

LEFT AND RIGHTWING ILLIBERTY

**Two Concepts of Illiberty: Rethinking the Left-Right Political Spectrum Through Moral  
Psychology**

Shayan Syed

Department of Psychology

Lakehead University

Thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in  
Psychology (Psychological Sciences)

August 2025

Supervisor: Dr. Laurence Fiddick

Additional Supervisory Member: Dr. Joseph Manson

Internal Examiner: Dr. Beth Visser

External Examiner: Dr. Davut Akca

### **Abstract**

By examining how three political orientations: Left-wing authoritarianism, libertarianism (subsequently divided into lifestyle and economic liberty), and Right-wing authoritarianism related to moral values, the current study found support for the notion that the standard left-right political spectrum conceals important distinctions and overlaps among political orientations. Participants ( $N = 155$ ) completed self-report measures for political orientation, endorsement of moral ethics (community, autonomy, and divinity), and moral foundations, immorality ratings of moral violations, emotional reactions to moral violations (“contempt,” anger, and disgust), and punishment preferences for moral violators. Across several different sets of results (Shweder’s Ethics, moral foundations, emotional responses to moral violations, and punishment preferences for moral violators), political orientations consistently displayed a heterogeneous pattern of differences between one another. The results revealed that political orientations diverged on some moral domains but converged on others, showing that the standard left-right spectrum fails to capture some variation. Political orientation scores were linked to differential responses across contrasts that did not conform to a simple unidimensional model

### **Acknowledgments**

I would like to express my gratitude to my thesis committee for their guidance and support throughout this process. I am especially indebted to my supervisor, Dr. Laurence Fiddick, whose mentorship, patience, and encouragement were invaluable at every stage of this project. Larry, you have not only given me countless opportunities to grow as a researcher, but also broadened the horizons of how I think about both problems and solutions, and that is something I will carry with me for life.

I would also like to thank Dr. Joe Manson, Dr. Beth Visser, and Dr. Davut Akça for their thoughtful feedback, constructive criticism, and willingness to challenge me to think more deeply about my research. Their expertise and insights have greatly enriched the quality of my education.

I am profoundly grateful to my parents, Munawar Syed and Jehan Zaib, for their unconditional love and sacrifices that made this journey possible. To my siblings, Mujtaba and Aqsa, thank you for your encouragement and belief in me. I also wish to honor the memory of my late brother, Haseeb, whose presence continues to inspire me.

To my extended family and friends, your support, understanding, and care sustained me through the most challenging moments of this journey.

Finally, I would like to thank Lakehead University Security Service, who I encountered numerous times due to me locking myself out of my lab, and not knowing who else to call, thank you (and sorry).

**Table of Contents**

Abstract .....	i
Table of Contents .....	ii
Setting the Scene .....	1
Rightwing Authoritarianism .....	2
Leftwing Authoritarianism .....	4
The Authoritarian-Illiberal Distinction .....	7
The Left-Right Political Spectrum .....	8
The Confusing Case for Liberalism .....	8
Psychological Models of Morality .....	10
Social Domain Theory .....	14
Shweder's Codes .....	14
The CAD Triad Hypothesis .....	20
Moral Foundations Theory .....	22
Liberty as a Moral Foundation .....	24
Study Hypotheses .....	33
Method .....	37
Procedure .....	46
Results .....	47
Discussion .....	95
Limitations and Next Steps .....	107
References .....	115
Appendix A (Demographics Questionnaire) .....	128

## RIGHT AND LEFTWING ILLIBERTY

Appendix B (RWA Scale) .....	130
Appendix C (LWA Scale) .....	134
Appendix D (Liberty Foundation Scale) .....	138
Appendix E (MFQ-2) .....	140
Appendix F (Shweder's Codes Moral Values Measurement) .....	144
Appendix G (Harm Measures) .....	147
Appendix H (Facial Expressions) .....	149
Appendix I (REB Approval Letter) .....	154

## **Two Concepts of Illiberty: Right and Left-wing Illiberty**

### **Setting the Scene**

We all know that, in any serious historical sense, these terms [liberal and conservative] have lost all meaning. The use of such artificial labels, in political debate, merely distorts the issue and confuses the citizen. It substitutes the slogan for thought, the false label for the serious goal. (Rockefeller, 2014, p.21)

Although I do not necessarily suggest that the terms liberal and conservative have lost all sense of meaning, the following thesis will certainly suggest that some of the common terminology used in the context of the standard left-right political spectrum has become inconsistent with their traditionally coherent definitions. Therefore, the terms have become relative to the political ecosystems in which they are most often used, rendering the terms less effective in aiding our understanding of political psychology on both theoretical and practical levels, both to the researcher and the layman.

To ground this thesis, I will begin by outlining the ideological and psychological features of Right-wing authoritarianism (RWA), Left-wing authoritarianism (LWA), and liberty-oriented orientations. I will then introduce the moral psychological frameworks that guide the present research, including Shweder's moral codes, Moral Foundations Theory, and the contempt-anger-disgust (CAD) triad, and explain how these models allow political orientations to be linked with moral values, immorality judgments, emotional reactions, and punishment preferences. With this conceptual groundwork in place, I will describe the methodological approach and analytic strategy, followed by the presentation of results organized around the study objectives. Finally, I will discuss the implications of the findings for theories of political ideology, moral psychology, and contemporary issues such as polarization.

### **Right-wing Authoritarianism**

Early research on RWA traces its roots back to a German social scientist, Theodor Adorno, and his colleagues (Adorno et al., 1950). The research, conducted in the wake of World War II, was an attempt at assessing anti-democratic personality factors and was centered around understanding the psyche of what was at the time, regarded as the “authoritarian personality” (Costello et al., 2020). Adorno et al. (1950) developed what was known as the “F Scale”, where F stood for fascist. The F Scale was an attempt at outwardly explaining the minds of those who supported the Third Reich and their policies; policies such as Hitler’s “final solution”, which resulted in the systematic killing of approximately six million Jews (United States Holocaust Memorial Museum, 2021; Wyman, 2007). The F Scale was one of many scales on the authoritarian personality published by Adorno and colleagues, and it existed within a framework deeply rooted in psychoanalysis. The scale was devised under the assumption that the authoritarian personality was underscored by a weak and insecure ego, a cruel and domineering superego, repressed psychosexual deviancy, and ethnocentrism, all of which coalesced to form a representation of the German people as morally bankrupt (Stone, 1980). Prejudice towards outgroups (especially towards Jews) was also thought to have been intrinsic to the authoritarian personality (Stone, 1980). The F Scale was ultimately superseded when it became clear that the underlying theory was marred by serious psychometric and methodological flaws, as well as Adorno’s political biases (given that he was a committed Marxist), making further use of the scale untenable (Duckitt et al., 2010).

It was Canadian psychologist Bob Altemeyer who went on to revitalize authoritarianism research in a more data-oriented (and less psychoanalytic) manner, producing the now widely used RWA scale (Altemeyer, 1998; Conway et al., 2017; Costello et al., 2020). Like Adorno,

Altemeyer conceptualized RWA as a structure of personality, some components of which included: conventionalism, viewing the world as a dangerous place, being submissive to authorities, and willingness to engage in violence on behalf of authorities perceived to be legitimate (Altemeyer, 1998)<sup>1</sup>. Altemeyer's approach was more robust than Adorno's, and provided a new foundation for contemporary research into authoritarianism.

The contemporary research that followed however, painted a slightly different picture of RWA than Altemeyer had first envisioned (Costello et al., 2022). Current research suggests that RWA is better viewed not as a unidimensional and innate structure of personality, as both Adorno and Altemeyer thought, but instead as a set of related attitudes, values, and beliefs, related to personality, which are not necessarily personality structures in and of themselves (Duriez & Van Hiel, 2002; Heaven & Connors, 2001; Saucier, 2000).

Duckitt and Sibley (2010) refer to RWA scales as measuring social attitudes, especially politically conservative ones. As such, according to recent empirical works by Duckitt and Sibley, RWA can be broadly described as an attitudinal expression of the values of collective security, social-conservatism, stability, and order (Duckitt & Sibley, 2010; Duckitt & Sibley, 2016). These attitudinal expressions tend to manifest themselves in adherence to socially conservative norms, emphasis on obedience towards established authorities, dogmatism (having strong and rigid beliefs that one holds unwaveringly as absolute truths), and potential to demonstrate lethal partisanship (Costello et al., 2020), still mirroring much of the definition provided by Altemeyer (1998).

One of the key and most fundamental characteristics of RWA that has survived these various reconceptualizations is support for hierarchies that RWAs believe to be legitimate (the

---

<sup>1</sup> Altemeyer (1998) believed that the view of the world as a dangerous, violent, and evil-ridden place, fostered feelings of aggression within RWAs.



term authority itself being highly suggestive of hierarchy). Another characteristic that has survived is an acceptance of violence for moral or political ends. RWAs tend to believe that their violence is sanctioned by the authorities that they perceive to be legitimate, instilling in their minds that their actions may be morally righteous, just, and even necessary (McFarland, 2005). For example, McFarland found that high RWA scores predicted support for the Iraq war among American students, echoing the pattern of support by American RWAs for American-led conflicts (2005). However, authoritarian support for hierarchy is not the same as violence. Violence may be used in support of hierarchies, but that does not necessarily make them synonymous. For example, one could use oral arguments in support of hierarchy, and in so doing, one is not necessarily being violent.

### **Left-wing Authoritarianism**

Altemeyer (1998) also proposed the existence of Left-wing authoritarianism (LWA). Altemeyer conceived of LWAs as being submissive to revolutionary authorities, and as having a willingness to engage in violence in their name or on their behalf. When Altemeyer studied LWA, he discovered that there was very little evidence of the construct, stating that the “‘authoritarian on the left’ has been as scarce as hens’ teeth” within his samples (p. 71).

More recently, Conway et al. (2017) have revived the concept of LWA, arguing that researchers must ask questions targeting left-wing concerns. If done correctly, they argue, one would discover that the prejudice and dogmatism characterizing RWA would also be found within LWA, simply reflecting left-wing concerns instead of right-wing ones. Conway et al. rewrote Altemeyer’s RWA scale to reflect leaders and causes that were pertinent to the left more so than the right (2017). It is critical to note that Conway et al. failed to separate LWA terminology from liberal terminology, potentially conflating the two ideologies. For example,

some might view libertarianism as inimical to the far left and at the same time view it as related to liberalism as support for individual autonomy. Instead, LWA is often conflated with liberalism; that is, liberals are often grouped in with the undifferentiated left (or left of center).

One potential problem with the foregoing formulation of LWA is that it imposes the authoritarian component of RWA, onto those with a left-wing orientation, which is fundamentally problematic for a number of reasons, most obvious of which is that the left are typically opposed to hierarchies and centralized power structures (Costello et al., 2022). In describing the militant group “Weather Underground”, Costello et al. (2022) offer a modern illustration of organized and political anti-state violence driven by extreme leftwing attitudes. The U.S. based, nonhierarchical group was self-described as “communist” and “anti-imperialist”. The group conducted bombings on the Capitol, Pentagon, and other American infrastructure with the intention of punishing and overthrowing the government (Costello et al., 2022; Federal Bureau of Investigation, 2016; U.S. Congress, 1975)<sup>2</sup>. This is not to say that authoritarians do not exist on the left, but merely that their 'authoritarianism' might be expressed non-hierarchically. They might recognize other, non-hierarchical forms of authority in the service of which they are willing to use violence. This potentially explains why Altemeyer failed to find substantive evidence for LWA

Where LWAs and RWAs align then, is not in their endorsement of authority in the form of hierarchical structures, but instead in their rigid, dogmatic belief systems, punitive stance toward dissenters, and a shared willingness to sacrifice individual liberties in service of collective conformity. Rather than valuing open discourse, both orientations exhibit a tendency to enforce their own moral and political orthodoxies, often through coercive or exclusionary

---

<sup>2</sup> Allegedly, the Capitol and Pentagon were bombed in response to the U.S. invasion of Laos and bombing of Hanoi, respectively (U.S. Congress, 1975).

means. In the case of LWA, this dogmatism is typically expressed through left-wing moral and political values, such as strong commitments to collectivism, social justice, and the suppression of perceived inequalities (Manson, 2020). Although some early critics argued that LWA is conceptually incoherent or merely a reactionary mirror of RWA (Stone, 1980), more recent empirical research has provided growing support for its validity as a distinct ideological construct (Costello et al., 2022; Manson, 2020). These findings suggest that LWA is not merely a theoretical artifact but reflects a measurable and increasingly relevant dimension of authoritarianism.

LWA becomes significantly more coherent as a construct when its defining feature is reframed, not as support for hierarchy, as in RWA, but as opposition to hierarchy instead. Costello et al. (2022) proposed a tripartite model of LWA composed of anti-conventionalism, anti-hierarchical aggression, and top-down censorship. Of these, anti-hierarchical aggression most directly captures the LWA stance toward social hierarchies, emphasizing hostility toward perceived dominance structures rather than deference to them. However, despite offering this important clarification, Costello et al. retain the label “left-wing *authoritarianism*”, a term that, as I argue in the next section, may obscure more than it reveals. By equating dogmatism and coercion exclusively with authoritarianism in the capacity of support for hierarchy, the broader construct of illiberalism is ultimately overlooked. Authoritarianism, particularly in its right-wing form, is indeed a major expression of illiberalism, but it is certainly not the only one.

### **The Authoritarian-Illiberal Distinction**

In the foregoing discussion, I have argued that while LWA and RWA share important psychological traits, they diverge in some respects as well, one way is in their orientation toward

hierarchy. The political right typically endorses hierarchical social structures, valuing order, tradition, and deference to authority, whereas the political left more often rejects hierarchy, emphasizing equality instead (Atari et al., 2023). Given that authoritarianism has long been theorized as closely intertwined with support for hierarchy, this presents a foundational conceptual tension within the idea of left-wing authoritarianism. Yet despite this incongruity, empirical studies have repeatedly shown that individuals high in LWA do exhibit rigid dogmatism, punitive attitudes toward dissenters, and a willingness to restrict civil liberties to enforce ideological conformity (Manson, 2020). These traits are clearly reminiscent of authoritarianism, but I argue they are more accurately characterized as expressions of illiberalism. That is, what LWA and RWA truly share is not a common relationship to hierarchy or tradition, but a deeper rejection of liberal norms such as open discourse and tolerance for ideological diversity. Reframing both orientations under the broader umbrella of illiberalism helps resolve the conceptual ambiguity surrounding LWA while also clarifying the psychological and moral commonalities that unite extreme ideologies across the political spectrum.

### ***Illiberalism***

Main (2021) broadly defines illiberalism as being contradictory to core liberal principles, such as inalienable human rights, political egalitarianism, rule of law, and tolerance which does not suppress reasonable discussion. Both LWAs and RWAs tend to be willing to restrict individual autonomy in favor of their own moral imperatives or for those of their tribe, thus violating the outlined principles of liberalism (Main, 2021; Shweder et al., 1997). The avenues through which each group tends to enforce adherence to norms are what, in the context of this study, partially forces the distinction between the terms authoritarianism and illiberalism. As I have alluded to, LWAs tend not to support the status quo, or the established authorities that

perpetuate it (Costello et al., 2022; Merriam-Webster, n.d). Since those high in LWA tend to oppose established social hierarchies, the typical authoritarian description of obedience and deference to established authorities, as I mentioned, is fundamentally in error within the context of describing LWA, indicating that classing LWAs as “authoritarian” is ill-suited (Costello et al., 2022). Throughout this thesis, I use the terms LWA and RWA when referring to existing theories, scales, or findings that explicitly use that terminology. However, when presenting our own interpretations or theoretical contributions, I adopt the terms LWI and RWI. This distinction allows for a clearer separation between prior research and the current framework and avoids attributing novel interpretations to constructs that were originally defined differently.

### **The Left-Right Political Spectrum**

While RWA and LWA are often treated as mirror opposites on the political spectrum, their similarity in illiberalism raises questions about whether a single left-right dimension can adequately capture the structure of political ideology.

The left-right political spectrum is a linear construct along which political ideologies are traditionally positioned. Its historical roots can be traced back to the French Revolution of 1789, during which members of the French National Assembly physically divided themselves according to their ideological allegiances. Monarchists sat to the right of the presiding officer in the National Assembly, and radical revolutionaries seeking to abolish the monarchy sat to the left (Lewis & Lewis, 2023). This spatial arrangement eventually evolved into a symbolic classification system which continues to influence political discourse across much of the world.

### ***The Confusing Case for Liberalism***

The concept of liberalism lacks a universally agreed-upon definition in practice (Bell, 2014). Its meaning often varies across historical periods, cultural contexts, and ideological

communities. In its contemporary usage, what liberalism signifies to any given individual is shaped by their sociopolitical environment, personal experiences, and the ideological groups or “tribes” with which they identify (Bell, 2014; McCloskey, 2019). This, in part, may be due to the distorted and inconsistent utilization of the left-right political spectrum, for example, often conflating “liberal” with the undifferentiated left, and as necessarily antagonistic to “conservative”, despite this not always being the case (Bell, 2014; McCloskey, 2019).

Where does liberalism fit on the traditional left-right political spectrum? The answer seems unclear. Liberal parties exist across the ideological spectrum: Canada’s Liberals and the UK’s Liberal Democrats are center-left, while Australia’s Liberal Party and Denmark’s Venstre (venstre translates to “left”) are on the center-right. One possible solution is to place liberalism in the center of the spectrum. But this leads to another puzzle: where should libertarianism be placed? Libertarians are often viewed as more conservative, and support more extreme versions of individual rights and freedoms rooted in classical liberalism (Graham et al., 2009). The notion of an “extreme center” however, is contradictory in nature. How can one be radical about moderation? But perhaps the contradiction only arises because liberalism has been miscategorized to begin with. If liberalism is not truly the center of the left-right spectrum, but instead is a distinct orientation altogether, then the idea of “extreme liberalism” becomes more coherent.

What actually separates these ideological orientations from one another? Are they defined merely by political behavior, who they vote for, and what policies they support? Or are there more fundamental psychological differences at play? Might they differ in their values, their moral intuitions, or their emotional responses to right and wrong? If so, is the traditional left-right spectrum really the best framework for capturing that complexity?

These questions reveal a deeper problem: the left-right spectrum may obscure more than it clarifies, and this misfit suggests the need to move beyond a unidimensional political spectrum. In response, the present study adopted a multidimensional approach to political ideology.

Classical liberalism, associated with thinkers like Adam Smith and John Stuart Mill, emphasizes individual autonomy, and legal equality under a limited government tasked primarily with protecting civil rights and facilitating open markets. Its foundational values include tolerance, open-mindedness, respect for personal freedom, and the belief in merit-based social equality (McCloskey, 2019). These values also align closely with the liberal virtues outlined by political theorists such as Main (2021), who emphasize procedural justice, pluralism, and individual rights as moral imperatives within a democratic society.

For the purposes of the present study, liberalism will refer specifically to this classical tradition, the extreme of which is libertarianism. It is conceptually distinct from both left and rightwing illiberalism. At its most extreme, classical liberalism culminates in libertarianism, an ideology that amplifies liberal values, particularly individual liberty and minimal state interference, to their maximal expression. This framework positions liberalism not as a blend of left and right, but as a distinct third orientation within the broader moral-ideological space. Understanding liberalism in this classical sense thus provides a crucial reference point for interpreting the psychological and moral structure of the political orientations examined in this study.

### **Psychological Models of Morality**

The following theories are discussed because they specify how morality is structured and expressed in psychology, which in turn allows for exploration of how distinct political

orientations may map onto moral dispositions. Social Domain Theory (SDT) clarifies the boundary conditions of what counts as “moral” versus conventional or personal, so that our measures target moral judgments rather than etiquette or preference. Shweder’s ethics (autonomy, community, divinity) casts those domains as moral codes, providing content areas that different orientations may prioritize. Rozin et al.’s CAD triad links those codes to discrete emotions (contempt, anger, disgust), providing testable predictions for my emotion measures. Moral Foundations Theory supplies measurable value dimensions, care, equality, proportionality, loyalty, authority, purity, and liberty, that are known to covary with ideology (Graham et al., 2009).

### **Social Domain Theory**

Social Domain Theory (SDT) was developed as a means of understanding socio-moral development and reasoning (Lourenço, 2014; Turiel, 1983). SDT posits three independent domains of social knowledge: the moral, the social-conventional, and the personal (Ilten-Gee & Manchanda, 2021; Nucci, 2001).

### ***The Moral Domain***

The moral domain encompasses interrelated concepts such as human welfare, justice, and harm (Turiel, 1983). For example, in a study by Davidson et al. (1983), child participants overwhelmingly framed their moral reasoning around concepts such as welfare, fairness, and obligation, suggesting that these are reliably developing moral concerns. The obligatory character of morality is reflected in its independence from authority, social consensus, and the existence of rules. For example, if murder is truly immoral, then it remains so even if permitted by authority figures, or by social consensus; nor is murder made immoral simply because there is a rule against it. Hence, Turiel (1983) proposed that diagnostic criteria (independence from



authority, social consensus, and rules), in addition to universality, demarcate the moral from other domains of action.

These criteria of the moral were then incorporated into Turiel's criterion judgment methodology, a methodology that he used to demonstrate an early, emerging understanding of the moral domain using children. However, this method requires contrasting the moral with other domains of action, so before considering this methodology further, it would help to first consider other, nonmoral domains of action proposed by Turiel.

### ***The Social-Conventional Domain***

Matters of social-convention are distinct from matters of morality. Matters of social-convention are defined by the greater society an individual is embedded in, and do not necessarily relate to ethical principles directly (Turiel, 1983). Social-conventions are posited to be established and perpetuated by groups, societies, and cultures, and tend not to be universal (Nucci, 2001; Turiel, 1983). Since there is not the same noncontingent universality as with moral issues, social-conventions can be said to be more arbitrary than moral issues, and are relative to the context of a specific social system (Nucci, 2001; Turiel, 1983). For example, in some cultures, it is considered quite rude, but not immoral, to address one's teacher/instructor by their first name, whereas in other cultures it is considered less so (Chejnová, 2013). According to Nucci (2001), social-conventions within groups and societies serve as shared expectations of acceptable behaviors; individuals who do not conform to such expectations are at risk of being shunned or ostracized by their community.

Methodologically, the social-conventional can be distinguished from the moral by posing the aforementioned criterion judgments, even to young children. For example, the immorality of an action should not be based upon whether or not it is permitted by an authority figure, whereas

the acceptability of violating a social convention could very well be influenced by the judgments of authority figures. Therefore, a child might be posed the following question: “in our school, the principal says that you cannot pull other children’s hair, but I’ve heard that across town there is a school where the principal says that you can pull other children’s hair. Is that okay?”. All the child has to do is answer “okay” or “not okay”. Most children will answer that it is not okay for a child to pull another’s hair, regardless of whether that action was permitted by the principal or not, who, in their eyes, is a figure of authority (Turiel, 1983). This answer takes on even greater significance when contrasted with the answer the same child might give to a seemingly parallel question: “in our school, the principal says that you have to hold up your hand if you want to ask a question, but I’ve heard that across town there is a school where the principal says that you don’t have to hold up your hand to ask a question. Is that okay?”. Now, unlike the previous question, children will state that it is okay for a child to act this way (not holding up their hand), despite it being frowned upon, and often even being a rule in many classrooms. SDT explains this differential pattern of responding by arguing that the first scenario falls within the purview of the moral domain, because pulling someone’s hair causes them to suffer, whereas the second scenario involves no such suffering, hence, falling within the scope of the social conventional domain. The rule of holding up one’s hand to ask a question helps to coordinate social interaction by establishing shared expectations. But the rule, as a social convention, can be overridden by legitimate authority figures, social consensus, or the absence of the rule, meaning that the rule need not be universal (e.g., across town in a different school, other children may act differently).

