statistical software (R Core Team, 2022; Rosseel, 2012). The CLPM aims to examine (1) the influence of two or more variables on each other over time, (2) the causal predominance of one variable over another, and (3) whether such effects are positive or negative (Elliott et al., 2008; Usami et al., 2019). Accordingly, a CLPM is ideally suited to examine the factors that contribute to subjective SES, life satisfaction, and system justification.

The model included three observed variables (subjective SES, life satisfaction, and system justification) across four measurement points. Direct effects were estimated by modeling lag-1 paths between subjective SES and system justification in both directions. To assess bidirectional mediation, we defined indirect effects spanning multiple waves. Specifically, subjective SES was modeled as predicting life satisfaction at the next wave (lag-1), which in turn predicted system justification at the subsequent wave (lag-2). Conversely, system justification was modeled as predicting life satisfaction at the next wave, which then predicted subjective SES in the following wave. In addition to these hypothesized pathways, two alternative indirect effects were specified for each direction of influence. The first modeled the autoregressive effect of the predictor on itself at the subsequent wave, which then predicted the outcome (e.g., $SES \rightarrow SES+1 \rightarrow SJ+1$). The second modeled the direct effect of the predictor on the outcome at the next wave, followed by the autoregressive path of the outcome (e.g., $SES \rightarrow SJ+1 \rightarrow SJ+2$). Parallel sets of indirect pathways were also modeled with system justification as the predictor and subjective SES as the outcome. These indirect paths allowed for the examination of bidirectional mediation over time. In addition to estimating direct and indirect effects, total

effects were also computed for both pathways by calculating the sum of the direct effects and indirect effects for each directional pathway respectively.

The model was estimated using maximum likelihood estimation with robust standard errors (MLR) to account for non-normality. Full information maximum likelihood (FIML) was used to handle missing data, as this has been shown to outperform other approaches (Enders & Bandalos, 2001). To enhance model parsimony and test reciprocal influences between constructs, the present research used a stationary cross-lagged model where all parameters were constrained to be time-invariant. Equality constraints were placed on both the cross-lagged and autoregressive paths. Constraining autoregressive paths to equality assumes that the relative strength of each construct's stability remains consistent over time, rather than varying across measurement waves. While this approach does not eliminate random fluctuations, it ensures that any observed directional effects are not dependent on specific time points but instead reflect broader temporal patterns.

These constraints serve both theoretical and empirical purposes. Theoretically, they align with developmental and social psychological perspectives suggesting that the relationships among socioeconomic perceptions, well-being, and ideological beliefs are shaped by consistent and reinforcing mechanisms over time rather than short-term situational effects (Kenny, 1975). Empirically, imposing equality constraints improves the statistical efficiency and interpretability of the model by reducing the number of estimated parameters, preventing overfitting, and allowing for a more parsimonious comparison of relative effect sizes across constructs (Preacher, 2006). Furthermore, previous research has demonstrated that models with freely estimated cross-lagged effects often yield unstable estimates due to sampling variability and measurement error,

making it difficult to draw robust conclusions about directional influences (Hamaker et al., 2015; Usami et al., 2019).

The present research presents unstandardized parameters, which are invariant over time due to the constraints placed on the model. Because standardized estimates are useful for comparing strengths of paths, a range of standardized beta weights is included alongside the unstandardized parameters (See Table S3 and Figure S1 in [Appendix 2](#)).²⁵

Figure 4.2 shows unstandardized estimates for the bidirectional mediation CLPM. Overall, model fit for the observed stationary cross-lagged panel model was poor due to model complexity ($\chi^2 = 299.407$, $p < .001$, CFI = .910, RMSEA = .130, 90% CI [.116, .144], SRMR = .058). While these model fit indices assess auxiliary assumptions rather than the accuracy of the hypothesized relationships, the poor fit suggests additional uncertainty surrounding the validity of the estimates (Kline, 2023). However, given the theoretical importance of the bidirectional relationships under investigation, the model was retained for interpretation despite these limitations (see Tables S1 – S3 in [Appendix 2](#) for model statistics).

Autoregressive Paths

As shown in Figures 4.2 and S1 in [Appendix 2](#), across all time points, the autoregressive paths for subjective SES (b 's = .696 - .764, 95% CI [.648, .816], $p < .001$), system justification (b 's = .775 - .821, 95% CI [.736, .860], $p < .001$), and life satisfaction (b 's = .654 - .682, 95% CI [.602, .739], $p < .001$) were found to be significant.

Bidirectional Cross-Lagged Paths

²⁵ It is important to note that the standardized coefficients are not random over time because they depend in part on residual variances which are permitted to fluctuate over time

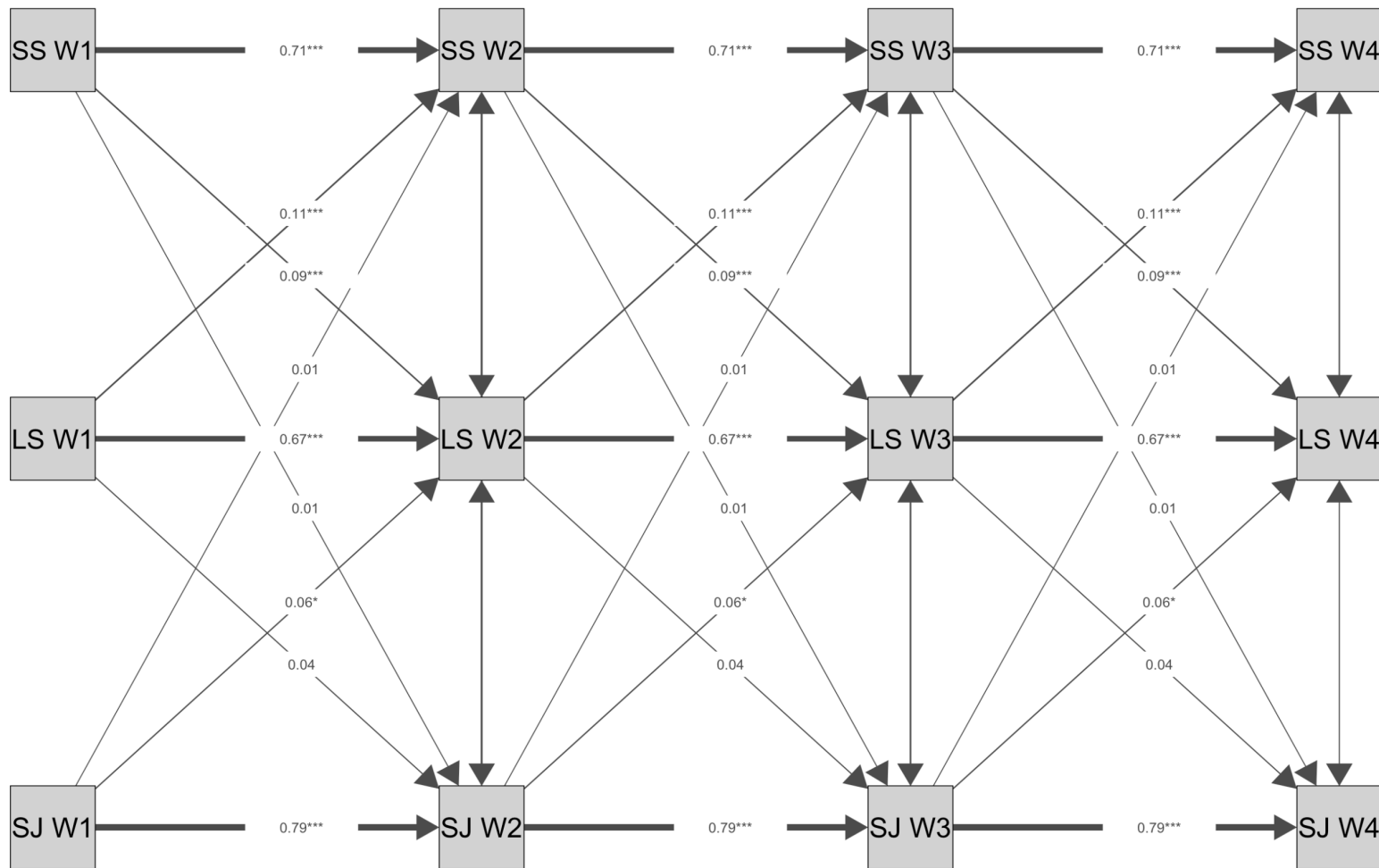
Moving on to the cross-lagged effects, both the lagged effect of subjective SES ($b = .089$, 95% CI [.038, .141], $SE = .026$, $z = 3.389$, $p < .001$) and system justification ($b = .060$, 95% CI [.012, .108], $SE = .024$, $z = 2.436$, $p = .015$) positively predicted the mediator, life satisfaction, across waves. In turn, the lagged effect of life satisfaction was a significant positive predictor of subjective SES ($b = .106$, 95% CI [.057, .155], $SE = .025$, $z = 4.197$, $p < .001$) but not system justification ($b = .038$, 95% CI [-.007, .084], $SE = .023$, $z = 1.645$, $p = .100$). We then examined the direct lag-1 bidirectional association between subjective SES and system justification when controlling for life satisfaction's lagged effect. Neither subjective SES ($b = .010$, 95% CI [-.035, .055], $SE = .024$, $z = 0.432$, $p = .666$) nor system justification ($b = .013$, 95% CI [-.031, .058], $SE = .024$, $z = 0.584$, $p = .559$) exerted significant direct effects on one another.

To test for bidirectional mediation in the CLPM, we estimated three indirect effects in each direction using lag-1 cross-lagged paths combined with autoregressive carryover (bias-corrected 95% CIs). System justification showed a small but significant indirect effect on subjective SES via life satisfaction at the intervening wave (*Indirect 1* $SJ_{t-1} \rightarrow LS_t \rightarrow SES_{t+1}$: $b = .006$, 95% CI [.001, .012], $SE = .003$, $z = 2.163$, $p = .031$). The two alternative $SJ \rightarrow SES$ indirect effects that incorporate autoregressive pathways were non-significant (*Indirect 2* $SJ_{t-1} \rightarrow SJ_t \rightarrow SES_{t+1}$: $b = .008$, 95% CI [-.028, .044], $SE = .020$, $z = 0.431$, $p = .666$; *Indirect 3* $SJ_{t-1} \rightarrow SES_t \rightarrow SES_{t+1}$: $b = .008$, 95% CI [-.028, .044], $SE = .020$, $z = 0.431$, $p = .666$). In the reverse direction, subjective SES did not exhibit significant indirect effects on system justification (*Indirect 1* $SES_{t-1} \rightarrow LS_t \rightarrow SJ_{t+1}$: $b = .003$, 95% CI [-.001, .008], $SE = .002$, $z = 1.522$, $p = .128$; *Indirect 2* $SES_{t-1} \rightarrow SES_t \rightarrow SJ_{t+1}$: $b = .010$, 95% CI [-.022, .041], $SE = .019$, $z = 0.583$, $p = .560$; *Indirect 3* $SES_{t-1} \rightarrow SJ_t \rightarrow SJ_{t+1}$: $b = .010$, 95% CI [-.022, .041], $SE = .019$, $z = 0.583$, $p = .560$).

Lastly, we computed total effects by summing the direct path with each type of indirect effect respectively. For system justification → subjective SES, all three totals were non-significant (*Total 1*: $b = .016$, 95% CI $[-.030, .062]$, $SE = .025$, $z = 0.701$, $p = .483$; *Total 2*: $b = .017$, 95% CI $[-.060, .094]$, $SE = .043$, $z = 0.432$, $p = .666$; *Total 3*: $b = .018$, 95% CI $[-.063, .099]$, $SE = .044$, $z = 0.431$, $p = .666$). The same null pattern emerged for subjective SES → system justification (*Total 1*: $b = .017$, 95% CI $[-.027, .060]$, $SE = .024$, $z = 0.759$, $p = .448$; *Total 2*: $b = .024$, 95% CI $[-.056, .104]$, $SE = .044$, $z = 0.585$, $p = .559$; *Total 3*: $b = .023$, 95% CI $[-.054, .100]$, $SE = .043$, $z = 0.584$, $p = .559$). Taken together, these results provide no support for hypothesis 1 and only weak ambiguous support for hypothesis 2 (See Table 4.3 for a list of indirect effects from this model).

Figure 4.2

Unstandardized Bidirectional Mediation CLPM (Constrained)



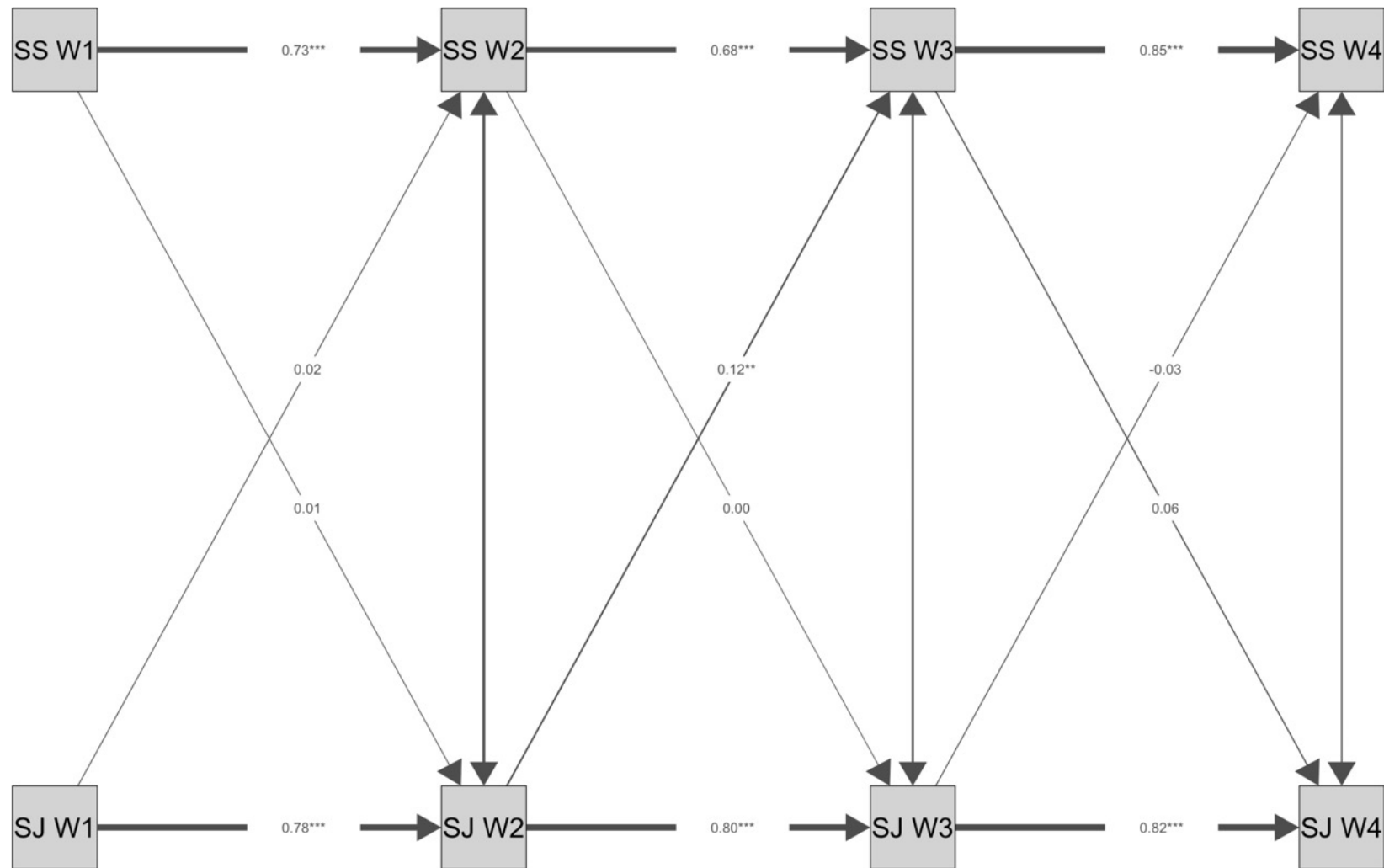
Note. SS = Subjective SES, LS = Life Satisfaction, SJ = System Justification, W1 - W4 = Wave 1 - Wave 4, * $p < .05$, ** $p < .01$, *** $p < .001$

Simplified Bidirectional Cross-Lagged Panel Model

For exploratory purposes, we ran a simplified stationary CLPM to examine whether subjective SES and system justification exhibited direct reciprocal effects on one another when life satisfaction was not included as a mediator (see Figure 4.3). Unlike the bidirectional mediation CLPM, which assumes that any influence of subjective SES on system justification (and vice versa) occurs indirectly through life satisfaction at a lag of two waves, this simplified model allows for the possibility that these variables may exert direct effects on one another at the next wave (i.e., lag 1). By removing life satisfaction as a mediator, this analysis provides a complementary test of whether subjective SES and system justification influence each other more immediately over time. Results indicated that cross-lagged paths from subjective socioeconomic status to system justification were non-significant ($b = .030$, 95% CI [-.010, .071], $SE = .020$, $z = 1.481$, $p > .05$). Similarly, the cross-lagged effects of system justification on subjective socioeconomic status were also non-significant ($b = .034$, 95% CI [-.010, .078], $SE = .022$, $z = 1.497$, $p > .05$). See Tables S4 – S6 in [Appendix 2](#) for model statistics regarding this analysis.

Figure 4.3

Standardized Bidirectional CLPM between Subjective SES and System Justification Over Time



Note. SS = Subjective SES, SJ = System Justification, W1 - W4 = Waves 1 - 4, * $p < .05$, ** $p < .01$, *** $p < .001$

Random-Intercept Cross-Lagged Panel Model approach

According to Hamaker et al. (2015) and Lucas (2023), the CLPM can potentially confound stable between-person differences with dynamic within-person changes, therefore not adequately accounting for stable-trait-like associations. A recommendation put forward by these researchers, amongst others, is the use of a more robust longitudinal modeling approach, such as the random-intercept cross-lagged panel model (RI-CLPM) and the Stable Trait Autoregressive Trait State model (STARTS) which can each separate between-person trait-like stability from within-person change (Kenny & Zautra, 1995, 2001). To address this shortcoming with the CLPM modeling approach presented above, we re-ran the bidirectional mediation CLPM as a bidirectional mediation RI-CLPM (See Figure 4.4 below and Tables S7 – S12 in [Appendix 2](#)).²⁶ Given the modest sample size and the limited number of waves—both of which can impact the statistical power of a reciprocal mediation model in an RI-CLPM framework, as well as lead to convergence issues for overly complex models (De Jonckere & Rosseel, 2022)—we used bounded estimation in lavaan to mitigate nonconvergence issues. This adjustment ensured that parameter estimates remained within plausible bounds and improved model stability.

By comparing the results obtained by the CLPM and the RI-CLPM, we aim to provide a more accurate assessment of the longitudinal relationship between subjective SES, life satisfaction, and system justification. This dual modeling approach helps distinguish between genuine within-person changes and stable between-person differences, offering a more nuanced understanding of the underlying mechanisms driving these associations. Moreover, given that RI-CLPMs typically require larger samples and more time points to achieve adequate statistical

²⁶ We also compared our bidirectional CLPM to a STARTS model. The results of this analysis can be found in the [Appendix 2](#) starting from Table S13.

power, reporting both CLPM and RI-CLPM results allows for an examination of the robustness of findings across complementary yet methodologically distinct analytical strategies.

Figure 4.4 displays the stationary RI-CLPM. In this model, stable between-person differences in each construct across time are captured by the latent random-intercept factors (labeled as subjective SES, life satisfaction, and system justification), while the arrows between time-specific measures reflect within-person fluctuations around these stable levels (indicated using W1 – W4). The within-person paths include both autoregressive effects (the stability of fluctuations over time) and cross-lagged effects (how deviations in one construct predict subsequent deviations in another construct). This structure allows us to disentangle enduring trait-like differences from dynamic within-person processes.

Overall, model fit for the observed stationary RI-CLPM was acceptable ($\chi^2 = 120.191$, $p < .001$, CFI = .977, RMSEA = .060, 90% CI [.046, .075], SRMR = .055). The results of the RI-CLPM indicated several significant associations at the between-person level. System justification was found to be positively associated with life satisfaction ($r = .459$, 95% CI [.336, .582], SE = .063, $p < .001$) and subjective SES ($r = .331$, 95% CI [.119, .464], SE = 0.067, $p < .001$). Similarly, subjective SES was positively associated with life satisfaction ($r = .583$, 95% CI [.474, .691], SE = 0.055, $p < .001$).

At the within-person level, only a handful of significant cross-lagged and autoregressive paths were observed. Life satisfaction at an earlier wave negatively predicted system justification at later waves ($b = -.089$, 95% CI [-.173, -.006], SE = .046, $z = -2.171$, $p = .030$). System justification at a previous time point predicted greater system justification at a subsequent time point ($b = .370$, 95% CI [.116, .624], SE = .104, $z = 4.188$, $p < .001$). However, no other significant cross-lagged or autoregressive paths were observed. Taken together, at the within-

person level, there was no evidence of a direct effect of subjective SES on system justification, or vice versa. Similarly, we found no indication at the within-person level of either an indirect, or total effect between subjective SES and system justification when life satisfactions mediator effect was accounted for nor when assessing alternative indirect effects via autoregressive pathways (see Table 4.3 for list of indirect effects of this model and [Appendix 2](#) for parameter estimates).

Taken together, the results of this analysis refine the findings of the CLPM by suggesting that the mediational relationship between subjective SES, life satisfaction, and system justification is largely attributable to stable between-person differences rather than dynamic within-person processes. While the CLPM provided tentative evidence for an indirect effect of system justification on subjective SES through life satisfaction over time, the RI-CLPM did not support this, indicating that these associations are more reflective of enduring individual differences.