***The Personal Domain***

In addition to the moral and the social conventional, there are also aspects of social cognition which do not fit tidily into these domains (Nucci, 2001). Ambiguous as this may sound, SDT suggests that these aspects are not without structure. When acts have consequences only for the self for example (non-social), SDT posits that such issues would fall within the purview of the personal domain (Nucci, 2001; Smetana, 1995). Personal matters are those which are not constrained by others, such as whether or not one decides to wear a short sleeve t-shirt or a tank top. Although, there may be circumstances in which even that decision may transcend the personal domain (i.e., if a woman wears a tank top in Saudi Arabia, she would likely have this personal matter become a social matter rather quickly). The key then, is that the personal domain pertains to personal decisions, and is unfettered by societal judgements, if the actions of an individual concern someone else, then that no longer falls within the personal domain.

**Shweder's Codes**

Unlike the singular approach to morality of Turiel's SDT, Shweder's ethics represent a pluralist model of moral psychology that proposes more than one irreducible and innate elements of morality, or as Graham et al. so succinctly put it: morality is more than one thing (2012). A pluralist model inherently rejects the notion that morality can be reduced to a universally monolithic construct. This lack of reduction to an all-or-nothing construct offers a tremendous theoretical benefit: allowing for a greater understanding and appreciation of a diversity of moral systems, which aids in comprehension of the vastly complicated and overarching concept of morality itself (Haidt & Rozin, 2017). The key criterion dividing the moral from the nonmoral in SDT is whether or not an innocent other potentially suffers (Turiel, 1983). SDT assumes, however, that this can only happen in the domain of the moral, whereas Shweder et al. (1997)

propose that there are different ways of suffering that potentially correspond to SDT's nonmoral domains. For example, morality is intrinsically dyadic in SDT (Schein & Gray, 2018, and consequently, there is no place for victimless crimes. How then should one make sense of the following scenario: "a man goes to the supermarket once a week and buys a dead chicken. But before cooking the chicken, he has sexual intercourse with it. Then he cooks it and eats it" (Haidt, et al, 1993, p. 617). Haidt et al. (1993) found that many of the adults they tested judged the man's actions to be immoral, despite no innocent other suffering. Shweder et al. (1997) would argue that the man's actions do involve a form of suffering, a moral suffering in which the man's spirit or soul is debased by his degrading actions. According to Shweder et al. (1997), SDT's conception of immorality is constrained to a biomedical model of suffering that is dyadic in nature. But if one accepts that there is a moral order in which humans exist in a relatively exalted state, degrading acts (that SDT treats as merely personal), can cause one to suffer morally. Moreover, actions that involve no material harm, but causes one to lose standing within one's community can be construed as a form of interpersonal harm that results from violations in SDT's social conventional domain. In other words, Shweder et al. (1997) suggest that each of SDT's domains, the moral, the social conventional, and even the personal, can be construed as moral domains given different conceptualizations of suffering and the self. Hence, Shweder et al. (1997) propose distinguishing between three different moral codes/ethics: the autonomy code, the community code, and the divinity code, that approximate SDT's domains of morality, social convention, and the personal, respectively.

### *The Autonomy Code*

Given that Turiel (1983) construes morality in terms of judgments of justice, rights, and welfare pertaining to how people ought to relate to each other, the autonomy code, which likewise emphasizes harms, rights, and justice, can be construed as Shweder et al.'s equivalent of the morality domain, grounded in a biomedical understanding of suffering in a material sense (Shweder, et al., 1997). Physical injury is a prototypical cause of biomedical suffering. Although Turiel seldom explicitly frames the moral domain in terms of individualism, Haidt (2012, p. 12, emphasis original) contends that for Turiel, "morality is about treating individuals well." One might also be tempted to align the autonomy code with the personal domain given the latter's emphasis on personal autonomy. However, the personal domain, as construed within SDT, is a realm of nonsocial action. If personal autonomy is considered within a social context where it is constrained by others, it would no longer fall within the personal domain but would instead fall within the moral domain, and hence, would align with Shweder et al.'s autonomy code. According to Shweder (2003, p. 1120), the autonomy code "conceptualiz[es] the self as an individual preference structure where the point of moral regulation is to increase choice and personal liberty."

This conceptualization of autonomy as personal liberty, free from external interference, resonates with classical liberalism and the political aims of libertarians. Indeed, Shweder (2003)

### ***The Community Code***

The community code corresponds to Turiel's social-conventional domain, because both concern community-specific, traditional social norms and deference to authority figures. Here, harm may be viewed in terms of an interpersonal model of suffering such that harms can be inflicted in a nonmaterial way by "witches, ancestral spirits, envious neighbors or domineering relatives" (Shweder et al., 1997, p. 127). This is not to say that biomedical harms, like physical

injury, are not recognized by those applying the community code, it is more that the interpersonal causes of harm are foregrounded such that demonstration of direct physical causality is less important. Moreover, the harms inflicted need not be of a physical nature. They can be social in nature, like a loss of face, honor, or failure to fulfill one's duties and obligations.

According to Shweder (2003), the moral agent in the community code is viewed as occupying a status, in the sense of a social role, to which are attached office-specific rights and obligations. In other words, agents are authorized to act in ways recognized by the community. Hence, it is unsurprising that Radkiewicz (2020) found that RWA is positively associated with the community code, though it should be noted that he operationalized the community code in terms of the moral foundations: loyalty and authority (see Moral Foundations Theory below).

### ***The Divinity Code***

Finally, the divinity code can be mapped onto SDT's personal domain. This might appear a tenuous correspondence, but both are compatible with nonsocial actions. The personal domain is, by definition, a domain of nonsocial action, while many acts that are viewed as immoral, even though no second party suffers (i.e., victimless crimes), are typically divinity code violations. For example, Haidt et al.'s (1993) example of the man who masturbates into a dead chicken and then eats it would be a divinity code violation because the act is personally degrading, damaging the man's status as a moral being. Here, the relevant model of suffering is a moral model in which individuals are seen as primarily responsible for their own hardships (Shweder et al., 1997). The divinity code only appears more removed from the personal domain if one does not subscribe to an underlying ontology in which there is a natural order, imbued with moral significance – in which solitary acts that are viewed as unnatural can damage one's spiritual status. If one does

accept such an ontology, then the mapping from the personal domain to the divinity code is more straightforward.

There is, however, another line of argument by which the personal can be viewed as moral suggested by the radical feminist slogan: “the personal is political”. (Swan, 2020). This suggestion that even personal actions that do not directly affect another person might still contribute to others suffering through our relations to the underlying social order resonates with Shweder et al.’s (1997) characterization of the divinity code’s underlying ontology regarding underlying connectedness and moral orders. Indeed, it is often family life that feminists sought to open to critique with their claim that the personal is political. The more general point is that there is a pervasive (im)moral order within which one acts, regardless of whether their actions are solitary and personal or public and interpersonal. This manner of thinking could potentially encourage advocates of left-wing identity politics to judge even the most mundane and unintended solitary actions as supporting the patriarchy or structural racism.

The divinity code need not be limited to religion then. Forms of the world, forms of the social world, can easily be mapped onto either identity groups like gender, race, and sexual orientation, or it can be mapped on to biological species, as in the concerns of environmentalists. Hence, one can distinguish between right- and left-leaning versions of the divinity code. On the right, the sacred has traditionally been defined by organized religion. By contrast, on the left, one might propose that there are identitarian and environmental conceptions of the sacred.

Left-wing identity politics is a left-leaning political ideology and it is also highly correlated with LWA (Fasce & Avendaño, 2023). However, this is hardly surprising given that identity politics is often built into LWA scales. For present purposes it would be somewhat circular to test whether LWA is associated with an identitarian form of divinity. Instead, I

consider a more general form of divinity based on social unity. Pinker (2011) has suggested that Shweder's divinity code overlaps with Alan Fiske's (1991) communal sharing relational model. Fiske associates this form of social relation with Marxist ideology, the prototypical far left political ideology. More recently Rai and Fiske (2011) have suggested that communal sharing is associated with a moral principle of social unity. Therefore, it is likely that social unity also captures an aspect of the divinity code.

Haidt and Rozin (2017) suggest that environmentalism might represent a distinct form of divinity concern that might also be associated with the political left. Furthermore, there is evidence that environmentalism is positively correlated with LWA (Conway et al., 2018; Milfont & Osborne, 2024). The findings regarding RWA are less consistent with Conway et al. and Milfont and Osborne finding that environmentalism is negatively associated with RWA, whereas Reese (2012) found that RWA is positively associated with environmentalism. Given that Reese's study was a self-described pilot-study involving only 56 participants, and the positive association with environmentalism was limited to the submission subcomponent of RWA and indeed the authoritarian aggression component of RWA was negatively associated with environmentalism, the balance of evidence suggests that RWA in general is negatively associated with environmentalism.

Returning to Shweder's more religious framing of the divinity code, this is most likely to be associated with RWA. Although I was unable to find any published studies investigating potential associations between RWA and a specifically religious conception of the divinity code (Radkiewicz, 2020, only investigated the autonomy code and the community code), it is routinely observed that RWA is associated with religiosity (Fasce & Avendaño, 2020). Hence, it



is reasonable to assume that religious forms of the divinity code are likely to be associated with RWA.

### ***The CAD Triad Hypothesis***

Shweder et al.'s (1997) three moral codes are further elaborated upon by Rozin et al.'s (1999) CAD triad hypothesis. The CAD triad hypothesis (Rozin et al., 1999) conjectures that violation of each of Shweder et al.'s moral codes (Community, Autonomy, and Divinity) is associated with its own characteristic emotional reaction (Contempt, Anger, and Disgust, respectively). They proposed that violations of the community code are associated with the emotion contempt; violations of the autonomy code are associated with the emotion anger; and violations of the divinity code are associated with the emotion disgust.

Contempt, anger and disgust are often other-critical emotions, but each according to Rozin et al., are elicited in different contexts. Anger, they argue, is “a reaction to frustration or goal blockage” (p. 575), which maps well onto the infringement of personal autonomy that characterizes violations within the autonomy code. “Contempt is often linked to hierarchy and a vertical dimension of social evaluation,” (p. 575), which maps well onto the community code given the focus on social hierarchy. Both anger and contempt are prototypically elicited in reaction to the actions of others. By contrast, disgust is prototypically elicited by actions of the self, again, reinforcing my contention that the divinity code is best aligned with SDT's personal domain. One is more disgusted, for example, when one steps in dog feces oneself than when someone else steps in dog feces. One can react to the actions of others with disgust (so called sociomoral disgust), core disgust however is associated with the ingestion of contaminating substances within one's own person (Rozin et al., 1993). Regardless, sociomoral disgust is a particularly apt reaction to divinity code violations given that it is “triggered by a variety of

situations in which people behave without dignity or in which people strip others of their dignity” (Rozin et al., p. 575). Many people are likely to judge a man masturbating into a dead chicken in the privacy of his own home as both undignified and disgusting, regardless of whether they would also judge it to be immoral.

Rozin et al. (1999) provided empirical support for the CAD triad hypothesis across a variety of studies, but the most relevant study, given that a variation on the same method is employed in the current research, involved participants selecting the facial expression (contempt, anger, or disgust) that they felt best depicted how someone else (a bystander) would react to violations of Shweder’s moral codes. They found that both American and Japanese participants preferentially selected anger in response to autonomy code violations, disgust in response to divinity code violations, and, to a lesser extent, contempt in response to community code violations. However, data from Rozin et al. also raises concerns about whether participants actually viewed the community code violations as moral violations. Study three in the CAD triad paper showed relatively low immorality ratings for community violations, suggesting that participants may have interpreted them as social-conventional, or breaches of social etiquette rather than moral transgressions.

A similar concern applies to their divinity code violations, such as eating rotten meat, which may have prompted strong reactions of disgust without necessarily being judged as immoral. Indeed, Rozin et al.’s divinity violations bore less relation to Shweder’s original conception of the divinity code than they did core disgust elicitors, e.g., the aforementioned rotten meat example, but also someone biting into an apple with a worm in it, and violations of sexual morality, e.g., “A 70 year old male has consensual sex with a 20 year old female”

(modification of an item from Rozin et al., 1999; see Appendix G). These ambiguities complicate the interpretation of the CAD triad.

In order to facilitate comparisons with Rozin et al. (1999), I have distinguished two further versions of the divinity code: bodily divinity (associated with core disgust elicitors) and sexual divinity (associated with sexual morality; see Appendix G). Of particular relevance to core disgust violations is a hypothesized behaviour immune system (BIS), which consists of a collection of psychological responses against infectious disease, such as disgust reactions (Schaller, 2006).

Several studies have investigated whether there is a relationship between the BIS and social conservatism, such as RWA. Terrizzi et al. (2013) conducted a meta-analysis on these studies and found that there is indeed a relationship between social conservatism (more so than economic conservatism) and BIS responses, like disgust. However, RWA is less related to disease avoidance disgust (core disgust) than it is with sexual disgust, which is hypothesized to motivate one to avoid sexual activity, such as incest or homosexuality, that is less likely or unlikely to produce healthy offspring (Chamorro Coneo et al., 2023; Tybur et al., 2010). Furthermore, Chamorro Coneo et al. (2023) found that the relationship between sexual disgust and both homonegativity and transnegativity is partially mediated by RWA. These findings on RWA, the BIS, and sexual disgust, suggests that those scoring higher on RWA will provide higher endorsements of bodily divinity and sexual divinity and will be more likely to judge violations in these subdomains as immoral.

### **Moral Foundations Theory**

While Shweder et al. (1997) proposed three moral codes, Graham et al. (2012) proposed five innate and universally available moral foundations that were not necessarily framed in

reference to five innate and universally available moral foundations: care/harm, fairness/cheating, loyalty/betrayal, authority/subversion, and sanctity/degradation (these will be described in more detail below in the section on the 2023 revision of the theory). Moral Foundations Theory (MFT) describes what Graham et al. (2012) refer to as “a theory of the first universal draft of the moral mind” (p. 10). All the moral foundations are posited to exist within each and every culture; how morality is constructed atop these foundations however, depends upon the culture in question (Atari et al., 2023; Haidt & Joseph, 2004).

Of particular relevance to the present study is Graham et al.’s (2009) study in which they found that self-identified “liberals” differentially valued care/harm and fairness/cheating, whereas “conservatives” valued all five foundations. Participants primarily indicated their political identification using a 7-point Likert scale with *strongly liberal* and *strongly conservatives* at opposing ends of the scale. Participants were only given the opportunity to identify as libertarian in one of the studies. The libertarians valued each of the foundations less overall than both liberals and conservatives, but were more similar to the liberals in the pattern of values.

Graham et al.’s (2009) demonstration that liberals and conservatives value the moral foundations differently generated considerable interest in the political psychology literature. Kivikangas et al. (2021) subsequently conducted a meta-analysis of such studies that involved a political-self-placement question (PSP, what I refer to here as political identification) and the moral foundation questionnaire (MFQ, Graham et al., 2011). After searching the literature and incorporating data from the YourMorals.org website, Kivikangas et al.’s meta-analysis included 89 samples and over 200,000 participants. They found that “conservatism” or a “rightward” political orientation is negatively associated with care and fairness and positively associated with

loyalty, authority, and sanctity, with sanctity being more strongly associated with a “conservative” (as opposed to a “rightward”) political orientation and care being more negatively correlated with a “rightward” political orientation.

Many studies have also investigated the associations between the more specific political orientation of RWA with the moral foundations (e.g., Guidetti et al., 2021; Hadaricks & Kende, 2018; Harnish et al., 2018; Kugler et al., 2014; Milojev et al., 2014). As with the PSP studies reviewed by Kivikangas et al., each of these studies found that RWA is positively associated with endorsements of loyalty, authority, and sanctity. All of the studies, except Milojev et al., also found that RWA was negatively associated with care and fairness, though in most cases these negative correlations failed to reach significance. In this respect, the RWA results are more like the PSP results where participants identify as “conservative” than when they identify as being on the “right.” More will be said about this distinction in the Discussion section.

Compared with RWA, there have been fewer studies investigating the associations between LWA and Haidt’s moral foundations. This no doubt is due to the fact that interest in LWA has only developed more recently. Unsurprisingly, Love and Sharman (2024) found that LWA displays the opposite of the pattern of associations observed with conservatism and RWA, namely a positive association with care and fairness and a negative association with loyalty, authority, and sanctity.

### **Liberty as a Moral Foundation**

A group of researchers, many of whom are frequent collaborators on MFT with Jonathan Haidt, established a website, YourMorals.org, that has attracted thousands of visitors. The site is used as a platform for recruiting participants in psychological research. Among the questions participants in these studies are typically asked is their political orientation. Iyer et al. (2012)

report that out of the 157, 804 participants recruited for one such study, 11,994 self-identified as “libertarian.” Iyer et al. proposed that these libertarians might value a sixth moral foundation, liberty, especially negative liberty, characterized by freedom from interference. To test this proposal they created a Liberty Foundations Scale, which when factor-analysed revealed two factors: economic libertarianism and lifestyle libertarianism (see Appendix D). Economic libertarianism featured items like: “People who are successful in business have a right to enjoy their wealth as they see fit,” whereas lifestyle libertarianism featured items like: “People should be free to decide what group norms or traditions they themselves want to follow.”

Iyer et al. tested the aforementioned participants on a range of measures, including the MFQ and the Liberty Foundation Scale. Participants were categorized as libertarian, liberal or conservative using a PSP measure. As predicted, they found that libertarians scored highest on the liberty foundation, significantly higher than liberals or conservatives. Liberals ( $M = 3.89$ ) were most similar to the libertarians ( $M = 4.47$ ; conservatives,  $M = 3.51$ ) in their scores on the lifestyle subscale, whereas conservatives ( $M = 3.88$ ) were most similar to the libertarians ( $M = 4.27$ ; liberals,  $M = 2.32$ ) on the economic subscale. Turning to the other moral foundations, the libertarians scored lower than both liberals and conservatives on harm, lower than liberals ( $M = 3.76$ ) on fairness, but similar ( $M = 3.09$ ) to conservatives ( $M = 3.02$ ), though given these sample size this was a significant difference; similar ( $M = 2.25$ ) but significantly different from liberals ( $M = 2.14$ ) on loyalty, and lower than conservatives ( $M = 3.12$ ); similar ( $M = 2.16$ ) but significantly different from liberals ( $M = 2.12$ ) on authority, and lower than conservatives ( $M = 3.32$ ); and no different ( $M = 1.35$ ) from liberals ( $M = 1.37$ ) on sanctity, and lower than conservatives ( $M = 3.00$ ). In summary, the libertarians displayed a distinctive mix of moral values. Beyond their high valuation of liberty, they scored similarly to conservatives on harm

and fairness and similarly to liberals on loyalty, authority and sanctity. A more concise way of putting this is that they scored low on all moral foundations except liberty, which is consistent with Graham et al.'s (2009, Study 3) finding that libertarians are more willing to violate the five original foundations than either liberals or conservatives. To the best of our knowledge, there has been no other studies that have investigated the associations between libertarianism and the moral foundations.

### **Moral Foundations Theory (2023 Revision)**

Since its inception, it was made clear by the architects of MFT that their theory may require expansion and refinement as research continued to grow (Graham et al., 2012). Indeed, in 2023 MFT was majorly revised, and the Moral Foundations Questionnaire-2 (MFQ-2) was developed (Atari et al., 2023; replicated and further validated by Zakharin & Bates, 2023). Interestingly, the addition of a liberty foundation was not one of the changes. Instead, the fairness foundation was split into separate equality and proportionality foundations, and then conceptually distinguishing the two even further (Atari et al., 2023). Atari et al. state that the motivation for the equality-proportionality distinction spawned from a desire to correct the assumption that fairness is reducible to a single concept. Further rationale for the change comes from Rai and Fiske's (2011) moral motives, which states that equality is distinct from proportionality in that equality deals with totally equal outcomes in social contexts, whereas proportionality deals with outcomes based on attributes such as merit and relative contributions. By distinguishing these two dimensions, the revision corrected an oversimplification of fairness in moral psychology (Atari et al., 2023).

### *Equality*

Equality can be described as evenness in social relationships, which includes: equal rights to vote, equal rights to free speech, equal say in decision-making, matching of in-kind reciprocity, equality of outcome, and the tracking of favors (Atari et al., 2023; Rai & Fiske, 2011). In brief, equality concerns itself with ensuring uniform outcomes in social contexts, regardless of individual differences.

Atari et al. (2023) analyzed the relationships between LWA and RWA on the one hand and each of the moral foundations on the other with correlations (Study 3), but they assessed the relationships between PSP “left” / “right” responses (dependent variable) and the moral foundation scores (independent variables) using a random-intercept, multilevel model (Study 2). Zakharin and Bates (2023) reported correlations with LWA, RWA, and PSP “left” / “right.” It is helpful to compare these as differences between the authoritarianism measures and the PSP responses might suggest alternate forms of political orientation that are not being captured by the standard unidimensional spectrum.

With respect to equality, Atari et al. found a negative association with the “right” (and hence a positive association with the “left”), while they also found a positive correlation with LWA, but no significant correlation, positive or negative with RWA suggesting that perhaps there might be some of the variance in the equality response might be unaccounted for in the unidimensional spectrum. Atari et al. further conducted tests for quadratic effects with the foundations and observed a significant effect suggesting that the extreme left and right score higher on equality than those in the middle of the spectrum, suggesting that perhaps some political orientation in the middle of the political spectrum display a negative association with equality. Zakharin and Bates, however, found a negative correlation for both the “right” and



RWA, and a positive correlation with LWA (the negative correlation with the “right” meant a positive correlation with the “left”). This might suggest that there is not any unexplained variance in the middle of the spectrum, though Zakharin and Bates tested a smaller ( $N = 835$ ) and European sample than Atari et al.’s larger ( $N = 1410$ ) and predominantly North American sample.

### ***Proportionality***

Proportionality entails calculation of ratios with respect to things such as cost or merit (Rai & Fiske, 2011). Proportionality is grounded in merit; in social relationships, punishments should be proportional to transgressions, and rewards proportional to accomplishments or merit (equality of opportunity). Proportionality does not necessarily mean equality, however. That is, someone convicted of stealing a car is not punished by having their car stolen in turn (Rai & Fiske, 2011). Instead, they are punished in a manner that the law deems proportional, such as being fined or serving a jail sentence. A student in a group project who contributed nothing and yet received a grade equal to that of the hardest worker would not be looked upon favorably by their group mates, reflecting the innate desire for proportionality (Atari et al., 2023). What is deemed to be proportionate however, is often a reflection of a mixture of personal, cultural, religious, and societal expectations rather than a universal truth (Atari et al., 2023; Rai & Fiske, 2011).

Although proportionality and equality are not necessarily opposed, in practice they often will be. If one worker works for 10 hours and another works for 20 hours, all else being equal, proportionality suggests that the second worker should be paid twice as much, but in terms of outcomes, this leaves the workers unequal. Another way of thinking of these foundations is that proportionality is typically based on equality of opportunity, as expressed by the MFQ2 item: “I

think people should be rewarded in proportion to what they contribute,” whereas the equality foundation emphasizes equality of outcome, as expressed by the item: “Our society would have fewer problems if people had the same income.” Therefore, it wouldn’t be surprising if proportionality produced the opposite pattern of results as equality, which generally was the case. Atari et al. found that proportionality was positively associated with the “right” and RWA, but bore no relation to LWA. Zakharin and Bates also found that proportionality was positively associated with the “right” and RWA, but was also negatively correlated with LWA.

Atari et al. also found a significant quadratic relationship between proportionality and the PSP measure, this time suggesting that the center of the spectrum scored higher on proportionality than the extreme left and right. Taken together, the pattern of incomplete significance for the authoritarian measures and significant and opposed quadratic effects suggests that some orientation in the middle of the spectrum is positively associated with proportionality, but negatively associated with equality.

### *Care*

The care/harm foundation relates most closely to Shweder's ethic of autonomy, and deals largely in the mechanisms and perceptions related to harm (Atari et al., 2023; Graham et al., 2012). The foundation is linked to identification of suffering and distress, and feelings such as of nurturance, kindness, empathy, and compassion (Graham et al., 2012).

Atari et al. found that care was negatively associated with the “right” and RWA, but was unrelated to LWA suggesting that perhaps some other orientation on the left might bear a positive association with care. However, unlike equality and proportionality, they did not find any quadratic effect for care. Zakharin and Bates found a positive association between care and

the “left” and LWA, and a negative association with RWA, which is consistent with the findings for care measured with the earlier MFQ (Kivikangas et al., 2021).

### ***Loyalty***

The loyalty foundation is principally concerned with groups, specifically in-group loyalty and outgroup competition (Atari et al., 2023). Atari et al. found that loyalty was positively associated with the “right” and RWA, but bore no significant relation to LWA. Likewise, Zakharin and Bates also found a significant association between loyalty and both the “right” and RWA, but they also observed a significant negative association with LWA. The inconsistency between Atari et al.’s PSP result and the lack of a negative association with LWA might be taken as an indication of some other orientation on the left bearing a negative association with loyalty, but Atari et al. found no significant quadratic effect for loyalty, casting some doubt on this being the case. Moreover, three out of four questions in the loyalty subscale refer to loyalty to one’s country, two refer to being proud of one’s community, and the last one refers to the strength of a sports team being relative to their loyalty to one another. Atari et al. did not distinguish between these items, but Zakharin and Bates did, distinguishing loyalty to country from loyalty to group. They found a significant negative correlation between LWA and loyalty to country, but no association between LWA and loyalty to group.

### ***Authority***

The authority foundation revolves around opinions, attitudes, and beliefs towards institutional authorities which are perceived to be legitimate, such as a sheriff, or a judge in a courtroom (Atari et al., 2023). The authority foundation represents a broad concept which can be applied to any social situation in which hierarchies exist, including but not limited to: peer groups, corporations, militaries, and federal organizations (Graham et al., 2012). Atari et al.

(2023) found a positive association between the authority and the “right” and RWA, but no significant relationship to LWA. Likewise, Zakharin and Bates found a significant correlation between loyalty and the “right” and RWA, as well as a significant negative correlation with LWA. Although there was a discrepancy between Atari et al.’s PSP results and the lack of a negative correlation for LWA, they did not find evidence of any quadratic effect.

### *Purity*

When considering a spiritual perspective, the purity foundation generally relates to Shweder’s divinity code, and focuses on moral cleanliness as well as disgust (Graham et al., 2012; Haidt & Rozin, 2017). Just as in the divinity code however, the question of what is considered to be morally impure can be a subjective one and can change depending upon factors such as but not limited to, culture, religion, and political ideology (Atari et al., 2023). While developing the MFQ-2, Atari et al. (2023) found that being non-Western, religious, female, or on the “right” was able to successfully predict higher scores on the purity foundation<sup>3</sup>. Surprisingly they also found that LWA was positively correlated with purity. This was in contrast with Zakharin and Bates, who found that LWA had a significant negative correlation with purity, though they did find that the “right” and RWA were positively correlated with purity.

As noted earlier, Atari et al. tested a substantially larger sample size than Zakharin and Bates, so perhaps more credence should be given to the former’s finding. Moreover, the purity foundation bears considerable overlap with Shweder’s divinity code. As I suggested in the review of the divinity code, there may be alternate forms of the divinity code, some of which might be more associated with the left. I suggested the possible existence of an environmental divinity, to which there might correspond an environmental purity. On balance, it might be

---

<sup>3</sup> To assess political orientation, Atari et al. (2023) used a US-specific Democrat vs Republican scale, while in their non-US subsample, only a single item was used.

reasonable to conclude that LWA is positively associated with some form of purity sentiment, that perhaps is counterbalanced in the PSP results, where there is consistently a negative association between the “left” / “liberal” and purity (Atari et al., 2023; Kivikangas et al., 2021; Zakharin & Bates, 2023) by some unaccounted for centrist orientation that is negatively associated with purity. However, given that Atari et al. found no quadratic effect for purity, there is less warrant for predicting the existence of such an opposing centrist effect.

### **Current Study**

The left-right political spectrum remains one of the most widely used frameworks for understanding political ideology, but it may obscure more than it clarifies. Although it assumes a single continuum from liberal to conservative, there is reason to believe that moral values underlie political ideology, and mounting evidence suggests that the underlying moral values are not unidimensional in nature.

Moral psychological theories provide tools for linking political orientation to moral values, and Rozin et al.’s CAD triad links moral values to emotional reactions. Yet, the CAD studies raise doubts about whether all moral code violations are judged as genuinely moral, while studies employing the Moral Foundations Theory show inconsistent findings across orientations. Moreover, work on left-wing authoritarianism often conflates it with liberalism, with libertarianism seemingly having no coherent place on the political spectrum, leaving important gaps in how ideology maps onto morality.

The present study addresses these limitations by testing whether a multidimensional model of political ideology better explains moral and emotional differences than the traditional left-right spectrum. Three orientations (LWA, RWA, and libertarianism) were examined across multiple moral psychological frameworks: Shweder’s ethics, moral foundations, the CAD triad

of emotions, and punishment preferences. This approach allowed for an account of how moral values relate to political psychology, and whether distinct psychological profiles emerge that the unidimensional spectrum fails to capture.

Based on this framework, the following hypotheses were developed.

### *Study Hypotheses*

**Hypothesis One.** Hypothesis one predicted that with respect to Shweder's moral codes (note that for this part of the study, the divinity subdomains were religious divinity, environmental divinity, and social unity divinity), LWA was expected to be associated with nonreligious forms of the divinity code (environmental and social unity), libertarianism with the autonomy code, and RWA with the community code and the religious form of the divinity code

**Hypothesis Two.** Similar to hypothesis one, which predicted that political orientations would differ in their endorsement of moral values derived from Shweder's moral codes, hypothesis two predicted that political orientations would also differ in their endorsement of moral values as defined by Moral Foundations Theory. Following previous findings (Atari et al., 2023; Iyer et al., 2012; Zakharin & Bates, 2023), it was predicted that LWA would be positively associated with the care, equality, and purity foundations, and negatively associated with proportionality, loyalty, and authority. However, given the contrasting results between Atari et al. and Zakharin and Bates, the effects were predicted to be strongest for equality, which was the only foundation for which there was a consistent pattern of results between them.

By contrast, RWA should be negatively associated with care, and positively associated with proportionality, loyalty, authority, and purity. Although both Atari et al. and Zakharin and Bates observed a positive association between RWA and proportionality, Atari et al. also found a significant quadratic relationship for proportionality, suggesting that the extremes of the left/right

spectrum are lower on proportionality than the center. Given that RWA is on the far right, this suggests that it might, perhaps, be low on proportionality, perhaps not a negative relationship, but lower than the center and possibly still significant. Likewise, Atari et al. found a significant quadratic effect for equality suggesting that the extremes of the left/right spectrum are higher on equality than the center, but given that Atari et al., with a larger sample size than Zakharin and Bates, found no significant relation between RWA and equality. It is hypothesized that there will be no significant relationship between RWA and equality, or possibly a significant negative association, but smaller than the negative association with a more central political orientation such as libertarianism.

Based on the complementary quadratic effects suggesting that a political orientation in the center of the spectrum would be positively associated with proportionality and negatively associated with equality, these are the predictions for libertarianism. However, these are also consonant with libertarianism's stress on individualism (Iyer, et al., 2012), which seems most related to proportionality conceptually. Given that Atari et al. (2023) found a significant positive correlation between LWA and purity and yet at the same time found a significant negative correlation between the "left" and purity (as did Zakhrin & Bates, 2023, and Graham et al., 2009), it was seen as possible that there may have been a negative correlation between libertarianism and purity, assuming libertarianism leans leftwards. Then again, Atari et al. did not find a quadratic effect for purity, and Iyer et al. (2012) found that libertarianism was not associated with any moral foundation other than the liberty foundation, so if there was a negative correlation between libertarianism and purity, it may be small in magnitude. There aren't any other empirical grounds for predicting any other associations, positive or negative, between

libertarianism and care, loyalty, or authority. The liberty foundation will be used in this study, but not as a moral foundation.

**Hypothesis Three.** Patterns of immorality judgments were expected to align with moral values. Note that for this part of the study, the divinity domains included bodily divinity, sexual divinity, and environmental divinity, due to the fact that participants assessed the immorality of code violations modelled, in part, after Rozin et al. (1999). Hence, with this alteration noted, LWA scores were predicted to be associated with higher immorality judgements for environmental divinity (social unity divinity is not featured in this part of the study), libertarianism with autonomy code violations, and RWA with violations of the community code as well as bodily and sexual divinity violations.

**Hypothesis Four.** Rozin et al.'s research suggests that the violations of different moral subdomains are associated with different emotional reactions, therefore, a natural extension of hypothesis three is that people with different political orientations, because they value the various moral domains differently, may have different emotional reactions to these domains. In particular, it was hypothesized that participants would react with anger to violations of those domains that they moralize. For reasons that I further clarify in the methods section, I expected participants to react with contempt to those violations that they viewed as wrong, though not immoral, with the possible exception of the bodily divinity and sexual divinity domains. Disgust was primarily added as a possible emotional reaction to keep this part of the study parallel to Rozin et al. The predictions with respect to disgust are complicated by the widely held expert view that disgust reactions are elicited by a range of situations. Following Tybur et al. (2013), I will assume that disgust reactions can be elicited as a disease avoidance reaction (core disgust), as a reaction to fitness decreasing reproduction (sexual disgust), and as a reaction to moral



violations (moral disgust). Based on facial reactions alone, it is difficult, if not impossible, to determine if a person's disgust reaction is one of core disgust, sexual disgust, or moral disgust. Therefore there were no clear predictions, given the method employed, to determine if a person is associating a violation with core, sexual, or moral disgust. However, the following theoretical considerations readily suggest themselves. Overall, participants should react with more core disgust to bodily divinity violations, more sexual disgust to sexual divinity violations, and more moral disgust to those violations they moralize. Hence, if participants do not moralize bodily and sexual divinity, they might also react with more core and sexual disgust, respectively. Those who interpret violations in these domains as immoral, might react with more moral disgust. Unfortunately, because one and the same observable disgust reaction is associated with both nonmoral and moral forms of disgust, it is not possible to distinguish between these, given the method employed. The more testable predictions are with respect to anger and contempt.

Leaving aside disgust, it was predicted that participants scoring higher on LWA will associate violations of environmental divinity with more anger and less contempt (and less anger and more contempt for other violations). Those scoring high on libertarianism would associate violations of autonomy with more anger and less contempt (and less anger and more contempt for other violations). Finally, those scoring high on RWA would associate violations of the community code, bodily divinity and sexual divinity with more anger and less contempt (and less anger and more contempt for other violations).

**Hypothesis Five.** The final set of hypotheses concerned punishment preferences across political orientations and moral code violations. Given their anti-hierarchical orientation, individuals high in LWA were expected to favor informal social punishment options, whereas those high in RWA were expected to prefer state-based punishment. Libertarianism was

hypothesized to align more with monetary penalties. Each of these predictions is more relative to the other political orientations and not necessarily predictions of an absolute preference. For example, for some violations, persons scoring high on each of the orientations might prefer a state-based punishment, but LWA and libertarianism might be associated with this form of punishment less so and more so with informal social punishments or fines, respectively.

LWA should be associated with higher punitive sentiments for environmental violations, libertarianism should be associated with higher punitive sentiments for autonomy violations, and RWA should be associated with higher punitive sentiments for community, bodily divinity, and sexual divinity. Across all forms of punishment, LWA and RWA, as authoritarian orientations, should be associated with greater punitive sentiments than libertarianism.

## **Method**

### **Participants**

Overall, 217 participants were recruited. Of these, 60 participants were recruited from Prolific, an online research platform. The remainder of participants were recruited from Lakehead University's psychology department participant pool, as well as from the general public through snowball sampling (at the end of the study, participants were provided with the web address for the study and encouraged to share the link with anyone they believed may be interested in participating). Data from six participants were excluded from analyses because they indicated "no, do not use my responses" on the final study item. An additional 55 participants were removed for providing ten or more missing responses. Although the choice of ten items as a cutoff was somewhat arbitrary, it was intended as a conservative threshold to reduce noise from potentially disengaged respondents. Little's MCAR test indicated that data were missing completely at random,  $\chi^2(45) = 44.38, p = .50$ . The final sample consisted of 155 participants (89

female participants, 64 male participants, and 2 participants who preferred not to disclose their gender). Ages ranged from 18 to 70 years ( $M = 34.36$ ,  $SD = 14.22$ ), with the median reported age being 31 years old. All participants were required to be 18 or older, and fluent in English.

Participants on Prolific were all region-locked to Canada, and were paid £4.50 each for their participation<sup>4</sup>. Those who were recruited from Lakehead University's psychology department student pool were awarded one credit in eligible classes. Members of the general public (participants who were not recruited through Prolific or Lakehead University), received no compensation.

### ***Power Analysis***

An a priori power analysis was conducted using G\*Power (Faul et al., 2007) to determine the required sample size for detecting a medium effect size ( $f^2 = .15$ ) with an alpha level of .05 and power set at 90%. The analysis indicated that a minimum of 146 participants would be required to achieve adequate power for the planned regression analyses.

### **Data Analysis Tools**

All data analysis was conducted in SPSS (version 29.0.1.0) for Windows.

### **Measures**

#### ***Demographics Questionnaire***

Participants completed a demographic questionnaire that measured information such as age, gender, religiosity and political orientation. Self-identified political identity was measured by a single item: participants were asked "what best describes your current political identity", and rated themselves on a unidimensional scale from one (very liberal), to ten (very conservative). This liberal-conservative PSP approach was chosen given that a single-item

---

<sup>4</sup> Prolific's currency is in pound sterling; the cost in Canadian dollars was \$8.29 per participant at the time of the study

approach has been the traditional method of measurement of left vs right placement. The full questionnaire is included in Appendix A.

### ***Rightwing Authoritarianism Scale***

In order to assess RWA tendencies, participants completed Duckitt's Authoritarianism-Conservatism-Traditionalism Scale (Duckitt, 2010)<sup>5</sup>. The scale conceptualizes RWA as comprising three interrelated components: authoritarianism, conservatism, and traditionalism. It has demonstrated strong internal consistency across cultural samples, including Israelis ( $\alpha = .87$ ), New Zealanders ( $\alpha = .91$ ), Romanians ( $\alpha = .82$ ), and Americans ( $\alpha = .92$ ). The scale contains 36 items rated on a seven-point Likert scale. An example item is: "The real keys to the 'good life' are respect for authority and obedience to those who are in charge." Each participant's RWA score was computed by averaging their responses across all of the scale items. The full scale including reverse-keyed items is presented in Appendix B.

### ***Leftwing Authoritarianism Scale***

The LWA scale was developed by Costello et al. (2022), and was used to capture tendencies associated with anti-hierarchical aggression, anti-conventionalism, and top-down censorship. Items that were specific to the American context were reworded to ensure relevance for a Canadian sample. For example: "Canada [America] would be much better off if all of the rich people were at the bottom of the social ladder", was reworded. The final scale included 35 items rated on a seven-point Likert scale from one (strongly disagree) to seven (strongly agree). Each participant's LWA score was computed by averaging their responses across all of the scale items. The full scale including reverse-keyed items is provided in Appendix C.

---

<sup>5</sup> Although it was earlier stated that I would refer to RWA and LWA as RWI and LWI respectively, the official scales are still named the RWA and LWA scales. Hence, in the method section, and in subsequent analyses to follow, I refer to them as the authors have named them.

***Liberty Foundation Scale***

The Liberty Foundation Scale was used to assess libertarian values (Iyer et al., 2012). The scale includes subcomponents for economic libertarianism and lifestyle libertarianism, contains nine items in total, and is rated on a five-point Likert scale ranging from one (strongly disagree) to five (strongly agree). The mean score for all the lifestyle items (of which there were only two) formed each participants' lifestyle libertarianism score, while the mean score for all the economic libertarianism questions formed the economic libertarianism scores for each participant. The full scale including reverse-keyed items is included in Appendix D.

***Moral Foundations Questionnaire-2***

The MFQ-2 was used to assess six moral foundations: care ( $\alpha = .89$ ), equality ( $\alpha = .87$ ), proportionality ( $\alpha = .78$ ), loyalty ( $\alpha = .85$ ), authority ( $\alpha = .87$ ), and purity ( $\alpha = .86$ ) (Atari et al., 2023). The questionnaire includes 36 items rated on a five-point Likert scale ranging from one (strongly disagree) to five (strongly agree). Each subscale score was calculated by averaging across the items for each subscale. No items were reverse-keyed. The full MFQ-2 is included in Appendix E.

***Shweder's Codes Attitude Measurement***

Participants rated their agreement with statements describing Shweder's moral codes, which were adapted from Rozin et al (1999). Each code was introduced with a descriptive statement, and participants responded using a seven-point Likert scale from one (strongly disagree) to seven (strongly agree). One description each was used for the community and autonomy codes, while three descriptions were used to assess the divinity code, as there were three types of divinity. The additional divinity items were created for the study, and included to better capture moral concerns beyond traditional religiosity, encompassing broader domains such

as environmental and social unity divinity. For the nonreligious versions of the divinity code, an effort was made to keep the structure of their descriptions similar to that of Rozin et al (1999).

Descriptions of each code are included in Appendix F.

### ***Harm and Punishment Measures***

**Emotion Ratings.** As with the measurement of participants' attitudes regarding Shweder's codes, this part of the study also divided the divinity code into three specific domains to allow for a comparison between different forms of divinity. However, again following the lead of Rozin et al. (1999) who devised the method employed here and from which many of the scenarios were derived, separate bodily (core disgust) and sexual domains of divinity were distinguished. Rozin et al. did not explicitly distinguish bodily and sexual divinity, but in their operationalization of Shweder's code, they used examples of "moral" violations that would either elicit core disgust (e.g., someone eating rotten meat) or described a violation of some sexual norm (e.g., incest).

Their violations of the divinity code did not describe actions of a sacreligious nature. However, given that religions often mandate norms of sexual behaviour, violations of the sexual divinity domain are likely to be viewed as immoral by those who subscribe to the religious version of the divinity code described in the previous subsection. By contrast, violations of bodily divinity, (i.e., actions that would normally elicit disgust in any person), like eating rotten meat, are not particularly religious in nature, even if provisions to moralize such things exist in some religions.

In addition to bodily and sexual divinity, violations of environmental divinity were also employed in this part of the study. No examples of social unity divinity were utilized. Hence, a

different decomposition of divinity into bodily, sexual, and environmental divinity was used for the harm and punishment sections of the study.

For the emotion ratings, participants responded to 15 scenarios depicting moral violations that were designed to assess emotional reactions to violations of each of Shweder's domains. These scenarios reflected violations of community, autonomy, and the three versions of the divinity code. For each scenario, participants were asked to indicate how a third party (someone not directly involved in the situation, but observing it or finding out about it for the first time) would react to the scenario. Participants were given the scenario, and then indicated their level of agreement with how a bystander would react if they observed the behavior in the scenario. In order to do so, participants were shown pictures of facial expressions of emotion from Matsumoto and Ekman (1988). Each picture represented either contempt, anger, or disgust, and for each scenario, participants were asked to rate all three on a scale ranging from "strongly disagree" to "strongly agree".

For contempt expressions, there is an important clarification to be made. Rozin et al. used two different expressions intended to represent contempt. One of these was the unilateral lip curl, a facial expression that has since been widely studied and debated. Research has questioned (Russell, 1991; Russell et al., 1993) whether the unilateral lip curl truly conveys contempt, or whether it might instead reflect responses to social norm violations, awkwardness, or even something else (Fiddick & Bushell, n.d.). The second expression used by Rozin et al., while labeled contempt, lacked any prior empirical validation and has not been adopted in later studies. Given this controversy, and to ensure methodological transparency, the current study used only the unilateral lip curl expression as an expression not of contempt, per se, but more, following Fiddick and Bushell (n.d.) as a reaction to a nonmoral social norm violation, which is why it will

henceforth be referred to as the *unilateral lip curl* rather than as *contempt*. An image of the expression is included in Figure 1.

For the moral violations themselves, the exact wording of the prompt preceding each facial expression was: “a bystander would react this way (see below) if they observed this behaviour”; facial expressions were ordered such that participants saw each configuration an approximately equal amount of times. An example of a moral violation is: a happily married woman performs sex acts online to earn some extra money to pay for her children’s tuition. The full list of moral violations can be seen in Appendix G.

The facial expressions adapted from Matsumoto and Ekman (1988) captured caucasian males and females, as well as Japanese males and females. Therefore, there were four different versions of the following study, the only difference among versions being the race and/or gender of the facial expression (i.e., one version used the caucasian female expressions, one used the Japanese female expressions, one used the caucasian male expressions, and one used the Japanese male expressions). The full list of facial expressions can be seen in Appendix H.

Despite concerns about its link to contempt, the unilateral lip curl remains of interest because it has shown differential associations with certain domains, particularly community code violations. Rozin et al. interpreted this as evidence that community code violations elicit moral condemnation signaled via contempt. However, more recent findings (e.g., Fiddick & Bushell, n.d.) challenged that interpretation, suggesting that participants often did not view community code violations as immoral, but rather as violations of social convention. Nevertheless, the expression may still be useful for exploring individual differences in moral evaluation.



**Figure 1**

*An Example of the Unilateral Lip Curl*



**Immorality Ratings.** Participants also rated how immoral they perceived each violation to be. Participants were provided each scenario once again, and after each scenario, they were asked to indicate the immorality of the scenario they had just read on a scale from zero (not immoral at all) to 100 (extremely immoral).

**Punishment Ratings.** Participants were asked to rate their agreement with four different punishment options on a scale ranging from “strongly disagree, to “strongly agree”. The immorality and punishment questions were given in conjunction for each scenario, meaning that participants would be given a scenario, asked to rate immorality, and then be asked: “someone acting this way should:”. This was repeated for each scenario. The specific wording of the punishment types were: (1) “be punished with a monetary fine”, (2) “be punished by state authorities who are empowered to use force if necessary”, (3) “be punished informally by the disapproval of the community, possibly resulting in the loss of the person’s friendships, job, etc.” and (4) “not be punished at all”.

## **Procedure**

The study received ethical approval from Lakehead University's Research Ethics Board prior to recruitment (See Appendix I). Participants first read an information page about the general nature of the study (without revealing the study's hypotheses), so that they could then give informed consent to participate in the study. Participants then completed the demographic questionnaire. After the demographics questionnaire, participants were presented with the RWA, LWA, and Liberty Foundation scales. Then, the MFQ2, Shweder's moral codes, the emotion questions, and the immorality judgement and punishment section. After that, the participants were asked a final question before being directed to the debrief form: "as a final question, seeing as your data is extremely important in the formation of sound empirical research, have you answered these questions **carefully** in a way that we should use your data for our research?". Participants were asked to indicate either "yes, I answered carefully therefore you should use my responses", or "no, do not use my responses".

After the final question, participants were directed to the debrief page, which explained the purpose and objectives of the study, and explained to participants that while they were free to share the study link with others who may be interested, they were asked not to discuss the content or hypotheses of the study to avoid biasing future responses. The debrief also included a reading list for those interested in learning more about the research topic, as well as contact information for the researchers.

## **Statistical Assumptions**

All statistical analyses were conducted with close attention to the assumptions underlying the models employed. For the ANCOVAs and repeated-measures analyses, two assumptions were tested: normality of residuals and sphericity. Normality of residuals was examined through

visual inspection of histograms and Q-Q plots, which indicated that the distribution of residuals was approximately normal across analyses. Sphericity was assessed using Mauchly's Test of Sphericity. In instances where sphericity was violated, Greenhouse-Geisser corrected values were reported. For example, in an ANCOVA where political orientations were covariates and Shweder Code endorsements was the dependent variable, Mauchly's test indicated a violation of sphericity,  $\chi^2(9) = 85.99$ ,  $p < .001$ ; therefore, Greenhouse-Geisser corrected results were presented. Because the design did not include between-subjects factors, Levene's tests of homogeneity of variance were not applicable.