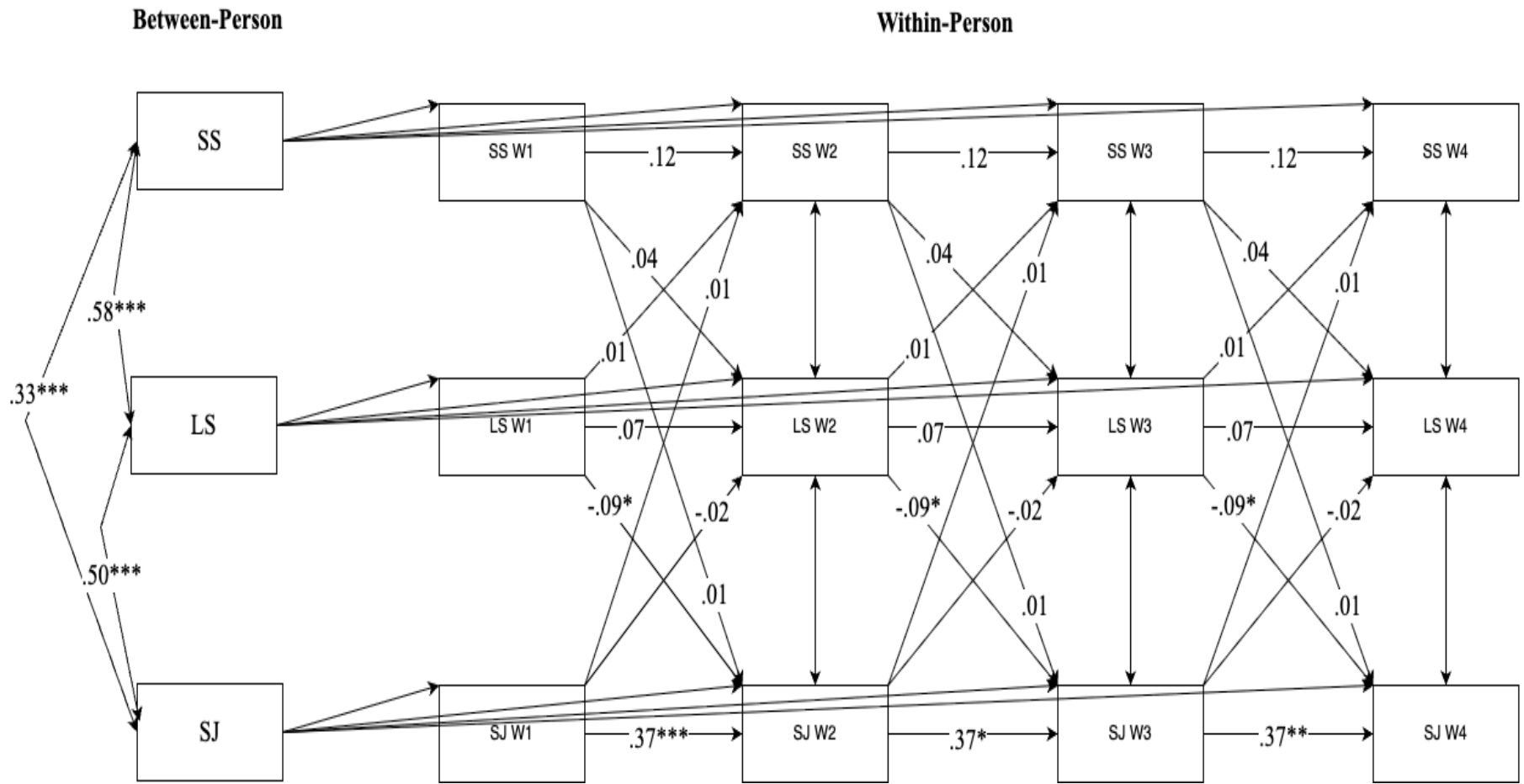
Table 4.3*Indirect effects of interest for constrained bi-directional CLPM and RI-CLPM*

Model	Pathway	Indirect b	SE	95% CI	p
Model 1 (CLPM)	SES _{t-1} → SJ _t → SJ _{t+1}	.010	.019	[-.022, .041]	.560
	SES _{t-1} → SES _t → SJ _{t+1}	.010	.019	[-.022, .041]	.560
	SES_{t-1} → LS_t → SJ_{t+1}	.003	.002	[-.001, .008]	.128
	SJ _{t-1} → SES _t → SES _{t+1}	.008	.020	[-.028, .044]	.431
	SJ _{t-1} → SJ _t → SES _{t+1}	.008	.020	[-.028, .044]	.431
	SJ_{t-1} → LS_t → SES_{t+1}	.006*	.003	[.001, .012]	.031
Model 2 (RI-CLPM)	SES _{t-1} → SJ _t → SJ _{t+1}	.005	.030	[-.039, .049]	.831
	SES _{t-1} → SES _t → SJ _{t+1}	.002	.013	[-.014, .017]	.843
	SES_{t-1} → LS_t → SJ_{t+1}	-.004	.005	[-.012, .004]	.367
	SJ _{t-1} → SES _t → SES _{t+1}	.002	.016	[-.019, .023]	.887
	SJ _{t-1} → SJ _t → SES _{t+1}	.005	.041	[-.059, .069]	.886
	SJ_{t-1} → LS_t → SES_{t+1}	.000	.002	[-.004, .003]	.855

Note. Hypothesized mediation pathway highlighted in bold, t = time (wave), * p < .05

Figure 4.4

Unstandardized Bidirectional Mediation RI-CLPM (Constrained)



Note. SS = Subjective SES, LS = Life Satisfaction, SJ = System Justification, W1 - W4 = Waves 1 - 4, * $p < .05$, ** $p < .01$, *** $p < .001$

General Discussion

This study examined a novel bidirectional mediation model to determine whether subjective SES and system justification exert cyclical effects through life satisfaction. By doing so, we aimed to clarify why previous research has consistently found a positive relationship between subjective SES and system justification (Brandt et al., 2020; Li et al., 2020b; Vargas-Salfate et al., 2018b; Valdes et al., 2023, 2024b). Moreover, the palliative effects of system-justifying ideology hypothesis argues that rationalizing, justifying, and legitimizing a given system can have the potential to reduce negative affect, increase positive affect, and overall make one feel better about their current circumstances. From this perspective, we argue that greater feelings of life satisfaction due to a rewarding social system provide a pathway for an individual to feel a greater motive to not only system justify but also perceive themselves as above others on a status hierarchy over time. However, the results of our CLPM contradicted H1, and provide only weak evidence for H2, suggesting that the relationship between subjective SES and system justification does not appear to be bidirectional through life satisfaction.

A key insight from the CLPM findings is the observed discrepancy between the three-variable and two-variable CLPMs, which exemplifies the importance of mediating mechanisms in longitudinal relationships. In the full bidirectional mediation CLPM, system justification had a weak albeit significant indirect effect on subjective SES via life satisfaction (but not vice versa), despite the absence of significant direct or total effects. This result provides only tentative evidence of a positive indirect effect of system justification on subjective SES due to its theorized palliative effects on life satisfaction. This finding is consistent with recent meta-analytical evidence that finds that system justification serves a palliative function, but that this association is relatively weak (Vargas-Salfate et al., 2024). However, in a simpler model

excluding the mediator, neither system justification nor subjective SES consistently predicted one another over time. This statistical pattern may resemble suppression effects or indirect-only partial mediation (Zhao et al., 2010), where the mediating variable may capture the primary mechanism underlying the relationship, while direct paths remain non-existent. However, due to the ambiguity of these results and the lack of a significant total effect of system justification on subjective SES via direct and indirect pathways, the present research cannot rule out the possibility that this relationship is non-existent.

Examining the cross-lagged components of the bidirectional mediation CLPM, both subjective SES and system justification positively predicted subsequent life satisfaction. In contrast, life satisfaction only significantly predicted later levels of subjective SES, but not system justification. Regarding mediation, subjective SES showed no significant direct, indirect, or total effects on system justification via life satisfaction or autoregressive pathways. System justification exhibited a small but significant lag-2 indirect effect on subjective SES through lag-1 life satisfaction. No other indirect, total, or direct effects of system justification on subjective SES were observed through alternative pathways.

Even though the present research did not find strong evidence for life satisfaction's mediational role in the CLPM, the significant reciprocal cross-lagged effects between subjective SES and life satisfaction may have important implications. The finding that both subjective SES and system justification positively predicted life satisfaction suggests that individuals who perceive themselves as advantaged, as well as those who hold system-justifying beliefs, experience greater psychological well-being over time. Moreover, the positive effect of life satisfaction on subjective SES, but not on system justification, indicates that greater well-being may reinforce perceptions of socioeconomic position, but does not appear to stabilize or

strengthen ideological beliefs in system legitimacy. This is consistent with previous cross-sectional, experimental, and cross-cultural work that have found a main effect of system-justifying beliefs on psychological well-being in support of a palliative function of system justification (Jost et al., 2008; Napier & Jost, 2008; Osborne & Sibley, 2013; Sengupta et al., 2017; Vargas-Salfate et al., 2018a; Vargas-Salfate et al., 2024).

Comparing the CLPM to RI-CLPM

The comparison of the bidirectional mediational CLPM and the RI-CLPM underscores the critical importance of distinguishing between within-person and between-person processes when modeling longitudinal associations among psychological constructs. While the CLPM suggested weak mediation effects—particularly a small but statistically significant indirect effect of system justification on subjective SES via life satisfaction—the RI-CLPM tells a more nuanced and arguably more robust story. Specifically, the RI-CLPM revealed that these effects were primarily driven by stable between-person differences, rather than dynamic within-person changes over time.

In line with critiques from Hamaker et al. (2015) and Lucas (2023), these findings demonstrate that the traditional CLPM may conflate stable individual differences with genuine change processes, potentially leading to misinterpretations of temporal dynamics. The RI-CLPM corrects for this by partitioning variance into within- and between-person components, allowing for more accurate attribution of observed effects. Thus, while the CLPM initially appeared to provide weak support for at least one longitudinal mediational pathway, the RI-CLPM suggests that these associations likely reflect enduring trait-like differences between individuals rather than reciprocal causal influences occurring over time. This highlights the analytical value of the

RI-CLPM as a more appropriate model for testing longitudinal mediation in constructs characterized by high temporal stability and substantial between-person variance.

Strengths, Limitations, and Future Directions

The present study offers several key strengths, both methodologically and theoretically, that enhance its contribution to the literature on system justification, subjective SES, and psychological well-being. This research builds on methodological advancements in studying bidirectional relationships over time. By employing a longitudinal approach, it moves beyond cross-sectional correlations and experimental manipulations to offer a more dynamic perspective on the interplay between system justification and perceptions of socioeconomic standing. While causal inferences remain tentative due to methodological limitations, the findings provide a foundation for future research employing alternative statistical techniques or experimental designs to further test these mechanisms.

The use of a longitudinal design and bidirectional CLPM and RI-CLPM provides a dynamic and robust framework for examining the temporal relationships between system justification, subjective SES, and life satisfaction. This design allows for a deeper understanding of the nature of these constructs over time, offering insights beyond static cross-sectional correlations. The inclusion of autoregressive paths and the examination of indirect effects through life satisfaction further strengthens the analysis, revealing the subtle interplay between these variables. Theoretically, the research extends the palliative function of system justification beyond its traditional focus on psychological well-being by highlighting how system-justifying beliefs can contribute to individuals' perceptions of their social status. This advancement provides a novel insight into how system justification influences not only psychological comfort but also the reinforcement of status hierarchies over time, making a significant theoretical

contribution to the understanding of how ideological beliefs shape social comparisons that are embedded within subjective SES.

There are few limitations of this research worth noting. First, life satisfaction was used as a proxy for psychological well-being, yet it captures only one dimension of well-being. Future research should consider a broader set of indicators, such as depression, anxiety, and perceived stress, to more comprehensively assess the psychological consequences of system justification and subjective SES. Second, subjective SES was measured using a single item, which may not fully capture the multidimensional nature of perceived status, such as including economic, social, and cultural dimensions. A more nuanced approach incorporating multiple-item scales could provide greater sensitivity to the various ways individuals perceive their social standing.

Lastly, assessing bidirectional mediation using robust longitudinal techniques such as the RI-CLPM requires a substantial sample size and a sufficient number of measurement waves to produce reliable and precise estimates (Hamaker et al., 2015; Usami et al., 2019). The modest initial sample size ($n = 339$) and the limited number of waves (4) may have constrained the statistical power necessary for these modeling approaches, potentially affecting the robustness of the parameter estimates. However, by comparing these more advanced models to a baseline CLPM, the present study was still able to provide a rigorous test of the proposed longitudinal relationships between subjective SES, life satisfaction, and system justification. While longitudinal observational studies are better than cross-sectional correlational studies for producing causal inferences, they're still subject to threats to internal validity (e.g., causal effects occurring over different timeframes than those hypothesize; time-varying confounds). Therefore, longitudinal experimental studies would be ideal for this endeavor.

Future research should explore additional moderator variables when it comes to investigating the underlying mechanisms by which this cyclical relationship may work for those that are disadvantaged. One such moderator put forth by Li et al. (2020a) is perceived upward social mobility, which may influence the extent to which system justification enhances life satisfaction and, in turn, subjective SES. Specifically, perceiving the system as just and fair may lead disadvantaged individuals to believe they have a reasonable chance to improve their socioeconomic position in the future, thereby strengthening the link between system justification and subjective SES via life satisfaction. Another pathway forward in accord with previous tests of the palliative function of system-justifying ideology would be to expand these findings to other types of status hierarchies outside of subjective SES. Lastly, future research could explore longitudinal experimental designs or instrumental variable approaches where feasible to better isolate causal effects.

Conclusion

The present study highlights the complex and dynamic relationship between system justification, subjective SES, and life satisfaction. By employing both a CLPM and RI-CLPM, this research does not find support for bidirectional mediation over time. The findings do provide tentative evidence for an effect in one direction during the CLPM, in that system justification may play a significant albeit weak positive role in shaping perceptions of greater socioeconomic status via its palliative effect on psychological well-being over time. However, during the RI-CLPM analysis these findings were contradicted at both the between- and within-person level. Furthermore, the effect of life satisfaction on both subjective SES and system justification was entirely explained by between-person differences, rather than dynamic within-person changes. Overall, this research contributes to the growing body of literature on system justification and

psychological well-being, offering both theoretical insights and methodological advancements for future research.

Conflict of Interest Statement

There are no potential conflicts of interests with respect to the research, authorship, and/or publication of this article.

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Transparency Statement: The design and analysis plan for the research presented herein was not preregistered. The data, research materials, and code that support the findings of this study are available and can be located at the following link:

https://osf.io/6jyfu/?view_only=422b55cb689f4947a044a0fadbc56757

Preface 4: Chapter 5

Once again, the study presented in Chapter 3 found that relationship between political ideology and system justification was moderated by a nation's political party in power. More specifically, individuals seem to system justify to a greater extent when their political ideological beliefs coincide with the political beliefs of the government in charge of governing the system. This raises the question: How might a nation undergoing a general election influence the relationship between political ideology and system justification? Additionally, does the motivation to justify the system fluctuate over time to align with political ideological identification and the party in power (i.e., self- and group-interest), or is system justification a stable ideological disposition, with right-leaning individuals consistently exhibiting higher levels of system justification compared to their left-leaning counterparts, regardless of which party holds power?

This 5th Chapter enters the debate within the system justification literature between those who are considered SIMSA-based theorists (Owuamalam et al., 2018b, 2019, 2023a, 2023b; Rubin et al., 2023a, 2023b) and those who are supportive of SJT (Jost, 2019, 2020; Jost & Banaji, 1994; Jost et al., 2023). By in large, the two camps differ in how they believe system-justifying processes operate for disadvantaged individuals. Simply put, those who are more supportive of the postulates of SIMSA tend to argue that the system-justification motive does not exist since the desire to system-justify is largely explained by self- and group-interests. Conversely, those who support SJT make the opposite prediction, in that the system-justifying motive can go against self and group interests due to internalized ideology about the legitimacy of the status quo. I believe it would be of great benefit to the system justification literature and the field of intergroup relations if these opposing perspectives were tested using a quasi-experimental longitudinal observational design to see if a [political] system that may change due

to a general election leads to changes in system justification over time for those who are on the winning side versus the losing side ideologically. Doing so would be as direct of a test between the two perspectives since there should be a side that coincides with the party in power prior to the election and one after the results of the election are known. This would also be a direct test of SJT's original tenet that those who are socially and politically conservative are the strongest system-justifiers.

STATEMENT OF CONTRIBUTION DOCTORATE WITH PUBLICATIONS/MANUSCRIPTS

We, the student and the student's main supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the student's contribution as indicated below in the Statement of Originality.

Student name:	Evan Armando Valdes				
Name and title of main supervisor:	Associate Professor Matt Williams				
In which chapter is the manuscript/published work?	5				
Describe the contribution that the student and members of the supervisory team have made to the manuscript/published work: ¹ The student conceptualized the project, drafted the original manuscript, was responsible for analyzing the data, revised the manuscript during the process of peer review. James Liu and Matt Williams provided their feedback on drafts of this manuscript during the revision process as it had gone through one round of peer review. Matt provided feedback on the analysis plan. Rosalind Searle (University of Glasgow) provided her feedback on the revised manuscript.					
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Chapter 5: A longitudinal investigation of the effects of New Zealand's 2023 election on System Justification

Abstract

This study investigates the role of system justification across an electoral cycle, contrasting the ideological dispositional and situational framework of System Justification Theory (SJT) with the self- and group-interest arguments of the Social Identity Model of System Attitudes (SIMSA). Using a four-wave natural quasi-experimental design conducted around New Zealand's 2023 general election (N = 339; 1,159 observations), we test hypotheses regarding the temporal dynamics of system justification and the distinct predictions of each theory.²⁷ While both theories agree that ideologically advantaged individuals system justify because their ego, group, and system justification concerns coincide, they diverge on why ideologically disadvantaged individuals would do so. Findings suggest that right-leaning individuals exhibited consistently higher levels of system justification regardless of the political context, supporting SJT's dispositional claims. However, for left-leaning individuals, system justification decreased post-election, aligning with SIMSA's self- and group-interest predictions. A modest rebound in system justification among left-leaning individuals was observed once the right-leaning government became established, highlighting the dynamic nature of system-justifying beliefs. Lastly, we found stronger evidence for perceived system threat moderating the interaction between time and political ideology in explaining system justification post-election, consistent with SJT. This was more robust compared to the moderating role of optimism about the future, as proposed by SIMSA, in explaining why left-leaning, ideologically disadvantaged electoral losers continued to justify New Zealand's social and political systems. These results underscore the importance of political context, temporal processes, and individual differences in shaping system justification.

Keywords: System Justification Theory, Social Identity Model of System Attitudes, Elections,

Longitudinal Data

²⁷ The New Zealand election outcome was that a previously left-leaning government that had been in power (for 6 years) led by the Labour Party was ousted and replaced by a rightward-leaning coalition government led by a more conservative National Party

Why do people support the systems that govern their lives, even when these systems sometimes disadvantage them? This question is particularly pressing in times of political change, such as during elections, where shifts in power bring uncertainty about governance, policy, and social stability. In 2024, around half the world's population residing in more than 70 countries have experienced national elections in selecting their leaders, making it the largest election year in history. This was widely considered a defining year for democracy, particularly amid concerns about a global democratic backslide that has given way to a rise in autocracy and populism since the mid-2010s (O'Neill, 2024). General trends in 2024 (in non-authoritarian countries) showed unfavorable outcomes for incumbent parties, with new leaders elected in nations such as Indonesia, Pakistan, the UK, and the US (Cossa & Glosserman, 2024; Heath et al., 2024). These shifts reflect broader challenges including economic crises, international conflicts, and domestic grievances, creating a timely and critical context for exploring how individuals react to social and political systemic changes. Understanding the factors that drive people to defend or challenge societal systems during such pivotal moments has profound implications for explaining political polarization, social cohesion, and collective action (i.e., system justification vs system criticism; Osborne et al., 2019a, 2019b).

One theoretical perspective in the literature of intergroup relations on system-justifying processes is known as System Justification Theory (SJT; Jost & Banaji, 1994). SJT argues that individuals are motivated to perceive the system in which they are embedded (e.g., societal, political, and economic) and the corresponding status quo as just, fair, and legitimate (Jost & Banaji, 1994). This motivation, known as the system justification motive, drives individuals to adopt and maintain positive attitudes toward these overarching social systems, referred to as system justification (Jost, 2019). According to SJT, system-justifying attitudes can sometimes

compete with other justifying motivations, such as ego justification (the need to acquire a positive self-image) and group justification (the need to acquire a positive social identity) (Jost, 2020). From SJT's perspective, the reason system justification can sometimes conflict with ego and group justifications is because system justification is thought to fulfill existential, epistemic, and relational needs, allowing for the belief that the world in which one lives is predictable, certain, and safe (Jost & Hunyady, 2005).

Within the literature on system-justifying processes, there stands an opposing perspective to SJT regarding how and why system justification operates for [disadvantaged] individuals. According to Social Identity Model of System Attitudes (SIMSA; Owuamalam et al., 2018b, 2023a, 2023b; Owuamalam & Spears, 2020; Rubin & Hewstone, 2004; Rubin et al., 2023a, 2023b), which builds on Social Identity Theory (Tajfel & Turner, 1979), system justification does not stem from a distinct system justification motive as proposed by SJT. Instead, SIMSA argues that self- and group-interest motivations fully account for system justification, explaining its occurrence among both advantaged and disadvantaged individuals. According to this perspective, "system justification reflects either (1) an accurate perception of the existing status quo (i.e., social reality) or (2) a strategy for maintaining or improving ingroup status and, consequently, the positivity of an associated social identity" (Rubin et al., 2023a, pg. 4). Social reality in this case refers to the perception that the status quo reflects a legitimate and realistic representation of social structural hierarchy, making it "accurate" and "realistic" to acknowledge their disadvantageous position. Owuamalam et al. (2018) provide the example of a social reality that is often acknowledged within social hierarchies that advantaged out-groups are perceived as *better* than disadvantaged in-groups.

Both SJT and SIMSA would agree that when the advantaged (i.e., high-status groups) system-justify, they do so because the status quo and their self- and group interests are in alignment. Where the two theoretical perspectives tend to diverge in their theorizing about system justification is in relation to the disadvantaged (i.e., low status groups; Rubin et al., 2023b). According to SIMSA, it would be “*socially maladaptive*” (our emphasis, Owuamalam et al., 2019, p. 394) for disadvantaged individuals to challenge any system that went against these interests. SIMSA goes on to state that this is especially true when the advantaged within the system have achieved their advantageous position legitimately (Owuamalam et al., 2018b). On the other hand, SJT researchers (Jost, 2019, 2020; Jost & Banaji, 1994; Jost et al., 2002, 2013, 2023) argue that there exists a motive to system-justify that sometimes can be at odds with other justifying motivations, such as ego- and group-justifications. This leads [disadvantaged] individuals to sometimes justify a system that may go against their personal/group interests, due to internalized ideology. SJT argues that when disadvantaged individuals system-justify, it is likely due to the system justification motive that competes with and contradicts the need for a positive social identity (i.e., ego- and group-justifications, Jost, 2020).

The ideology of system justification

According to Jost (2020), system justification is an attitude that arises from an ideological process in which its strength can vary according to both situational and dispositional factors such as (1) system criticism or threat; (2) feelings of system dependence; (3) perceptions that the system is unavoidable; and (4) representations of the social system are linked to a long-standing and legitimized historical charter. Despite these situational factors, from SJT’s perspective, providing legitimacy toward the status quo is also to a significant extent tied to stable ideological dispositions in which those who are more politically rightward leaning would be expected to

hold greater levels of system justification, even when doing so would go against their self- and group-interests. Previous research conducted across a variety of political contexts have consistently found that system justification is positively associated with the endorsement of politically conservative or rightward-leaning ideologies (Jost, 2021). This aligns with the view that conservatism as an ideology, emphasizes preserving the status quo, and that individuals on the political right, more so than those on the left, are inclined to see existing social, political, and economic inequalities as both legitimate and desirable (Jost, 2019; Jost et al., 2003a, 2003b, 2004, 2005, 2012a 2017). To this end, the left-right political ideological distinction is influential in assessing who is more likely to appreciate current dominance-based hierarchies or on the other hand criticize the societal status quo (Jost, 2021; Jost et al., 2003b).

On the other hand, SIMSA postulates that political ideologies entail specific social norms that shape worldviews and behaviors, thereby rendering political identity a form of social group identification. When individuals strongly identify with their political group, they are likely to endorse the group's distinctive beliefs which can shape and sustain broader social and political attitudes, including the tendency to system-justify. This influence, however, is contingent upon the alignment of the system with the group's underlying beliefs, norms, and values (Owuamalam et al., 2018b; Rubin et al., 2023a). Therefore, from SIMSA's perspective, system justification along the [political] ideological lines is inherently tied to group interest motives: either to preserve the current advantage of one's political ingroup or to secure future advantages for the ingroup by viewing the system as just and fair.

To this end, Friesen et al. (2019) argue that both the status quo and the desire to legitimize it are not unitary, stable entities concerning political ideology. In many countries, there are regular intervals of democratic governmental power-shifting between ideologically

different political parties, which fundamentally has consequences on the status quo. This influences one's motive to system-justify or not. In other words, in a democratic system, the ideologies of both those governing the system and those who are motivated to either legitimize or challenge it are often changing (Liu et al., 2008; Martorana et al., 2005; Szabó & Lönnqvist, 2021). Consistent with this, recent cross-cultural research across 42 nations has found that individuals on either side of the political spectrum are willing to system-justify when the government in charge of the social and political system aligns with their ideological beliefs and values (Valdes et al., 2024b).

The situational nature of system justification

Both SJT and SIMSA argue that there are situational factors that would likely elicit disadvantaged individuals to endorse greater system-justifying beliefs, but for different reasons. SJT appears to make the argument that the motive to system justify can be strengthened and take precedence over self- and group-justification motives/interests in order to defend the legitimacy of a social or political system that is facing threat or criticism (Jost, 2020). SJT further argues that by bolstering the legitimacy of a system by system-justifying satisfies both epistemic and existential psychological needs to reduce uncertainty and threat (Jost, 2019). SIMSA on the other hand makes an argument that one of the ways that disadvantaged individuals would likely system-justify is by believing that by doing so, they are investing in a positively distinct future social identity because the status quo will eventually work in their favor (Zhang et al., 2013). SIMSA refers to this self- and group-interest-based prediction as the *hope for future ingroup advantage hypothesis* (Rubin et al., 2023b).

SJT states that people often respond defensively to threats, criticisms, and challenges directed at the overarching social and political system (Jost et al., 2005; Kay et al., 2005; Ullrich

& Cohrs, 2007). When the system is perceived to be under threat, over 40 experiments published since 2005 have shown that individuals experience a heightened need to defend and legitimize the status quo (Jost, 2019; Miller & Borgida, 2019; Monteith & Hildebrand, 2020). This dynamic is particularly relevant during elections, which are moments of heightened social and political uncertainty. The potential for social and political change brought about by an election result can lead individuals to perceive the overarching social and political systems as being under threat. Such perceptions activate system-justifying tendencies, as election often highlight criticisms of both the current status quo and its potential alternatives. As a result, elections can inadvertently increase individuals' propensity to justify existing institutions and structures as means of alleviating this perceived threat. This being said, Blasi and Jost (2006) explain that since the system-justifying motive competes with ego- and group-justification motives over time, it is likely that endorsement of system justification can weaken when these competing motives become more salient. Therefore, when one's social and political system is perceived to be under threat, one may respond with heightened system-justifying attitudes until the more self- and group-interest motives become activated and the enhanced system-justifying beliefs dissipate when they are not in alignment.

The result of New Zealand's 2023 election brought a right-leaning coalition government of the National, ACT, and NZ First parties to power, which may be perceived as a threat to New Zealand's traditionally progressive social and political system by individuals on the political left (Szöllősi-Cira, 2022). This perception is particularly salient for Māori and left-leaning progressive individuals, who see key policy proposals as jeopardizing features of New Zealand's status quo that prioritize social equity, indigenous rights, and environmental protection (Eketone, 2024). For example, National's policies focus on cutting public service roles and reducing

emissions pricing, signaling a shift away from prioritizing climate action and public welfare toward economic productivity (National, 2023). ACT's platform emphasizes drastically reducing government spending, abolishing the Ministry for Māori Development, and replacing race-based funding with needs-based approaches, threatening institutional mechanisms that address historical injustices against Māori (ACT, 2023). Similarly, NZ First has pledged to end "separatism" by halting co-governance arrangements and reevaluating policies perceived as privileging Māori rights, further challenging existing frameworks for bicultural governance and equity (NZ First, 2023). These initiatives, coupled with rhetoric critiquing equity measures as creating division, signal a shift that some left-wing commentators fear could undermine the foundations of social cohesion, biculturalism, and inclusivity that have been intimately tied to New Zealand society (Gibbon, 2024; Hanly, 2024; Jose, 2024).

From the perspective of SJT, the election results and the policies proposed by the winning coalition government may be perceived as threatening for electoral losers (i.e., left-leaning individuals and groups) because they challenge key aspects of New Zealand's progressive social and political identity. Specifically, the coalition's agenda signals a departure from principles of equity, bicultural governance, and sustainability that many on left view as foundational to social and political system's legitimacy and stability (Bertenshaw et al., 2023; Gibbons, 2024; Lilly et al., 2024). In this context, the election outcome is not merely a change in political leadership but an ideological shift that raises concerns about the broader system's ability to maintain inclusivity and fairness. According to SJT, perceived threats to systemic legitimacy – such as those posed by New Zealand's 2023 election outcome – often activate a system justification motive, a psychological mechanism that reduces anxiety by defending or rationalizing aspects of the system under threat (Jost, 2011; Kay et al., 2005). SJT suggests that,

for left-leaning individuals, the election result may paradoxically trigger system-justifying responses that aim to restore stability and reduce uncertainty, even as these individuals oppose the new government's agenda (Miller & Borgida, 2019; Monteith & Hildebrand, 2020).

From the perspective of SIMSA, system justification among disadvantaged individuals and groups can vary over time because it is influenced by shifts in self- and group-justification motives. SIMSA believes one potential reason for why the disadvantaged system-justify is due to the disadvantaged holding optimistic beliefs about their future self and group prospects. Specifically, Rubin et al. (2023b) state “members of low-status (*disadvantaged*) groups to support the current social system, even if it currently disadvantages them, because they hope that a fair and legitimate system will one day result in an improved social status for the ingroup” (pg. 221). Therefore, disadvantaged electoral losers may perceive the current social and political system as just and fair if they remain optimistic that their political ideological ingroup's status will improve in the future, such as through an eventual electoral victory.

In the context of a democracy, one's political leanings shape how individuals perceive their nation's social and political system. In turn, these perceptions influence whether individuals engage in system-justifying beliefs or not (Anderson & LoTempio, 2002; Jost & Kramer, 2016). National elections provide a unique opportunity to observe how political leanings shape responses to the election and its outcome and to examine whether system justification shifts in alignment with self- and group-interests or not. The election also allows for an applied test of key theoretical moderators proposed by SJT and SIMSA that help to explain why electoral losers may continue to system justify after the election: perceptions of system threat and optimism about the future.

Furthermore, the stages of the election process provide a compelling situational framework for examining the temporal dynamics of system justification as outlined by SJT (Friesen et al., 2019). Friesen and colleagues (2019) explain three stages as the pre-decision stage which coincides with the pre-election period (Wave 1), during which political outcomes remain uncertain, and individuals are more likely to defend the status quo as a means of maintaining stability and reducing uncertainty. The pre-implementation stage, which occurs after the election results are announced but before the winning candidate(s) assumes office (Wave 2), reflects a transitional period when individuals begin to rationalize the anticipated new political and social reality. Finally, the post-implementation stage corresponds to the period after the elected candidate(s) take office (Waves 3 and 4), when the new system has been enacted and is fully operationalized. Building on the arguments of Friesen et al., this temporal framework suggests that system justification motivations will intensify as the election progresses from uncertainty to inevitability, leading to higher levels of system justification during the pre-implementation and post-implementation stages compared to the pre-decision stage (Jost et al., 2011; Kay et al., 2009; Laurin, 2018).

Election outcomes and [dis]advantage

We posit that being on the ideological winning side of an election temporarily elevates one's status, as this sides political values, beliefs, and overall identity gain normative and often institutional traction. Conversely, electoral losers may perceive themselves as relatively disadvantaged or low status due to the marginalization of their political perspective.²⁸

Importantly, this conceptualization of advantage or disadvantage is relative to a group's prior

²⁸ However, political status is layered and intersected by enduring social structures, and some ideological groups retain influence despite electoral outcomes.

ideological standing, rather than their broader social position. For example, a Green Party supporter with left-leaning values may feel ideologically disadvantaged following a right-leaning National victory, even if their socioeconomic status remains unchanged.

This assumption is central to the present study's capacity to test the claims of the SJT and SIMSA. Both theories make distinct predictions about how and why individuals in advantaged (high-status) and disadvantaged (low-status) positions respond to systemic outcomes. By framing electoral winners as ideologically advantaged and losers as ideologically disadvantaged, we establish the conditions necessary to examine the dynamics of system justification across these contrasting groups. In this sense, electoral outcomes not only shift the ideological landscape but also serve as a lens through which individuals reassess their group's relative position within an ideological hierarchy.

Present Research

The present research aims to explore how the dynamics of system justification are influenced by a potentially changing social and political status quo. To this end, we took advantage of a naturally occurring, large-scale, and highly salient event in which groups of powerful social collectives were engaged in competition, followed by a victory of a coalition of parties and a defeat for others: the 2023 New Zealand General Election. Centering our design around the election [outcome] allows us to employ a longitudinal quasi-experimental design which is ideal for assessing how and if system justification change over time in accordance with self- and group-interests or not. Furthermore, we will be able to test whether SJT or SIMSA makes the most accurate predictions about system justification in response to election outcomes by examining whether system-justifying beliefs change when one's political group gains versus loses political power. This investigation is crucial for assessing the accuracy of SJT (Jost, 2020,

2021; Jost et al., 2023) and SIMSA (Owuamalam et al., 2018b; Rubin et al., 2023a, 2023b) during periods of social and governmental change. Unlike the predominant use of cross-sectional and laboratory experimental methods found in the system justification literature, we contend that longitudinal quasi-experimental assessments are helpful in this endeavor. In doing so, we can elucidate whether system-justifying beliefs change over time in response to real-life election outcomes for those on the political right and left.

Hypotheses

H1: Building on the theoretical framework of SJT (Jost & Banaji, 1994), as elaborated by Laurin (2018) and Friesen et al. (2019), we hypothesize that individuals' levels of system justification will vary across distinct stages of the election process. Specifically, we expect system justification to be lower during the pre-decision stage (Wave 1), when political outcomes remain uncertain, compared to the pre-implementation (Wave 2) and post-implementation stages (Waves 3 and 4). This hypothesis is grounded in SJT's core proposition that individuals are motivated to rationalize and justify the status quo, particularly as it becomes more inevitable and certain. The election process provides a situational context in which system justification motivations are likely to intensify as the uncertainty of the pre-decision stage transitions into the perceived stability and inevitability of the pre-implementation and post-implementation stages.

H2: According to SJT, the motive to system justify coincides more with those who hold more social, political, and economic conservative dispositions (Jost, 2021). Therefore, we would expect to see greater levels of system justification for right-leaning individuals when compared to their politically left-leaning counterparts even if a left-leaning political party is in power (i.e., before and after the election).

H3: Both SJT and SIMSA imply that desire to system-justify can be tied to situational factors and should be strongest for the advantaged when ego, group, and system justification desires are in alignment. Therefore, we expect to see levels of system justification for those on the winning (advantaged) side of the election increase after the election results are known (Waves 2 – 4) in comparison to prior to the election (Wave 1).

H4A: According to SJT, system-justifying serves fundamental epistemic, existential, and relational needs for certainty, security, and conformity, especially when the system is perceived to be under threat (Jost et al., 2017; Kay et al., 2009; Montith & Hildebrand, 2020). Electoral events, particularly in polarized political contexts, can elicit perceptions of system threat by raising concerns about the legitimacy or stability of the prevailing sociopolitical order. For individuals ideologically aligned with the political party that has lost power, the election outcome may represent a disruption to their perceived continuity of governance, values, and societal priorities, which can be construed as a threat to the broader system. Jost (2011) explains that exposure to system threat—that is information or an event that potentially threatens the legitimacy or stability of the social and political system—leads individuals to endorse greater system-justifying beliefs more (Jost et al., 2005; Kay et al., 2005), and to score more highly on direct measures of system justification (Ullrich & Cohrs, 2007). For ideologically disadvantaged electoral losers who face the potential for political and social change due to an electoral loss, the outcome of the election may be perceived as a not just a threat to their political preferences, but as a challenge to the fairness and stability of the sociopolitical system they value. This perception can activate system justification motives to define the legitimacy of the existing social and political order, even if it disadvantages their own ideological stance. Based on this perspective of SJT, we hypothesize that the disadvantaged electoral ‘losers’ level of system justification will

momentarily increase once the election results are known (Waves 2 – 4) in comparison to Wave 1 system justification because they have experienced a system threatening event that undermines their perceived legitimacy and stability of status quo.

H4B: Conversely, SIMSA argues that low-status electoral losers (i.e., disadvantaged) are unlikely to system-justify unless it coincides with their personal and group interests. Therefore, we would expect to see those on the electoral ‘losers’ ideological side of the election level of system justification decline after experiencing an electoral loss (Waves 2 – 4) when compared to prior to the election (Wave 1).

H5A: Building on SIMSA’s explanation of hope for future ingroup advantage (Rubin et al., 2023a, 2023b), ideologically disadvantaged individuals (i.e., electoral losers) may justify the system to cope with their current disadvantage if they believe the system is fair and remain optimistic about future opportunities for their group’s improvement. Although optimism about collective upward mobility is central to this mechanism, general optimism about the future can serve as a valid proxy, as it reflects a broader sense of confidence in positive future outcomes that may encompass group-specific upward mobility (Urbatsch, 2018). Therefore, we hypothesize that optimism about the future will moderate the relationship between political ideology and wave (time treated as categorical) on system justification. Specifically, we predict a conditional two-way interaction: among left-leaning individuals, we expect that higher optimism about the future will help buffer against the electoral loss and be associated with a more positive association with system justification post-election (Waves 2-4) when compared to pre-election (Wave 1), whereas left-leaning individuals who have lower optimism about the future will be

associated with a stronger decline in system justification post-election (Waves 2-4) when compared to their scores at Wave 1.²⁹

H5B: According to SJT, greater perceptions of system threat should heighten the motivation to defend and justify the current status quo, even when doing so conflict with one's person or group interests (Kay et al., 2009). System threat is typically understood as a perception of instability or threat to the legitimacy and functioning of the broader sociopolitical system. In the current study, system threat is operationalized as the perceived threat to one's way of life in response to the election outcome. This measure captures the subjective and psychological salience of the election results, which often reflect broader concerns about system stability for individuals who view their personal way of life as deeply connected to the current sociopolitical structure (Hasen, 2020). Therefore, we hypothesize that perceived system threat will moderate the relationship between political ideology and wave (time treated as categorical) on system justification. Once again, we hypothesize a conditional two-way interaction: left-leaning disadvantaged electoral losers who perceive the election outcome to be a greater threat to their way of life (compared to left-leaning individuals who perceive it as a lesser threat) will show increased system justification post-election (Waves 2-4) relative to their baseline levels prior to the election (Wave 1). Conversely, for left-leaning individuals who perceive the election as a lesser threat to their way of life, will show decreased system justification post-election (Waves 2-4) relative to their baseline levels prior to the election (Wave 1).³⁰

²⁹ We consider this test a slightly limited and supplementary analysis since our optimism about the future item does not explicitly measure optimism about election outcomes or systemic processes; To test this hypothesis, we will specify a three-way interaction (wave*political ideology*optimism) to also explore the effect of optimism about the future on system justification for right-leaning electoral winners over time (please find more details in the results section on model specification).

³⁰ Similarly to H5A, to test this hypothesis we will specify a three-way interaction (wave*political ideology*system threat) to explore the effect of system threat on system justification for right-leaning electoral winners.

Method

Participants and Procedures

A four-wave quasi-experimental online study was conducted in New Zealand using the opt-in online panel provider, Prolific, which has been found to facilitate high retention rates in longitudinal research (Kothe & Ling, 2019). The quasi-experimental design of the present study used New Zealand's 2023 General Election as a natural event which we postulated would elicit divergent psychological and emotional responses from those on the winning and losing sides, thereby impacting participants' perceptions of New Zealand's political and social systems. The sample size was determined for a separate pre-registered project examining how system justification and conspiratorial beliefs change over time using random-intercept cross-lagged panel models. The rationale for the sample size via a priori power analysis can be found in Valdes et al. (2024a).³¹ The first wave was recruited one month before the election in September 2023 ($N = 339$), the second wave immediately following the announcement of the likely majority/winning parties in October 2023 ($N = 290$), the third wave following the formation of a 3-party coalition government (see below for details) in November 2023 ($N = 265$), and the fourth wave immediately following release of the newly confirmed coalition governments 100-day plan in December 2023 ($N = 265$).

The election outcome was that a previously left-leaning government that had been in power (for 6 years) led by the Labour Party was ousted and replaced by a rightward-leaning coalition government led by a more conservative National Party (for background on these parties and NZ politics, see Satherley et al., 2020). To address selection and nonresponse biases, we

³¹ The pre-registration also contains all variables (most of which are not discussed/analyzed in the current paper) collected that were a part of the larger project. See results section for sensitivity analysis for main effects of interest.

compared the final sample to the initial sample as well as to population statistics (See Table 5.1).³² Participants were slightly more likely to be female, older, and similarly educated as the population. Importantly, we found no significant differences in the socio-demographic details of wave 1 and wave 4 participants.

Table 5.1

Descriptive Statistics of Study Sample Compared to Population Benchmarks

	Wave 1 (N = 339)	Wave 2 (n = 290)	Wave 3 (n = 265)	Wave 4 (n = 265)	Population Benchmarks
Gender (Female)	52.2%	54.1%	52.4%	53.3%	50.1%
University educated	62.1%	63.4%	63.2%	62.2%	65.2%
Mean age (years)	36.5	38.3	39.1	39.4	38.1
Political Ideology					
Left	52.8%	51.2%	54.7%	54.2%	NA
Right	47.2%	48.8%	45.3%	45.8%	NA

Measures

System justification (Wave 1 – 4)

System justification was measured using a brief version of the System Justification Scale (Kay & Jost, 2003) in which items that tapped national attachment, and two reverse-coded items were excluded (Vesper et al., 2022). The Brief System Justification Scale used included the four following items: “In general, I find society to be fair,” “In general, New Zealand’s political

³² <https://www.stats.govt.nz/2023-census/>

system operates as it should,” “Everyone in New Zealand has a fair shot at wealth and happiness,” and “New Zealand’s society is set up so that people usually get what they deserve.” Responses were given on a range from 1 (*Disagree completely*) to 7 (*Agree completely*). A mean system justification score was calculated for each participant ($\alpha = .82$).

Political Ideology (Wave 1 – 4)

Political ideology was assessed with the following single item: “On political issues, where would you place yourself on a scale of 1-11, where 1 = Strong conservative (*right-leaning*) and 11 = Strong liberal (*left-leaning*)?”

Optimism About the Future (Wave 1 – 4)

Optimism about the future was assessed with the two following items: “How optimistic/pessimistic do you feel about your personal future,” and “How optimistic/pessimistic do you feel about New Zealand’s future.” Responses were given on a scale from 1 (*Extremely pessimistic*) to 7 (*Extremely optimistic*).

System Threat (Wave 1 – 4)

System threat was assessed with the following single item: “How much do you think the general election result will threaten your way of life in the near future” Responses were given on a scale from 1 (*Not at all*) to 5 (*A great deal*).

Demographic Variables (Wave 1)

Age was assessed using the single item, “What is your age?” Gender was assessed using the single item, “What is your gender?” with three responses (*1 = male, 2 = female, 3 = non-binary*). Education was measured using the single item, “what is the highest level of education

you have completed” with responses ranging from 1 (*Elementary School*) to 7 (*Doctorate Degree*).

Data Analysis

Since the present research is analyzing longitudinal data where participants (individual-level) were nested within themselves (context-level individual change units over time), we utilized multilevel models to (a) account for within- and between-person variance and (b) avoid underestimated standard errors—which often results in Type 1 errors (Gelman & Hill, 2006; Heck & Thomas, 2020). The longitudinal multilevel modeling approach allows us to estimate how individuals differ from themselves across time (within-person effects) and how individuals differ from each other, on average (between-person effects), as well as allowing for the individualization of effects via random intercepts (Enders & Tofighi, 2007).

Time (measured as waves 1 – 4) was modeled as a fixed categorical effect in all analyses to account for systematic trends over time that might influence both the predictor, moderator and outcome variables. Modeling time as a fixed effect allows the present research to capture the overall mean trajectory of the outcome variable across waves while accounting for the possibility that changes in the predictor or moderator variables might align with time-related patterns. This inclusion is particularly important in longitudinal studies, as time may serve as a proxy for developmental, contextual, or external influences on the variables of interest (Willett & Singer, 2003). By treating time as a fixed effect, we allow the relationship between time and the outcome variable to remain constant across all individuals, rather than assuming a slope that varies for individuals. Additionally, the inclusion of time as a fixed effect ensures that any observed effect of the predictors or moderator are not confounded by overall temporal trends. Including time as a

fixed effect allows the present research to isolate these general trends from within- and between-person relationships which is of the most interest to the present research.

Sensitivity Analysis

To estimate the statistical power of our multilevel models for detecting fixed effects of interest, we conducted a sensitivity analysis using the *simr* package in R (Green & MacLeod, 2016) on participants who completed all relevant measures. Sensitivity analyses, based on 1,000 simulations per effect, employed likelihood ratio tests (or Kenward-Roger tests where appropriate) with an alpha level of .05 to determine the smallest detectable effect size (in the model's natural units) with 80% power ($1 - \beta$) and 95% confidence intervals.

The analyses indicated that the smallest detectable main effect of wave (time treated as categorical) was $b = .053$ for 81% power (95% CI [79.37, 84.24]). The interaction between wave and political ideology required $b = .054$ for 81% power (95% CI [77.91, 82.91]. For the three-way interaction between wave, political ideology, and optimism about the future, $b = .054$ was needed for 81% power (95% CI [78.64, 83.58]). Finally, the three-way interaction between wave, political ideology, and perceived system threat required $b = .056$ for 80% power (95% CI [77.70, 82.72]).

Data Accessibility Statement

The data, research materials, and code that support the findings of this study are available and can be located at the following link: <https://osf.io/462fc>

Results

Descriptive Analysis

See Table 5.2 for descriptive statistics and bivariate correlations between system justification, and political ideology across the four waves. We found that system justification was consistently significantly negatively correlated with political ideology, meaning that conservatives were more likely to justify the system both prior to and after the election results were known. This finding held even at wave 1 when a left-leaning political party was in power. The correlational results also demonstrated sufficient test-retest reliability for both system justification and political ideology over time. Specifically, system justification from Wave 1 to Wave 4 had correlations ranging from $r = .64 - .81$, $p < .01$ and similarly, political ideology from Wave 1 to Wave 4 had correlations ranging from $r = .70 - .86$, $p < .01$.

Table 5.2

Means, Standard Deviations, and Correlations with 95% Confidence Intervals between Variables of Interest

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. System Justification W1	3.55	1.30							
2. System Justification W2	3.62	1.34	.77** [.72, .81]						
3. System Justification W3	3.69	1.31	.64** [.56, .70]	.78** [.72, .82]					
4. System Justification W4	3.69	1.35	.69** [.62, .75]	.80** [.75, .84]	.81** [.76, .85]				
5. Political Ideology W1	6.42	2.32	-.28** [-.38, -.18]	-.36** [-.46, -.26]	-.40** [-.49, -.29]	-.36** [-.46, -.25]			
6. Political Ideology W2	6.42	2.26	-.30** [-.40, -.19]	-.34** [-.44, -.24]	-.35** [-.45, -.23]	-.35** [-.45, -.24]	.80** [.76, .84]		
7. Political Ideology W3	6.47	2.25	-.27** [-.37, -.15]	-.37** [-.47, -.26]	-.41** [-.51, -.31]	-.34** [-.45, -.23]	.74** [.68, .79]	.70** [.63, .75]	
8. Political Ideology W4	6.47	2.20	-.31** [-.41, -.19]	-.37** [-.47, -.26]	-.42** [-.52, -.32]	-.40** [-.49, -.29]	.78** [.72, .82]	.73** [.67, .79]	.86** [.83, .89]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$.

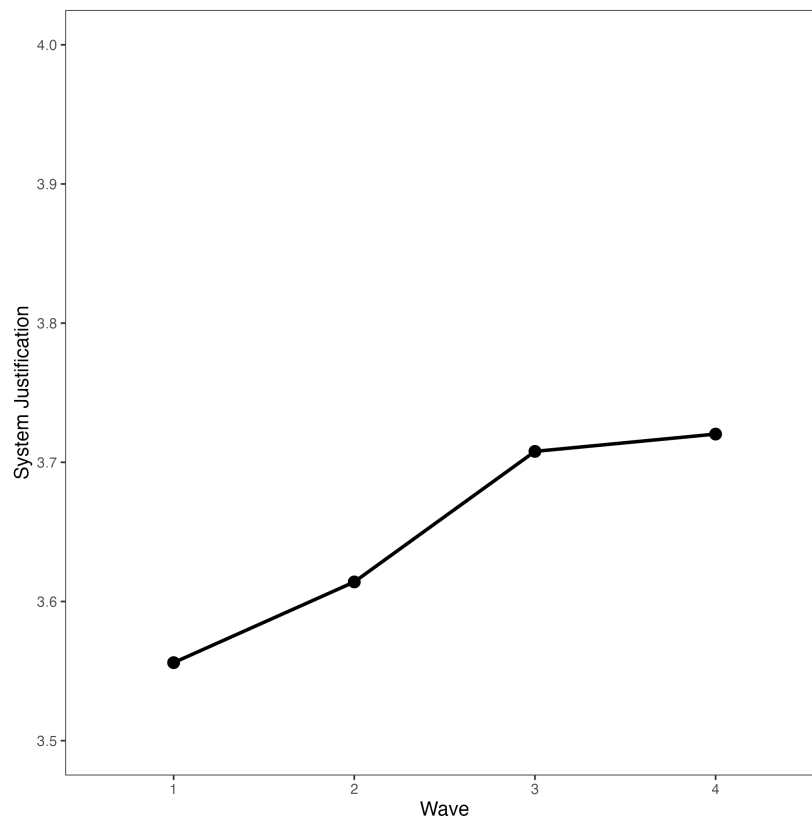
Next, we ran a series of multilevel models using the `lme4`, `lmerTest`, and `sjPlot` packages (Bates et al, 2014; Kuznetsova et al., 2017; Lüdtke, 2024) in R statistical software (R Core Team, 2022) to test hypotheses 1-5B. Directly observed predictor, moderating, and outcomes variables are analyzed, controlling for political ideology (model 1 only to assess the impact the election [outcome] had on system justification regardless of ideology), age, and gender as we are not interested in investigating generational or gender differences in system justification. Before conducting our analyses, we centered each of our predictors, time-invariant covariates, and moderator variables at the grand-mean (Enders & Tofighi, 2007; Gelman & Hill, 2006).

We first set out to see whether individuals reported greater levels of system justification as the election process progressed from the pre-decision stage of Wave 1 (i.e., lead up to an election) to the pre-implementation stage of Wave 2 (i.e., the lame duck period between the election of a new leader and their swearing in) to the post-implementation stage of Waves 3 and 4 (i.e., new leader is sworn in). Table 5.3 presents the results of this first multilevel model in predicting system justification using wave (i.e., time treated as a categorical variable) while controlling for political ideology, age, and gender to test H1 (See Model 1). Results of this model indicate that individual's level of system justification at baseline 1-month prior to the election during the pre-decision stage (Wave 1) was slightly above the midpoint ($b = 4.15$, $SE = .19$, 95% $CI [3.78, 4.53]$, $t = 21.06$, $p < .001$). Compared to Wave 1, system justification scores did not significantly differ during the pre-implementation stage of Wave 2 (announcement of likely election winner, $b = .06$, $SE = .05$, 95% $CI [-.05, .17]$, $t = 1.06$, $p = .289$), but scores significantly increased during the post-implementation stage of Waves 3 (coalition government formation; $b = .15$, $SE = .06$, 95% $CI [.04, .26]$, $t = 2.69$, $p = .007$) and 4 (release of coalition governments 100-day plan; $b = .16$, $SE = .06$, 95% $CI [.05, .28]$, $t = 2.88$, $p = .004$) when

compared to the reference level. Taken together, these results provide partial support for H1 that individuals level of system justification regardless of political ideology increased in the post-implementation but not pre-implementation stages when compared to the pre-decision stage of the election process (See Figure 5.1).