For the multiple regression analyses, assumptions of linearity, normality of residuals, independence of errors, and homoscedasticity were assessed. Linearity was evaluated through scatterplots of each predictor against the outcome, which revealed approximately linear relationships. Normality of residuals was assessed using histograms and Q-Q plots of standardized residuals, both of which indicated no meaningful deviations from normality. Homoscedasticity was examined using residual scatterplots, which showed no evidence of systematic patterns, suggesting that residual variance was evenly distributed across predicted values. The independence of errors was evaluated using Durbin-Watson statistics, which fell within the acceptable range for each regression. Although, one case produced a standardized residual of -3.35, influence diagnostics indicated this case did not affect the model. Specifically, Cook's Distances ranged from .000 to .131, all well below the threshold, suggesting that no individual case exerted disproportionate influence on the regression results.

Multicollinearity was assessed by calculating variance inflation factors (VIFs). All VIF values were well below the conventional threshold of 10, and in most cases below two, confirming that multicollinearity among predictors was not a concern.

Missing data were also carefully evaluated. Little's MCAR test was conducted to determine whether the data were missing completely at random. The test was non-significant, supporting the conclusion that the pattern of missing data did not systematically bias the dataset. On this basis, listwise deletion or standard regression-based handling of missing data could be considered appropriate, as no corrective imputation procedures were necessary.

## **Results**

### **Participant Political Identities and Religious Adherence**

Participants self-identified their political identity (political self-placement, PSP) on a scale from one (very liberal) to ten (very conservative). The mean score for this liberal-conservative PSP was 4.46 ( $SD = 2.50$ ). On average ( $M = 3.92$ ), participants reported not being particularly adherent to organized religion, on a scale of one to ten (where 1 = strongly disagree, 10 = strongly agree, to being adherent). Although, there was a spread of answers among participants ( $SD = 3.56$ ). Participants also self-identified their belief in a spiritual order separate from an organized religion using the same scale ( $M = 3.30$ ,  $SD = 3.11$ ). On average, participants tended not to frequently engage in religious practices (apart from social obligations such as weddings or funerals) ( $M = 3.39$ ,  $SD = 3.21$ ).

The subsequent analyses explored how moral foundations and moral codes were associated with each political orientation. Before testing relationships among political and moral constructs, I first position the study's key orientation variables in relation to the traditional left-right political spectrum. Participant self-identified political identity was used as an anchor for this comparison; correlations between the item and each of the primary political orientation variables (LWA, RWA, and the Liberty Foundation Scale component parts), were computed to establish their positions relative to the traditional left-right spectrum.

LWA was negatively correlated with the liberal-conservative PSP item ( $r = -.50, p < .001$ ), and RWA was positively correlated ( $r = .61, p < .001$ ). The fact that LWA negatively correlated with the liberal-conservative PSP, and RWA positively correlated with it (a positive correlation means that the RWA correlated closer to conservatism) is unsurprising, given that LWA tends to be viewed as rooted in progressive values typically associated with the left, and RWA tends to be viewed as rooted in conservatism and hierarchy that is typically associated with the right.

However, one might argue that, though LWA and RWA are associated with the left and right, respectively, their authoritarian components are arbitrary additions to otherwise sound measures of the political left and right. If this were the case, then the elimination of these arbitrary additions should increase the correlations with the responses on the liberal-conservative PSP. To assess the merits of this objection, the anti-hierarchical aggression items of the LWA scale were temporarily removed (e.g., “When the tables are turned on the oppressors at the top of society, I will enjoy watching them suffer the violence that they have inflicted on so many others”), leaving the items associated with anti-conventionalism and top-down censorship (see the factor loadings in Table 6 from Costello et al., 2022) as the basis for a more non-authoritarian LWA scale. Likewise, the authoritarianism items of the RWA scale (e.g., “What our country really needs is a tough, harsh dose of law and order”) were eliminated, leaving the conservatism and traditionalism items as the basis for a more non-authoritarian RWA scale (see Appendix B). Participants’ scores on these non-authoritarian versions of the scale were then correlated with the liberal-conservative PSP. This led to a slight, but nonsignificant increase in the negative correlation between LWA and the liberal-conservative PSP ( $r = .52$ ; difference,  $Z = -.79$ , n.s.). By contrast, the correlation between RWA and the liberal-conservative PSP significantly

decreased after the elimination of the authoritarianism items ( $r = .54$ ; difference,  $Z = -2.36$ ,  $p < .01$ ). Given that the elimination of the authoritarian items reduced the association between RWA and “conservatism”, and had no effect on the association between LWA and “liberalism” the decision was made to use the full LWA and RWA scales. However, this decision will be revisited when the punishment results are reported below.

Liberty was associated positively with the liberal-conservative PSP ( $r = .32$ ,  $p < .001$ ), and given this contradiction of liberty correlating with conservatism, liberty was split into its component parts for further analysis. When the composite was separated, lifestyle libertarianism was found to correlate negatively with political identity, indicating that individuals who scored higher in lifestyle libertarianism tended to identify as more liberal ( $r = -.19$ ,  $p = .019$ ), and economic libertarianism correlated positively with political identity, indicating that individuals who scored higher in economic libertarianism tended to identify as more conservative ( $r = .41$ ,  $p < .001$ ). Indeed, this could have been anticipated because Iyer et al. (2012) found that PSP “liberals” scored higher on lifestyle libertarianism than did PSP “conservatives,” while the reverse was observed for economic libertarianism. Given that different components of the Liberty Foundation Scale fell on the left and right of the political spectrum, important distinctions may have been obscured by using an overall score as a measure of liberty. Therefore, the component parts of liberty (economic and lifestyle libertarianism/libertarianisms) were used in all subsequent analyses.

### ***Libertarianism Clarification***

Before proceeding to the results, it is necessary to recognize that this distinction has important implications for how the original hypotheses are to be interpreted. While I had primarily been focused on the left being a coalition between the progressive left (epitomized by LWA) and classical liberalism (epitomized by libertarianism), Duckitt and Sibley’s (2016) dual

process model of political ideology makes a related argument for the right. According to Duckitt and Sibley, the political right is a coalition between social conservatives (epitomized by RWA) and economic conservatives (epitomized by social dominance orientation, SDO; see also Kivikangas et al., 2021). Given that economic libertarianism is a form of economic “conservatism”, it is natural to associate it with SDO, which has likewise been identified as a form of economic conservatism.

What Atari et al. and Zakharin and Bates both found is that SDO is negatively associated with care and equality, and positively associated with loyalty, authority, and purity. Atari et al. found no relation between SDO and proportionality, though the coefficient was positive, whereas Zakharin and Bates found that SDO is positively associated with proportionality. Given that the predictions for libertarianism were that it is negatively associated with equality, and possibly purity, but positively associated with proportionality, one fairly straightforward prediction is that it is likely economic libertarianism that is negatively associated with equality. Indeed, one of the key characteristics of SDO is a preference for, or at the very least, a tolerance of inequality (Pratto et al., 1994).

Although both Atari et al. and Zakharin and Bates found that SDO is negatively correlated with care and positively associated with loyalty, authority and purity, the initial predictions for libertarianism did not include any predictions for care, loyalty, or authority, so no predictions will be made for these foundations with respect to either lifestyle or economic libertarianism. And although both also converge on a positive correlation between SDO and purity, the initial prediction for libertarianism was a negative correlation with purity. So if SDO is positively correlated with purity, then that suggests that the negative correlation with purity will be exhibited by lifestyle libertarianism.

While Atari et al. failed to find a significant positive correlation for proportionality and SDO, the correlation coefficient was still positive, and as mentioned above, one might expect proportionality and equality to be inversely related. So if economic libertarianism is predicted to be negatively correlated with equality, then one might also expect it to be positively correlated with proportionality. Hence, the revised MFQ2 predictions are that economic libertarianism will be positively correlated with proportionality and negatively correlated with equality, while lifestyle libertarianism might be negatively correlated with purity.

Turning to the predictions for Shweder's codes, Radkiewicz (2020) used the earlier MFQ to construct analog measures of the autonomy and community code by combining care and fairness for autonomy and loyalty and authority for community. Again, he did not have any measure for the divinity code, though the purity foundation has generally been assumed to relate to the divinity code, and while Radkiewicz did not include a measure of the purity foundation, Atari et al. and Zakharin and Bates did. Kivikangas et al.'s (2021) meta-analysis also includes studies investigating relationships between the MFQ and SDO.

Radkiewicz reports that SDO was negatively correlated with the autonomy related foundations (care / fairness) but bore no relation to the community code foundations (loyalty / authority). Kivikangas et al. also found that SDO was negatively correlated with the autonomy related foundations, even more so than RWA was. However, they also found that SDO was positively correlated with loyalty, authority and purity, though less so than RWA. The comparisons with RWA are more meaningful in this case given that the large sample size of the meta-analysis meant that almost every simple association was significant. Collectively, what these results suggest is that economic libertarianism, for which SDO is a proxy, should be negatively associated with the autonomy code, and weakly positively associated with the community code and the original, religious divinity code, at least in comparison with RWA. The original prediction that libertarianism would be associated with the autonomy code would,



therefore, fall on lifestyle libertarianism. Despite the distinction drawn between lifestyle and economic libertarianism, the fact that a classical liberal political orientation, economic libertarianism, is hypothesized to be negatively associated with the autonomy code is quite counter-intuitive. This could be taken to suggest that SDO and economic libertarianism, despite their rightward lean and focus on “economics” are quite different, but further discussion of this will be left for the final discussion section.

Given that measures of bodily, environmental, sexual and social unity divinity were all devised specifically for this study, there is no prior data upon which predictions can be made for these subdomains of divinity. However, the preservation of social harmony and the promotion of the common good that characterizes the description of social unity divinity (see Appendix F) is at odds with the unrestrained economic self-interest at the core of economic libertarianism, so a reasonable prediction is that it might exhibit a negative correlation with social unity divinity.

These adjustments are crucial for accurately interpreting the results that follow.

**Table 1**

*Correlations Between Political Orientations and Self-described Identity*

Variable	1	2	3	4	5
1. LWA					
2. Lifestyle Lib.	.07				
3. Liberty	-.24**	.51***			
4. Econ. Lib.	-.29***	.27***	.97***		
5. RWA	-.37***	-.26***	-.28***	.40***	
6. Political Identity	-.50***	-.19*	.32***	.41***	.61***

*Note.* N = 155. \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ . Pearson correlations ( $r$ ) are reported. Color indicates strength and direction of association, the darker the color, the stronger the association.

### ***Moral Domain Interrelationships***

The study included two sets of moral domain measures: the MFQ-2, and a set of five domains adapted from Shweder's three ethics framework: community, autonomy, and divinity. The divinity code was further subdivided into two novel dimensions: social unity divinity and environmental divinity. Pearson correlations were computed among all MFQ-2 foundations, moral codes, and participant liberal-conservative orientation. These results are presented in Table 2.

**Relationship Between Moral Foundations.** Among the moral foundations, patterns mirrored that which has been found in prior works in moral psychology, including in the formulation of the MFQ-2 itself (Atari et al., 2023). Care and equality were found to positively correlate with one another, the binding foundations (loyalty, authority, and purity) all correlated with one another as well. Proportionality was positively associated with loyalty, authority, and purity, as was found by Atari et al. (2023). In contrast, equality was negatively correlated with proportionality, authority, and purity.

Internal consistency within the study sample for the MFQ-2 subscales were good for Care ( $\alpha = .87$ ), Equality ( $\alpha = .87$ ), Proportionality ( $\alpha = .83$ ), Loyalty ( $\alpha = .77$ ), Authority ( $\alpha = .83$ ), and Purity ( $\alpha = .81$ ).

**Table 2**

*Correlation Matrix for Political Identification, Moral Foundations, and Moral Codes*

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Autonomy											
2. Community	.11										
3. Divinity - Religion	-.13	.44**									
4. Divinity - Social Unity	.36**	.32**	.17*								
5. Divinity - Environment	.44**	.17*	-.06	.56**							
6. Care	.25**	-.07	-.08	.28**	.27**						

7. Equality	< .01	-.19*	-.28**	.20*	.13	.42**					
8. Proportionality	.06	.13	.10	-.04	-.05	.05	-.31**				
9. Loyalty	-.04	.34**	.41**	.23**	.04	.13	-.14	.45**			
10. Authority	-.12	.36**	.48**	.13	-.09	.08	-.25**	.41**	.68**		
11. Purity	-.27**	.31**	.69**	.10	-.11	-.06	-.17*	.19*	.48**	.59**	
12. Political Identity	-.20*	.20*	.40**	-.12	-.20*	-.40**	-.42**	.28**	.34**	.41**	.37**

*Note.* N = 155. \*\*\*p < .001. \*p < .01. \*p < .05. Pearson correlations (*r*) are reported. Color indicates strength and direction of association.

**Relationships Between Moral Codes.** Among the moral codes, the autonomy code correlated positively with both social unity and environmental divinity, but did not correlate with the community code nor with religious divinity. The community code correlated positively with all three formulations of divinity (particularly religious divinity), and did not correlate with the autonomy code. Both social unity and environmental divinity were created for the study, and both preserved a sense of natural order; however, despite their underlying similarities in stressing a pre-existing natural order, participants appeared to treat them differently: social unity divinity was positively correlated with every code. Environmental divinity on the other hand, correlated with social unity divinity, the autonomy code, and community code. Environmental divinity did not correlate with religious divinity.

**Relationship Between Moral Foundations and Moral Codes.** Haidt and Graham (2009) found that care and fairness was most associated with Shweder's autonomy code, loyalty and authority were most related to the community code, and that purity was most related to the divinity code.

As seen in Table 2, similar results were found; care was related to the autonomy code, loyalty and authority were related to the community code, and purity was related to the

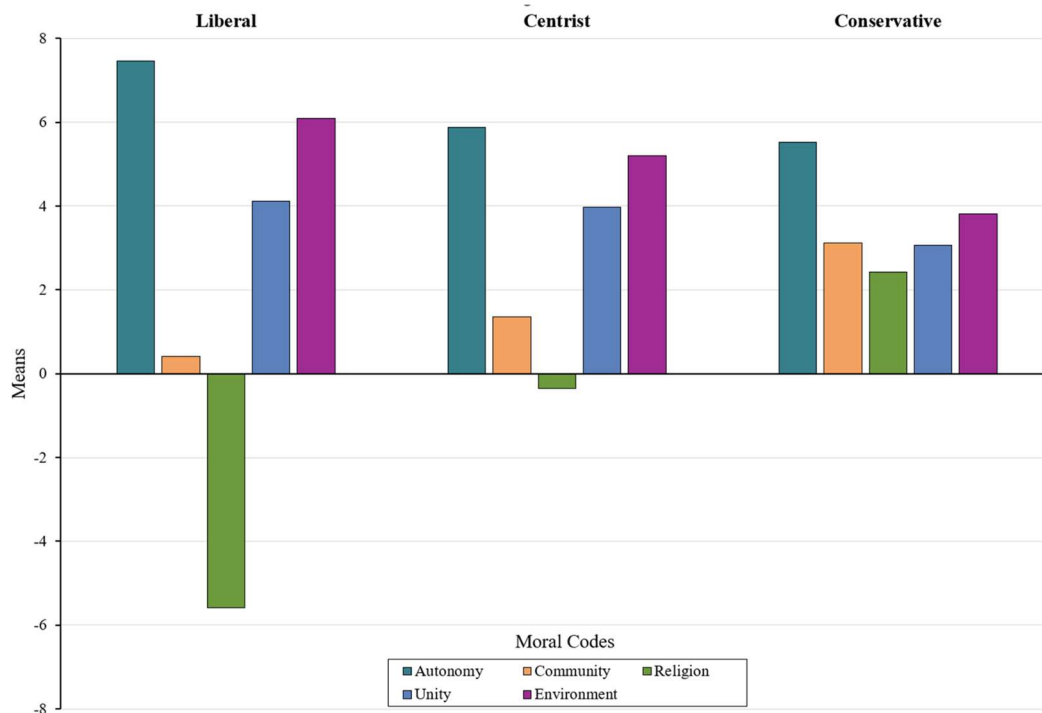
traditionally religious version of the divinity code. Given that the fairness foundation has been split into equality and proportionality, and that I further differentiated between interpretations of pre-existing moral order (social unity and environmental), further findings must be considered: care was related to the autonomy code, however was also related to both social unity and environmental divinity. Loyalty was related to both the community and religious divinity codes, but also with social unity divinity. Purity was mostly associated with the religious divinity code, but was also associated with the community code, and was negatively associated with the autonomy code.

**Associations with Political Identity.** Before examining how political orientation variables such as LWA, economic libertarianism, lifestyle libertarianism, and RWA related to moral domain measures, it is important to first consider how each moral domain related to self-described political identity on the standard left (liberal)-right (conservative) spectrum; providing a conceptual anchor for interpreting subsequent findings, and helping to establish how moral concerns aligned with the standard left-right ideological framework.

In order to do so, participants were classified into political orientations based upon their score on the self-identifying liberal-conservative PSP; those who scored one to three were classified as liberals, those who scored four to seven were classified as centrists, and those who scored eight to ten were classified as conservatives. Then, mean scores for orientation (liberal, centrist, conservative) were calculated and plotted on Figure 2.

**Figure 2**

*Mean Endorsement Scores of Moral Codes by Political Identity as Measured by a Unidimensional Liberal-Conservative PSP*



Note. N = 155. Means are reported.

As expected when using a unidimensional measure of political identity, which is common in existing research, mean endorsement of moral codes followed a predictable pattern: when endorsement was high on one end of the spectrum, it was low on the other, with centrists consistently falling in between.

At first glance, this suggests the standard left-right spectrum captures ideological variation well. However, this apparent clarity is misleading. By averaging across distinct forms of liberalism, the spectrum creates the illusion of a coherent midpoint while concealing meaningful differences. To test the adequacy of the unidimensional, left-right model of political identification a series of quadratic and cubic regressions were conducted using SPSS's curve fitting function. For each test one of Shweder's code was used as the dependent variable and responses to the liberal-conservative PSP as the independent variable. The logic of these tests is

the following. If the political spectrum is unidimensional from left to right, then the most straightforward prediction is that for any given politically relevant trait, liberals will be characterized by one value, be it high or low, and conservatives will be characterized by an opposite value, low if liberals are high and high if liberals are low. Because the spectrum is unidimensional, those in the center of the spectrum should be characterized by a value that is midway between the liberals and the conservatives. Hence, the unidimensional spectrum predicts a significant linear relationship between the PSP liberal-conservative responses (IV) and endorsements of a Shweder code (DV). By contrast, if there are distinct political orientations between very liberal and very conservative, as hypothesized, then this suggests that there could be significant quadratic relationships between the IV and DV. Given that preliminary analyses suggested that there are four distinct political orientations represented by LWA, lifestyle libertarianism, economic libertarianism, and RWA, there might even be significant cubic relationships. The results of these tests are presented in Table 3.

**Table 3***Quadratic and Cubic Tests of the PSP Liberal-Conservative Spectrum (Shweder)*

Test	R <sup>2</sup>	F-Score	b1	b2	b3
<i>Autonomy</i>					
Linear	0.039*	$F(1,152) = 6.10$	-0.324		
Quadratic	0.045*	$F(1,151) = 3.55$	-0.800	0.047	
Cubic	0.045	$F(1,150) = 2.36$	-0.604	0.002	0.003
<i>Community</i>					
Linear	0.039*	$F(1,152) = 6.20$	0.413		
Quadratic	0.040*	$F(1,151) = 3.12$	0.587	-0.017	

Cubic	0.043	$F(1,150) = 2.27$	1.859	-0.313	0.019
<i>Religious</i>					
Linear	0.163***	$F(1,153) = 29.86$	1.163		
Quadratic	0.169***	$F(1,152) = 15.45$	1.950	-0.078	
Cubic	0.183***	$F(1,151) = 11.26$	-1.475	0.721	-0.051
<i>Social Unity</i>					
Linear	0.013	$F(1,152) = 2.03$	-0.196		
Quadratic	0.014	$F(1,151) = 1.08$	-0.382	0.019	
Cubic	0.026	$F(1,150) = 1.35$	-2.278	0.461	-0.028
<i>Environmental</i>					
Linear	0.039*	$F(1,153) = 6.23$	-0.33		
Quadratic	0.040*	$F(1,152) = 3.16$	-0.497	0.017	
Cubic	0.041	$F(1,151) = 2.13$	-0.048	-0.088	0.007

Notes: \* =  $p < .05$ , \*\*\* =  $p < .001$ ; b1, b2, b3 = nonstandardized beta coefficients on the linear, quadratic, and cubic variables.

As can be seen in Table 3, for every moral code, with the exception of social unity divinity, there was a significant quadratic effect. For religious divinity, there was also a significant cubic effect, and for autonomy, community, and environmental divinity, there were cubic effects that approached statistical significance. For each moral code, again with the exception of social unity divinity, there was also a significant linear effect. For autonomy endorsements decreased as one moved to the political right, community endorsements increased, religious divinity increased, social unity divinity decreased (but nonsignificantly), and environmental divinity decreased. It appears that the unidimensional model of political

identification does predict people's moral sentiments, but as the significant quadratic and cubic relationships suggest, the unidimensional model leaves important variance unaccounted for.

### Hypothesis One

In order to test the revised hypothesis one, a repeated-measures ANCOVA was conducted on the endorsement ratings with Shweder's codes as a within-subjects variable and the political orientations as covariates. The results of this ANCOVA are presented in Table 4.

**Table 4**

*Shweder's Codes ANCOVA Results*

Test	F-Score	Significance	Partial $\eta^2$
<i>Main Effects</i>			
Code	$F(4,588) = 5.26$	$< .001$	.04
LWA	$F(1,147) = .01$	n.s.	.000
Lifestyle	$F(1,147) = .77$	n.s.	.01
Economic	$F(1,147) = .06$	n.s.	.000
RWA	$F(1,147) = 11.12$	$< .001$	.070
<i>Interactions</i>			
Code x LWA	$F(4,588) = 2.88$	$< .05$	.02
Code x Lifestyle	$F(4,588) = 4.40$	$< .01$	.03
Code x Economic	$F(4,588) = 1.90$	n.s.	.01
Code x RWA	$F(4,588) = 20.64$	$< .001$	.12

**Table 5**

*Correlation Matrix of Political Orientation and Moral Codes*

Variable	1	2	3	4	5	6	7	8	9
1. RWA									
2. LWA									

-.37\*\*



3. Liberty	.28**	-.24**							
4. Lifestyle Lib.	-.27**	.07	.51**						
5. Economic Lib.	.40**	-.29**	.97**	.27**					
6. Autonomy	-.23**	-.06	.01	.22**	-.05				
7. Community	.38**	-.11	.08	-.21**	.16	.11			
8. Divinity - Religion	.60**	-.30**	.15	-.27**	.25**	-.13	.44**		
9. Divinity - Social Unity	.08	.06	-.12	-.04	-.12	.36**	.32**	.17*	
10. Divinity - Environment	-.14	.16*	-.01	.08	-.04	.44**	.17*	-.06	.56**

Note. N = 155. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ . Pearson correlations ( $r$ ) are reported. Color indicates strength and direction of association, the darker the color, the stronger the association.

As can be seen in Table 4, there was a significant main effect for Shweder codes, participants were most likely to endorse the autonomy code ( $M = 6.41$ ), then environmental divinity ( $M = 5.24$ ), social unity divinity ( $M = 3.76$ ), community ( $M = 1.36$ ), and finally, religious divinity ( $M = -1.81$ ; all differences were significant at  $p < .01$ ). The only significant main effect for the political orientations was for RWA, which displayed a significant positive correlation with overall endorsements of Shweder codes ( $r = .32$ ,  $p < .001$ ), followed by economic libertarianism ( $r = .11$ , n.s.), lifestyle libertarianism ( $r = -.12$ , n.s.), and finally LWA ( $r = -.13$ , n.s.).

To assess the hypothesized code x political orientation interactions, Pearson correlations (Table 4) and multiple regressions analyses (Figure 3) were conducted. In all of the regressions, political orientations were dependent variables, and endorsements of each moral code were the dependent variables. It should be noted that this is different from the ANCOVA where endorsement of the codes was the dependent variable.