Figure 5.1

System Justification Over Time

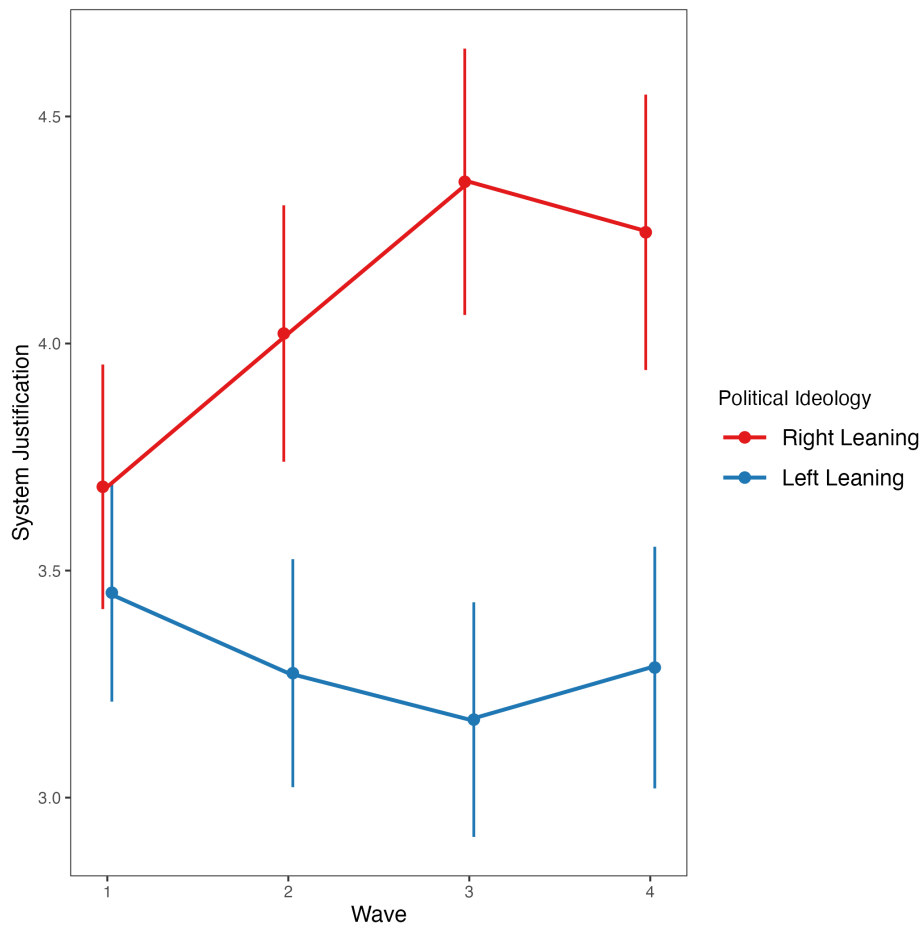


Next, Model 2 set out to test the four following between-person and within-person predictions: (1) political right-leaning individuals would possess greater levels of system justification when compared to politically left-leaning individuals; (2) that levels of system justification for those on the winning (advantaged) side of the election increased after the election results were known (Waves 2 – 4) in comparison to prior to the election (Wave 1); (3)

that according to SJT's systemic threat arguments, levels of system justification for those on the losing (disadvantaged) side of the election should increase to bolster the sagging legitimacy of their system after facing an election loss (Waves 2 – 4) when compared to prior to the election (Wave 1); and (4) conversely, according to SIMSA's self- and group-interest arguments, levels of system justification for those on the losing (disadvantaged) side of the election should decrease since ego, group, and system justification are not in alignment. To test these predictions, we ran a multilevel model where wave (time treated as a categorical variable), political ideology, and the interaction between time and political ideology were introduced as predictors of system justification while controlling for age and gender. Importantly, the interaction between political ideology and time was included to test whether changes in system justification over time varied by political ideology (See H2, H3, H4A, and H4B). Specifically, the interaction allows us to determine whether the trajectory of system justification differs between right-leaning and left-leaning individuals at each time point before and after the election.

Results of Model 2 show that individuals with more right-leaning political ideologies reported significantly greater system justification compared to those on the political left, even when a left-leaning political party was in power at Wave 1 ($b = -.11$, $SE = .04$, $95\% CI [-.21, -.04]$, $t = -2.56$, $p = .033$). Moving on to within-person changes, the interaction between political ideology and wave indicated that the relationship between conservative political ideology and system justification strengthened over time when compared to Wave 1. Specifically, the effect of political ideology on system justification became slightly more negative at Wave 2 when compared to Wave 1 when individuals were made aware that the likely winning party of the election was right-leaning ($b = -.12$, $SE = .05$, $95\% CI [-.22, -.03]$, $t = -2.54$, $p = .034$). The

effect further intensified at Wave 3, when a coalition of right-leaning political parties took power ($b = -.21, SE = .06, 95\% [-.33, -.10], t = -3.76, p < .001$), and remained stronger at Wave 4 in comparison to Wave 1, when the coalition released their 100-day plan ($b = -.16, SE = .06, 95\% CI [-.28 - -.05], t = -2.82, p = .005$). Taken together, these results provide strong evidence for both H2 and H3 (See Figure 5.2). To further explore this interaction, pairwise comparisons were conducted at different levels of political ideology to examine the conditional effects for left-leaning individuals. For those with a more left-leaning political ideology, there was a significant decrease in system justification between Wave 1 and Wave 3 ($b = -.15, SE = .07, t(866) = -2.75, p = .006$) and between Wave 1 and Wave 4 ($b = -.17, SE = .06, t(866) = -2.93, p = .003$). No significant differences were observed between Wave 1 and Wave 2 ($p = .29$), Wave 2 and Wave 3 ($p = .09$) or between Wave 3 and Wave 4 ($p = .84$). Taken together, these primarily non-significant decreases in system justification for left-leaning individuals over the course of the election provide weak evidence for the self- and group-interest arguments of H4B over H4A (See Figure 5.2).

Figure 5.2*System Justification Over Time by Political Ideology*

Note. Political ideology represents right-leaning as 1 SD below and left-leaning as 1 SD above the mean

Model 3 set out to assess SIMSA's self- and group-interest based 'hope for future ingroup advantage' hypothesis (H5A; Rubin et al., 2023b) to see if more hopeful (i.e., optimistic about the future) left-leaning electoral losers system justify more when compared to less hopeful left-leaning electoral losers. To test this prediction, we ran the same multilevel model as Model 2 but also included an interaction term between wave (treated as a categorical variable), political ideology, and optimism about the future in predicting system justification. While H5A could have been tested using a two-way interaction between optimism about the future and wave

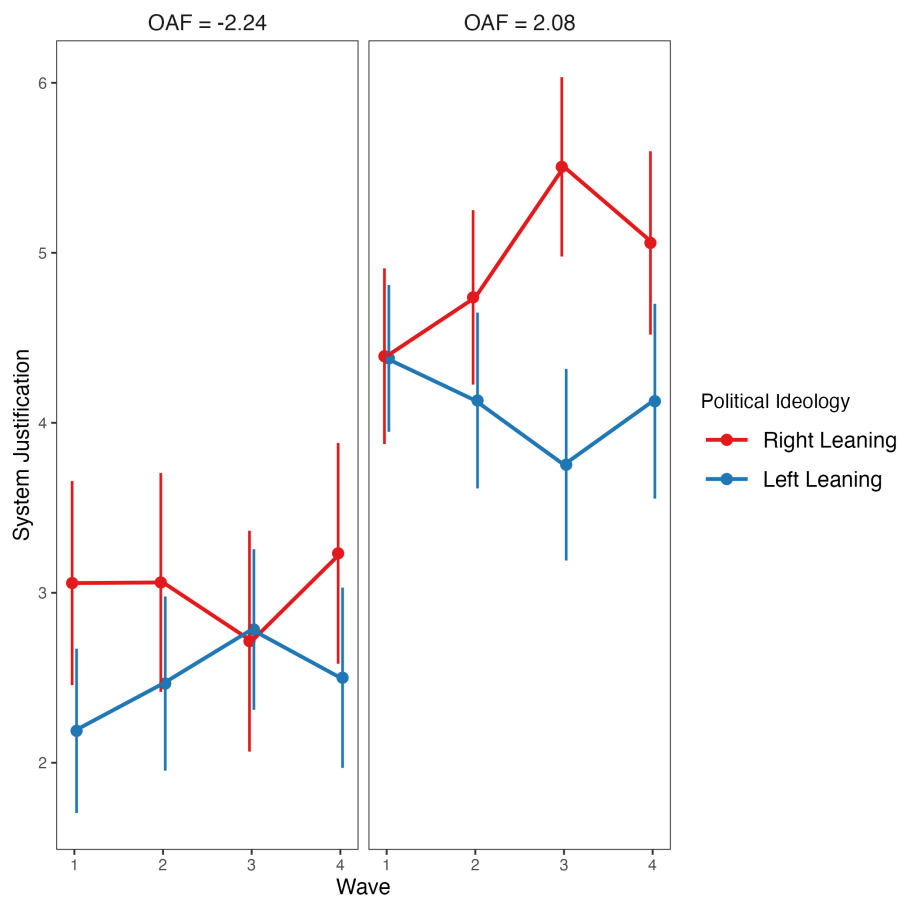
among only left-leaning individuals, specifying a three-way interaction that included political ideology allowed us to explicitly test H5A for left-leaning electoral losers while also capturing patterns among right-leaning electoral winners.

Results indicated that there was a significant positive main effect for optimism about the future, in that greater optimism about the future predicted greater system justification at Wave 1 across the sample ($b = .42$, $SE = .05$, 95% CI [.32, .51], $t = 8.86$, $p < .001$). However, the interactions between optimism about the future and Wave 2 ($b = -.03$, $SE = .06$, 95% CI [-.14, .08], $t = -.53$, $p = .596$), Wave 3 ($b = .0001$, $SE = .06$, 95% CI [-.12, .12], $t = -.002$, $p = .998$), and Wave 4 ($b = -.02$, $SE = .06$, 95% CI [-.13, .10], $t = -.33$, $p = .745$) were not significant. Furthermore, the interaction between optimism about the future and political ideology were also found to be non-significant ($b = .04$, $SE = .05$, 95% CI [-.04, .13], $t = 1.05$, $p = .295$). Lastly, the three-way interaction between political ideology, optimism about the future, and wave to test SIMSA's optimism about the future hypothesis was not consistently significant across waves (See H5A). At Wave 2 ($b = -.05$, $SE = .06$, 95% CI [-.15, .06], $t = -.82$, $p = .410$) and Wave 4 ($b = -.06$, $SE = .06$, 95% CI [-.17, .06], $t = -.97$, $p = .332$), the interaction term was found to be non-significant, indicating no evidence of a differential relationship between political ideology and wave on system justification due to optimism about the future. However, at Wave 3, the three-way interaction was found to be significant ($b = -.14$, $SE = .06$, $t = -2.49$, $p = .013$). This finding suggests that at this time point in comparison to Wave 1, the moderating effect of political ideology and wave on system justification depended on participants optimism about the future. Specifically, endorsing greater optimism about the future had a greater positive association with system justification for right-leaning individuals compared to left-leaning individuals during Wave 3. Interestingly, more optimistic ($OAF = 2.08$) left-leaning electoral

losers' level of system justification appeared to decrease whereas those who were less optimistic about the future ($OAF = -2.24$) appeared to increase in their levels of system justification when compared to Wave 1. This being said, left-leaning individuals who were the most optimistic did possess greater overall levels of system justification when compared to their less optimistic counterparts. Taken together, these findings contradict H5A based on SIMSA's hope for future ingroup advantage hypothesis about system justification for disadvantaged electoral losers (See Figure 5.3).

Figure 5.3

Moderating Effect of Optimism about the Future and Political Ideology on System Justification Over Time



Note. Political ideology represents right-leaning as 1 SD below and left-leaning as 1 SD above the mean. OAF = optimism about the future.

Lastly, Model 4 examined whether the motive to system-justify could override self- and group-interests among the disadvantaged by assessing whether perceptions of the election result as a threat to their way of life motivated left-leaning electoral losers to system-justify more after the election results were known (Waves 2 – 4) compared to pre-election levels (Wave 1). To test this prediction, we ran the same multilevel model as Model 2 but also included an interaction term between wave (treated as a categorical variable), political ideology, and perceived system threat in predicting system justification. Similarly to H5A, H5B could be tested using a two-way interaction, but specifying a three-way interaction allowed us to both explicitly test H5B for left-leaning electoral losers and explore patterns amongst right-leaning electoral winners.

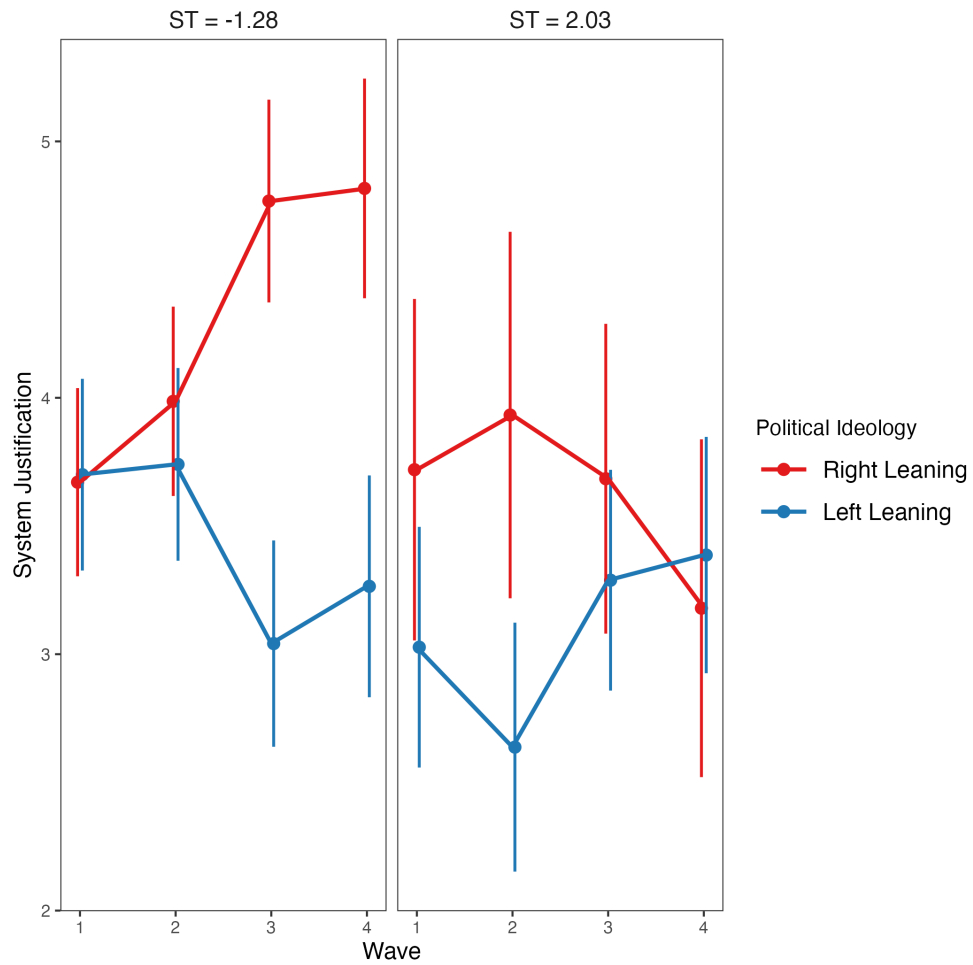
Results indicated that perceived system threat was a non-significant predictor of system justification ($b = -.10$, $SE = .06$, $95\% CI [-.21, .01]$, $t = -1.87$, $p = .062$). There was also no indication of a significant two-way interaction effect between perceived system threat and Wave 2 ($b = -.08$, $SE = .06$, $95\% CI [-.20, .03]$, $t = -1.40$, $p = .162$), Wave 3 ($b = -.005$, $SE = .07$, $95\% CI [-.13, .12]$, $t = -.07$, $p = .943$), or Wave 4 ($b = -.10$, $SE = .07$, $95\% CI [-.23, .03]$, $t = -1.56$, $p = .119$) when compared to the reference level in predicting system justification. Furthermore, the two-way interaction between political ideology and perceived system threat was not significantly related to system justification ($b = -.05$, $SE = .05$, $95\% CI [-.14, .04]$, $t = -1.06$, $p = .289$).

Lastly, the three-way interaction between Wave, political ideology, and perceived system threat was tested to examine whether the effect of wave on system justification, as moderated by political ideology, was further moderated by perceptions of system threat (See H5B). The results indicate a significant three-way interaction at Wave 3 ($b = .14$, $SE = .06$, $95\% CI [.02, .26]$, $t = 2.36$, $p = .018$) and Wave 4 ($b = .17$, $SE = .06$, $95\% CI [.05, .29]$, $t = 2.72$, $p = .007$), but not Wave 2 ($b = -.02$, $SE = .06$, $95\% CI [-.13, .09]$, $t = -.40$, $p = .289$). These interactions suggest

that the relationship between political ideology and system justification across time (wave) depends on the level of perceived system threat. Specifically, for individuals with higher perceptions of system threat, the difference in system justification scores between politically left- and right-leaning individuals became less pronounced at Waves 3 and 4 (post-election), compared to Wave 1 (pre-election). In contrast, for individuals with lower perceptions of system threat, the relationship between political ideology and system justification across waves was more pronounced. Specifically, right-leaning electoral winners who perceived the result of the election as less of a threat experienced a significant increase in their system-justifying beliefs (Waves 3 and 4), whereas left-leaning electoral losers experienced the opposite effect as the coalition took office and proposed their 100-day plan. Further support for H5B was observed as greater perceptions of system threat were associated with more positive system justification for left-leaning electoral losers but not right-leaning electoral winners at later waves when the coalition government was well established (Waves 3 and 4; See Table 5.3 and Figure 5.4).

Figure 5.4

Moderating Effect of System Threat and Political Ideology on System Justification Over Time



Note. Political ideology represents right-leaning as 1 SD below and left-leaning as 1 SD above the mean. ST = system threat.

Table 5.3
Multilevel Models Predicting System Justification Over Time

<i>Predictors</i>	Model 1		Model 2		Model 3		Model 4	
	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>
(Intercept)	4.15 *** (3.78 – 4.53)	<0.001	4.16 *** (3.78 – 4.53)	<0.001	4.10 *** (3.77 – 4.42)	<0.001	4.09 *** (3.72 – 4.46)	<0.001
Wave 2	0.06 (-0.05 – 0.17)	0.289	0.06 (-0.05 – 0.16)	0.289	0.09 (-0.02 – 0.19)	0.114	0.06 (-0.06 – 0.17)	0.321
Wave 3	0.15 ** (0.04 – 0.26)	0.007	0.15 ** (0.04 – 0.26)	0.006	0.17 ** (0.06 – 0.28)	0.003	0.14 * (0.02 – 0.25)	0.025
Wave 4	0.16 ** (0.05 – 0.28)	0.004	0.17 ** (0.06 – 0.28)	0.003	0.21 *** (0.10 – 0.32)	<0.001	0.16 * (0.03 – 0.28)	0.012
PI	-0.16 *** (-0.24 – -0.09)	<0.001	-0.11 * (-0.21 – -0.04)	0.033	-0.10 * (-0.19 – -0.01)	0.045	-0.06 (-0.16 – 0.05)	0.291
Age	0.16 ** (0.05 – 0.28)	0.006	0.16 ** (0.05 – 0.28)	0.006	0.17 ** (0.07 – 0.27)	0.001	0.16 ** (0.04 – 0.28)	0.007
Gender	-0.39 *** (-0.62 – -0.17)	0.001	-0.39 *** (-0.62 – -0.17)	0.001	-0.38 *** (-0.58 – -0.19)	<0.001	-0.36 ** (-0.58 – -0.13)	0.002
Wave 2 × PI			-0.12 * (-0.22 – -0.03)	0.034	-0.04 (-0.15 – 0.07)	0.470	-0.09 (-0.21 – 0.02)	0.123
Wave 3 × PI			-0.21 *** (-0.33 – -0.10)	<0.001	-0.10 (-0.22 – 0.01)	0.086	-0.22 *** (-0.34 – -0.09)	0.001
Wave 4 × PI			-0.16 ** (-0.28 – -0.05)	0.005	-0.09 (-0.21 – 0.02)	0.114	-0.14 * (-0.27 – -0.01)	0.029
OAF					0.42 *** (0.32 – 0.51)	<0.001		
Wave 2 × OAF					-0.03 (-0.14 – 0.08)	0.596		

Wave 3 × OAF	-0.00 (-0.12 – 0.12)	0.998	
Wave 4 × OAF	-0.02 (-0.13 – 0.10)	0.745	
PI × OAF	0.04 (-0.04 – 0.13)	0.295	
(Wave 2 × PI) × OAF	-0.05 (-0.15 – 0.06)	0.410	
(Wave 3 × PI) × OAF	-0.14 * (-0.25 – -0.03)	0.013	
(Wave 4 × PI) × OAF	-0.06 (-0.17 – 0.06)	0.332	
ST			-0.10 (-0.21 – 0.01) 0.062
Wave 2 × ST			-0.08 (-0.20 – 0.03) 0.162
Wave 3 × ST			-0.00 (-0.13 – 0.12) 0.943
Wave 4 × ST			-0.10 (-0.23 – 0.03) 0.119
PI × ST			-0.05 (-0.14 – 0.04) 0.289
(Wave 2 × PI) × ST			-0.02 (-0.13 – 0.09) 0.687
(Wave 3 × PI) × ST			0.14 * (0.02 – 0.26) 0.018
(Wave 4 × PI) × ST			0.17 ** (0.05 – 0.29) 0.007

Random Effects

σ^2	0.45	0.45	0.43	0.44
τ_{00}	1.10 _{ID}	1.10 _{ID}	0.77 _{ID}	1.02 _{ID}
ICC	0.71	0.71	0.64	0.70
N	328 _{ID}	328 _{ID}	328 _{ID}	328 _{ID}
Observations	1166	1166	1166	1166
Marginal R ² / Conditional R ²	0.078 / 0.730	0.082 / 0.736	0.211 / 0.718	0.115 / 0.734

*Note. PI = political ideology, OAF = optimism about the future, ST = system threat, * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$*

Discussion

The present quasi-experimental study examined how a major political event—the 2023 New Zealand General Election—shaped system-justifying beliefs over time. Specifically, we tested two competing theoretical perspectives. The first of which is SIMSA (Rubin et al., 2023a, 2023b) which argues that system justification primarily reflect self- and group-interest concerns, meaning both advantaged and disadvantaged individuals are more likely to endorse system-justifying beliefs when it serves their political or group interests. In contrast, SJT (Jost, 2020; Jost et al., 2023) suggests that system-justifying beliefs may sometimes work against self- and group-interest, particularly among disadvantaged groups, because of internalized ideology to defend the status quo from threat or change. The election provided an ideal natural quasi-experimental context to test these ideas. One political bloc—politically right-leaning individuals—was in the process of gaining political power, aligning with a self- and group-interest motivation to system-justify. In contrast, the opposing bloc—politically left-leaning individuals—was losing political power. This raised questions about how system-justifying beliefs change over time in response to the 2023 New Zealand election, how these changes differ for electoral winners versus losers, does optimism about the future or perceived system threat best explain system-justifying beliefs for electoral losers, and whether system justification is a stable ideological disposition that coincides with conservative ideologies over those with more liberal ideological beliefs.

Temporal Dynamics of System Justification

We first wanted to assess the effect of the various stages of the election process on individuals' system-justifying beliefs over time and if individuals will rationalize, justify, legitimize political change as it becomes more certain and inevitable (i.e., pre-decision compared

to pre-implementation and post-implementation stages of the election). Research on the temporal dynamics of system-justifying beliefs supports the idea that system justification tends to increase in response to election processes, particularly as anticipated political realities become current. Laurin (2018) demonstrated that rationalization processes are heightened as anticipated realities, such as the election of a new leader, become increasingly imminent and concrete. Similarly, Friesen et al. (2019) found that system-justifying beliefs often intensify in contexts where system stability is salient or perceived to be under threat due the election of a new political leader. Our results support and refine these insights by illustrating how system justification evolves across distinct stages of the election process as argued by both Laurin (2018) and Friesen et al. (2019). Specifically, we found that when controlling for political ideology, the samples system-justifying beliefs remained relatively stable during the pre-decision and pre-implementation stage (i.e., Waves 1 and 2), but significantly increased during the post-implantation stages (Waves 3 and 4) following the coalition government's (i.e., National, ACT, NZ First) formation and the release of their 100-day plan. This pattern suggests that while the anticipation of political change does not necessarily elicit increased system justification, the formalization and institutionalization of new leadership may activate stronger rationalization processes in the form of system justification. These findings build on prior research by showing that system justification may not uniformly increase in response to all stages of an electoral process but rather peaks when the change in leadership is fully implemented, concretized, and unavoidable (See Figure 5.1).