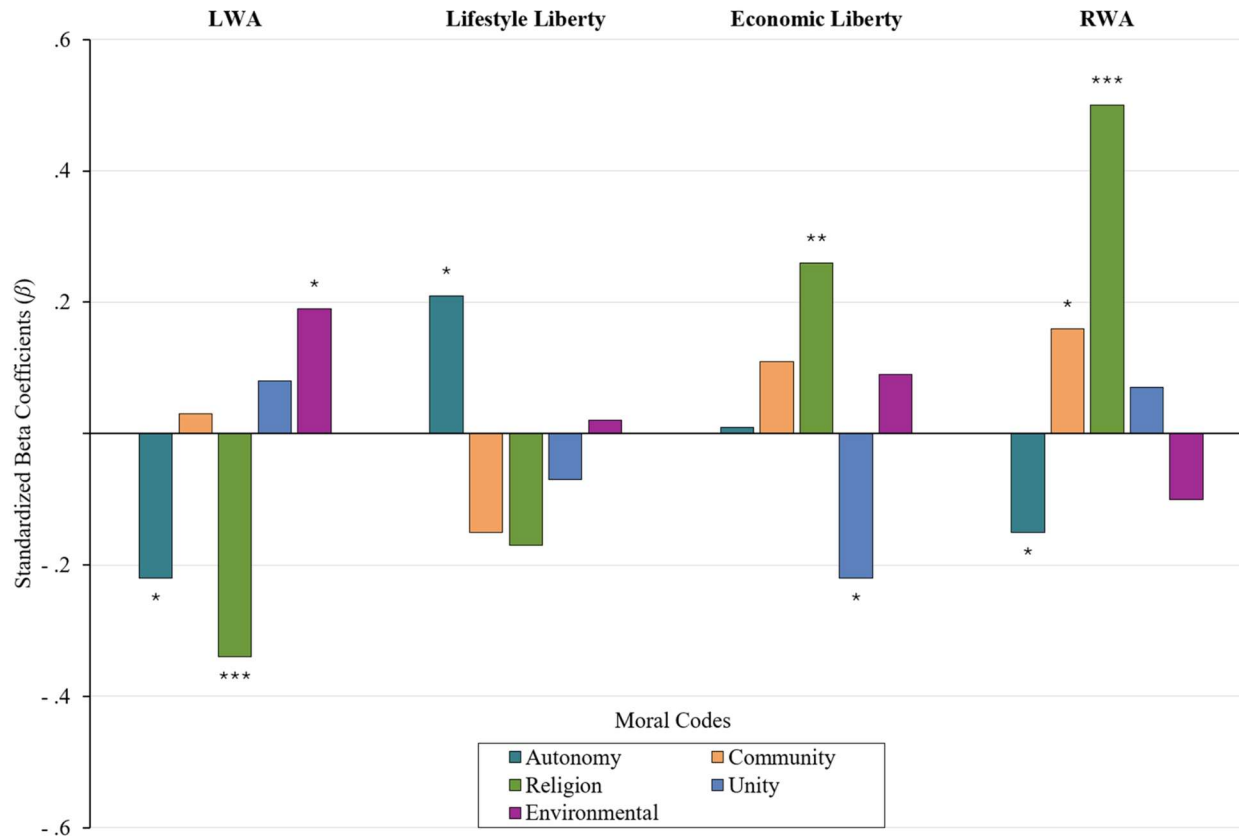
Endorsement of the codes was used as the dependent variable for the ANCOVA because it permitted the calculation of one omnibus test in which the measures of the political orientations could be entered unproblematically as covariates. Yet, if measures of the political orientations had instead been used as the dependent variables for the ANCOVA, then not only

would separate ANCOVAs need to be conducted (one for each political orientation measure) or alternatively the separate measures of political orientation would need to be treated as repeated measures of common political orientation variable, which seemed problematic, but the code endorsements would then need to be treated as covariates given that they are continuous measures. The compromise procedure that was taken here and going forward was to initially conduct an omnibus ANCOVA with the political orientations as covariates, but to switch to using the political orientation measures as dependent variables when conducting regressions to interpret interactions involving them.

Unlike with Figure 2 (where mean endorsement of each moral code was reported), the pattern in Figure 3 no longer maps onto the standard left-right spectrum. For example, the autonomy code is a negative predictor of LWA whereas in Figure 2, there was a linear relationship, the further left one got, the higher the mean endorsement of the autonomy code. In regression, endorsement of the autonomy code was a positive predictor of lifestyle libertarianism (center-left). But as one moves further right still, from lifestyle to economic libertarianism and RWA, the association with autonomy turns negative again, suggesting more similarity between LWA and RWA in this regard. There is no continuous transition from left to right. In fact, of the five moral codes, only endorsement of the religious divinity code followed the expected pattern of the standard left-right spectrum: those higher in RWA endorsed it most strongly, those higher in LWA endorsed it the least (negative association), and centrists fell somewhere in between. None of the remaining four codes followed this pattern, challenging the assumption that the moral values which underlie political orientation (Graham & Haidt, 2009) map cleanly onto a continuous dimension.

### **Figure 3**

*Regressions Predicting Political Orientations from Moral Codes*



Note. N = 155. \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ . Regression coefficients ( $\beta$ ) are reported.

The results were consistent with the predictions of hypothesis one. Specifically, LWA was associated with the nonreligious environmental divinity code, and negatively with religious divinity. RWA was most associated with the community code as well as the religious divinity code. Lifestyle libertarianism was associated with endorsement of the autonomy code. Finally, economic libertarianism was associated with endorsement of the religious divinity code, and less endorsement of nonreligious divinity, however, community did not reach significance as a predictor despite being a significant correlate.

## Hypothesis Two: Political Orientations and Moral Foundations Theory

Before testing whether MFT's foundations can account for people's political orientations, I again ask whether the unidimensional left-right spectrum is sufficient to account for people's politically relevant moral values. Quadratic and cubic regressions were computed using SPSS's curve fitting function with PSP "liberal" - "conservative" responses as the independent variable and each MFT foundation as the dependent variables. The results of these tests are presented in Table 6.

**Table 6**

*Quadratic and Cubic Tests of the PSP Liberal-Conservative Spectrum (MFT)*

Test	R <sup>2</sup>	F-Score	b1	b2	b3
<i>Care</i>					
Linear	0.163***	$F(1,153) = 29.77$	-0.097		
Quadratic	0.221***	$F(1,152) = 21.62$	-0.307	0.021	
Cubic	0.226***	$F(1,151) = 14.69$	-0.468	0.059	-0.002
<i>Equality</i>					
Linear	0.176***	$F(1,153) = 32.79$	-0.15		
Quadratic	0.212***	$F(1,152) = 20.47$	-0.396	0.024	
Cubic	0.215***	$F(1,151) = 13.79$	-0.591	0.07	-0.003
<i>Proportionality</i>					
Linear	0.081***	$F(1,153) = 13.47$	0.072		
Quadratic	0.086***	$F(1,152) = 7.17$	0.138	-0.007	
Cubic	0.089**	$F(1,151) = 4.94$	0.282	-0.04	0.002
<i>Loyalty</i>					
Linear	0.116***	$F(1,153) = 20.15$	0.096		
Quadratic	0.126***	$F(1,152) = 10.97$	0.196	-0.01	
Cubic	0.130***	$F(1,151) = 7.51$	0.023	0.03	-0.003
<i>Authority</i>					
Linear	0.166***	$F(1,153) = 30.38$	0.111		

Quadratic	0.180***	$F(1,152) = 16.70$	0.23	-0.012	
Cubic	0.186***	$F(1,151) = 11.54$	0.011	0.039	-0.003
<i>Purity</i>					
Linear	0.134***	$F(1,153) = 23.72$	0.124		
Quadratic	0.196***	$F(1,152) = 18.47$	0.428	-0.03	
Cubic	0.197***	$F(1,151) = 12.31$	0.319	-0.005	-0.002

Notes: \*\* =  $p < .01$ , \*\*\* =  $p < .001$ ; b1, b2, b3 = nonstandardized beta coefficients on the linear, quadratic, and cubic variables.

As can be seen in Table 6, for each moral foundation there was a significant linear effect. Endorsements of the care foundation decreased as one moves from the political left to the political right, equality also decreases, but proportionality, loyalty, authority, and purity all increased. However, once again there were significant quadratic and cubic effects. Indeed, this time a highly significant quadratic and cubic effect emerged for each moral foundation, reinforcing the conclusion that the standard unidimensional model of political identification fails to account for important variance in how a person's political identification relates to their moral values.

Turning now to the specific relationships between these moral foundations and participants' political orientations, Hypothesis two, which predicted differential endorsement of moral foundations by political orientation, was also mostly supported. A repeated measures ANCOVA was conducted on the endorsement ratings with moral foundation as a within-subjects variable (where each foundation was a level of the variable) and the political orientations as covariates (see Table 7).

**Table 7**

*Moral Foundations ANCOVA Results*

Test	F-Score	Significance	Partial $\eta^2$
<i>Main Effects</i>			
Foundation	$F(5,750) = 4.70$	$< .001$	.030
LWA	$F(1,150) = 3.90$	$= .05$	.025
Lifestyle	$F(1,150) = 5.28$	$< .05$	.034
Economic	$F(1,150) = 1.33$	n.s.	.009
RWA	$F(1,150) = 62.08$	$< .001$	.293
<i>Interactions</i>			
Foundation x LWA	$F(5,750) = 12.64$	$< .001$	.078
Foundation x Lifestyle	$F(5,750) = 5.79$	$< .001$	.037
Foundation x Economic	$F(5,750) = 9.60$	$< .001$	.060
Foundation x RWA	$F(5,750) = 20.64$	$< .001$	.170

As can be seen in Table 6, there was a significant main effect for moral foundations, participants were most likely to endorse the care foundation ( $M = 4.19$ ), then proportionality ( $M = 3.87$ ), authority ( $M = 3.57$ ), loyalty ( $M = 3.48$ ), equality ( $M = 3.14$ ), and finally purity ( $M = 2.85$ ; all differences are significant at  $p < .001$ , except for authority and loyalty which were not significantly different. There were significant main effects for LWA, lifestyle libertarianism, and RWA, displaying correlations with the overall foundation endorsements of  $r = -.06$  (n.s.),  $r = -.01$  (n.s.), and  $r = .52$  ( $p < .001$ ), respectively. Although economic libertarianism was positively correlated with the foundation endorsements,  $r = .17$  ( $p < .05$ ).

While it might seem odd that LWA and lifestyle libertarianism should be significant covariates, but not significant correlates, one needs to remember that an ANCOVA is equivalent to a multiple regression, hence the ANCOVA, but not the zero-order correlations, takes into account shared variances, which could potentially give rise to apparently discrepant results (ref).

Indeed, if instead of separate correlations, one runs a regression with the average foundation endorsement as the dependent variable and each of the covariates (the political orientation scores) as independent variables, one gets a significant model,  $R = .56$ ,  $F(4, 150) = 17.35$ ,  $p < .001$ , where RWA ( $\beta = .66$ ,  $p < .001$ ), LWA ( $\beta = .15$ ,  $p = .05$ ), Lifestyle ( $\beta = .18$ ,  $p < .05$ ) are significant predictors, with the exact same significance levels as the ANCOVA, while economic libertarianism ( $\beta = -.095$ , n.s.) failed to reach significance. As indicated in Table 2, the greatest correlation between any two political orientations is that between RWA and economic libertarianism ( $r = .40$ ), suggesting that the ANCOVA is eliminating the shared variance between RWA and economic libertarianism.

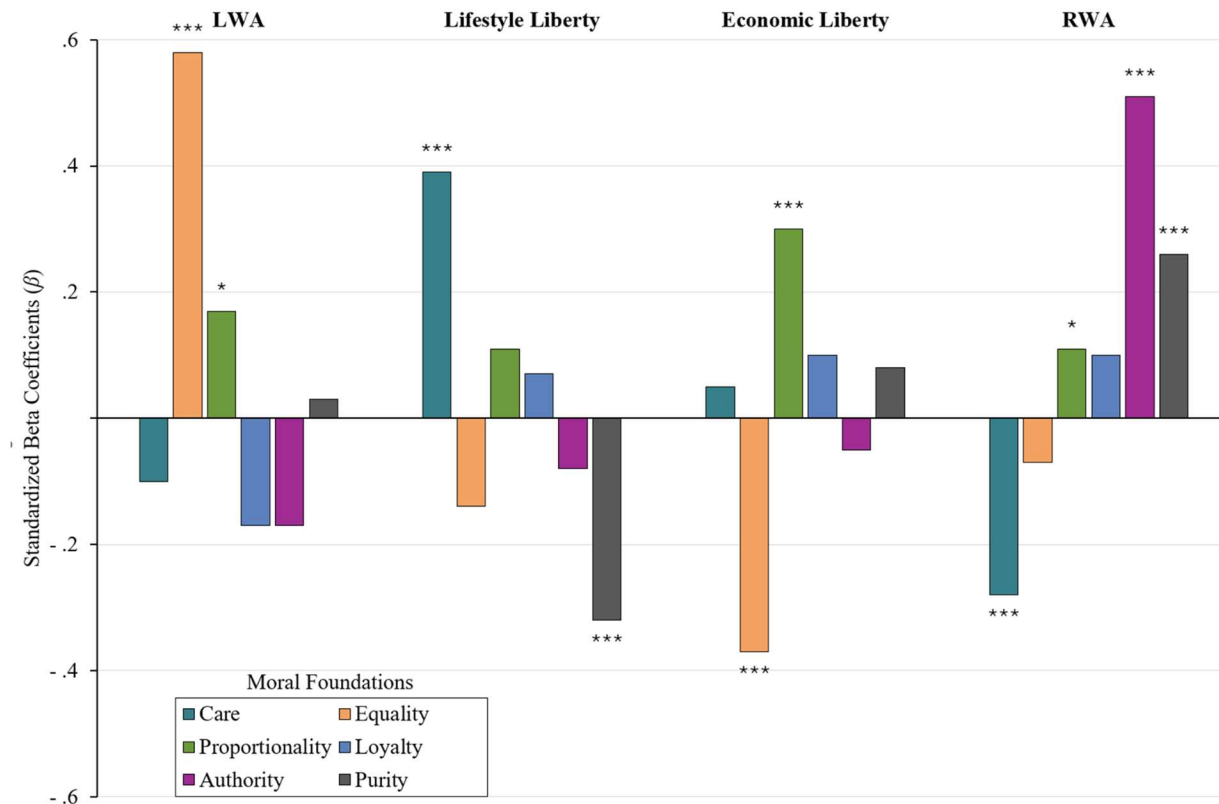
To assess the hypothesized foundation x political orientation interactions multiple regressions analyses were conducted (see Figure 4). In all of the regressions, political orientations were dependent variables, and endorsements of each moral foundation were the independent variables.

As with Figure 3, Figure 4 displays a heterogeneous set of results. Of the six moral foundations, only authority followed the expected unidimensional pattern. Care positively predicted lifestyle libertarianism, but failed to predict LWA, and negatively predicted RWA. Another example is equality, which strongly predicted LWA, but showed no relationship with RWA. Hypothesis two specifically predicted that LWA would be associated with endorsement of the equality and care foundations. This was partially supported: LWA was strongly associated with equality, but not with care. RWA was strongly associated with authority and purity, and negatively with care. It was hypothesized that lifestyle libertarianism would be negatively associated with purity, no other predictions were made with respect to lifestyle libertarianism. Consistent with this, there was a significant negative association, a significant positive

association with care emerged as well. Lastly, economic libertarianism was associated with proportionality and negatively with equality, as predicted.

**Figure 4**

*Regressions Predicting Political Orientations from Moral Foundations*



Note. N = 155. \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ . Regression coefficients ( $\beta$ ) are reported.

These findings lend support to the notion that the traditional left-right spectrum conceals important distinctions. For example, care was unrelated to LWA, positively related to lifestyle libertarianism, and negatively related to RWA, a pattern that cannot be reduced to the simple left-right distinction. Similarly, equality was strongly associated with LWA but showed no corresponding inverse association with RWA, while proportionality was linked primarily with economic libertarianism rather than either pole of the left-right spectrum. These kinds of heterogeneous patterns support the notion that each orientation draws on different moral



foundations, and that important distinctions are obscured when differences are forced into a single unidimensional spectrum.

### **Hypothesis Three: Immorality Ratings**

In order to test hypothesis three (LWA associated with greater immorality judgments for violations of environmental divinity; lifestyle libertarianism associated with greater immorality judgments for autonomy violations, economic libertarianism associated with greater immorality judgments for community violations, and RWA with greater immorality judgments for community, bodily divinity and sexual divinity violations), a repeated-measures ANCOVA was conducted on the immorality judgments with Shweder code (autonomy, community, bodily divinity, sexual divinity, and environmental divinity) as a within-subjects variable and the political orientations (LWA, lifestyle libertarianism, economic libertarianism, and RWA) as covariates. The results of this ANCOVA are presented in Table 8.

**Table 8**

#### *Immorality Judgments ANCOVA Results*

Test	F-Score	Significance	Partial $\eta^2$
<i>Main Effects</i>			
Code	$F(4,560) = 13.68$	$< .001$	.09
LWA	$F(1,140) = 2.32$	n.s.	.02
Lifestyle	$F(1,140) = .19$	n.s.	.001
Economic	$F(1,140) = .96$	n.s.	.01
RWA	$F(1,140) = 31.57$	$< .001$	.18

*Interactions*

Code x LWA	$F(4,560) = 3.90$	$< .01$	.03
Code x Lifestyle	$F(4,560) = 1.05$	n.s.	.01
Code x Economic	$F(4,560) = 4.85$	$< .001$	.03
Code x RWA	$F(4,560) = 15.55$	$< .001$	.10

As can be seen in Table 8, there was a significant main effect for the Shweder code, participants autonomy code violations as the most immoral ( $M = 91.21$ ), then community ( $M = 53.65$ ), environmental divinity ( $M = 51.16$ ), sexual divinity ( $M = 46.78$ ), and finally bodily divinity ( $M = 11.05$ ). Autonomy violations were judged to be significantly more immoral than community violations ( $p < .001$ ). Community violations were judged to be significantly more immoral than Sexual Divinity violations ( $p < .01$ ), but not environmental (n.s.). Sexual violations were not judged any more immoral than environmental violations (n.s.), but sexual violations were judged significantly more immoral than bodily divinity violations ( $p < .001$ ).

The only significant main effect for the political orientations was for RWA, which displayed a significant positive correlation with overall immorality judgments across the Shweder codes ( $r = .49, p < .001$ ), followed by economic libertarianism ( $r = .23, p < .01$ ), LWA ( $r = -.08, \text{n.s.}$ ), and finally lifestyle libertarianism ( $r = -.14, \text{n.s.}$ ). Again, the discrepancy between the ANCOVA results for covariates and the zero-order correlations likely was a result of shared variance between RWA and economic libertarianism.

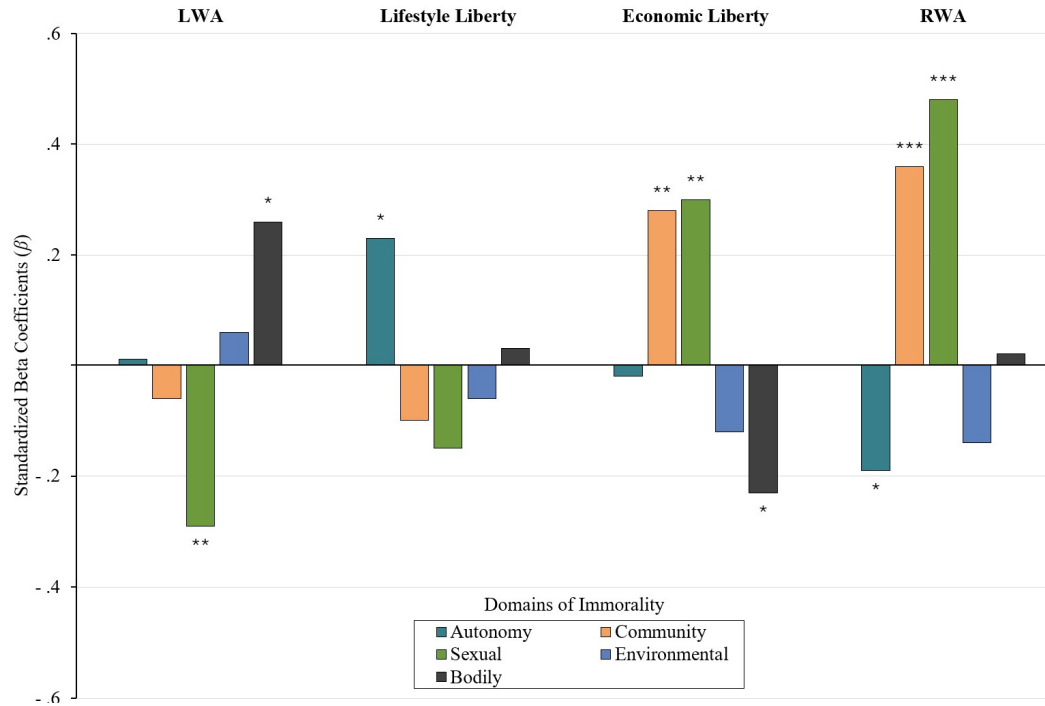
To assess the hypothesized code x political orientation interactions multiple regressions analyses (see Figure 5) were conducted. In all of the regressions, political orientations were dependent variables, and the immorality judgments for each Shweder code were the independent variables.

### *Summary of Relationship Between Political Orientations and Immorality Judgments*

In the multiple regressions reported in Figure 5, immorality judgements for each type of moral code was used to predict political orientation.

**Figure 5**

#### *Regressions Predicting Political Orientation from Immorality Judgements*



Note. N = 155. \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ . Regression coefficients ( $\beta$ ) are reported.

Patterns of immorality judgments were expected to align with moral values: participants were expected to judge violations of a given moral code or foundation as more immoral to the extent they endorsed the underlying values.

Hypothesis three predicted that LWA would be associated with stronger immorality judgments for violations of environmental divinity; RWA with immorality judgments for violations of community, bodily divinity and sexual divinity, and lifestyle libertarianism with autonomy. Based on past research associating SDO with the community code, economic

libertarianism should likewise be associated with higher immorality judgements for community code violations.

Interestingly, although individuals high in LWA strongly endorsed environmental divinity in the moral values section, they did not rate environmental violations as especially immoral. Instead, they judged bodily divinity violations as most immoral, suggesting that while environmental concerns may hold ideological importance for those high in LWA, they may not necessarily trigger strong moral condemnation, perhaps due to the less visceral nature of some of the scenarios presented. In contrast, bodily violations may evoke more immediate reactions, perhaps reflecting a non-religious form of purity concern centered on the body rather than spiritual defilement. LWA was also associated with viewing sexual divinity violations as less immoral. As predicted, lifestyle libertarianism displayed a positive association with higher immorality judgments for autonomy violations, a pattern consistent with their endorsement of the autonomy code and care foundation. As predicted, those higher in economic libertarianism displayed a positive association with higher immorality ratings of community violations, but unexpectedly they also displayed a positive association with higher immorality ratings for sexual divinity violations, perhaps aligning with their higher endorsements of religious divinity. Finally, as predicted, individuals high in RWA also judged community and sexual divinity violations as more immoral, but contrary to predictions RWA was not associated with higher predictions of immorality for the bodily divinity violations.

#### ***Hypothesis Four: Political Orientations and Emotional Reaction to Code Violations***

In order to test hypothesis four (each political orientation will be associated with a different pattern of emotional reactions in each of the moral domains), a two-way repeated-measures ANCOVA was conducted on the facial reaction ratings with Shweder's code and

emotion as within-subjects variables and the political orientations (LWA, lifestyle libertarianism, economic libertarianism, and RWA) as covariates. The results of this ANCOVA are presented in Table 6. The hypothesized code x emotion x political orientation differences was assessed by conducting a series of regressions, one for each code x political orientation combination, using a political orientation measure as the dependent variable and three facial reaction measures as the independent variables. The results of these regression analyses are plotted in Figures 6-10.

**Table 9***Facial Reaction ANCOVA Results*

Test	F-Score	Significance	Partial $\eta^2$
<i>Main Effects</i>			
Code	$F(4,600) = 0.91$	n.s.	.006
Emotion	$F(2,300) = 0.74$	n.s.	.005
LWA	$F(1,150) = 0.18$	n.s.	.001
Lifestyle	$F(1,150) = 0.01$	n.s.	.000
Economic	$F(1,150) = 0.10$	n.s.	.001
RWA	$F(1,150) = 3.81$	< .06	.025
<i>Code (C) Interactions</i>			
C x LWA	$F(4,600) = 0.20$	n.s.	.001
C x Lifestyle	$F(4,600) = 1.54$	n.s.	.01
C x Economic	$F(4,600) = 2.32$	< .06	.015
C x RWA	$F(4,600) = 2.56$	< .05	.017
<i>Emotion (E) Interactions</i>			
E x LWA	$F(2,300) = 0.29$	n.s.	.002
E x Lifestyle	$F(2,300) = 3.92$	< .05	.025

E x Economic	$F(2,300) = 0.18$	n.s.	.001
E x RWA	$F(2,300) = 5.24$	< .01	.034
<i>Code x Emotion (CE) Interactions</i>			
Code x Emotion	$F(8,1200) = 3.28$	= .001	.021
CE x LWA	$F(8,1200) = 1.87$	< .07	.012
CE x Lifestyle	$F(8,1200) = 0.92$	n.s.	.006
CE x Economic	$F(8,1200) = 0.79$	n.s.	.005
CE x RWA	$F(8,1200) = 2.07$	< .05	.014

As can be seen in Table 9, there was no main effect for either the Shweder code or the type of emotion expressed. There was, however, a significant main effect for RWA, which was positively correlated with facial reactions in general ( $r = .166, p < .05$ ). The strength of this association was significantly greater than that for either lifestyle libertarianism ( $r = -.048$ , *Steiger's*  $Z = 3.80, p < .001$ ) and LWA ( $r = -.025$ , *Steiger's*  $Z = 4.85, p < .001$ ) but not significantly different from economic libertarianism.

With respect to the interactions, there was significant RWA x code interaction and a marginally significant economic libertarianism x code interaction. However, given that no predictions were made with respect to emotional reactivity, regardless of the emotion depicted, these interactions will not be analyzed further.

There were also significant emotion x lifestyle libertarianism and emotion x RWA interactions. To better understand these interactions, the ratings for each facial expression were averaged across the five codes and then correlations between these and the measures of lifestyle libertarianism and RWA were calculated, as were the correlations between the ratings of the different facial reactions. While there was a strong positive association between ratings of anger and disgust ( $r = .82, p < .001$ ), there was a weak, nonsignificant negative correlation between

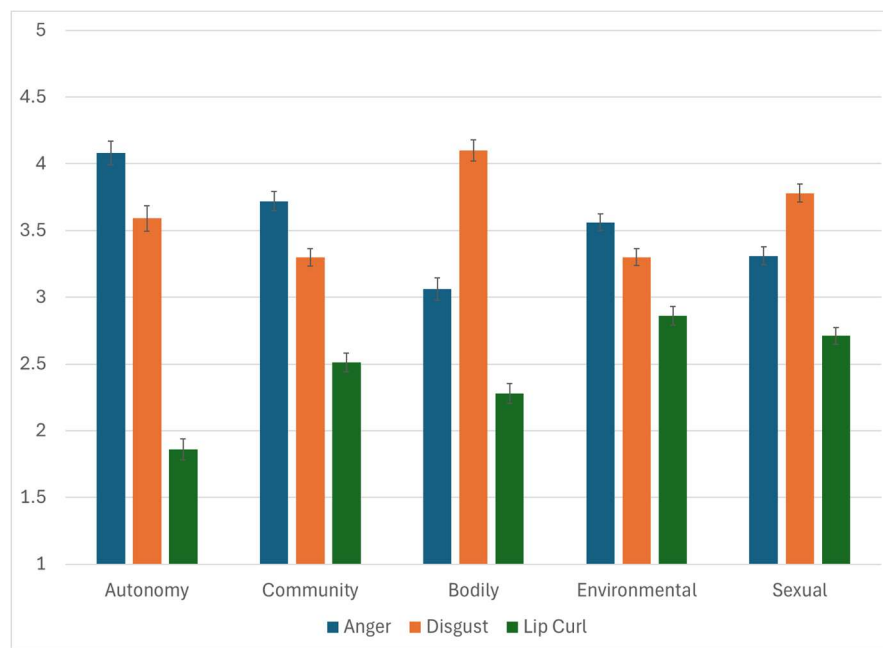
anger and the unilateral lip curl ( $r = -.12$ , n.s.). These differences were reflected in the orientation by emotion interactions. For lifestyle libertarianism, the strongest positive correlation was with anger ( $r = .06$ , n.s.) and strongest negative correlation was with the unilateral lip curl ( $r = -.14$ ,  $p < .08$ ), which was a significant difference (*Steiger's*  $Z = 1.64$ ,  $p = .05$ , one-tailed). There was no association between lifestyle and disgust,  $r = -.01$ , n.s.). The interaction with RWA paralleled that with lifestyle libertarianism, with the exception that the associations were more positive in general. The strongest association was again with anger ( $r = .23$ ,  $p < .01$ ), followed by disgust ( $r = .18$ ,  $p < .05$ ) and the most negative association was with the unilateral lip curl ( $r = -.08$ , n.s.). Again, the difference between anger and the unilateral lip curl was significant (*Steiger's*  $Z = 2.58$ ,  $p = .01$ , two-tailed). However, because no predictions were made about overall reactions of anger, disgust, and the unilateral lip curl, irrespective of the Shweder code, these interactions will not be explored further.

The reason for not making any code x orientation or emotion x orientation predictions is that, following Rozin et al. (1999), it is reasonable to assume that there would be a significant code x emotion interaction complicating any predictions. This was indeed a significant interaction (see Table 9). The ratings of each emotion for each type of code violation is depicted in Figure 6. As can be seen in Figure 6, anger was rated highest for autonomy violations and lowest for violations of bodily divinity. Conversely, disgust was rated highest for bodily divinity violations and lowest for community and environmental divinity violations. This is largely consistent with Rozin et al. who observed that autonomy violations were associated with angry reactions and undifferentiated divinity violations were associated with disgust reactions. Three of Rozin et al.'s five divinity violations fell into what is called bodily divinity here. Their other two divinity violations fell into what is called sexual divinity here, which received the second highest

ratings of disgust. Unlike Rozin et al., but replicating Fiddick and Bushell (n.d.), participants rated angry reactions the highest for the community code violations. However, it should be noted that the present study only uses a subset of Rozin et al.'s community violations and only the unilateral lip curl is used as the expression of contempt, whereas Rozin et al. used two different facial expressions of contempt. In general though, the present emotion results tend to replicate past findings with the same violations.

### Figure 6

*Average Rating of Facial Expression in Each Domain (error bars represent standard errors)*



Given this code x emotion background, it is arguably best to assess the influence of political orientation on emotional reactions in a code-specific manner. Therefore, a series of regressions were conducted in which each of the measures of each political orientation were the dependent variables and the ratings of the emotional reactions were the independent variables. These regressions were repeated five times, once for each of Shweder's codes (see Figures 7-11).



**Figure 7***Predicting Political Orientation from Emotional Responses to Violations of the Community Code*

Note.  $N = 155$ . † = approaches significance ( $p < .1$ ). Regression coefficients ( $\beta$ ) are reported.

In response to community code violations, disgust approached significance as a negative predictor of LWA, and did not approach significance as a predictor for any other orientation. The lip curl (“contempt”) approached significance as a negative predictor of lifestyle libertarianism, but did not approach significance with any other orientation. Although significance was not reached in regression, RWA was positively correlated with both anger and disgust in response to community violations, but was not correlated with contempt.

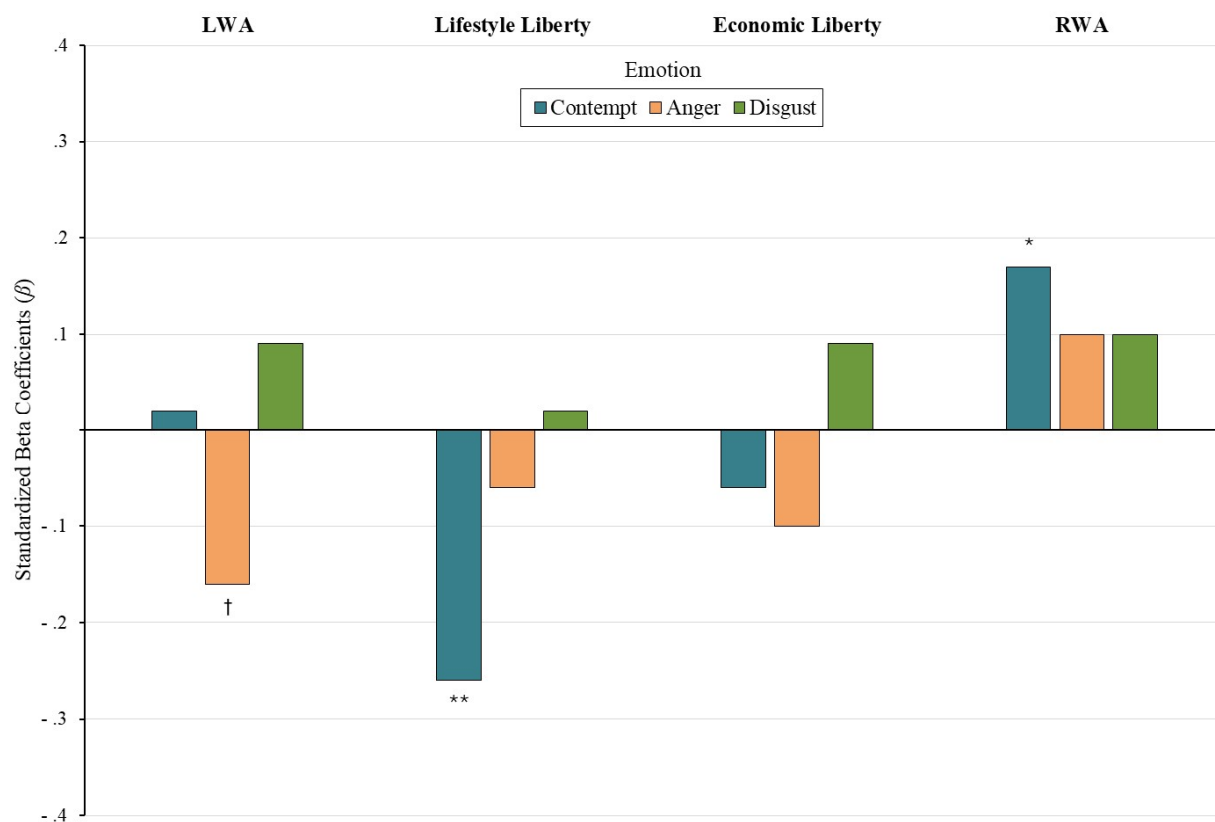
See Figure 8 for regression results predicting political orientation from emotional responses to violations of the autonomy code.

In response to violations of the autonomy code, the lip curl was a negative predictor of lifestyle libertarianism, but a positive predictor of RWA. Recall that lifestyle libertarianism was associated with endorsement of the autonomy code, and RWA was negatively associated with endorsement of the autonomy code. If one assumes that the lip curl does not represent a moral

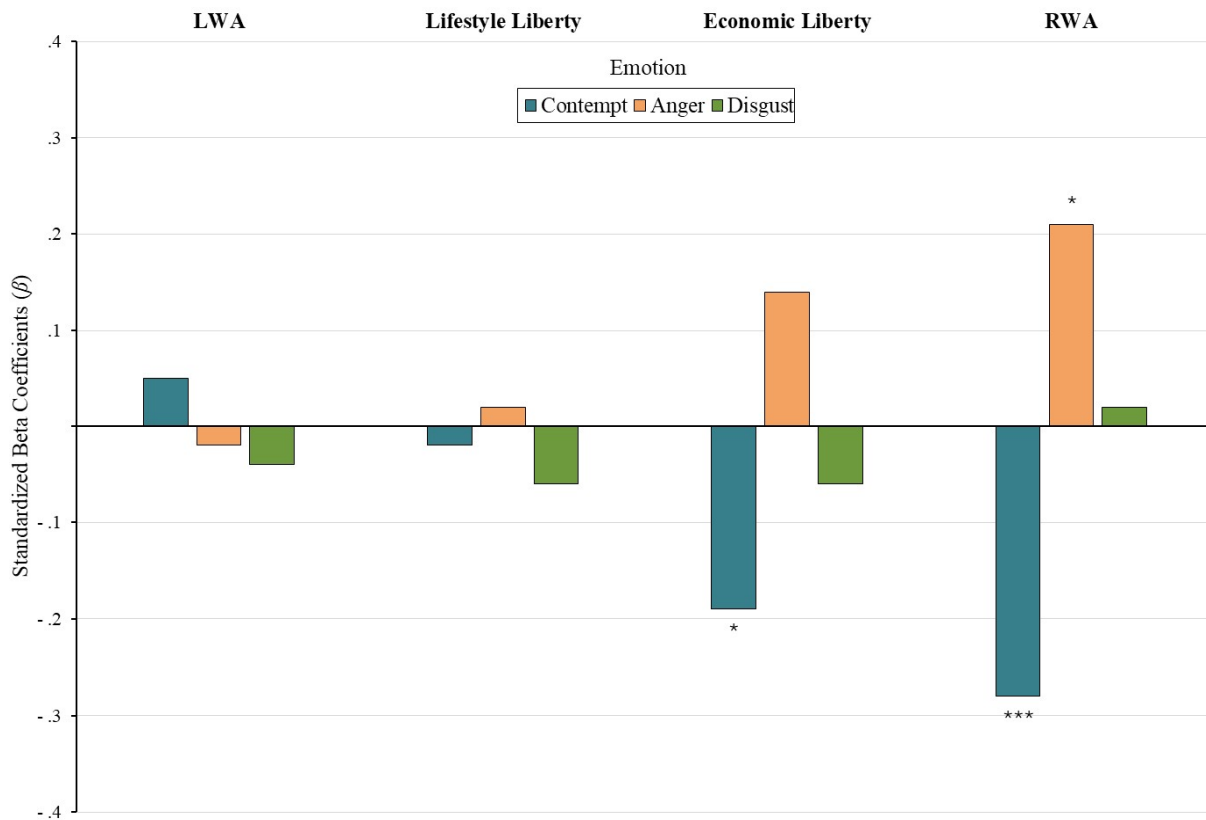
emotion, and instead might represent a reaction to something like a norm violation, then the findings make sense. Given that those higher in lifestyle libertarianism endorsed the autonomy code, it would make sense that those higher in lifestyle libertarianism would also be less likely to report the non-moralizing emotion as a response to the autonomy code. Similarly, given that those higher in RWA did not endorse the autonomy code, it follows that autonomy violations would not be seen primarily as moral violations, and so more reporting of the unilateral lip curl expression would be expected. See Figure 9 for regression results predicting political orientation from emotional responses to violations of sexual divinity.

**Figure 8**

*Predicting Political Orientation from Emotional Responses to Violations of the Autonomy Code*



Note. N = 155. \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ . † = approaches significance ( $p < .1$ ). Regression coefficients ( $\beta$ ) are reported.

**Figure 9***Predicting Political Orientation from Emotional Responses to Violations of Sexual Divinity*

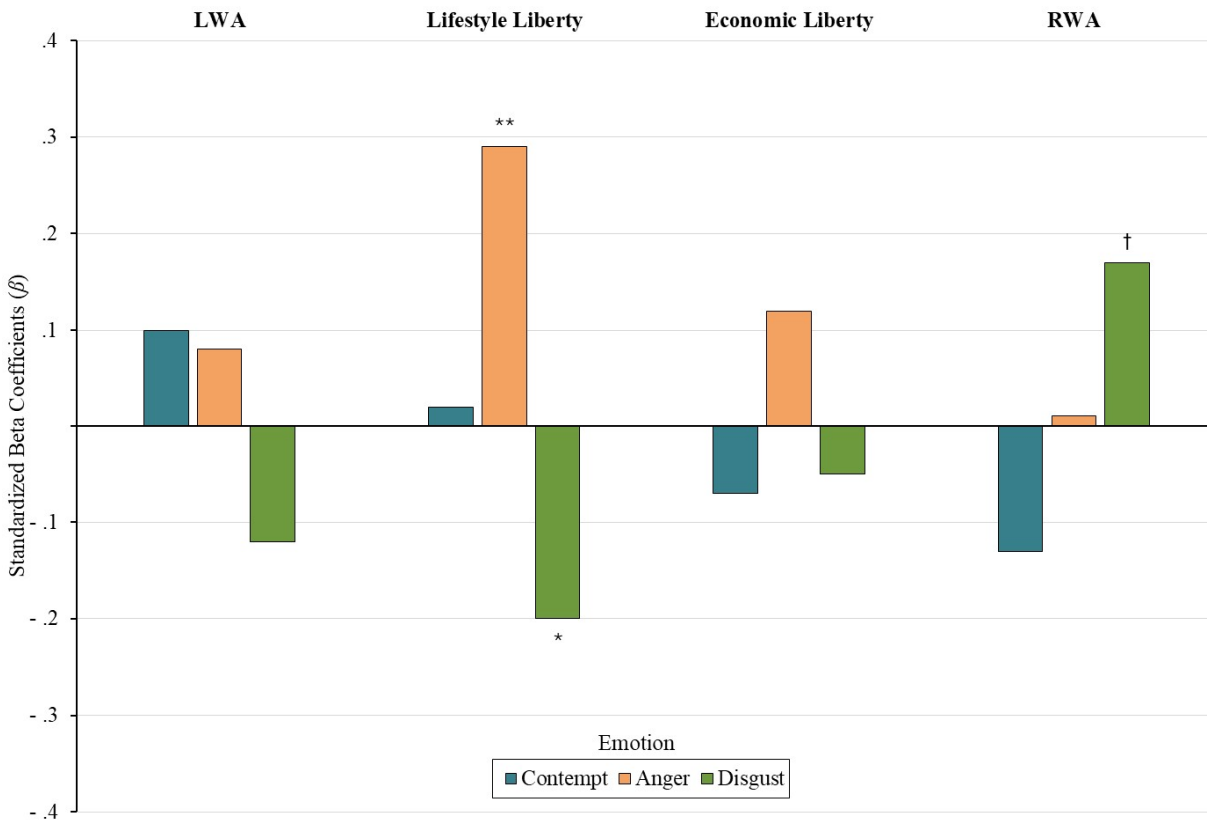
Note. N = 155. \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ . Regression coefficients ( $\beta$ ) are reported.

The lip curl was a negative predictor of both economic libertarianism and RWA. Anger towards violations of sexual divinity also predicted RWA. These findings are unsurprising, given that RWA was associated with support for traditional religious beliefs (which often have to do with sexual concerns), and that sexual divinity violations were deemed as immoral by those higher in both economic libertarianism and RWA.

See Figure 10 for regression results predicting political orientation from emotional responses to violations of environmental divinity.

**Figure 10**

*Predicting Political Orientation from Emotional Responses to Violations of Environmental Divinity*



Note.  $N = 155$ . \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ . † = approaches significance ( $p < .1$ ). Regression coefficients ( $\beta$ ) are reported.

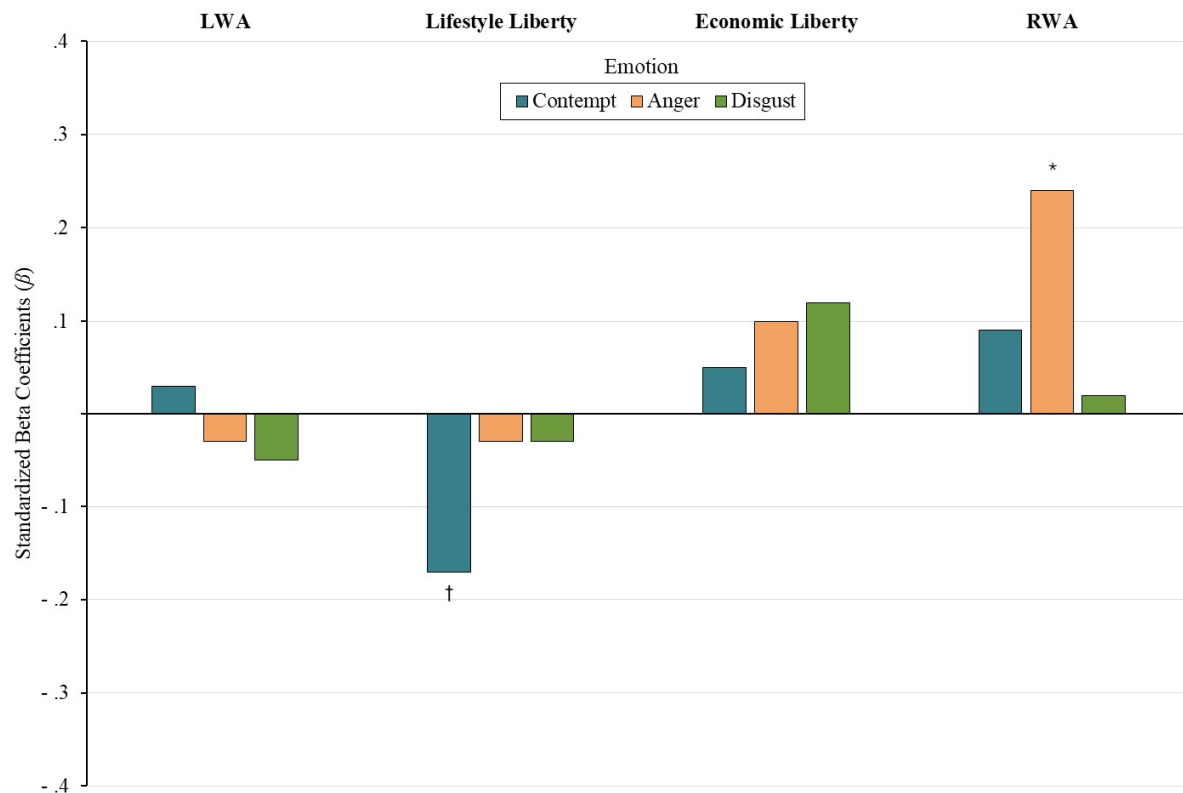
Anger towards violations of environmental divinity predicted lifestyle libertarianism.

Disgust, however, was a negative predictor for lifestyle libertarianism, possibly suggesting that individuals high in lifestyle libertarianism responded to perceived environmental harm with a sense of injustice or moral outrage. Disgust approached significance as a predictor for RWA in response to environmental violations, possibly reflecting a global purity sensitivity among high-RWA individuals, where environmental degradation may still be perceived as a symbolic violation of natural order or sanctity.

See Figure 11 for regression results predicting political orientation from emotional responses to violations of bodily divinity

**Figure 11**

*Predicting Political Orientation from Emotional Responses to Violations of Bodily Divinity*



Note. N = 155. \* $p < .05$ . † = approaches significance ( $p < .1$ ). Regression coefficients ( $\beta$ ) are reported.

The lip curl approached significance as a negative predictor of lifestyle libertarianism, suggesting that individuals high in lifestyle libertarianism may have been less inclined to respond with the expression to bodily divinity violations. Anger in response to bodily divinity violations was a significant positive predictor of RWA.

Hypothesis four predicted specifically that LWA would be associated with anger with respect to violations of the environmental divinity code. Similarly, it was also predicted that RWA would be associated with anger and/or disgust in response to violations of the community,

bodily divinity, and sexual divinity codes, lifestyle libertarianism with autonomy code violations, and economic libertarianism with community code violations. Overall, there was partial support for hypothesis four.