System Justification Among Electoral Winners and Losers

In the next model of our analysis (See Model 2), we opted to test whether those on the political right endorsed greater levels of system justification when compared to their political left-leaning counterparts regardless of who was in power at the time (Jost, 2021; Jost et al.,

2003b). Furthermore, we wanted to see if those on the more advantage electoral winning side of the election (i.e., politically right-leaning individuals) levels of system justification increased over time when compared to their Wave 1 levels, since their ego, group, and system justification motives were in alignment. Lastly, we wanted to assess which of competing claims between SJT and SIMSA regarding the disadvantaged electoral losers (i.e., politically left-leaning individuals) level of system justification would garner the greatest support. More specifically, would electoral losers system justification decrease since their self- and group-interest motivations were incongruent with system justification in accordance with SIMSA (Owuamalam et al., 2016b; Rubin et al., 2023a, 2023b), or would the threat of social and political change motivate them to system-justify even though it went against their self-and group-interests (Jost, 2020, 2021; Kay et al., 2009).

The findings from this analysis provided staunch support for both H2 and H3, underscoring the role of political ideology and situational factors in shaping system-justifying beliefs. Consistent with SJT, right-leaning individuals demonstrated significantly higher levels of system justification compared to their left-leaning counterparts, regardless of which political bloc was in power. This result aligns with prior research suggesting that conservatives are motivated to rationalize and legitimize existing social, political, and economic arrangements, which serves to preserve a sense of stability and order (Jost, 2021). Furthermore, the within-person analyses confirmed that individuals on the winning side of the election (right-leaning individuals) experienced an increase in system justification after the election results were known. This increase was observed as the election unfolded, highlighting how system-justifying motives are amplified when ego, group, and system interests align. These findings illustrate the dynamic

nature of system-justifying beliefs, particularly for advantaged groups, as they affirm their position within the newly established political hierarchy (Jost, 2020; Owuamalam et al., 2019).

The results regarding left-leaning individuals, who represented the ideologically disadvantaged electoral losers, provided greater support for H4B than H4A. Contrary to SJT's system-threat based argument that threats to the social and political status quo may motivate individuals to defend the system from threat and critique by increasing their levels of system justification (Kay & Jost, 2003; Kay et al., 2009), disadvantaged individuals' levels of system justification did not increase following the election result. Instead, consistent with the self- and group-interest arguments of SIMSA, their system justification levels decreased after learning their political ideological side had lost the election and continued to decline as the new right-leaning coalition government took power. While this pattern of decline was inconsistently statistically significant, it still suggests that, for electoral losers, system justification is less likely to occur when ego, group, and system motives are misaligned. Interestingly, there was evidence of a modest rebound in system justification among left-leaning individuals after the right-leaning coalition government had become well established (Wave 4). While this increase did not fully restore system justification to pre-election levels, it may reflect a gradual adaptation to the new political reality, as individuals recalibrate their beliefs to align with the emerging status quo (Laurin, 2018). These results emphasize the limits of system justification under conditions of ideological disadvantage and underscore the situational variability in the system-justifying motive, with the self-group-interest perspective of SIMSA offering a more compelling explanation for this pattern than the system-threat argument of SJT (See Figure 5.2).

Optimism and System Justification

Turning to Model 3, we wanted to explicitly test SIMSA's hope for future ingroup advantage hypothesis (Rubin et al., 2023b) by adding an interaction term between political ideology, wave (time treated as categorical), and optimism about the future to assess whether those who were more optimistic about the future (versus less) would possess greater levels of system justification over time (See H5A). The results for H5A provided mixed evidence regarding SIMSA's hope for future ingroup advantage hypothesis. While optimism about the future was positively associated with higher system justification overall, the predicted moderating effects of optimism about the future on the relationship between political ideology, wave, and system justification were largely unsupported. Although a significant three-way interaction emerged between wave, political ideology, and optimism at Wave 3, it was contrary to SIMSA's predictions in that optimism better explained the substantial increase in system justification for ideologically right-leaning advantaged electoral winners, but not for ideologically left-leaning disadvantaged electoral losers. Interestingly, while the findings indicated that the most optimistic left-leaning electoral losers exhibited higher levels of system justification than their less optimistic counterparts, their system justification paradoxically decreased over time (See Figure 5.3). This pattern further diverges from SIMSA's proposition that optimism about the future helps disadvantage individuals cope with their current disadvantageous position by investing in a status quo that ought to reward them with a more positive social identity in the future in turn leading to greater system justification (Owuamalam et al., 2019).

System Threat and System Justification

In Model 4, we aimed to explore whether perceptions of systemic threat in response to the election could explain why left-leaning electoral losers might engage in heightened system

justification, even when this appears contrary to self- and group-interests. The findings provided partial support for SJT's systemic threat hypothesis (H5B), indicating that left-leaning individuals who perceived the election as a greater threat to their way of life exhibited elevated system justification at Waves 3 and 4 when the new right-leaning coalition was well established. However, this effect was not evident immediately post-election (Wave 2), suggesting that the temporal dynamics of system threat may play a critical role in shaping system-justifying attitudes (Jost, 2011, 2019; Jost et al., 2017; Satherley et al., 2023).

The significant three-way interaction at Waves 3 and 4 suggests that heightened perceptions of system threat moderated the interaction between wave and political ideology in predicting system justification, leading to left-leaning individuals paradoxically becoming slightly stronger system-justifiers when compared to their right-leaning counterparts who also perceived the election result as threatening. For left-leaning individuals, this was consistent with the hypothesis that systemic threat could motivate defense of the status quo, potentially as a psychological coping mechanism to restore a sense of order and stability (Frie et al., 2024). This finding aligns with SJT's proposition that system threat enhances the motivation to justify the system when its legitimacy is in question (Jost, 2019). However, among electoral winners, greater system threat may have introduced uncertainty about whether the newly elected government will effectively uphold the status quo, leading to a weaker system-justifying response over time. Conversely, right-leaning individuals who perceived the election result as posing little to no threat experienced a stable or increasing sense of system justification post-election, which coincides with both SJT and SIMSA that ideologically advantaged individuals and groups are more likely to view the system as functioning well and feel a stronger need to system-justify.

Taken together, while these findings align with the broader theoretical argument that system threat may activate a motivation to defend existing structures, the evidence is not unequivocal. The non-significant two-way interactions involving system threat and wave and the relatively wide confidence intervals across waves suggest that these effects may be less robust or more conditional than initially hypothesized (See Figure 5.4). This calls for caution in making broad generalizations about the role of systemic threat in overriding self- and group-interests.

Strengths, Limitations, and Future Directions

We advanced the study of system justification by leveraging longitudinal data to see how election results impact the motives underlying these beliefs. Previous research has focused primarily on cross-sectional and experimental designs within nations that differ greatly in their social, ideological, and political contexts when compared to New Zealand (Sibley & Osborne, 2016). A strength of the current research is the longitudinal design centered around the 2023 New Zealand general election outcome where there was a switch from a center-leftist incumbent government (run by the Labour Party) to a center-rightist coalition government (run by the National Party) providing a useful first step identifying the dynamics of system justification as they relate to election outcomes over time. An added strength of the current study is our ability to evaluate the postulates of SJT and SIMSA within the context of a naturally occurring political event and transition of power to examine their influence on system-justifying beliefs. This approach provides ecological validity and immediate societal relevance by investigating how dynamic sociopolitical events, such as elections, shape these beliefs over time. Unlike traditional lab-based experiments, which often rely on artificial manipulations of system threat or hope for the future (e.g., exposure to hypothetical scenarios or priming tasks; see Falk & Hickman, 2009; Kay et al., 2009), our design captures the complexity and authenticity of real-world

psychological processes as they unfold in response to significant political events. This strengthens the generalizability of our findings and addresses limitations associated with more controlled but potentially “stale” experimental designs, where the scope of system threat or future-oriented hope may be restricted to hypothetical scenarios (Jost et al., 2023).

There are a few limitations of this research worth noting. First, we only used one item to assess political ideology within the New Zealand context. Although this may limit the complexity and variation of political ideology, previous research finds evidence for the usage of a single-item continuum from left to right to capture these beliefs (Jost, 2021). However, future studies would benefit from a more nuanced assessment of political ideology from a social, general, and economic dimension. Second, the study is limited by the construct validity of several measures. For instance, optimism about the future was assessed using items focused on general optimism regarding one’s personal future and New Zealand’s future. While these items provide valuable insights, they do not directly tap into the construct of optimism about future status or advantage theorized within SIMSA (Rubin et al., 2023b). Similarly, system threat was assessed using a single item measuring the extent to which participants felt the election result would threaten their way of life. While this measure captures elements of perceived status quo threat, it does not explicitly assess systemic threat in the broader sense of a threat to the legitimacy or stability of the social/political system. Third, this study operationalized being on the losing (versus winning) side of an election as an indicator of ideological disadvantage. While this interpretation aligns with some theoretical perspectives, it is important to acknowledge that some readers may contest the appropriateness of this operationalization. Alternative interpretations, such as differences in policy preference or partisan disappointment, could also influence these results. Fourth, the current study is limited to a relatively small sample

responding to a single election cycle within a single cultural context. This restricts the generalizability of the findings, as different political and cultural contexts may produce varying patterns of results. Lastly, the present study was not preregistered, and hypotheses were formed during the process of data analysis. However, our hypotheses were not designed to accommodate the results (Rubin, 2017) and indeed were contradicted by several aspects of our findings.

Conclusion

Across our analyses, we found strong evidence that both individual political ideology and sociopolitical context meaningfully interact to shape system-justifying beliefs over time. For example, while politically right-leaning individuals consistently endorsed higher system justification across all stages of the election process, left-leaning individuals displayed more variable responses, with decreases in system justification observed following electoral loss but partial rebounds as the new government solidified its position. These findings underscore the importance of considering both ideological and temporal factors in understanding how individuals rationalize and legitimize social and political systems (Jost, 2021; Valdes & Williams, 2025). Within the socio-political context of New Zealand, these processes are shaped by the nation's unique multi-party system and mixed member proportional voting structure (Karp, 2006; Sibley & Osborne, 2016). By requiring political parties to form coalitions to govern, the system pushes political elites and their supporters to seek common ground, inadvertently reducing polarization and creating conditions where ideological divides may soften, as Satherley et al. (2020) observed.

Critically, these findings point to the complementary strengths of both theoretical perspectives while also highlighting key areas of divergence. SJT offers compelling insights into the role of ideology and system-level threats in amplifying system-justifying beliefs, particularly

among ideologically disadvantaged individuals or under conditions of perceived instability. Conversely, SIMSA provides a nuanced framework for understanding how self- and group-interest dynamics influence system justification, particularly among those who are ideologically disadvantaged. This applied approach to understanding these theoretical frameworks advances the field by illustrating how system justification operates as a dynamic psychological mechanism, shaped not only by stable ideological predispositions but also by situational, temporal, and socio-contextual factors.

Ethics Statement

This study was deemed to be low risk according to the criteria of Massey University. A low-risk notification was therefore lodged and accepted by the Research Ethics Committee at Massey University (4000027804). The study was conducted in accordance with the Massey University code of ethical conduct for research, teaching and evaluations involving human participants. All participants provided informed consent by reading an information sheet and then answering a consent item. Participants had the right to withdraw from the study at any time.

Conflict of Interest Statement

The author(s) declared no potential conflicts of interests with respect to the research, authorship, and/or publication of this article.

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Chapter 6: General Discussion and Conclusion

Aims of the Thesis

This thesis investigated the competing theoretical perspectives on system-justifying processes. These perspectives were organized into two broad camps to facilitate theoretical integration and comparison. The first camp included self- and group-interest-based perspectives, such as social identity approach, Social Dominance Theory, and the Social Identity Model of System Attitudes; it argues that self- and group-interests largely coincide with system-justifying beliefs held by both the advantaged and disadvantaged. The second camp is from the perspective of System Justification Theory, which conceptualizes system justification as a belief system that arises from a system-justification motive in which its strength can vary due to both situational and dispositional factors (Jost, 2019). Contrary to the first camp, System Justification Theory argues that system-justifying beliefs can at times go against one's self- and group-interests—particularly for the disadvantaged (Jost, 2020). The aim of this thesis was to test these competing perspectives and to clarify the conditions under which one theoretical framework proved more accurate than the other regarding system-justifying processes.

Study 1 tested System Justification Theory's status-legitimacy hypothesis, attempting to replicate and extend the work of Li et al. (2020b) to assess the accuracy of System Justification Theory's claims in a cross-cultural two-country comparison of the United States and China (Study 1; Valdes et al., 2023). Study 2 was a preregistered omnibus assessment of these competing perspectives on system justification using a large-scale cross-cultural sample to pinpoint how the postulates of System Justification Theory, Social Dominance Theory, the social identity approach, and the Social Identity Model of System Attitudes hold up [and vary] across cultures due to cultural moderation (Study 2; Valdes et al., 2024b). Study 3 assessed one of the most robust findings that has consistently contradicted System Justification Theory's status-

legitimacy hypothesis: the positive association between subjective SES and system justification. I proposed that this contradictory evidence regarding System Justification Theory's status-legitimacy hypothesis was due to the palliative effects of system justification [as proposed by System Justification Theory], and that the relationship between subjective SES and system justification is likely to be bidirectional, due to the mediating effect of life satisfaction (Study 3; Valdes & Williams, 2025).

Study 4 examined how system-justifying beliefs change over time in response to the stages of New Zealand's 2023 general election. This final study investigated how changes in the desire to system-justify differed between those on the winning (right-leaning) and losing (left-leaning) sides of the election, and whether these patterns aligned more closely with System Justification Theory—or were instead malleable to self- and group-interests, as proposed by the Social Identity Model of System Attitudes. To further expand upon this investigation, Study 4 tested two moderator-based competing predictions made by System Justification Theory and the Social Identity Model of System Attitudes in hopes of explaining why ideologically disadvantaged electoral losers might continue to system-justify after the election. The first moderator, optimism about the future, was grounded in the self- and group-interest perspective of the Social Identity Model of System Attitudes. The second moderator, system threat, was derived from System Justification Theory (Valdes et al., 2025b, 2025c).

Summary of Findings and Empirical Contributions

Across the four studies of this thesis, system justification was found to align more consistently with self- and group-interests as argued by the social identity approach, Social Dominance Theory, and the Social Identity Model of System Attitudes, when compared with the predictions of System Justification Theory. Higher subjective and objective SES generally

positively predicted stronger system justification, suggesting that individuals with greater economic and social resources are more likely to perceive the system as fair and legitimate. Political alignment with the ruling government also consistently predicted higher system justification, demonstrating that both left- and right-leaning individuals justify the system more when it aligns with their ideological interests. These findings challenge System Justification Theory's claim that disadvantaged individuals are sometimes the greatest system-justifiers (Jost & Banaji, 1994) and instead supports the competing perspectives that emphasize that system-justifying beliefs primarily occur due to self- and group-interests.

However, there were important socio-cultural contexts in which System Justification Theory's ideological, situational, and dispositional claims found support. In China and other non-WEIRD societies, lower objective SES individuals sometimes exhibited greater system justification, suggesting that cultural norms, hierarchy-maintenance mechanism, and structural constraints shape these beliefs in ways that can override material self-interests (Lü, 2014), consistent with System Justification Theory's theorizing. Furthermore, societies with greater levels of inequality were associated with greater system justification, although this was especially pronounced in contexts with medium-to-high levels of objective social mobility – suggesting that structural opportunities for advancement may partially align with self- and group-interest motives, even as the broader pattern is consistent with System Justification Theory's emphasis on legitimizing inequality. During longitudinal analyses in New Zealand, politically right-leaning individuals appeared to possess greater levels of system justification than those on the left, regardless of the ideology of the government in power, supporting System Justification Theory's prediction that dispositional ideological factors independently promote system-supportive beliefs. Additionally, system threat emerged as a key moderator among the

disadvantaged politically left-leaning electoral losing during New Zealand's 2023 general election, demonstrating that ideologically disadvantaged individuals justified the system when they perceived political instability as a threat to one's way of life, consistent with System Justification Theory's proposition that threat can activate system-justifying motives even among the disadvantaged (Jost, 2020).

Overall, these findings contribute to the broader debate about system-justifying processes by demonstrating that its expression is dynamic and context-dependent. The evidence across the four studies suggests that self- and group-interest-based perspectives generally provide a more accurate explanation for system justification when compared to System Justification Theory's theoretical and empirical arguments. However, the results also highlight conditions under which ideological factors, cultural context, and perceived threat counteract self- and group-interests to sustain system justification. These insights call for a refinement of existing theories on system justification to better integrate self- and group-interest dynamics while accounting for ideological, situational, dispositional, and cultural influences.

Theoretical Contributions: Refining the cross-cultural and longitudinal framework for system justification processes

This thesis offers a comprehensive test of the competing perspectives of system justification. Drawing on findings from the four studies, it demonstrates how system justification operates predominantly through self- and group-interests, but on rare occasions, it can contradict those interests when driven by situational and dispositional motivations to preserve perceptions of status, stability, and political legitimacy. The theoretical contributions of this thesis are organized into five key subsections: (1) socioeconomic perceptions shape ideological beliefs, (2) system justification and political change, (3) ideological and cultural dimensions of system

justification, (4) integration of ideological and dispositional forces, and (5) the interplay of system justification, status, and political ideology across studies.

The Role of Socioeconomic Perceptions in Shaping Ideological Beliefs

One of the central contributions of this thesis lies in refining our understanding of the relationship between subjective SES and system justification. Across multiple studies, the findings indicate that greater subjective SES is associated with greater system justification both cross-culturally and over time—a relationship that was found to be mediated by life satisfaction across 42 societies cross-sectionally. While this finding contradicts System Justification Theory's status-legitimacy hypothesis, it nevertheless points to a cross-culturally replicable association between subjective SES, psychological well-being, and system justification—highlighting the potential pathway through which perceived status may inform ideological beliefs via its link with life satisfaction (O'Brien & Major, 2005).

With the aim to replicate and expand upon the cross-cultural mediational findings from the 42 nations study, Study 3 challenged the traditionally assumed unidirectional pathway in which greater subjective SES leads to greater system justification (Brandt et al., 2020; Vargas-Salfate et al., 2018b). Using a four-wave longitudinal bidirectional mediational Cross-Lagged Panel Model (CLPM), Study 3 tested the reciprocal dynamics among subjective SES, life satisfaction, and system justification. The results revealed that system justification indirectly predicted increases in subjective SES over time via greater life satisfaction—a pattern not observed in the reverse direction. These findings suggest that the mediational pathway may operate in the opposite direction than traditionally theorized, offering a refined perspective on system justification's palliative effects. Rather than being a consequence of perceived socioeconomic advantage, system-justifying beliefs may gradually reinforce such perceptions

through their influence on psychological well-being. This interpretation is consistent with recent meta-analytic findings suggesting that system justification, on average, exerts small but positive palliative effects on psychological well-being (Vargas-Salfate et al., 2024).

When re-analyzing this bidirectional model using more robust longitudinal techniques—namely, the Random-Intercept Cross-Lagged Panel Model (RI-CLPM) and the Stable Trait, Autoregressive Trait, State (STARTS) model (see Tables S7 onwards in [Appendix 2](#))—the previously observed palliative effect during CLPM was no longer present at the within-person level. These robust longitudinal models disaggregate stable between-person differences from dynamic within-person fluctuations, allowing for a more precise test of causal processes over time. The absence of within-person effects suggests that the observed associations between subjective SES, life satisfaction, and system justification may be primarily driven by stable between-person differences rather than intraindividual change. In other words, people who generally perceive themselves as higher in SES also tend to report greater system justification and life satisfaction—but shifts in these perceptions within a person over time do not appear to causally influence each other in the same way.

This discrepancy between traditional CLPM findings and more longitudinally robust RI-CLPM/STARTS results underscores a broader point: advancing psychological theory requires distinguishing between processes that operate at the between-person level and those that reflect true within-person change. While traditional cross-lagged models conflate these sources of variance, contemporary approaches compel greater theoretical precision about the level at which a process is expected to operate. Future theorizing and empirical work on the relationship between socioeconomic perceptions and ideological beliefs must take this distinction seriously to avoid overgeneralized or spurious interpretations of longitudinal data.

System Justification and Political Change

The role of system justification in response to political transitions is another key contribution of this thesis. Investigating the dynamics of system justification during the 2023 New Zealand General Election revealed how system-justifying beliefs shift in response to political change. In contrast to previous research that suggested that system justification functions as a coping mechanism during political instability (Jost, 2019; Jost et al., 2004; Laurin, 2018), this thesis found that system-justifying beliefs were most pronounced after political transitions were formalized—which suggests that system justification is contingent not just on the anticipation of political change but also on its institutionalization into formal governance structures. By highlighting the critical juncture of formal governmental leadership transitions, this thesis refines our understanding of the temporal dynamics of system justification, indicating that political change must be perceived as stable before individuals rationalize and justify the new system.

Ideological and Cultural Dimensions of System Justification

Another significant contribution of this thesis lies in its exploration of the cultural and ideological dimensions of system justification. This thesis revealed two key findings that have important theoretical implications for understanding system-justifying processes and cross-cultural research more broadly.

The first finding involves the widespread belief in meritocracy—a key ideological tool for system justification that is particularly prominent in developed nations (Hofstede, 2011). Meritocracy suggests that people who acquire social and economic advantages do so based on their merit, skills, and competencies (Son Hing et al., 2011). Cross-cultural evidence from this thesis found that countries with higher levels of inequality and objective social mobility

possessed greater levels of system justification (e.g., United States, United Kingdom, Italy, Singapore, Colombia, Hong Kong, China, Argentina, Malaysia, and Russia); each of these countries have also been found to value meritocratic ideals (Hofstede, 2011). The ideological belief system of meritocracy serves as an easily accessible justification for why [disadvantaged] individuals may still have hope for upward social mobility, as the system is perceived as legitimate and permeable (Owuamalam et al., 2019; Rubin et al., 2023a). This finding is consistent with System Justification Theory's arguments regarding the role of meritocracy as a cultural value that may implicitly help to maintain systemic legitimacy; however, given the correlational nature of the data, this interpretation remains tentative. On the other hand, it also reveals a limitation in this framework, particularly in societies where democratic institutions do not necessarily support high civil liberties – yet still exhibit high average levels of system justification (e.g., China and Russia). Here, the Self-Interest Acquiescence Model (Valdes et al., 2023) provides a useful lens to understand why individuals may system-justify even in societies with limited political and social cognitive alternatives.

The second finding regarding the ideological and cultural dimensions of system justification concerns the negative association between objective SES and system-justifying beliefs, observed *exclusively* in non-WEIRD societies (e.g., Peru, Panama, Venezuela, Pakistan, Morocco, South Africa, and Kenya). In these contexts, individuals with lower objective SES were found to be more likely to endorse system-justifying beliefs, supporting System Justification Theory's argument that disadvantaged individuals sometimes possess the strongest motive to defend, justify, and legitimize the status quo (See Table S2 and Figure S1 in [Appendix 1](#); Jost et al., 2004). This finding underscores the importance of expanding status-legitimacy theorizing beyond WEIRD perspectives. It is consistent with recent research suggesting that

system justification may be more prevalent in societies where political and civic structures provide few avenues for dissent or change (Owuamalam et al., 2023b). While this may include countries with lower levels of civil liberties and democratic participation (e.g., Venezuela and Morocco), it may also reflect other sociopolitical constraints – such as economic dependence on state institutions, clientelism, or historical legacies of authoritarianism – that limit perceived alternatives to the status quo. To explain these patterns, the Self-Interest Acquiescence Model (Valdes et al., 2023, 2024b) offers a culturally grounded explanation, arguing that individuals in such contexts may system-justify due to a perceived lack of viable alternatives rather than genuine endorsement of system legitimacy. Other work has argued that system justification in the Global South represents an aspirational mindset associated with global consciousness (Choi et al., 2025).

This thesis underscores the need for an integrative model that combines cultural and ideological factors, such as the Liberal Choice Producing Dissonance Model and the Self-Interest Acquiescence Model, to more accurately predict how system-justifying ideologies manifest across diverse societies. This is of particular importance when attempting to understand why system-justifying beliefs go against self- and group-interests.

Integration of Ideological and Dispositional Forces

This thesis offers an important theoretical contribution to the debate between System Justification Theory and the Social Identity Model of System Attitudes by testing their competing arguments. Observing system-justifying beliefs over the course of the election revealed that electoral winners and losers typically justified the system in line with their self- and group-interests. However, both System Justification Theory and the Social Identity Model of

System Attitudes propose specific moderators to explain why disadvantaged group might also continue to justify the system.