No emotion reached significance as a predictor of LWA with respect to violations of environmental divinity, the results for this contrast did not support hypothesis four. Although the results did not reach significance in regression, possibly due to shared variance, both anger and disgust were positively correlated with RWA, supporting hypothesis four. The lip curl did not reach significance, although trended in the negative direction. Likewise, results for lifestyle liberty only somewhat supported hypothesis four; there was a significant negative association between the lip curl and lifestyle liberty, however the expected positive association with anger did not reach significance. Although the directionality was correct (negative with contempt, positive with anger and disgust), there was no significant association between economic liberty and the predicted responses to violations of the community code.

**Secondary Predictions.** The original hypotheses were formulated based loosely on the predictions given in hypothesis one, with respect to Shweder's codes (loosely in part because in particular, different subdomains of divinity were employed). Given that immorality judgement data was also collected, one might look at the immorality judgement data and hypothesize that participants would react with more anger/disgust in response to violations of the domains that they found to be most immoral—secondary predictions can be intuited from this data.

For example, since LWA was negatively associated with immorality judgements for sexual divinity, one could predict that those who score higher on LWA should therefore react with more lip curl in response to sexual divinity violations than those who score lower on LWA. Similarly, LWA was positively associated with immorality ratings of bodily divinity violations,

and following this, those who scored higher on LWA should've reacted with more anger and/or disgust, and less lip curl relative to these other emotions in reference to those who scored lower on LWA. Although the directionality was right, no association reached significance, either as a correlate or predictor of LWA in response to violations of the sexual divinity code. No associations were significant for bodily divinity either.

RWA was negatively associated with immorality judgements for the autonomy code, and positively with the community code and sexual divinity code. Given these results, one might predict that RWA would also be positively associated with the lip curl in response to violations of the autonomy code, and anger/disgust in response to violations of the community and sexual divinity codes. Indeed, RWA was associated with the lip curl for autonomy violations, anger and disgust with respect to the community code, and negatively associated with the lip curl, but positively associated with anger in response to sexual divinity violations.

Similarly, lifestyle libertarianism was positively associated with immorality judgements for the autonomy code, and was significantly associated with less contempt in response to such violations. Although, surprisingly, neither anger nor disgust positively correlated. Economic libertarianism was positively associated with immorality judgements for the community code and sexual divinity code, and negatively with bodily divinity. Although contempt approached significance as a negative correlate, neither anger nor disgust approached significance in response to violations of the community code. Economic liberty was however associated with both less contempt and more anger with respect to sexual divinity violations.

### **Hypothesis Five: Political Orientations and Punishment Preferences**

In order to test hypothesis five, a two-way repeated-measures ANCOVA was conducted on the punishment ratings with Shweder code and punishment type as within-subjects variables and the political orientations (LWA, lifestyle libertarianism, economic libertarianism, and RWA)

as covariates. The results of this ANCOVA are presented in Table 10. The hypothesized code x type x political orientation differences will be assessed by conducting a series of regressions, one for each code x political orientation combination, using a political orientation measure as the dependent variable and three punishment type measures as the independent variables.

**Table 10***Punishment ANCOVA Results*

Test	F-Score	Significance	Partial $\eta^2$
<i>Main Effects</i>			
Code	$F(4,600) = 17.78$	$< .001$	.106
Type	$F(2,300) = 12.39$	$< .001$	.076
LWA	$F(1,150) = 14.99$	$< .001$	.091
Lifestyle	$F(1,150) = 0.11$	n.s.	.001
Economic	$F(1,150) = 0.11$	n.s.	.001
RWA	$F(1,150) = 31.06$	$< .001$	.176
<i>Code (C) Interactions</i>			
C x LWA	$F(4,600) = 7.44$	$< .001$	.047
C x Lifestyle	$F(4,600) = 2.83$	$< .05$	.018
C x Economic	$F(4,600) = 1.52$	n.s.	.01
C x RWA	$F(4,600) = 22.92$	$< .001$	.133
<i>Type (T) Interactions</i>			
T x LWA	$F(2,300) = 5.01$	$< .01$	.032
T x Lifestyle	$F(2,300) = .29$	n.s.	.002
T x Economic	$F(2,300) = 0.07$	n.s.	.001
T x RWA	$F(2,300) = 13.02$	$< .001$	.08
<i>Code x Type (CT) Interactions</i>			
Code x Type	$F(8,1200) = 5.16$	$< .001$	.033



CT x LWA	$F(8,1200) = 2.89$	$< .01$	.019
CT x Lifestyle	$F(8,1200) = 2.06$	$< .05$	.014
CT x Economic	$F(8,1200) = 1.08$	n.s.	.007
CT x RWA	$F(8,1200) = 4.13$	$< .001$	.027

As can be seen in Table 10, there were significant main effects for the Shweder code. Averaging over the three forms of punishment (state, fine, and informal), participants rated the autonomy violations as most deserving of punishment, i.e., “should be punished” ( $M = 4.44$ ), then the environmental violations ( $M = 3.05$ ), the community violations ( $M = 2.34$ ), the sexual violations ( $M = 2.13$ ), and finally the bodily violations ( $M = 1.36$ ), which generally paralleled the order of the immorality judgments. Each mean was significantly different from the others ( $p < .001$ ).

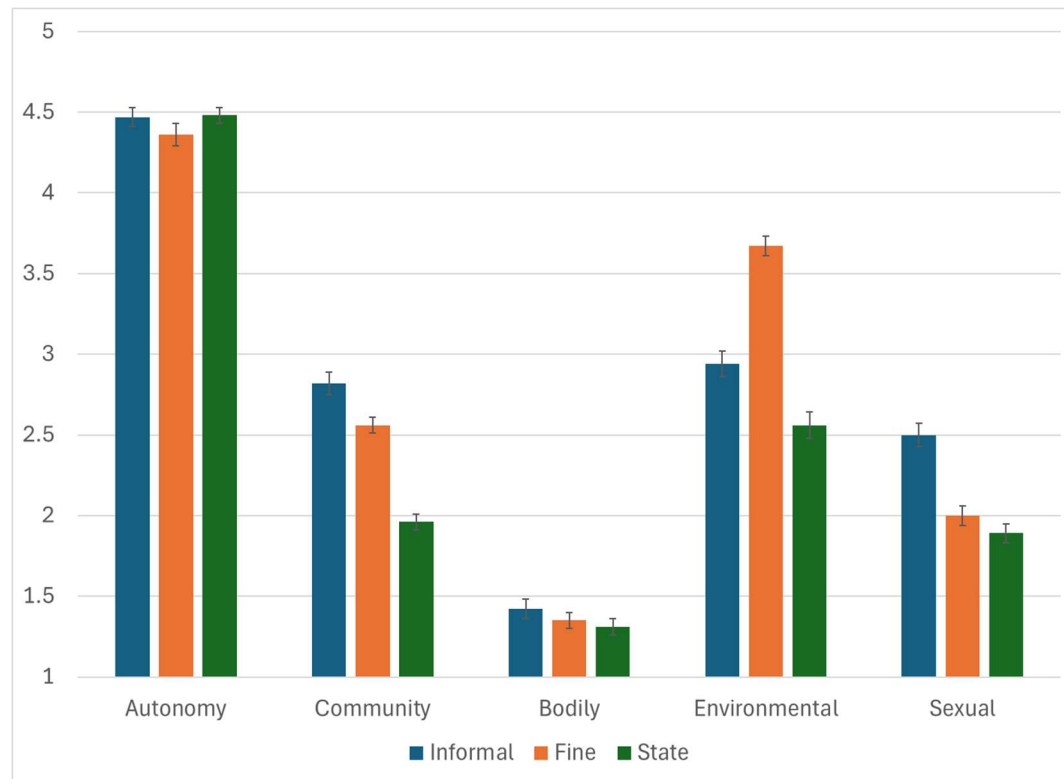
There was also a significant main effect for type of punishment. Participants most preferred informal punishments ( $M = 2.88$ ) over fines ( $M = 2.73$ ), then state punishments ( $M = 2.44$ ). However, there was also a significant code x type of punishment interaction. The mean code x type punishment preferences are plotted in Figure 12. As can be seen in Figure 12, there was no strong favoritism for a specific type of punishment for autonomy or bodily divinity violations, though punishment ratings in these domains were at ceiling and floor, respectively. By contrast, for the community and sexual divinity violations, participants favored informal punishments, whereas for environmental divinity violations, participants favored fines.

As predicted, there were also main effects for both LWA and RWA. Participants scoring higher on either political orientation were more in favor of punishment in general (LWA:  $r = .11$ , n.s.; RWA:  $r = .39$ ,  $p < .001$ ; both orientations returned significant positive beta weights when entered into a regression with all four political orientations as predictors of overall punishment

ratings,  $\beta = .303, p < .001$  and  $\beta = .496, p < .001$ , respectively). Neither libertarian orientation was associated with higher punitive sentiments.

**Figure 12**

*Average Punishment Type Rating in Each Domain (error bars represent standard errors)*



At this point it might be worth revisiting the decision to use the full LWA and RWA scales rather than using more restricted versions that eliminate the more authoritarian items from these scales, which arguably express punitive sentiments. To address any lingering concerns about the addition of these items, the ANCOVA was repeated substituting the reduced, non-authoritarian versions of these scales (see the discussion in the hypothesis one section above). After substituting the non-authoritarian versions, the main effects of LWA [ $F(1,150) = 10.47, p < .001, \text{partial } \eta^2 = .065$ ] and RWA [ $F(1,150) = 24.46, p < .001, \text{partial } \eta^2 = .140$ ] still held and in the same direction, though the effects were somewhat smaller. This suggests that the

authoritarianism items might have contributed to these effects, but did not account for all of the effects.

Each of the political orientations, with the exception of economic libertarianism, also produced significant interactions. There were significant LWA, lifestyle, and RWA by code interactions; significant LWA and RWA by type of punishment interactions; and significant LWA, lifestyle, and RWA by code by type of punishment interactions. Each of these will be assessed by a series of regression analyses with the four political orientation measures as the independent variables, and the punishment ratings averaged over code (Table 11), punishment type (Table 12), and code by punishment type (Table 13) as the dependent variables.

As indicated by the rightmost column in Table 11 (note the DVs for these regressions were the punishment ratings), the greatest difference in beta weights across Shweder codes is observed with RWA ( $\Delta\beta = .827$ ), followed by LWA ( $\Delta\beta = .432$ ), then lifestyle libertarianism ( $\Delta\beta = .333$ ), and finally economic libertarianism ( $\Delta\beta = .247$ ). This accounts for why there is a significant code x political orientation interaction for all of the orientations, except for economic libertarianism. However, the pattern of beta weights is informative in its own right. The only code for which the libertarian orientations (lifestyle and economic) display greater punitive sentiments than LWA and RWA is the autonomy code. Indeed, the autonomy code was the only domain in which LWA and RWA display a negative correlation with punitive sentiments. For the community, bodily, and sexual codes, both LWA and RWA are clearly associated with greater punitive sentiments, while there is no clear pattern of differences for the environmental code.

Substituting the non-authoritarian versions of the LWA and RWA scales did not substantially alter this pattern of results. The code x LWA interaction remained significant,

$F(4,600) = 6.28, p < .001, \text{partial } \eta^2 = .040$ , as did the code x RWA interaction,  $F(4,600) = 24.39, p < .001, \text{partial } \eta^2 = .140$ .

Regarding the predictions that LWA would display greater punitive sentiments for environmental violations, lifestyle autonomy violations, economic community violations, and RWA community, bodily, and sexual violations, the predictions were largely met if one interprets these predictions to mean which orientation best predicted punishment endorsements within a domain as opposed to which domain endorsements were most associated with an orientation (see Table 11). LWA was the political orientation most associated with punishment endorsements for environmental divinity, though the association was not significant. Lifestyle libertarianism was the only orientation that displayed a significant positive association with endorsements of punishment in the autonomy domain, and RWA displayed the strongest associations with punishment endorsements in the domains of community, bodily divinity, and sexual divinity. Economic divinity was also predicted to display significant positive endorsements of punishment in the community domain, but this was not observed. Still, overall, most of this set of predictions was supported.

The pattern of greater punitive sentiments for LWA and RWA is again replicated in Table 12 (note the DVs for these regressions were the punishment ratings), where these orientations are found to have highly significant positive associations with the punitive sentiment to impose fines and state punishments on violations. The differences across the political orientations are much reduced for informal punishments. Comparing across the types of punishment, the greatest difference in beta weights is again observed with RWA ( $\Delta\beta = .438$ ), followed by LWA ( $\Delta\beta = .264$ ). By contrast, the differences are much smaller for lifestyle libertarianism ( $\Delta\beta = .078$ ) and economic libertarianism ( $\Delta\beta = .035$ ). These differences in beta weights account for the significant RWA x type and LWA x type interactions and the absence of

interactions for lifestyle and economic libertarianism. The results also reinforce the observation that RWA and LWA are more associated with punitive sentiments than the libertarian orientations.

Substituting the non-authoritarian versions of the LWA and RWA scales did not substantially alter this pattern of results. The type x LWA interaction remained significant,  $F(2,300) = 5.44, p < .01, \text{partial } \eta^2 = .035$ , as did the type x RWA interaction,  $F(2,300) = 11.51, p < .001, \text{partial } \eta^2 = .071$ .

The orientation x type of punishment results allow one to test the prediction that LWA will be most associated with informal punishments, libertarianism will be most associated with fines, and RWA will be most associated with state-based punishments. It is difficult to say what the specific predictions will be for economic libertarianism as there is no apparent track record that looks at the type of punishments associated with SDO. As a result, it was just considered that the predictions for lifestyle libertarianism to be those originally put forward for libertarianism. What is perhaps more apparent in Table 12 is that regardless of punishment type, punishment endorsements are most strongly associated with RWA. If RWA is put aside for a moment, then it is found that regardless of punishment type, endorsements are most strongly associated with LWA. Hence, regardless of the type of punishment, the authoritarian orientations display the greatest associations with endorsements of punishment.

**Table 11***Regression  $\beta$ s: Punishment Ratings Averaged Over Code*

Predictors	Autonomy	Community	Bodily	Environmental	Sexual	Max $\beta$ Difference
LWA	-.101	.262***	.294***	.108	.331***	.432
Lifestyle	.205*	-.066	-.128	.103	-.003	.333
Economic	.193*	.059	-.043	-.027	-.054	.247
RWA	-.190*	.600***	.295**	.093	.637***	.827

Note. N = 155. \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ .

**Table 12***Regressions: Punishment Ratings Averaged Over Type of Punishment*

Predictors	Informal	Fine	State	Max $\beta$ Difference
LWA	.104	.368***	.315***	.264
Lifestyle	.010	-.022	.056	.078
Economic	.013	.049	.014	.035
RWA	.154	.534***	.592***	.438

*Note.* N = 155. \*\*\* $p < .001$ .

While it was found that across all the punishment options, RWA was most strongly associated with state-based punishments. Comparing similarly across punishment options, LWA was not most strongly associated with informal punishments and lifestyle libertarianism was not most strongly associated with fines. Overall, support for this set of predictions is weak.

Finally, Table 13 presents a series of regressions that provide further information for interpreting the three-way interactions between the codes, types of punishment, and political orientations. Note that unlike the regressions presented in Tables 9 and 10, these regressions were conducted with the political orientation measures as the dependent variables in order to assess whether each orientation is associated with a different pattern of results. The general pattern of results displayed to varying degrees across the three forms of punishment is that LWA was the only orientation to display a positive association with bodily divinity punishments, though this only reached significance for the fine punishments. Lifestyle libertarianism more consistently displayed a positive association with autonomy punishments and a negative

association with community punishments. Economic libertarianism displayed a weaker, more inconsistent positive association with autonomy punishments and a more consistent positive association with community punishments (contrasting with lifestyle libertarianism's negative association with community punishments). Finally, RWA displayed consistent and stronger associations with community and sexual divinity punishments. This overall pattern of results roughly parallels that observed for the immorality judgments.

**Table 13**

*Regression  $\beta$ s: Political Orientations Predicted by Punishment Ratings*

Predictors	LWA	Lifestyle	Economic	RWA
<i>Informal Punishments</i>				
Autonomy	-.034	.151	.078	-.217**
Community	-.124	.018	.165	.327***
Bodily	.175	-.101	-.058	-.017
Environmental	.128	.107	-.225*	-.371
Sexual	-.060	-.139	.131	.291
<i>Fines</i>				
Autonomy	.091	.237**	.111	-.100
Community	-.187	-.350***	.273*	.446***
Bodily	.217*	-.044	-.144	-.183*
Environmental	.031	.091	.012	-.054
Sexual	.166	.097	-.019	.305***
<i>State Punishments</i>				
Autonomy	-.122	.183*	.272***	.067
Community	-.158	-.201	.393***	.548***
Bodily	.134	-.126	-.102	-.148



Environmental	.024	.147	-.056	-.093
Sexual	.167	.040	-.098	.215*

Note. N = 155. \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ . Regression coefficients ( $\beta$ ) are reported.

Substituting the non-authoritarian versions of the LWA and RWA scales did not substantially alter this pattern of results. The code x type x LWA interaction remained significant,  $F(8,1200) = 2.23$ ,  $p < .05$ , *partial*  $\eta^2 = .015$ , as did the code x type x RWA interaction,  $F(8,1200) = 4.39$ ,  $p < .001$ , *partial*  $\eta^2 = .028$ .

### Discussion

The first, second, and third study hypotheses helped to map people's divergent political orientations onto the moral landscape viewed both in terms of Shweder's hypothesized moral codes and Haidt and colleagues' moral foundations. This objective was designed to highlight the complex and often non-linear ways in which moral cognition and political beliefs are related to one another, and to show that a person's politics is related to their morality in predictable ways. Importantly, this approach challenges the explanatory power of the traditional left-right political spectrum, which, it is argued, overlooks the underlying moral diversity which is both related to a person's political orientation and differs in important ways between political orientations.

#### Hypothesis One: Endorsement of Moral Codes

Hypothesis one predicted differential endorsement of moral values as represented by Shweder's codes. Specifically, it was predicted that LWA scores would be positively associated with endorsement scores for the non-religious, environmental and social-unity divinity codes, lifestyle libertarianism would be associated with the autonomy code, by contrast economic libertarianism would be associated negatively with the autonomy code, and positively with the community code and religious divinity code, and RWA would also be associated with the community and religious divinity codes. The predictions for hypothesis one were generally

supported with the noticeable exception that economic libertarianism was not negatively correlated with the autonomy code.

The observed pattern of associations was not consistent with the expectations of a unidimensional left-right spectrum. As can be seen in Table 3, there was a significant quadratic relationship between responses to the liberal-conservative PSP question and four of the five moral codes. The one moral code (social unity divinity) for which there was no evidence of a quadratic relationship, also displayed no significant evidence for a linear relationship. Rather than falling into a simple continuum, each orientation aligned with distinct combinations of Shweder's codes. This divergence suggests that a single axis cannot adequately capture how different orientations think about moral content, reinforcing the value of approaching political psychology with a multidimensional framework.

An interesting finding is that both LWA and RWA were significantly associated with negative endorsement of the autonomy code, suggesting a commonality between those high in LWA or RWA, possibly due to irreconcilable conflicts with other moral codes that they value. For example, RWA was positively associated with endorsement of the religious divinity code. What would happen, for example, if someone acted blasphemously, contrary to the religious code? Someone who is high on RWA might deem it permissible to restrict that person's autonomy and harm them by punishing them in an effort to encourage that person's respect for religious mores. Because lifestyle libertarianism is positively associated with the autonomy code and only the autonomy code, such conflicts between values likely wouldn't arise or at least wouldn't be viewed as a conflict. For example, if a person who valued individual autonomy recommended severe punishments for those who violated another person's individual autonomy, such punitive sentiments might tend to be viewed as a defense of individual autonomy rather

than a violation of it, even though punishing a person inflicts a harm upon them in violation of the autonomy code. By contrast, inflicting the same level of punishment on someone for blasphemy, in violation of the religious divinity code, would likely be viewed as a violation of the autonomy code. The counter-intuitive prediction that economic libertarianism would likewise be illiberal, based on the assumption that economic libertarianism is a proxy measure for SDO was not born out. However, further discussion of this will be postponed until after considering the MFQ2 results.

Shweder originally proposed the autonomy, community, and divinity codes as culturally grounded moral domains, but little research has mapped these codes onto political orientations. Instead, political psychology has tended to rely on the Moral Foundations framework, which was inspired by, but expanded beyond, Shweder's codes. This shift means that the original code framework has rarely been examined in relation to ideological differences, despite its potential to highlight how moral content is prioritized differently across orientations. The results presented here suggest that further investigation of the relationships between Shweder's codes and people's political psychology might be warranted.

### **Hypothesis Two: Endorsement of Moral Foundations**

Similar to hypothesis one, which predicted that scores on political orientation measures would be associated with differences in endorsement of moral values derived from Shweder's moral codes, hypothesis two predicted that political orientation scores would also show distinct patterns of association with endorsements of moral domains as defined by Moral Foundations Theory. Given that there is more of a track record exploring the relationships between MFT's foundations and political identification / orientation (though never having studied LWA, RWA, and forms of libertarianism all within a single study), a different tact was adopted in the

formulation of these hypotheses. Here the hypotheses were guided more by past findings. LWA was expected to be associated with endorsement of the care, equality, and purity foundations but negatively associated with proportionality, loyalty and authority; lifestyle libertarianism was expected to be negatively associated with purity; economic libertarianism was expected to be negatively correlated with equality and possibly positively associated with proportionality; and RWA was expected to be negatively associated with care, and positively associated with proportionality, loyalty, authority, and purity.

Overall, the data supported hypothesis two. The results for LWA deviated the most from the predictions. As predicted, there was a positive association with equality, but there was not a positive association with care or purity. Unexpectedly, proportionality was positively associated with LWA. Loyalty and authority were in the correct, negative direction, but failed to reach significance in the regression analysis. What was perhaps most striking is that care was negatively associated with LWA, though not significantly so, but was strongly positively associated with lifestyle libertarianism. Care was, however, strongly, negatively associated with RWA. In hindsight, this pattern of care results makes sense given that care is usually taken to be a component of the autonomy code (cf. Radkiewicz, 2020), with which it was significantly positively correlated ( $r = .25$ , see Table 2). Hence, care seems to be tracking liberalism, high in the case of lifestyle libertarianism, which was also positively associated with the autonomy code, but low in the case of LWA and RWA, the two political orientations that are hypothesized to be the most illiberal and the only to display a negative association with the autonomy code.

Lifestyle libertarianism also was negatively associated with purity, as predicted. Economic libertarianism was negatively associated with equality and positively associated with

proportionality, as predicted, though the current study failed to predict that proportionality would be so strongly associated with economic libertarianism.

Finally, as mentioned above, RWA was negatively associated with care and was also positively associated with proportionality, authority and purity. RWA fell short of predictions with respect to loyalty. The association with loyalty was in the correct direction, but it failed to reach significance.

Returning to the matter of economic libertarianism and SDO, while they both are associated with inequality, lean rightward, and arguably are focused on economic concerns, there was a mixed support for the predictions using SDO as a guide. For the most part, the predictions held up with the noticeable exception of the autonomy code. While it is true economic libertarianism was not significantly associated with autonomy, it did not display an illiberal tendency as one would expect based on past results with SDO. Nor was the strength of association between proportionality and economic libertarianism what one would have expected based on prior results. Atari et al. found a non-significant negative correlation between SDO and proportionality ( $r = -.10$ ) and while Zakharin and Bates found a significant weak correlation ( $r = .20$ ), this was the smallest correlation they found between SDO and any of the moral foundations. By contrast, the current study found a significant moderate correlation ( $r = .45, p < .001$ ) between economic libertarianism and proportionality.

These discrepancies can possibly be explained in terms of differences in attitudes about individual merit. SDO is not simply characterized by an acceptance of inequality. SDO, at least as it has been operationalized, embodies an active preference not only for inequality, but an inequality based on inherent social categories like sex and race. This can be seen in SDO scale items like: “Some groups of people are simply inferior to other groups” and “To get ahead in life,

it is sometimes necessary to step on other groups” (Pratto et al., 1994, Appendix C, p. 763).