To test these accounts, this thesis examined whether electoral losers would justify New Zealand's social and political system after the election due to an overarching hope for future in-group advantage—a prediction derived from the Social Identity Model of System Attitudes. Contrary to this expectation, results showed that continued system justification after the results of the election by electoral losers was more strongly predicted by perceived threat to their way of life—consistent with System Justification Theory. This finding suggests that system justification is not merely an expression of self- or group-interest but also can be driven by ideological motives activated in response to perceived system threat, especially among those who are disadvantaged. In contrast, ideologically advantaged electoral winners (i.e., those on the political right) exhibited a more dispositional tendency to justify the system, even when their preferred party was not in power. This supports System Justification Theory's claim that conservatism reflects a form of motivated social cognition (Jost et al., 2003b).

The Interplay of System Justification, Status, and Political Ideology Across Studies

The four studies within this thesis help to highlight the dynamic nature of system justification. Studies 1 and 2 highlight the cross-cultural and ideological dimensions of system justification, demonstrating the divergent role different conceptualizations of status have on system-justifying beliefs. Furthermore, through the investigation of cultural moderation in Study 2, this thesis was able to uncover the ways in which system justification largely coincides with the self- and group-interest arguments of the social identity approach, Social Dominance Theory, and the Social Identity Model of System Attitudes. However, this thesis also was able to demonstrate the ways in which system-justifying beliefs go against these interests within specific

cultural contexts; therefore, providing slight quantified support for System Justification Theory's arguments (Jost et al., 2017).

Study 3 refines our understanding of the relationship between system justification and subjective SES, illustrating how system justification can weakly reinforce status perceptions over time by bolstering life satisfaction in accordance with the palliative effects hypothesis of System Justification Theory (Jost & Hunyady, 2003, 2005). Study 4 contributes a nuanced understanding of how political context and ideological alignment influences system justification, revealing how individuals justify societal system in response to political change that is perceived as a threat to one's way of life.

Taken together, this thesis contributes to the literature by showing how system justification functions as both a situational and dispositional belief system. It reveals that system-justifying beliefs not only stabilize perceptions of status and legitimacy but also helps to preserve the ideological status quo across different political and cultural contexts. By examining system justification through a combination of cross-cultural and longitudinal lenses, this thesis provides an integrated theoretical framework that explains how system justification often aligns with self- and group-interests (as argued by the social identity approach, Social Dominance Theory, and the Social Identity Model of System Attitudes), while also identifying the conditions under which it diverges from these interests across individuals, groups, and societies (as System Justification Theory argues).

Societal Relevance, Practical Implications, and Action Recommendations

This thesis offers insights into contemporary societal challenges, such as rising political polarization, democratic backsliding, and economic inequality (Gu & Wang, 2022; Rau & Stokes, 2025). Across the globe, nations are facing ideological battles over the legitimacy of

political institutions, economic systems, and social hierarchies—tensions that manifest in movements arguing for either progressive social change or for the preservation of a traditional status quo (Carothers & O’Donohue, 2019). These struggles are evident in the rise of right-wing populism, increasing skepticism toward democratic institutions, and widening socioeconomic disparities (Rodrik, 2021, Valdes et al., 2025a 2025d). Understanding system justification processes is essential to explaining why individuals and groups sometimes support the status quo even when it appears to contradict their self- or group-interests.

This thesis sheds light on how system-justifying beliefs are shaped by the interaction of ideological, economic, dispositional, and cultural factors, with implications for global political trends. For instance, in societies with high economic inequality, belief in meritocracy serves as a psychological buffer, reinforcing the perception that mobility is attainable, and that the system is fair (Horberg et al., 2013; Wiederkehr et al., 2015). This helps explain why populist authoritarian leaders often invoke system-justifying narratives to maintain political legitimacy, framing societal hierarchies as natural or justified (Jost et al., 2017). In other contexts where political legitimacy is actively contested—such as the United States post-2020 election and the 6th of January Capitol insurrection (Frye, 2024), Brexit-related turmoil in the UK, or political divisions surrounding Israel and Palestine—system justification processes help explain why some citizens remain committed to democratic institutions, even as trust in specific political actors declines (Davidson & Satta, 2021). These findings have important implications for understanding the resilience and fragility of democratic governance. They suggest that system-justifying beliefs can serve a stabilizing function by preserving public adherence to democratic norms and institutions during crises of leadership or partisan conflict—potentially delaying mass disengagement or radicalization, but also potentially impeding needed structural reforms.

A crucial contribution of this thesis is its cross-cultural approach, which highlights both the strengths and limitations of applying Western-developed theories—such as System Justification Theory—to non-WEIRD contexts (Henrich et al., 2010), where distinct political, cultural, and historical factors may shape the psychological processes underpinning system legitimacy. In non-WEIRD societies, where political and economic constraints limit cognitive alternatives to the status quo, system justification may take different forms, shaped by local histories, societal hierarchies, and state propaganda (Cichocka & Jost, 2014; Kus et al., 2013; Liu & Hilton, 2005; van der Toorn et al., 2010, 2011). For instance, in more authoritarian contexts, system-justifying beliefs may be reinforced through socialization and state-controlled narratives rather than through ideological endorsement of meritocracy or democracy (Nugent, 2020). Recognizing these variations is vital for developing policies that address political discontent and systemic inequalities in ways that are contextually appropriate.

While this research primarily advances theoretical debates, its findings offer several practical implications and action recommendations for policymakers, activists, and institutions seeking to foster social change.

Addressing System-Justifying Beliefs in Public Discourse

Public messaging campaigns that directly engage with system-justifying narratives – such as the belief in meritocracy—have been shown to increase public awareness of structural inequality and reduce support for discriminatory policies (Horberg et al., 2013; Henriksson, 2024; Niederdeppe et al., 2023). Rather than focusing solely on calls for redistribution, such efforts may be more effective when they highlight the systemic barriers to social mobility that persist despite individual effort. This strategy has proven useful in addressing racial and gender

disparities (Braveman et al., 2022; Podreka et al., 2024) and could be adapted to challenge misconceptions surrounding class, economic, political, or viewpoint inequalities more broadly.

Enhancing Political Legitimacy in Democratic Societies

Given the rising distrust in democratic institutions worldwide (Butzlaff & Messinger-Zimmer, 2020; Carothers & O'Donohue, 2019; Cologna et al., 2025), governments should prioritize reforms that increase both the responsiveness and perceived fairness of political systems. This includes increasing transparency in electoral processes, reducing economic disparities that fuel resentment, and creating space for political participation that extend beyond elite-controlled structures. Recognizing that political legitimacy is not just about institutions but also about the public's perceived fairness of the system is crucial to preventing democratic erosion (Leung, 2022).

Integrating Cross-Cultural Perspectives into Policy Design

Policymakers should be aware that strategies for addressing system justification need to be tailored to cultural and political contexts. For instance, interventions aimed at reducing inequality or promoting social change in highly individualistic societies (e.g., framing inequality as a violation of personal autonomy) may not be effective in more collectivistic cultures. In collectivistic contexts, interventions that emphasize group-based fairness and social responsibility (such as policies aimed at improving communal welfare or enhancing solidarity through global consciousness) may resonate more strongly (Choi et al., 2025; Kus et al., 2013; Owuamalam et al., 2023a; van der Toorn et al., 2010; Zhang et al., 2024). Recognizing these cultural differences is essential to designing policies that effectively address inequality and resonate with diverse populations.

Reflections on System Justification and Societal Change

As political systems around the world face growing pressures from economic instability to rising authoritarianism, understanding system justification is more critical than ever (Buarque, 2024; Parcon, 2021; Slobodchikoff & Tandon, 2022). The resilience of system-justifying beliefs, even in the face of political, social, or economic turmoil, underscores the need for strategies that address both the psychological and structural factors that sustain inequality and legitimacy. The case of the 2023 New Zealand General Election, for example, illustrates how political change influences system justification over time, mirroring patterns observed in Brazil, the Philippines, India, and the United States, where dissatisfaction with specific political institutions coexists with continued support for the overarching social and political system (Jost, 2020, 2021).

By refining our theoretical understanding of system justification through cross-cultural and longitudinal research, this thesis offers vital insights into how political and systemic legitimacy is upheld, challenged, and reshaped in the modern world. These findings not only contribute to academic debates but also have real-world implications for addressing the pressing political challenges of our time.

Limitations and Directions for Future Research

While the individual studies within this thesis have their own study-specific limitations (discussed in their respective chapters), this section focuses on broader limitations that pertain to the thesis as a whole. These limitations primarily concern the theoretical scope, methodological constraints, and generalizability of findings. Additionally, these considerations point to promising avenues for future research.

Limitations of the Thesis

One overarching limitation of this thesis is the lack of a previously well-developed longitudinal theoretical framework for understanding how system justification evolves over time.

While System Justification Theory has been extensively tested using cross-sectional and experimental designs, there is limited theorization on how system justification should fluctuate or stabilize across different timeframes and socio-political contexts. This is particularly relevant when assessing how self-, group-, and system-interests shift. This lack of longitudinal theorization constrained the ability of this thesis to make strong claims about short- and long-term system-justifying processes.

A related methodological limitation concerns the temporal resolution of longitudinal data. While the studies in this thesis included cross-lagged panel analytical strategies and a quasi-experimental longitudinal approach, the time intervals between waves were relatively long (e.g., 1-month) given that cognitive and affective mechanisms influencing systemic perceptions may operate on much shorter timescales (Kuiper & Ryan, 2018). Therefore, this thesis may have missed short-term fluctuations in system justification following salient socio-political events that were related to the 2023 New Zealand general election (e.g., political media reporting, political scandals, political protests, etc.). Additionally, this thesis used the brief version of the general system justification scale, which involved the removal of two reverse-coded items as well as an item that taps national attachment, due to cross-cultural interpretability and measurement equivalence challenges in previous cross-cultural work (Vesper et al., 2022). Nonetheless, this may have inadvertently introduced acquiescence bias into participants' responses to the system justification items.

While this thesis included a large-scale cross-cultural component, the number of countries used in Study 2 was relatively limited for robust multilevel modeling. This restriction may have reduced the statistical power to detect meaningful cross-cultural moderation effects, particularly regarding country-level ideological and economic indicators (e.g., economic

inequality and civil liberties). Relatedly, the measurement of political ideology in some studies was simplified to a single left-right continuum, which may not fully capture ideological complexity across cultures. Furthermore, this thesis relied on observational survey data, which is susceptible to social desirability issues, especially when assessing polarizing social, political, and systemic beliefs (Krumpal, 2013).

Studies 3 and 4 within this thesis were constrained by the challenges of studying system justification within the socio-political context of New Zealand. The relatively low levels of political polarization and the coalition-based government structure may have attenuated some of the expected system justification dynamics associated with electoral outcomes. While this provided an opportunity to test the competing perspective of system justification outside of highly polarized environments, future research should explore how system justification functions during the general election cycle in more politically polarized settings. Lastly, although quota sampling was used to attempt to recruit a demographically representative New Zealand sample via Prolific for the analyses in Chapters 4 and 5 (Study 3 and 4, respectively), the platform had a limited number of New Zealand participants at the time, which constrained the overall sample size. To address this limitation and bolster the statistical power of the longitudinal analytical techniques within these studies, data collection was extended to include an additional wave.

Directions for Future Research

Given these limitations, future research can build on this thesis in several key areas.

Methodological advancements

Future studies should aim to develop a longitudinal theoretical framework that models how system justification evolves over time in response to shifting self- and group-interests. One promising direction involves using *intensive longitudinal designs* (e.g., daily or weekly

assessments; Bolger & Laurenceau, 2013; Hamaker & Wichers, 2017) to capture short-term fluctuations in system justification in response to political events or personal experiences. Such designs would also allow researchers to more rigorously evaluate the palliative effects hypothesis—that system justification may enhance psychological well-being in the short term, but not necessarily in the long run. A second avenue involves examining *long-term trajectories*, investigating how system-justifying beliefs unfold over years or decades, particularly during major societal transitions such as regime change, economic crisis, or large-scale protest movements. Third, future studies should employ *longitudinal experimental interventions* (Farrington et al., 2009) to examine how sustained exposure to socio-political information, threat cues, or system-supportive narratives shapes individuals' system justification trajectories over time. Finally, *cross-cultural research* remains essential. This includes expanding the range of societies studied, particularly those that are politically or economically underrepresented, and using larger, more diverse country samples to improve the robustness of cross-cultural inferences. Incorporating multidimensional measures of political ideology (e.g., differentiating between social, economic, and general dimensions) will also enhance precision in capturing ideological variation across cultural contexts.

Addressing Theoretical and Methodological Disputes

The study of system justification remains a contested area, with ongoing debates about its theoretical underpinnings and empirical robustness (Jost, 2024; Jost et al., 2022, 2023; Rubin et al., 2023a, 2023b). To address these challenges, the field would benefit from encouraging researchers with competing theoretical perspectives on the motivational bases of system justification—such as the self- and group-interest accounts derived from the social identity approach, Social Dominance Theory, and the Social Identity Model of System Attitudes, versus

System Justification Theory—to engage in *adversarial collaboration* with pre-registered competing hypotheses (Ceci et al., 2024). The benefits of such an approach include fostering mutual understanding, enhancing transparency, and generating more decisive empirical tests of rival explanations (Clark & Tetlock, 2023). Moreover, given the contentious debate over how best to test system-justifying processes, researchers should consider adopting *registered reports* (Nosek & Lakens, 2014). This format would enable scholars to design studies from the ground up while explicitly integrating alternative methodological and theoretical assumptions. Ideally, these reports would be reviewed by proponents of both frameworks regarding system justification processes, thereby promoting theoretical and empirical rigor and reducing susceptibility to reviewer bias (Chambers & Tzavella, 2022). Lastly, future research should continue to incorporate *cumulative science approaches*, such as large-scale replications and meta-analyses, to assess the stability and generalizability of system justification effects across diverse socio-cultural contexts. These methods help establish the robustness of observed patterns, identify boundary conditions, and address publication bias—ultimately contributing to a stronger and more integrated empirical foundation for the field.

Theoretical Developments

Future research should continue refining and expanding System Justification Theory, considering emerging evidence. Future research should continue refining and expanding System Justification Theory (SJT) in light of emerging evidence that highlights both its complexity and contextual variability. One important direction is to clarify the conditions under which system justification aligns with or diverges from self- and group-interest models (Owuamalam et al., 2018b, 2019; Rubin et al., 2023b). While this thesis provides evidence that system justification is shaped by both ideological and socio-structural factors, further research is needed to specify

when and why it overrides personal or collective interests. There is also a growing need to develop an integrated framework that captures both stable, trait-like tendencies to legitimize the status quo and dynamic, state-level processes that fluctuate in response to political events or perceived threats (Jost, 2020; Kay & Friesen, 2011). Although SJT has traditionally emphasized stability and resistance to change, recent findings—including those from this thesis—suggest that system justification can be more fluid, particularly during moments of socio-political transition. Finally, future research should explore ideological asymmetries in system justification more systematically. While conservatives have often been found to justify the system more strongly (Jost et al., 2003b, 2009), there is growing recognition that liberals may also endorse system-justifying beliefs when the prevailing system reflects their values (Friesen et al., 2019; Valdes et al., 2024b, 2025d). These ideological contingencies are especially salient during election cycles and moments of ideological realignment, offering a promising avenue for theory development that takes context and political power dynamics into account.

Conclusion

This thesis set out to examine the circumstances under which individuals are most likely to engage in system justification, drawing from diverse competing theoretical frameworks and empirical approaches. Across four studies, this thesis provided a multifaceted analysis of the role of status, ideology, and cultural context in shaping system-justifying beliefs. By integrating cross-cultural, longitudinal, and quasi-experimental data, the findings challenge assumptions about the universality and rigidity of System Justification Theory, emphasizing the interplay of self- and group-interests in sustaining perceptions of legitimacy.

A central contribution of this thesis is its demonstration that system justification is a dynamic process shaped by situational, dispositional, ideological, and socio-cultural context. The

findings of this thesis highlight the need for a more integrative approach to system justification research—one that acknowledges both its dispositional underpinnings and its responsiveness to socio-political dynamics. This thesis advances the conversation by bridging theoretical perspectives, employing diverse methodologies, and situating system justification within broader societal processes. As future research continues to refine these insights, the challenge remains to understand not only when and why individuals justify the system but also the conditions under which these justifications may falter—or transform—in response to shifting social realities.

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Appendix 1: Supplementary Materials for Chapter 3**Table S1. Individual-Level Descriptive Demographic Statistics (N=24,009)**

Region	Country	N	Age (Mean)	Age (SD)	Male	Female	Population Age (Mean)	Population Female (%)
Nordic	Sweden	496	41.6	13	238	258	41.1	50.3
	Finland	459	40.1	13	211	248	42.4	50.6
Anglo	Australia	486	43.3	14	211	275	38.9	50.2
	UK	507	41.4	13	222	285	40.6	50.6
	New Zealand	479	40.7	13	215	262	37.7	50.5
	Canada	463	43.0	13	209	254	42.4	50.3
	United States	458	41.5	13	196	260	39.2	50.5
Western Europe	Germany	468	43.4	13	229	238	46.8	50.6
	Netherlands	863	44.9	14	410	453	42.8	50.2
	Spain	497	39.9	12	235	262	43.6	50.5
	Italy	847	41.0	12	381	466	45.4	51.3
	Greece	500	39.1	12	240	260	43.8	50.3
Confucian Asia	Portugal	525	37.7	12	240	285	42.4	51.1
	Hong Kong	498	36.3	11	236	263	41.5	53.7
	South Korea	446	41.2	11	190	256	43.0	50.1
	Taiwan	482	36.5	11	222	259	42.0	50.5
	Japan	510	47.8	12	250	260	47.3	51.3
Eastern Europe	China	571	30.9	9	271	300	37.4	48.7
	Poland	977	38.9	13	475	502	40.0	51.7
	Hungary	463	39.9	13	211	251	43.3	52.2
	Russia	427	39.2	11	211	216	39.5	53.6
	Turkey	583	33.5	10	319	261	31.5	49.8
South East Asia	Serbia	463	38.1	12	213	249	43.1	51.3
	Singapore	536	38.8	12	273	262	42.0	50.1
	Malaysia	569	33.6	10	300	269	30.3	48.6
	Indonesia	590	33.3	10	328	259	30.2	49.7
	Philippines	499	33.9	11	228	271	27.6	49.6
Latin America	Argentina	462	34.2	11	244	218	31.5	50.1
	Panama	489	30.7	10	240	249	29.7	49.6
	Mexico	534	33.2	11	249	285	29.3	50.5
	Peru	529	33.5	10	246	283	28.9	49.9
	Colombia	514	33.6	11	259	252	30.2	50.9
South Asia	Brazil	1126	34.2	11	470	655	32.4	50.8
	Bolivia	466	29.8	9	253	213	25.6	50.1
	Venezuela	515	35.1	12	269	243	29.6	50.3
	India	462	32.4	11	742	563	27.8	48.1
	Pakistan	926	28.1	8	711	213	27.5	48.8
Northern Africa	Egypt	562	29.4	9	313	249	24.3	49.5
	Morocco	495	31.2	10	267	226	29.2	50.4
Sub-Saharan Africa	South Africa	476	34.2	11	244	232	31.7	50.8
	Kenya	470	30.1	9	242	228	26.4	50.2
	Nigeria	466	30.6	9	267	199	29.3	49.6

Note. Population benchmarks were retrieved from the [World Bank](#), the [CIA World Factbook](#), and [Statista](#)

Table S2. *Individual-Level Bivariate Correlations of Interest for System Justification (SJ) by Country (N=24,009)*

Region	Country	N	SJ (M)	Subjective SES	Education	Income	Life Satisfaction	Political Orientation
Nordic	Sweden	496	3.60	.36**	.20**	.15**	.40**	-.05
	Finland	459	3.73	.40**	.20**	.11*	.44**	-.02
Anglo	Australia	486	3.91	.48**	.09*	.10*	.47**	.15**
	UK	507	3.63	.42**	.06	.12*	.46**	-.13*
	New Zealand	479	4.00	.29**	.09*	.15**	.39**	-.03
	Canada	463	3.99	.51**	.03	.10*	.45**	.18**
	United States	458	3.74	.41**	.09*	.20**	.39**	-.15**
Western Europe	Germany	468	3.35	.38**	.20**	.11*	.35**	.07
	Netherlands	863	3.61	.41**	.20**	.17**	.29**	.15**
	Spain	497	2.79	.35**	.12**	.08*	.29**	-.08*
	Italy	847	2.82	.32**	.03	.04	.33**	-.01
	Greece	500	2.33	.40**	-.01	-.04	.28**	.03
	Portugal	525	2.92	.34**	.04	-.07	.25**	.06
Confucian Asia	Hong Kong	498	3.62	.33**	.03	.02	.37**	.19**
	South Korea	446	2.76	.29**	-.05	.05	.37**	.05
	Taiwan	482	3.40	.28**	.02	-.04	.37**	.01
	Japan	510	3.50	.40**	.05	.09*	.39**	.15**
	China	571	4.80	.41**	.05	.06	.57**	.12**
Eastern Europe	Poland	977	2.92	.25**	-.02	.03	.20**	-.11**
	Hungary	463	2.60	.25**	.07	-.04	.23**	-.26**
	Russia	427	3.40	.34**	.02	.08	.43**	.07
	Turkey	583	2.93	.38**	-.05	.19**	.44**	-.19**
	Serbia	463	2.60	.29**	-.06	-.05	.33**	-.04
South East Asia	Singapore	536	4.12	.41**	.11**	.08*	.49**	.06
	Malaysia	569	3.94	.35**	-.01	.02	.42**	.13**
	Indonesia	590	3.81	.29**	.06	.04	.43**	.23**
	Philippines	499	3.71	.35**	.03	-.01	.41**	.07
Latin America	Argentina	462	2.66	.30**	.06	-.07	.15**	-.12**
	Panama	489	2.70	.25**	-.04	-.11*	.13**	.18**
	Mexico	534	3.09	.33**	.08	.06	.26**	.07
	Peru	529	3.00	.16**	-.09*	-.04	.14**	.11*
	Colombia	514	2.83	.28**	.07	.02	.26**	-.14**
	Brazil	1126	2.76	.38**	.12**	.05	.34**	-.09**
	Bolivia	466	2.60	.13**	-.07	.02	.21**	.10**
	Venezuela	515	2.40	.21**	-.10**	.01	.22**	.28**
South Asia	India	462	3.93	.38**	.10**	.04	.43**	.19**
	Pakistan	926	3.08	.19**	-.11**	-.02	.20**	-.03
Northern Africa	Egypt	562	3.02	.34**	.07	.02	.34**	-.13**
	Morocco	495	2.60	.19**	.02	-.08*	.28**	-.07
Sub-Saharan Africa	South Africa	476	2.58	.29**	.07	-.12*	.28**	.13**
	Kenya	470	2.65	.18**	-.09*	-.13*	.22**	-.03
	Nigeria	466	2.47	.23**	.01	.05	.32**	-.02

Table S3. *Country-Level Bivariate Correlations of Variables of Interest*

Individual-Level Variables	N	M	SD	1	2	3	4	5
1. System Justification	23,833	3.22	1.42					
2. Income	23,833	3.93	1.12	.14** [.12, .15]				
3. Education	23,833	4.33	1.14	.06** [.05, .08]	.02** [.01, .04]			
4. Subjective SES	23,833	5.50	1.88	.33** [.32, .34]	.13** [.11, .14]	.19** [.18, .20]		
5. Political Orientation	23,833	6.43	2.59	.03** [.02, .05]	.07** [.05, .08]	.08** [.07, .09]	.11** [.10, .12]	
6. Life Satisfaction	23,833	4.54	1.44	.33** [.32, .34]	.07** [.06, .09]	.10** [.09, .11]	.39** [.38, .40]	.02** [.01, .04]
Country-Level Variables	N	M	SD	1	7	8	9	10
7. Inequality	42	38.22	8.25	-.02** [-.01, -.03]				
8. Civil Liberties	42	68.45	25.38	.01 [-.01, .02]	-.29** [-.30, -.28]			
9. Social Mobility	42	61.66	12.88	.12** [.11, .13]	-.54** [-.55, -.53]	.54** [.53, .55]		
10. Political Party in Power	42	1.17	.89	.04** [.03, .05]	.19** [.17, .20]	-.10** [-.11, -.09]	-.32** [-.33, -.31]	

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). All correlations for the continuous variables are Pearson's *r*. * indicates $p < .05$. ** indicates $p < .01$.

Figure S1. *Effect of Income on System Justification by Country (H1A - H1B)*

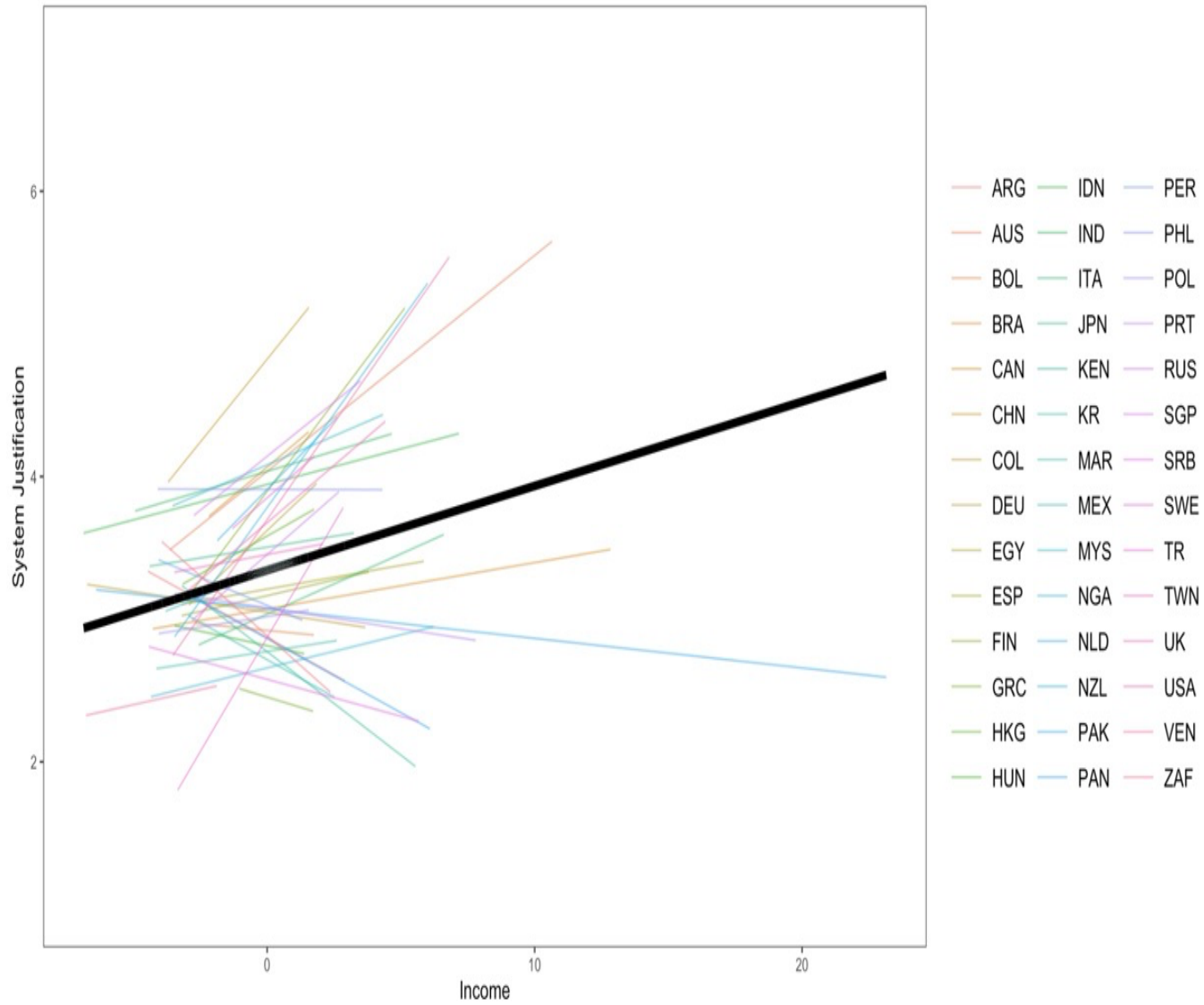
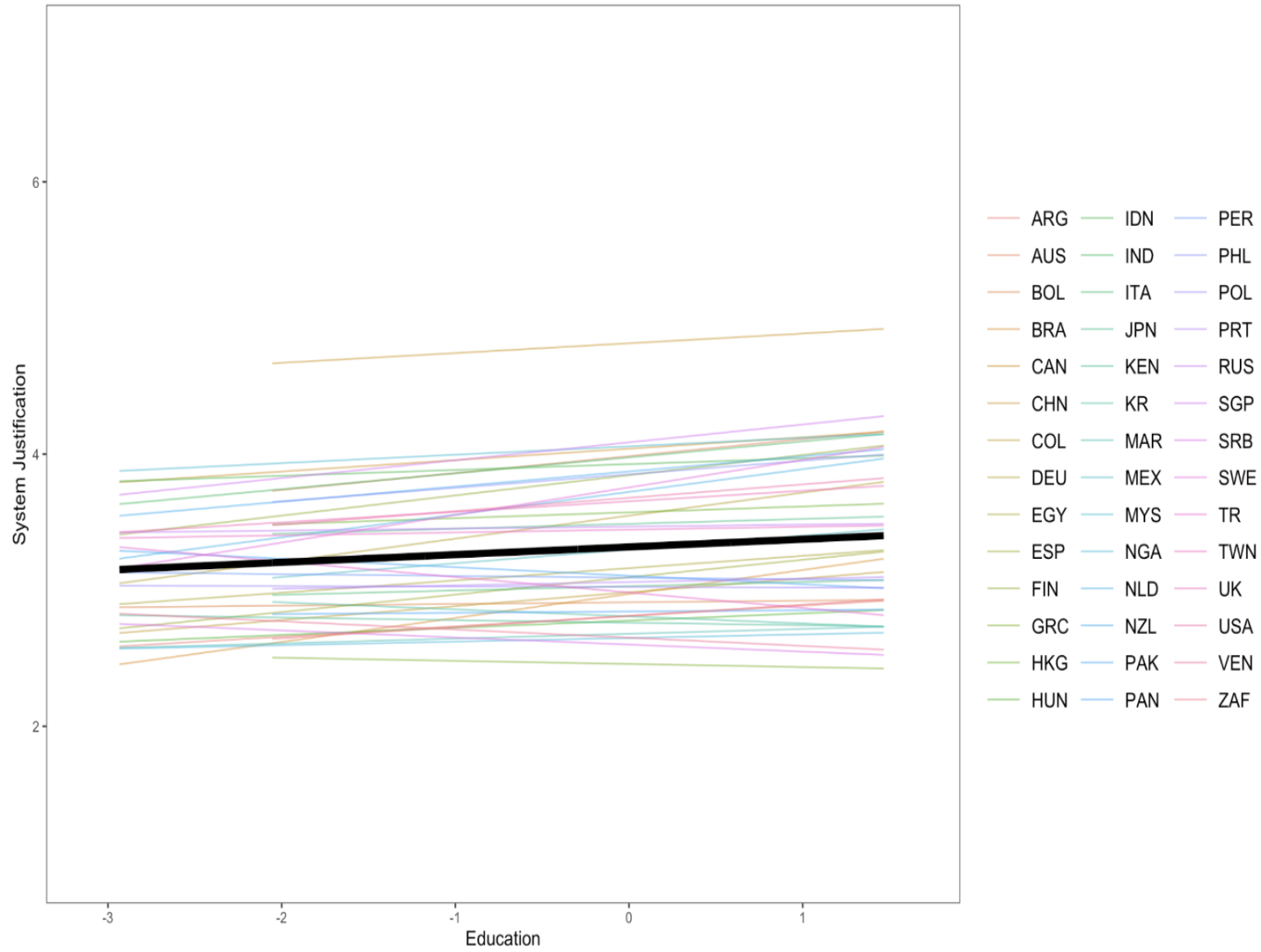


Figure S2. *Effect of Education on System Justification by Country (H1A - H1B)*



Appendix 2: Supplementary Materials for Chapter 4

Bidirectional Mediation CLPM (Subjective SES, Life Satisfaction, System Justification)

Table S1. *Bidirectional cross-lagged panel mediation model significance*

		Model Significance		
	N	χ^2	df	p
	337	299.407	45	0.000

Table S2. *Bidirectional cross-lagged panel mediation model fit*

		Model Fit				
CFI	RMSEA	90% CI	TLI	SRMR	AIC	BIC
0.910	0.130	0.116 - 0.144	0.868	0.058	7694.382	7866.286

Table S3. *Bidirectional cross-lagged panel mediation model (auto-regressive and cross-lagged paths)*

Predictor	DV	Regression Paths							
		Unstandardized		Standardized		SE	z	p	
b	95% CI	β	95% CI	sig					
Life Satisfaction W1	Life Satisfaction W2	0.666	0.614 - 0.718	0.654	0.602 - 0.706	***	0.026	24.773	0.000
System Justification W1	Life Satisfaction W2	0.060	0.012 - 0.108	0.059	0.011 - 0.106	*	0.024	2.436	0.015
Subjective SES W1	Life Satisfaction W2	0.089	0.038 - 0.141	0.088	0.037 - 0.138	***	0.026	3.389	<0.001
Life Satisfaction W2	Life Satisfaction W3	0.666	0.614 - 0.718	0.675	0.621 - 0.729	***	0.028	24.538	0.000

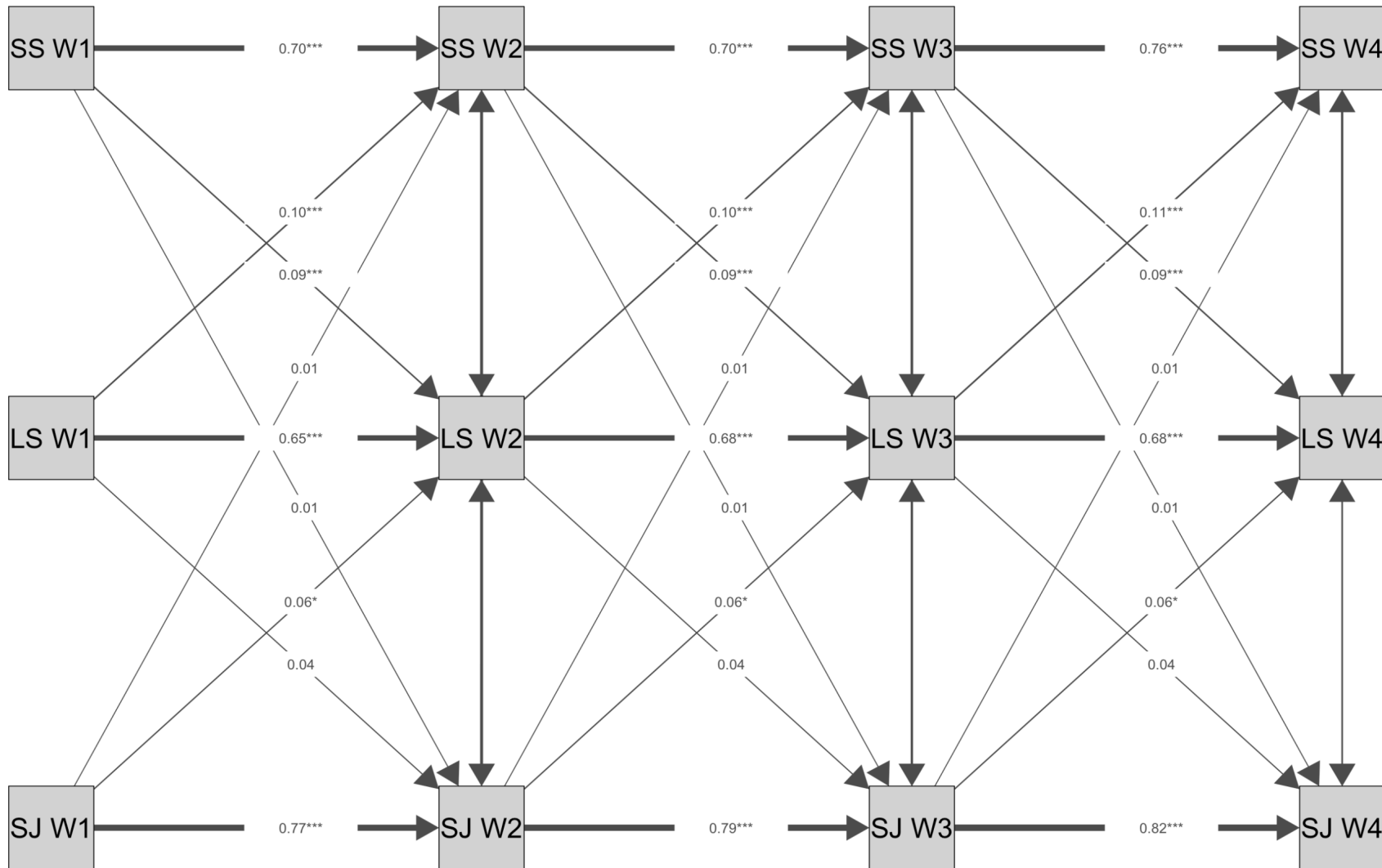
Predictor	DV	Regression Paths							
		Unstandardized		Standardized		SE	z	p	
		b	95% CI	β	95% CI				sig
System Justification W2	Life Satisfaction W3	0.060	0.012 - 0.108	0.061	0.012 - 0.110	*	0.025	2.429	0.015
Subjective SES W2	Life Satisfaction W3	0.089	0.038 - 0.141	0.091	0.038 - 0.144	***	0.027	3.375	<0.001
Life Satisfaction W3	Life Satisfaction W4	0.666	0.614 - 0.718	0.682	0.624 - 0.739	***	0.030	23.098	0.000
System Justification W3	Life Satisfaction W4	0.060	0.012 - 0.108	0.062	0.012 - 0.112	*	0.026	2.430	0.015
Subjective SES W3	Life Satisfaction W4	0.089	0.038 - 0.141	0.095	0.040 - 0.150	***	0.028	3.362	<0.001
Life Satisfaction W1	System Justification W2	0.038	-0.007 - 0.084	0.037	-0.007 - 0.082		0.023	1.645	0.100
System Justification W1	System Justification W2	0.792	0.750 - 0.833	0.775	0.736 - 0.813	***	0.020	39.131	0.000
Subjective SES W1	System Justification W2	0.013	-0.031 - 0.058	0.013	-0.031 - 0.057		0.022	0.585	0.558
Life Satisfaction W2	System Justification W3	0.038	-0.007 - 0.084	0.038	-0.007 - 0.084		0.023	1.638	0.101
System Justification W2	System Justification W3	0.792	0.750 - 0.833	0.792	0.753 - 0.831	***	0.020	39.745	0.000
Subjective SES W2	System Justification W3	0.013	-0.031 - 0.058	0.013	-0.031 - 0.058		0.023	0.585	0.558

Predictor	DV	Regression Paths							
		Unstandardized		Standardized		SE	z	p	
		b	95% CI	β	95% CI				sig
Life Satisfaction W3	System Justification W4	0.038	-0.007 - 0.084	0.039	-0.008 - 0.085		0.024	1.637	0.102
System Justification W3	System Justification W4	0.792	0.750 - 0.833	0.821	0.781 - 0.860	***	0.020	40.624	0.000
Subjective SES W3	System Justification W4	0.013	-0.031 - 0.058	0.014	-0.033 - 0.062		0.024	0.584	0.559
Life Satisfaction W1	Subjective SES W2	0.106	0.057 - 0.155	0.104	0.055 - 0.153	***	0.025	4.197	<0.001
System Justification W1	Subjective SES W2	0.010	-0.035 - 0.055	0.010	-0.034 - 0.054		0.023	0.432	0.666
Subjective SES W1	Subjective SES W2	0.711	0.663 - 0.760	0.696	0.650 - 0.743	***	0.024	29.417	0.000
Life Satisfaction W2	Subjective SES W3	0.106	0.057 - 0.155	0.104	0.055 - 0.153	***	0.025	4.175	<0.001
System Justification W2	Subjective SES W3	0.010	-0.035 - 0.055	0.010	-0.034 - 0.054		0.023	0.432	0.666
Subjective SES W2	Subjective SES W3	0.711	0.663 - 0.760	0.696	0.648 - 0.745	***	0.025	28.142	0.000
Life Satisfaction W3	Subjective SES W4	0.106	0.057 - 0.155	0.110	0.058 - 0.162	***	0.026	4.178	<0.001
System Justification W3	Subjective SES W4	0.010	-0.035 - 0.055	0.010	-0.037 - 0.058		0.024	0.432	0.666
Subjective SES W3	Subjective SES W4	0.711	0.663 - 0.760	0.764	0.712 - 0.816	***	0.027	28.838	0.000
c2	Direct SES	0.010	-0.035 - 0.055	0.010	-0.037 - 0.058		0.024	0.432	0.666

		Regression Paths							
Predictor	DV	Unstandardized		Standardized		sig	SE	z	p
		b	95% CI	β	95% CI				
c1	Direct SJ	0.013	-0.031 - 0.058	0.014	-0.033 - 0.062		0.024	0.584	0.559
a2*b2	Indirect SES 1	0.006	0.001 - 0.012	0.007	0.001 - 0.013	*	0.003	2.163	0.031
c2*ar_ses	Indirect SES 2	0.008	-0.028 - 0.044	0.009	-0.030 - 0.048		0.020	0.431	0.666
c2*ar_sj	Indirect SES 3	0.008	-0.028 - 0.044	0.009	-0.030 - 0.048		0.020	0.431	0.666
a1*b1	Indirect SJ 1	0.003	-0.001 - 0.008	0.004	-0.001 - 0.008		0.002	1.522	0.128
c1*ar_ses	Indirect SJ 2	0.010	-0.022 - 0.041	0.011	-0.026 - 0.047		0.019	0.583	0.560
c1*ar_sj	Indirect SJ 3	0.010	-0.022 - 0.041	0.011	-0.026 - 0.047		0.019	0.583	0.560
c2+(a2*b2)	Total SES 1	0.016	-0.030 - 0.062	0.017	-0.031 - 0.066		0.025	0.701	0.483
c2+(c2*ar_ses)	Total SES 2	0.017	-0.060 - 0.094	0.018	-0.065 - 0.102		0.043	0.432	0.666
c2+(c2*ar_sj)	Total SES 3	0.018	-0.063 - 0.099	0.019	-0.067 - 0.105		0.044	0.431	0.666
c1+(a1*b1)	Total SJ 1	0.017	-0.027 - 0.060	0.018	-0.028 - 0.064		0.024	0.759	0.448
c1+(c1*ar_sj)	Total SJ 2	0.024	-0.056 - 0.104	0.026	-0.061 - 0.112		0.044	0.585	0.559
c1+(c1*ar_ses)	Total SJ 3	0.023	-0.054 - 0.100	0.025	-0.059 - 0.109		0.043	0.584	0.559

* p < .05; ** p < .01; *** p < .001

Figure S1. *Standardized Bidirectional Mediation CLPM*



Note. SS = Subjective SES, LS = Life Satisfaction, SJ = System Justification, W1 - W4 = Wave 1 - Wave 4, * $p < .05$, ** $p < .01$, *** $p < .001$

Bidirectional CLPM between Subjective SES and System Justification**Table S4.** *Bidirectional direct effect between subjective SES and system justification over time model significance*

N	Model Significance		
	χ^2	df	p
337	202.987	20	0.000

Table S5. *Bidirectional direct effect between subjective SES and system justification over time model fit*

CFI	RMSEA	90% CI	Model Fit			
			TLI	SRMR	AIC	BIC
0.904	0.165	0.145 - 0.186	0.865	0.065	5123.652	5215.334

Table S6. *Bidirectional direct effect between subjective SES and system justification over time (auto-regressive and cross-lagged paths)*

Predictor	DV	Regression Paths							
		Unstandardized		Standardized		sig	SE	z	p
b	95% CI	β	95% CI						
System Justification W1	System Justification W2	0.800	0.760 - 0.841	0.784	0.747 - 0.821	***	0.019	41.449	0.000
Subjective SES W1	System Justification W2	0.030	-0.010 - 0.071	0.030	-0.010 - 0.069		0.020	1.481	0.139
System Justification W2	System Justification W3	0.800	0.760 - 0.841	0.798	0.760 - 0.837	***	0.020	40.790	0.000
Subjective SES W2	System Justification W3	0.030	-0.010 - 0.071	0.031	-0.010 - 0.071		0.021	1.479	0.139

Predictor	DV	Regression Paths							
		Unstandardized		Standardized		sig	SE	z	p
		b	95% CI	β	95% CI				
System Justification W3	System Justification W4	0.800	0.760 - 0.841	0.831	0.793 - 0.868	***	0.019	43.643	0.000
Subjective SES W3	System Justification W4	0.030	-0.010 - 0.071	0.033	-0.011 - 0.076		0.022	1.474	0.140
System Justification W1	Subjective SES W2	0.034	-0.010 - 0.078	0.033	-0.010 - 0.076		0.022	1.504	0.133
Subjective SES W1	Subjective SES W2	0.758	0.714 - 0.802	0.739	0.697 - 0.781	***	0.021	34.634	0.000
System Justification W2	Subjective SES W3	0.034	-0.010 - 0.078	0.033	-0.010 - 0.076		0.022	1.497	0.134
Subjective SES W2	Subjective SES W3	0.758	0.714 - 0.802	0.739	0.695 - 0.783	***	0.022	33.144	0.000
System Justification W3	Subjective SES W4	0.034	-0.010 - 0.078	0.036	-0.011 - 0.082		0.024	1.498	0.134
Subjective SES W3	Subjective SES W4	0.758	0.714 - 0.802	0.818	0.775 - 0.861	***	0.022	37.212	0.000

* $p < .05$; ** $p < .01$; *** $p < .001$

Robust Longitudinal Data Analyses

To address this shortcoming with the CLPM modeling approach presented in the current manuscript, we re-ran the bidirectional mediation CLPM as a bidirectional mediation RI-CLPM (See Tables S7 - S12 below), STARTS (See Tables S13 - S18).

Random-Intercept Cross Lagged Panel Model (RI-CLPM) Analysis

Given the modest sample size and the limited number of waves—both of which can impact the statistical power of a reciprocal mediation model in an RI-CLPM framework, as well as lead to convergence and identification issues for overly complex models (De Jonckere & Rosseel, 2022). Therefore, when estimating this RI-CLPM in lavaan, we used bounded estimation to avoid nonconvergence due to a relatively modest sample.

Table S7. *Bidirectional Mediation Random-Intercept Cross Lagged Panel model significance*

N	Model Significance		
	χ^2	df	p
337	120.191	54	<0.001

Table S8. *Bidirectional Mediation Random-Intercept Cross Lagged Panel model fit*

CFI	RMSEA	90% CI	Model Fit			
			TLI	SRMR	AIC	BIC
0.977	0.060	0.046 - 0.075	0.971	0.055	9979.247	10116.770

Table S9. *Bidirectional Mediation Random-Intercept Cross Lagged Panel Model Factor Loadings*

Latent Factor	Indicator	Factor Loadings							
		Unstandardized		Standardized		sig	SE	z	p
Loading	95% CI	Loading	95% CI						
LS	Life Satisfaction W1	1.000	1.000 - 1.000	0.796	0.744 - 0.847	***	0.026	30.464	0.000
LS	Life Satisfaction W2	1.000	1.000 - 1.000	0.846	0.803 - 0.890	***	0.022	38.150	0.000
LS	Life Satisfaction W3	1.000	1.000 - 1.000	0.848	0.804 - 0.892	***	0.022	37.804	0.000
LS	Life Sat Satisfaction W4	1.000	1.000 - 1.000	0.847	0.804 - 0.890	***	0.022	38.779	0.000
SJ	System Justification W1	1.000	1.000 - 1.000	0.798	0.744 - 0.853	***	0.028	28.580	0.000
SJ	System Justification W2	1.000	1.000 - 1.000	0.843	0.751 - 0.935	***	0.047	17.944	0.000
SJ	System Justification W3	1.000	1.000 - 1.000	0.824	0.751 - 0.897	***	0.037	22.104	0.000
SJ	System Justification W4	1.000	1.000 - 1.000	0.844	0.773 - 0.915	***	0.036	23.381	0.000
SUBSES	Subjective SES W1	1.000	1.000 - 1.000	0.830	0.779 - 0.880	***	0.026	32.116	0.000

Latent Factor	Indicator	Factor Loadings							
		Unstandardized		Standardized		sig	SE	z	p
Loading	95% CI	Loading	95% CI						
SUBSES	Subjective SES W2	1.000	1.000 - 1.000	0.846	0.793 - 0.898	***	0.027	31.608	0.000
SUBSES	Subjective SES W3	1.000	1.000 - 1.000	0.847	0.781 - 0.913	***	0.033	25.313	0.000
SUBSES	Subjective SES W4	1.000	1.000 - 1.000	0.902	0.866 - 0.939	***	0.019	48.506	0.000
wLS1	Life Satisfaction W1	1.000	1.000 - 1.000	0.606	0.539 - 0.673	***	0.034	17.659	0.000
wLS2	Life Satisfaction W2	1.000	1.000 - 1.000	0.532	0.463 - 0.602	***	0.035	15.097	0.000
wLS3	Life Satisfaction W3	1.000	1.000 - 1.000	0.530	0.460 - 0.600	***	0.036	14.778	0.000
wLS4	Life Satisfaction W4	1.000	1.000 - 1.000	0.531	0.463 - 0.600	***	0.035	15.263	0.000
wSJ1	System Justification W1	1.000	1.000 - 1.000	0.602	0.530 - 0.675	***	0.037	16.255	0.000
wSJ2	System Justification W2	1.000	1.000 - 1.000	0.538	0.393 - 0.682	***	0.074	7.293	<0.001
wSJ3	System Justification W3	1.000	1.000 - 1.000	0.566	0.460 - 0.673	***	0.054	10.433	0.000
wSJ4	System Justification W4	1.000	1.000 - 1.000	0.536	0.425 - 0.648	***	0.057	9.448	0.000

Latent Factor	Indicator	Factor Loadings							
		Unstandardized		Standardized		sig	SE	z	p
Loading	95% CI	Loading	95% CI						
wSUBSES1	Subjective SES W1	1.000	1.000 - 1.000	0.558	0.483 - 0.633	***	0.038	14.521	0.000
wSUBSES2	Subjective SES W2	1.000	1.000 - 1.000	0.533	0.450 - 0.617	***	0.042	12.562	0.000
wSUBSES3	Subjective SES W3	1.000	1.000 - 1.000	0.532	0.427 - 0.636	***	0.053	9.969	0.000
wSUBSES4	Subjective SES W4	1.000	1.000 - 1.000	0.431	0.355 - 0.507	***	0.039	11.077	0.000

* p < .05; ** p < .01; *** p < .001

Table S10. *Bidirectional Mediation Random-Intercept Cross Lagged Panel model (between- and within-person paths)*

Predictor	DV	Regression Paths							
		Unstandardized		Standardized		sig	SE	z	p
b	95% CI	β	95% CI						
c2	Direct SES	0.013	-0.156 - 0.181	0.015	-0.181 - 0.210		0.100	0.147	0.883
c1	Direct SJ	0.013	-0.102 - 0.128	0.016	-0.126 - 0.158		0.073	0.220	0.826
a2*b2	Indirect SES 1	0.000	-0.004 - 0.003	0.000	-0.005 - 0.004		0.002	-0.182	0.855
c2*ar_ses	Indirect SES 2	0.002	-0.019 - 0.023	0.002	-0.030 - 0.034		0.016	0.142	0.887
c2*ar_sj	Indirect SES 3	0.005	-0.059 - 0.069	0.006	-0.074 - 0.086		0.041	0.143	0.886
a1*b1	Indirect SJ 1	-0.004	-0.012 - 0.004	-0.004	-0.014 - 0.005		0.005	-0.902	0.367

Predictor	DV	Regression Paths							
		Unstandardized				Standardized			
		b	95% CI	β	95% CI	sig	SE	z	p
c1*ar_sj	Indirect SJ 2	0.005	-0.039 - 0.049	0.006	-0.052 - 0.065		0.030	0.213	0.831
c1*ar_ses	Indirect SJ 3	0.002	-0.014 - 0.017	0.003	-0.022 - 0.028		0.013	0.198	0.843
c2+(a2*b2)	Total SES 1	0.012	-0.157 - 0.182	0.014	-0.182 - 0.211		0.100	0.142	0.887
c2+(c2*ar_ses)	Total SES 2	0.014	-0.175 - 0.204	0.017	-0.210 - 0.244		0.116	0.147	0.883
c2+(c2*ar_sj)	Total SES 3	0.017	-0.215 - 0.250	0.021	-0.255 - 0.296		0.141	0.146	0.884
c1+(a1*b1)	Total SJ 1	0.009	-0.104 - 0.123	0.012	-0.129 - 0.152		0.072	0.161	0.872
c1+(c1*ar_sj)	Total SJ 2	0.018	-0.141 - 0.177	0.022	-0.179 - 0.224		0.103	0.218	0.827
c1+(c1*ar_ses)	Total SJ 3	0.015	-0.115 - 0.145	0.019	-0.149 - 0.186		0.085	0.217	0.828
wLS1	wLS2	0.066	-0.061 - 0.194	0.080	-0.070 - 0.231		0.077	1.048	0.295
wSJ1	wLS2	-0.024	-0.108 - 0.061	-0.031	-0.139 - 0.078		0.055	-0.553	0.581
wSUBSES1	wLS2	0.041	-0.039 - 0.121	0.059	-0.054 - 0.171		0.057	1.025	0.305
wLS2	wLS3	0.066	-0.061 - 0.194	0.067	-0.061 - 0.195		0.065	1.025	0.305
wSJ2	wLS3	-0.024	-0.108 - 0.061	-0.026	-0.118 - 0.066		0.047	-0.552	0.581
wSUBSES2	wLS3	0.041	-0.039 - 0.121	0.055	-0.057 - 0.168		0.057	0.966	0.334
wLS3	wLS4	0.066	-0.061 - 0.194	0.066	-0.064 - 0.197		0.067	0.995	0.320
wSJ3	wLS4	-0.024	-0.108 - 0.061	-0.028	-0.126 - 0.071		0.050	-0.555	0.579

Predictor	DV	Regression Paths							
		Unstandardized		β		Standardized			
		b	95% CI	β	95% CI	sig	SE	z	p
wSUBSES3	wLS4	0.041	-0.039 - 0.121	0.055	-0.052 - 0.162		0.055	1.004	0.315
wLS1	wSJ2	-0.089	-0.173 - -0.006	-0.099	-0.188 - -0.010	*	0.046	-2.171	0.030
wSJ1	wSJ2	0.370	0.116 - 0.624	0.438	0.233 - 0.642	***	0.104	4.188	<0.001
wSUBSES1	wSJ2	0.013	-0.102 - 0.128	0.017	-0.132 - 0.166		0.076	0.225	0.822
wLS2	wSJ3	-0.089	-0.173 - -0.006	-0.076	-0.143 - -0.009	*	0.034	-2.220	0.026
wSJ2	wSJ3	0.370	0.116 - 0.624	0.343	0.058 - 0.628	*	0.145	2.361	0.018
wSUBSES2	wSJ3	0.013	-0.102 - 0.128	0.015	-0.116 - 0.146		0.067	0.223	0.824
wLS3	wSJ4	-0.089	-0.173 - -0.006	-0.082	-0.150 - -0.013	*	0.035	-2.339	0.019
wSJ3	wSJ4	0.370	0.116 - 0.624	0.400	0.124 - 0.676	**	0.141	2.839	0.005
wSUBSES3	wSJ4	0.013	-0.102 - 0.128	0.016	-0.126 - 0.158		0.073	0.220	0.826
wLS1	wSUBSES2	0.014	-0.121 - 0.149	0.013	-0.109 - 0.135		0.062	0.205	0.837
wSJ1	wSUBSES2	0.013	-0.156 - 0.181	0.012	-0.150 - 0.175		0.083	0.147	0.883
wSUBSES1	wSUBSES2	0.120	-0.088 - 0.329	0.128	-0.096 - 0.353		0.114	1.122	0.262
wLS2	wSUBSES3	0.014	-0.121 - 0.149	0.011	-0.091 - 0.113		0.052	0.204	0.838
wSJ2	wSUBSES3	0.013	-0.156 - 0.181	0.010	-0.128 - 0.149		0.071	0.147	0.883
wSUBSES2	wSUBSES3	0.120	-0.088 - 0.329	0.121	-0.077 - 0.319		0.101	1.200	0.230

Predictor	DV	Regression Paths									
		Unstandardized				Standardized					
		b	95% CI		β	95% CI		sig	SE	z	p
wLS3	wSUBSES4	0.014	-0.121 - 0.149		0.014	-0.118 - 0.146			0.067	0.206	0.837
wSJ3	wSUBSES4	0.013	-0.156 - 0.181		0.015	-0.181 - 0.210			0.100	0.147	0.883
wSUBSES3	wSUBSES4	0.120	-0.088 - 0.329		0.158	-0.128 - 0.445			0.146	1.081	0.280

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 11. Bidirectional Mediation Random-Intercept Cross Lagged Panel Model latent factor correlations

Factor	Factor	Latent Factor Correlations					
		r	95% CI		sig	SE	p
SUBSES	SJ	0.331	0.199 - 0.464		***	0.067	<0.001
SUBSES	LS	0.583	0.474 - 0.691		***	0.055	0.000
LS	SJ	0.459	0.336 - 0.582		***	0.063	<0.001
wSUBSES1	wLS1	0.282	0.106 - 0.458		**	0.090	0.002
wSUBSES1	wSJ1	0.287	0.130 - 0.445		***	0.080	<0.001
wLS1	wSJ1	0.288	0.120 - 0.455		***	0.086	<0.001
wSUBSES2	wLS2	0.172	0.086 - 0.258		***	0.044	<0.001
wSUBSES2	wSJ2	0.146	0.035 - 0.257		*	0.057	0.010
wLS1	wSJ2	0.031	-0.048 - 0.110			0.040	0.440
wSUBSES3	wLS3	0.173	0.079 - 0.267		***	0.048	<0.001
wSUBSES3	wSJ3	0.132	0.040 - 0.224		**	0.047	0.005
wLS3	wSJ3	0.034	-0.052 - 0.120			0.044	0.436
wSUBSES4	wLS4	0.228	0.113 - 0.343		***	0.058	<0.001
wSUBSES4	wSJ4	0.193	0.051 - 0.335		**	0.073	0.008
wLS4	wSJ4	0.038	-0.056 - 0.131			0.048	0.430

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 12. *Bidirectional Mediation Random-Intercept Cross Lagged Panel Model Latent Factor and Residual Variance*

Factor	Latent Factor Variance/Residual Variance		sig	p
	Variance	Std. Variance		
wSUBSES1	0.896	1.000	***	<0.001
wSUBSES2	0.773	0.981	***	<0.001
wSUBSES3	0.768	0.984	***	<0.001
wSUBSES4	0.440	0.973	***	<0.001
wLS1	0.639	1.000	***	<0.001
wLS2	0.432	0.989	***	<0.001
wLS3	0.427	0.991	***	<0.001
wLS4	0.430	0.991	***	<0.001
wSJ1	0.730	1.000	***	<0.001
wSJ2	0.431	0.826	***	<0.001
wSJ3	0.530	0.875	***	<0.001
wSJ4	0.432	0.833	***	<0.001
SUBSES	1.981	1.000	***	0.000
LS	1.103	1.000	***	0.000
SJ	1.284	1.000	***	0.000

Stable Trait Autoregressive Trait State model (STARTS) Analysis

The STARTS model is a structural equation modeling approach that decomposes panel data into distinct components, allowing for a more nuanced understanding of stability and change over time (Kenny & Zautra, 1995, 2001). Specifically, it separates stable, between-person differences (trait components) from within-person fluctuations across waves (state components), while also modeling autoregressive processes that capture temporal stability. By distinguishing these elements, the STARTS model provides insight into whether associations among psychological constructs primarily reflect enduring individual differences or dynamic within-person processes (Kenny & Zautra, 2001).

Overall, model fit for our STARTS model was acceptable ($\chi^2 = 65.056$, $p = .006$, CFI = .991, RMSEA = .045, 90% CI [.024, .063], SRMR = .032). The results of the STARTS model indicated significant autoregressive stability for system justification across waves. System justification at an earlier wave significantly predicted system justification at the subsequent wave: W1 \rightarrow W2 ($b = 0.254$, 95% CI [0.139, 0.369], SE = 0.054, $z = 4.482$, $p < .001$), W2 \rightarrow W3 ($b = 0.254$, 95% CI [0.139, 0.369], SE = 0.055, $z = 4.324$, $p < .001$), and W3 \rightarrow W4 ($b = 0.254$, 95% CI [0.139, 0.369], SE = 0.059, $z = 4.381$, $p < .001$).

By contrast, autoregressive paths for life satisfaction and subjective SES were non-significant ($ps > .15$), as were all cross-lagged predictions among the constructs. Specifically, system justification did not predict changes in life satisfaction or subjective SES ($ps = .296$ to $.690$), subjective SES did not predict subsequent system justification or life satisfaction ($ps = .441$ to $.809$), and life

satisfaction did not predict either system justification or subjective SES ($ps = .440$ to $.690$). The direct effects between subjective SES and system justification were non-significant in both directions. Subjective SES did not directly predict system justification ($b = 0.010$, 95% CI $[-0.068, 0.087]$, $SE = 0.048$, $z = 0.242$, $p = .809$), and system justification did not directly predict subjective SES ($b = 0.027$, 95% CI $[-0.081, 0.136]$, $SE = 0.049$, $z = 0.500$, $p = .617$).

We also tested three forms of indirect effects similar to those reported during CLPM and RI-CLPM analyses: (1) $IV_{t-1} \rightarrow mediator_t \rightarrow DV_{t+1}$, (2) $IV_{t-1} \rightarrow DV_t \rightarrow DV_{t+1}$, and (3) $IV_{t-1} \rightarrow IV_t \rightarrow DV_{t+1}$. None were significant in either direction. For example, the indirect effect of subjective SES on system justification via life satisfaction (Indirect SES 1) was $b = 0.002$, 95% CI $[-0.003, 0.006]$, $SE = 0.002$, $z = 0.654$, $p = .513$, while the corresponding effect of system justification on subjective SES via life satisfaction (Indirect SJ 1) was $b = 0.000$, 95% CI $[-0.001, 0.001]$, $SE = 0.001$, $z = -0.251$, $p = .802$. Similarly, indirect pathways in both directions through autoregressive stability of the IV or DV (Indirect effects 2 and 3) were also non-significant for both subjective SES and system justification ($ps > .62$). Total effects, which combined the direct path with each type of indirect effect, were likewise non-significant. For example, the total effect of subjective SES on system justification ranged from $b = 0.029$ to 0.034 across specifications (95% CIs overlapping zero; $ps = .597$ to $.618$). The reverse direction (system justification predicting subjective SES) showed the same null pattern, with total effects ranging from $b = 0.009$ to 0.012 ($ps = .810$ to $.811$). Despite the lack of within-person dynamic effects, trait-level associations among the constructs were robust. System justification was positively correlated with subjective SES ($r =$

0.296, 95% CI [0.097, 0.495], SE = 0.102, $p = .004$) and life satisfaction ($r = 0.401$, 95% CI [0.240, 0.563], SE = 0.082, $p < .001$).

Likewise, subjective SES and life satisfaction were strongly correlated ($r = 0.548$, 95% CI [0.407, 0.689], SE = 0.072, $p < .001$).

Taken together, these results indicate that while system justification demonstrates consistent autoregressive stability, there is little evidence for reciprocal, dynamic effects between system justification, subjective SES, and life satisfaction at the state level. Instead, the data suggest that these constructs are linked primarily through enduring, trait-level associations.

Table S13. *Bidirectional Mediation STARTS model significance*

N	Model Significance		
	χ^2	df	p
337	65.056	39	0.006

Table S14. *Bidirectional Mediation STARTS model fit*

CFI	RMSEA	90% CI	Model Fit			
			TLI	SRMR	AIC	BIC
0.991	0.045	0.024 - 0.063	0.984	0.032	9954.112	10148.936

Table S15. *Bidirectional Mediation STARTS model factor loadings*

Latent Factor	Indicator	Factor Loadings							
		Unstandardized		Standardized		sig	SE	z	p
Loading	95% CI	Loading	95% CI						
Stable Trait Life Satisfaction	Life Satisfaction W1	1.000	1.000 - 1.000	0.785	0.721 - 0.849	***	0.033	24.037	0.000
Stable Trait Life Satisfaction	Life Satisfaction W2	1.000	1.000 - 1.000	0.815	0.744 - 0.886	***	0.036	22.464	0.000
Stable Trait Life Satisfaction	Life Satisfaction W3	1.000	1.000 - 1.000	0.806	0.731 - 0.881	***	0.038	21.102	0.000
Stable Trait Life Satisfaction	Life Satisfaction W4	1.000	1.000 - 1.000	0.811	0.743 - 0.879	***	0.035	23.417	0.000
Stable Trait Subjective SES	Subjective SES W1	1.000	1.000 - 1.000	0.800	0.716 - 0.883	***	0.043	18.778	0.000
Stable Trait Subjective SES	Subjective SES W2	1.000	1.000 - 1.000	0.762	0.665 - 0.860	***	0.050	15.303	0.000
Stable Trait Subjective SES	Subjective SES W3	1.000	1.000 - 1.000	0.761	0.642 - 0.880	***	0.061	12.529	0.000

Latent Factor	Indicator	Unstandardized		Factor Loadings		Standardized			
		Loading	95% CI	Loading	95% CI	sig	SE	z	p
Stable Trait Subjective SES	Subjective SES W4	1.000	1.000 - 1.000	0.811	0.703 - 0.920	***	0.055	14.667	0.000
Stable Trait System Justification	System Justification W1	1.000	1.000 - 1.000	0.734	0.643 - 0.824	***	0.046	15.864	0.000
Stable Trait System Justification	System Justification W2	1.000	1.000 - 1.000	0.702	0.608 - 0.795	***	0.048	14.694	0.000
Stable Trait System Justification	System Justification W3	1.000	1.000 - 1.000	0.661	0.570 - 0.751	***	0.046	14.329	0.000
Stable Trait System Justification	System Justification W4	1.000	1.000 - 1.000	0.674	0.579 - 0.769	***	0.048	13.923	0.000

* $p < .05$; ** $p < .01$; *** $p < .001$

Table S16. *Bidirectional Mediation STARTS model cross-lagged and autoregressive paths (state components)*

Predictor	DV	Regression Paths							
		Unstandardized		β		Standardized		z	p
		b	95% CI		95% CI	sig	SE		
Life Satisfaction W1	Life Satisfaction W2	0.028	-0.049 - 0.105	0.029	-0.050 - 0.108		0.040	0.716	0.474
System Justification W1	Life Satisfaction W2	0.036	-0.032 - 0.104	0.038	-0.033 - 0.108		0.036	1.045	0.296
Subjective SES W1	Life Satisfaction W2	0.010	-0.045 - 0.066	0.014	-0.059 - 0.086		0.037	0.368	0.713
Life Satisfaction W2	Life Satisfaction W3	0.028	-0.049 - 0.105	0.028	-0.048 - 0.103		0.039	0.711	0.477
System Justification W2	Life Satisfaction W3	0.036	-0.032 - 0.104	0.039	-0.034 - 0.112		0.037	1.046	0.295
Subjective SES W2	Life Satisfaction W3	0.010	-0.045 - 0.066	0.014	-0.061 - 0.089		0.038	0.367	0.714
Life Satisfaction W3	Life Satisfaction W4	0.028	-0.049 - 0.105	0.028	-0.050 - 0.106		0.040	0.706	0.480
System Justification W3	Life Satisfaction W4	0.036	-0.032 - 0.104	0.042	-0.036 - 0.120		0.040	1.045	0.296
Subjective SES W3	Life Satisfaction W4	0.010	-0.045 - 0.066	0.014	-0.061 - 0.090		0.039	0.368	0.713
Life Satisfaction W1	System Justification W2	-0.015	-0.089 - 0.059	-0.014	-0.086 - 0.057		0.036	-0.398	0.690

Predictor	DV	Regression Paths							
		Unstandardized		Standardized		sig	SE	z	p
b	95% CI	β	95% CI						
System Justification W1	System Justification W2	0.254	0.139 - 0.369	0.243	0.137 - 0.349	***	0.054	4.482	<0.001
Subjective SES W1	System Justification W2	0.010	-0.068 - 0.087	0.011	-0.081 - 0.104		0.047	0.243	0.808
Life Satisfaction W2	System Justification W3	-0.015	-0.089 - 0.059	-0.013	-0.077 - 0.051		0.033	-0.399	0.690
System Justification W2	System Justification W3	0.254	0.139 - 0.369	0.239	0.131 - 0.347	***	0.055	4.324	<0.001
Subjective SES W2	System Justification W3	0.010	-0.068 - 0.087	0.011	-0.080 - 0.103		0.047	0.242	0.809
Life Satisfaction W3	System Justification W4	-0.015	-0.089 - 0.059	-0.014	-0.080 - 0.053		0.034	-0.400	0.689
System Justification W3	System Justification W4	0.254	0.139 - 0.369	0.259	0.143 - 0.375	***	0.059	4.381	<0.001
Subjective SES W3	System Justification W4	0.010	-0.068 - 0.087	0.012	-0.082 - 0.105		0.048	0.242	0.809
Life Satisfaction W1	Subjective SES W2	0.041	-0.064 - 0.146	0.032	-0.049 - 0.112		0.041	0.770	0.441
System Justification W1	Subjective SES W2	0.027	-0.081 - 0.136	0.021	-0.061 - 0.103		0.042	0.499	0.618
Subjective SES W1	Subjective SES W2	0.091	-0.037 - 0.219	0.087	-0.033 - 0.207		0.061	1.415	0.157

Predictor	DV	Regression Paths							
		Unstandardized		β		Standardized		z	p
		b	95% CI		95% CI	sig	SE		
Life Satisfaction W2	Subjective SES W3	0.041	-0.064 - 0.146	0.030	-0.047 - 0.108		0.039	0.769	0.442
System Justification W2	Subjective SES W3	0.027	-0.081 - 0.136	0.022	-0.064 - 0.107		0.044	0.499	0.617
Subjective SES W2	Subjective SES W3	0.091	-0.037 - 0.219	0.091	-0.035 - 0.216		0.064	1.420	0.156
Life Satisfaction W3	Subjective SES W4	0.041	-0.064 - 0.146	0.033	-0.050 - 0.116		0.042	0.773	0.440
System Justification W3	Subjective SES W4	0.027	-0.081 - 0.136	0.025	-0.072 - 0.122		0.049	0.500	0.617
Subjective SES W3	Subjective SES W4	0.091	-0.037 - 0.219	0.097	-0.042 - 0.236		0.071	1.370	0.171
c2	Direct SES	0.027	-0.081 - 0.136	0.025	-0.072 - 0.122		0.049	0.500	0.617
c1	Direct SJ	0.010	-0.068 - 0.087	0.012	-0.082 - 0.105		0.048	0.242	0.809
a2*b2	Indirect SES 1	0.002	-0.003 - 0.006	0.001	-0.003 - 0.005		0.002	0.654	0.513
c2*ar_ses	Indirect SES 2	0.007	-0.021 - 0.035	0.006	-0.019 - 0.032		0.013	0.488	0.625
c2*ar_sj	Indirect SES 3	0.007	-0.021 - 0.035	0.006	-0.019 - 0.032		0.013	0.488	0.625
a1*b1	Indirect SJ 1	0.000	-0.001 - 0.001	0.000	-0.002 - 0.001		0.001	-0.251	0.802
c1*ar_ses	Indirect SJ 2	0.001	-0.007 - 0.008	0.001	-0.009 - 0.011		0.005	0.228	0.820

Predictor	DV	Regression Paths							
		Unstandardized		Standardized		Standardized		z	p
		b	95% CI	β	95% CI	sig	SE		
c1*ar_sj	Indirect SJ 3	0.001	-0.007 - 0.008	0.001	-0.009 - 0.011		0.005	0.228	0.820
c2+(a2*b2)	Total SES 1	0.029	-0.079 - 0.137	0.026	-0.070 - 0.123		0.049	0.529	0.597
c2+(c2*ar_ses)	Total SES 2	0.030	-0.088 - 0.148	0.027	-0.079 - 0.134		0.054	0.499	0.618
c2+(c2*ar_sj)	Total SES 3	0.034	-0.102 - 0.171	0.031	-0.091 - 0.153		0.062	0.498	0.618
c1+(a1*b1)	Total SJ 1	0.009	-0.067 - 0.086	0.011	-0.082 - 0.104		0.047	0.239	0.811
c1+(c1*ar_sj)	Total SJ 2	0.012	-0.085 - 0.109	0.015	-0.104 - 0.133		0.060	0.241	0.810
c1+(c1*ar_ses)	Total SJ 3	0.010	-0.074 - 0.095	0.013	-0.091 - 0.116		0.053	0.241	0.810

* p < .05; ** p < .01; *** p < .001

Table S17. Bidirectional Mediation STARTS model latent factor correlations (trait components)

Factor	Factor	Latent Factor Correlations			SE	p
		r	95% CI	sig		
Stable Trait System Justification	Sable Trait Subjective SES	0.296	0.097 - 0.495	**	0.102	0.004
Stable Trait System Justification	Stable Trait Life Satisfaction	0.401	0.240 - 0.563	***	0.082	<0.001
Sable Trait Subjective SES	Stable Trait Life Satisfaction	0.548	0.407 - 0.689	***	0.072	<0.001

* p < .05; ** p < .01; *** p < .001

Table S18. *Bidirectional Mediation STARTS model latent factor variance and residual variance (trait components)*

Factor	Latent Factor Variance/Residual Variance		sig	p
	Variance	Std. Variance		
Stable Trait System Justification	0.883	1.000	***	<0.001
Sable Trait Subjective SES	1.649	1.000	***	<0.001
Stable Trait Life Satisfaction	1.013	1.000	***	<0.001