Contrast this with the following MFQ2 proportionality items used in this study: “In a fair society, those who work hard should live with higher standards of living” and “The effort a worker puts into a job ought to be reflected in the size of a raise they receive” (see Appendix E). SDO reflects a preference for a social world where inequality characterizes groups and is assigned at birth, whereas proportionality reflects a preference for a social world where inequality characterizes individuals and low status of some individuals is the unintended consequence of meritocracy.

SDO and economic libertarianism likely differ with respect to the autonomy code because the autonomy code stresses individual rights and freedom from interference from others, whereas SDO strives for an inequality that is actively reinforced by coercion of groups viewed as inherently inferior, as in the SDO scale item: “In getting what you want, it is sometimes necessary to use force against other groups” (Pratto et al., 1994, Appendix C, p. 763).

Despite their similarities, SDO and economic libertarianism, as embodied in the proportionality foundation, are distinct political orientations. However, there appear to be no published studies that report whether there is any association between economic libertarianism and SDO, but Peng (2022) found a moderate correlation between SDO and “free market ideology” ( $r = .52, p < .001$ ). This raises the question of whether much of what has been attributed to SDO has instead been driven by economic libertarianism, which is quite different in character from SDO. This is a question that should be explored in future research.

Cronbach’s alphas for the MFQ-2 subscales in the present sample ranged from .77 to .87, somewhat lower than those reported by Atari et al. (2018). Differences in reliability may reflect sample size, cultural/contextual differences, and the shorter number of items per foundation, all

of which can reduce alpha estimates. Nevertheless, all subscales demonstrated acceptable levels of internal consistency for research purposes.

### **Hypothesis Three: Judgements of Immorality**

Hypothesis three aimed to explore the relationship between political orientations and perceived immorality of moral code violations. Hypothesis three predicted that patterns of immorality judgments would align with associated predicted moral values: LWA scores were expected to be positively associated with immorality ratings for environmental divinity violations, RWA with violations of the community code, as well as sexual and bodily divinity violations, lifestyle liberty with autonomy code violations, and economic libertarianism with community code violations (there was no equivalent of the religious divinity code in this part of the study).

Hypothesis three was mostly supported; each specified orientation was associated with their predicted immorality judgements, except for LWA with environmental divinity, and economic libertarianism and sexual divinity. Instead of being associated with higher immorality ratings for environmental divinity violations, LWA scores were positively associated with immorality ratings for bodily divinity violations, and negatively with sexual divinity violations. Economic libertarianism was positively associated with higher immorality judgments for community code violations, but unexpectedly, was also positively associated with higher immorality judgments for sexual divinity violations.

RWA was significantly associated with immorality judgements for community, sexual divinity, and bodily divinity violations. However in regression, community and sexual divinity violations were the only significant positive predictors of RWA, and immorality ratings for autonomy violations were a significant negative predictor, which aligns with past findings where

it has been shown that RWA is associated with purity concerns, most of which are sexual in nature within the MFT framework. Lifestyle libertarianism was associated with immorality judgements for autonomy code violations, suggesting that libertarianism treats restrictions on personal freedom as moral wrongs. Economic libertarianism results were similar to RWA in that economic libertarianism scores were associated with immorality judgements of the community and sexual divinity codes, but no association was observed with the autonomy code, and bodily divinity was a negative predictor.

#### **Hypothesis Four: Emotional Responses to Moral Violations**

Hypothesis four predicted that emotional responses to moral violations, specifically the unilateral lip curl, anger, and disgust, would differ by political orientation. Because each orientation as a whole was hypothesized to prioritize different moral domains, it was also predicted that they would also have different emotional reactions to violations of different moral domains. It was hypothesized that participants would react with anger or possibly disgust to violations that they moralized, and react with the unilateral lip curl towards actions viewed as wrong but not immoral, and with disgust also being elicited by violations perceived as possibly contaminating but not immoral. In particular, hypothesis four predicted specifically that LWA would be associated with anger with respect to violations of the environmental divinity code, RWA would be associated with anger and/or disgust in response to violations of the community, bodily divinity, and sexual divinity codes, lifestyle libertarianism with autonomy code violations, and economic libertarianism with community code violations.

Hypothesis four was only partially supported, given that in some cases, significance was not reached. Of interest, however, are secondary predictions that could be made, which would follow from the immorality judgements. For example, LWA was found to be positively



associated with immorality ratings for the bodily divinity code, and negatively with immorality ratings for the sexual divinity code. However, LWA scores were not significantly associated with anger or disgust in response to bodily divinity violations as was predicted. This may be in part due to the nature of multiple regression. These results suggest that the lack of significant associations for anger and disgust should not necessarily be interpreted as absence of effect, given that in multiple regression, one variable may absorb much of the shared explanatory power, reducing the apparent contribution of others. In this case, contempt tended to operate in the opposite direction of anger and disgust. Thus, when contempt accounted for variance in immorality judgments, the remaining unique variance left for anger and disgust to explain was diminished. The remainder of the emotions regressions may be susceptible to the same implications.

RWA scores were associated positively with immorality ratings for violations of the community and sexual divinity codes, and negatively for ratings for the autonomy code. In turn, anger and disgust in response to community code violations were positively associated with RWA, while the lip curl was negatively associated. Further, the lip curl was the best predictor of RWA in response to violations of the autonomy code (which was a code that was not moralized by those high in RWA). Given that RWA scores were highly associated with immorality ratings for sexual divinity violations, hypothesis five also predicted that the lip curl would be negatively associated with RWA, while anger and possibly disgust would be positively associated with RWA. It was found that, in response to violations of the sexual divinity code, the lip curl was indeed a significant negative predictor of RWA scores, while anger was a significant positive predictor.

Lifestyle libertarianism scores were associated positively with immorality ratings for autonomy code violations. As predicted then, the unilateral lip curl was a negative predictor of lifestyle libertarianism in response to violations of the autonomy code. However, neither anger nor disgust reached significance as predictors of lifestyle libertarianism; one possibility for this is that anger and disgust ratings in response to autonomy violations may have approached the upper limits of the scale, leaving limited variability for political orientation to explain. Alternatively, the null findings may suggest that the lip curl (“contempt”), rather than anger or disgust, more distinctly captures liberty-oriented responses to autonomy violations. Economic libertarianism scores were associated with finding violations of the community and sexual divinity codes as immoral, and bodily divinity violations as less immoral. However, only the lip curl reached significance as a negative predictor for economic libertarianism in sexual divinity violations (lending support to the hypothesis), no other contrasts reached significance. Findings by Iyer et al. suggest that a lack of emotionality is to be expected however, routinely finding that libertarianism was associated with lower dispositional emotions, including weaker loving feelings towards friends, family, romantic partners, and others (2012). Therefore, it is possible that the weaker associations observed here simply reflect a broader tendency for liberty-oriented individuals to respond to moral violations with muted emotional reactions

Further, there may be several explanations as to why some of the predicted emotional effects did not reach significance. For example, collinearity among the CAD emotions limited their independent contributions in the regression models. Collinearity diagnostics showed that anger and disgust were strongly overlapping, with variance proportions of .46 and .93 on the same dimension (Condition Index = 11.92), while contempt and anger also shared variance, with proportions of .34 and .48 on another dimension (Condition Index = 13.62). As a result, when,

for example, community anger and community disgust (for which  $r = .53, p < .01$ ) were entered into the model as predictors of RWA. The overall relationship between anger and disgust also exceeded .8, and was also significant. Combined with the modest sample size and variability in emotional responses across scenarios, this helps explain why some predicted effects did not achieve significance in the emotions section.

### **Hypothesis Five: Preferences for Punishment**

Several predictions were made under hypothesis five. The first is that LWA would be most associated with informal, social punishments; lifestyle libertarianism would be most associated with fines, and RWA would be most associated with state-based punishments. The only one of these predictions that was supported is that RWA would be most associated with state-based punishments.

More support was found for the second set of predictions, that LWA would be the best predictor of endorsements of punishments for environmental divinity violations, lifestyle libertarianism would be the best predictor of punishments for autonomy violations, and RWA would be the best predictor of punishments for community, bodily divinity, and sexual divinity violations. The only prediction that was not met was that economic libertarianism would be the best predictor of endorsements of punishment for community violations, though it should be noted that this prediction is in competition with the same association predicted for RWA, which was supported.

Finally, the prediction that LWA and RWA would display the strongest associations with punishment endorsements was supported.

### **Positioning Political Orientations Along the Traditional Left-Right Spectrum**

In the current study, LWA, RWA, and libertarianism have been used as extreme endpoints in a multidimensional model of political psychology. And yet when scores on each of these political orientations were correlated with responses to a standard liberal-conservative PSP question, the results likely seemed underwhelming, if not problematic. If measures of LWA are taken to be a proxy for “leftism” and measures of RWA are taken to be a proxy measure for “rightism” then the observed correlations of  $r = -.51$  and  $r = .60$ , respectively, might seem to suggest that these are poor measures of leftward and rightward political orientations. And yet, what is the alternative? Most of the studies cited in this thesis, many of which study people’s political psychology, typically rely on just one PSP question to assess people’s left-right political identification.

Is political identification merely a matter of the subjective identification of participants? What if a participant who favors taking away women’s right to vote, favors second class status for racial and ethnic minorities, and a state religion, strict blasphemy law, and an alignment of state law with religious law, nevertheless claims to be far left in their political identification. In other words, what if their policy preferences are at odds with their preferred political label?

Lesschaeve (2017) sought to validate a left-right PSP question by seeing how well it predicted people’s political policy preferences. Responses to the PSP question were entered into a multilevel logistic regression along with participants gender, education level, income, region of residence, and political interest. In addition, he added three interaction terms: PSP response x lower education level, PSP response x middle education level, and PSP response x higher education level. The dependent variable was the participants’ political policy preference. What he found was that 0.25% of the variance ( $B = .05$ ) in policy preferences was explained by

participants' PSP responses. By comparison, having a higher level of education accounted for 3.61% of the variance ( $B = .19$ ) in policy preferences. While I do not contend that the observed correlations of  $r = -.50$  (25% of variance) and  $r = .61$  (37.21% of variance) between the PSP responses and LWA and RWA, respectively, are directly comparable, the relatively low predictive power of PSP responses with respect to policy preferences does help to contextualize how little of the observed variance might typically be explained in the domain of politics, even for such a widely used measure like a left-right PSP question.

Furthermore, one might question the fundamental assumption that doubts about the validity of these orientations as measures of political orientation betray. To assume that some scale might do better as a measure of participants' political orientation assumes that there is some coherent political construct that underlies the "left" or "right." But this begs the question against the position staked out here, that the "left" and "right" have no essence to be measured, instead they are ad hoc categories composed of people with partially overlapping values who form coalitions to advance their political goals. The negative correlation between lifestyle liberty and the liberal-conservative PSP ( $r = -.19$ ) and the positive correlation between economic liberty and the liberal-conservative PSP ( $r = .41$ ), suggests that they too might identify as "liberal" and conservative," respectively. But if liberals are a mix of people comprised in part of people one might call left-wing authoritarians and lifestyle libertarians who value quite different moral values and conservatives are a mix of people comprised in part of people one might call right-wing authoritarians and economic libertarians who also value quite different moral values, why should there be the assumption that there is some essential commonality between them that makes them liberals and conservatives, respectively? Given these ad hoc mixes of moral values, and the fact that PSP identifications seem so poorly associated even real-world markers of

political orientation, like policy preferences, why assume that any other scale might be much better calibrated to people's political orientations? Perhaps the better strategy is to measure people on a variety of political orientations, the strategy followed here.

There is also the "horseshoe theory" that has captured the popular imagination. The idea that the further you go to the left and right, the more the opposing political orientations come to resemble one another. The results of this thesis explain how this might be so. LWA and RWA are typically viewed as being on the far left and far right, respectively. Clearly they are different in their values. LWA was positively associated with environmental divinity and equality. RWA was positively associated with community, religious divinity, authority, and purity. And yet, despite these differences, there were also similarities. Both orientations were positive associated with proportionality, but more importantly, both were negatively associated with the liberal values of autonomy and care, by virtue of which there is warrant in calling these orientations illiberal. Perhaps they are illiberal because liberal toleration would get in the way of the pursuit of other values. It might be precisely the exaggerated pursuit of these other values that requires those high in LWA and RWA to downplay the liberal values. Hence, the far left and the far right are not identical in total. The values that they do favor are quite different for the most part. Where they are similar is in their illiberality.

## **Limitations and Next Steps**

### ***Limitations***

**Inconsistencies Across Political Scales.** A major limitation concerns the eclectic mix of political orientation measures employed. The LWA, RWA, and liberty-oriented composites were drawn from separate theoretical frameworks and constructed independently by different authors,

not all within the same or even similar frameworks. As such, these scales may be conceptually different to varying degrees, introducing interpretive noise.

**Conceptual Limitations in Shweder's Moral Codes.** Shweder's original triad, particularly the divinity code, lacks conceptual breadth. It was formulated largely from interviews with devout Hindus and therefore emphasized religious purity and spiritual defilement. This orientation may have biased the code toward a religious rendering of concerns with the "natural order," and overlooked nonreligious forms of sacralization, such as environmental or social purity. Subsequent operationalizations, such as Rozin et al.'s CAD study and the derived MFQ-2's purity foundation, appear to have carried forward this narrowing. For example, Atari et al. (2023) reported that the purity foundation was weighted most heavily toward items measuring sexual immorality, with less emphasis on other forms of contamination or sacredness. In the present study, this limitation was evident in that different versions of the divinity code (religious, bodily, environmental) mapped onto different political orientations, suggesting that the original religious-centric formulation underestimates morally charged responses among secular or ecologically motivated participants. While the present differentiation remains preliminary, it highlights the need to reconsider whether Shweder's divinity code was always more multi-barreled than subsequent measures have acknowledged.

Shweder's original conception of the divinity code emphasized concerns with sanctity and the "natural order," but the way it has been operationalized, particularly in Rozin et al.'s CAD studies and later measures such as the MFQ, as aforementioned, has leaned heavily on religious and sexual violations. This narrowing risks underrepresenting other culturally salient forms of perceived sacredness. For example, environmental concerns or ideals of social harmony may also be experienced as inviolable, but are not captured by traditional divinity violations. The

present study took an initial step toward broadening this scope by including alternative forms of divinity, such as environmental divinity, which may better reflect how secular or modern ideological groups moralize the “natural order.” Future work should validate and standardize these additional domains, thereby clarifying whether the religious-centric rendering of divinity by Rozin et al. adequately reflected Shweder’s broader theoretical framework, or whether it overlooked parallel forms of sacredness that emerge in nonreligious contexts.

**Issues with Moral Foundations Content Validity.** Some foundations fail to fully capture the scope of what they are meant to assess. For example, the loyalty foundation is operationalized largely through items about loyalty to one’s country or sports teams. While these may resonate with conservative or nationalist orientations, they fail to capture forms of loyalty more typical among left-leaning respondents. As a result, left-wing group loyalty may be underestimated, not because it is absent, but because the measure does not reflect the kinds of allegiances they prioritize. A similar issue arises with the authority foundation, which emphasizes respect for traditional hierarchy and leadership but overlooks egalitarian or perhaps horizontal forms of authority that may be valued on the left. Furthermore, the authority foundation, and indeed this thesis, does not assess instances where LWAs have come to power, transforming view of authority from horizontal to vertical. Even within purity, Atari et al. (2023) showed that MFQ-2 items were unevenly weighted toward sexual immorality, neglecting other dimensions such as environmental or bodily sanctity that are increasingly moralized outside of religious contexts.

While my critique has focused on how the authority foundation tends to be conceptualized in ways that primarily capture right-wing or conservative expressions of deference, it is important to acknowledge that authoritarianism is not confined to the political



right. As Joseph Manson has noted (personal communication, August 21, 2025), left-wing regimes and dictatorships have also exhibited extreme demands for obedience, conformity, and punishment of dissent. This raises the question of whether the authority foundation, as it is currently operationalized, adequately accounts for the full range of authoritarian dynamics across the ideological spectrum. On the one hand, the measurement items often emphasize traditional forms of authority (e.g., respect for elders, obedience to parents, loyalty to nation), which map more readily onto right-wing authoritarianism. On the other hand, authoritarianism expressed in left-wing contexts often takes different forms (e.g., enforced egalitarianism, suppression of dissent in the name of equality or social justice) that may not be captured by these items. Thus, while the authority foundation is a useful starting point, its content validity may be limited by its tendency to privilege right-oriented authority structures, underscoring the need for expanded conceptualizations that better encompass authoritarianism across the political spectrum.

The present study helps address these limitations by turning to Shweder's (1997) moral codes, which provide a broader framework for conceptualizing morality. For example, by disaggregating the divinity code into religious, bodily, and environmental forms, study was able to capture moral concerns that are overlooked in the MFQ-2's purity foundation. There is a need to update or supplement MFQ items so that constructs like loyalty are measured in ideologically neutral terms. Questions tapping ideological, cultural, or activist group loyalty may offer a fuller picture of how moral foundations function across political identities.

### ***Next Steps***

To address these limitations and further develop the framework established in this study, several next steps are proposed:

**Development of a Unified Political Ideology Measure.** A foundational next step is to construct a set of scales for LWA, RWA, and classical liberalism based on shared theoretical architecture. Rather than treating the orientations as embodying identical concepts, the focus should be on ensuring that the way items are generated is held constant across scales. If both LWA and RWA are to be understood as forms of authoritarianism, then authoritarianism itself must be operationalized in the same way, while still clearly differentiating the objects of protection (e.g., hierarchy vs. equality vs. liberty). These should emphasize the structure of illiberalism (i.e., coercion, dogmatism, punishment), while clearly differentiating the objects of protection (e.g., hierarchy vs. equality vs. liberty).

**Replication with Sample Consideration.** A necessary next step is to replicate this thesis with a larger and more representative sample. The current dataset combined participants from student populations, Prolific, and the general public, which limited the ability to draw clear inferences about how well the findings may actually generalize. A refined replication should implement sampling strategies that produce a more balanced representation across age, education, socioeconomic status, and political background. Separating and comparing subsamples, rather than collapsing them into a single dataset, would also help identify whether the observed patterns are robust across groups or driven by any characteristics of a particular population. Doing so would increase both the reliability and the external validity of the proposed framework.

### **Practical Implications**

The finding that political orientations diverged in some moral domains but overlapped in others suggests that the conventional left-right spectrum oversimplifies the psychological roots of conflict. This has direct implications for understanding and addressing hate and polarization.

First, polarization may be fueled not simply by a binary clash between “liberals” and “conservatives,” but by different constellations of moral concerns that cut across the spectrum. For example, LWA and RWA both predicted strong moralized emotions and punitive responses, but toward different targets. Recognizing this symmetry highlights that illiberalism is not exclusive to one side and helps explain why both ends of the spectrum can generate intolerance and hostility.

Second, interventions aimed at reducing hate may need to be tailored to specific orientations rather than treating “left” and “right” as homogenous camps. Approaches that emphasize shared moral ground (e.g., appeals to fairness or harm avoidance) could reduce hostility when overlap exists, while strategies that acknowledge and depolarize domain-specific moral concerns (e.g., sexual or environmental issues) may be more effective where orientations diverge.

Third, these results suggest that efforts to reduce polarization should move away from a one-dimensional left-right framing, which can obscure potential commonalities. Highlighting areas of overlap across orientations may encourage dialogue and coalition-building, while recognizing the diversity of moral concerns can prevent mischaracterization of opponents as uniformly “immoral” or “irrational.”

### **Conclusions**

The present study critiqued the left-right spectrum by using self-identified political identity as an anchor while simultaneously testing a multidimensional model that separated left-wing illiberalism, right-wing illiberalism, and liberty-based orientations. This approach revealed that the spectrum conceals important heterogeneity in how moral values, judgments, emotions, and punitive preferences map onto politics. In retrospect, a fully bottom-up strategy such as

exploratory factor analysis, multidimensional scaling, or network modeling could have been used to derive ideological dimensions without imposing existing constructs, and the inclusion of related measures like social dominance orientation, system justification, or populism might have clarified overlaps and divergences with the tripartite model. Future research should refine theory by treating “left” and “right” as shifting coalitional labels rather than fixed psychological dimensions, and should move toward measurement strategies that avoid ideological self-labels altogether to reduce artifacts. Finally, predictive comparisons are needed to establish whether multidimensional approaches outperform the spectrum in explaining outcomes such as voting, policy preferences, and punishment judgments, thereby making the case for replacing the left-right line with models that capture the plural and context-dependent nature of political psychology. Across many measures, patterns of response depended on the specific moral domain being considered, and orientations that might be seen as opposites on the left-right scale often showed similarities in some domains, and differences in others. These results indicate that political differences are multidimensional, with each orientation linked to particular moral content rather than fitting neatly along a single continuum. Overall, the findings support moving beyond the left-right model in political and moral psychology, and toward an approach that maps orientations in relation to the moral content they prioritize, which may provide a clearer and more accurate understanding of how people form judgments and respond to wrongdoing.

### References

- Altemeyer, B. (2002). Dogmatic behavior among students: Testing a new measure of dogmatism. *The Journal of Social Psychology, 142*(6), 713–721.  
<https://doi.org/10.1080/00224540209603931>
- Altemeyer, B. (1998). The other “authoritarian personality.” *Advances in Experimental Social Psychology, 47*–92. [https://doi.org/10.1016/s0065-2601\(08\)60382-2](https://doi.org/10.1016/s0065-2601(08)60382-2)
- Atari, M., Haidt, J., Graham, J., Koleva, S., Stevens, S. T., & Dehghani, M. (2023). Morality beyond the weird: How the nomological network of morality varies across cultures. *Journal of Personality and Social Psychology, 125*(5), 1157–1188.  
<https://doi.org/10.1037/pspp0000470>
- Bell, D. (2014). What is liberalism? *Political Theory, 42*(6), 682–715.  
<https://doi.org/10.1177/0090591714535103>
- Bizumic, B., Duckitt, J., Popadic, D., Dru, V., & Krauss, S. (2009). Psychological structure of ethnocentrism. *European Journal of Social Psychology, 39*, 871–899
- Chamorro Coneo, A. M., Navarro, M. C., & Quiroz Molinares, N. (2023) Sexual-specific disgust sensitivity mechanisms in homonegativity and transnegativity: The mediating role of right-wing authoritarianism (RWA), *Psychology & Sexuality, 14*(1), 203-218, DOI: 10.1080/19419899.2022.2100270
- Chejnová, P. (2013). Addressing in academic setting – students' preferences. *Sapere Aude, (3)*, 87–93.

- Conway, L. G., Houck, S. C., Gornick, L. J., & Repke, M. A. (2017). Finding the Loch Ness monster: Left-wing authoritarianism in the United States. *Political Psychology*, 39(5), 1049–1067. <https://doi.org/10.1111/pops.12470>
- Costello, T. H., Bowes, S. M., Stevens, S. T., Waldman, I. D., Tasimi, A., & Lilienfeld, S. O. (2022). Clarifying the structure and nature of left-wing authoritarianism. *Journal of Personality and Social Psychology*, 122(1), 135–170. <https://doi.org/10.1037/pspp0000341>
- Davidson, P., Turiel, E., & Black, A. (1983). The effect of stimulus familiarity on the use of criteria and justifications in children's social reasoning. *British Journal of Developmental Psychology*, 1(1), 49–65. <https://doi.org/10.1111/j.2044-835x.1983.tb00543.x>
- Duckitt, J. (2015). Authoritarian personality. *International Encyclopedia of the Social and Behavioral Sciences*, 255–261. <https://doi.org/10.1016/b978-0-08-097086-8.24042-7>
- Duckitt, J., & Sibley, C. G. (2007). Right wing authoritarianism, social dominance orientation and the dimensions of generalized prejudice. *European Journal of Personality*, 21(2), 113–130. <https://doi.org/10.1002/per.614>
- Duckitt, J., Bizumic, B., Krauss, S. W., & Heled, E. (2010). A tripartite approach to right-wing authoritarianism: The authoritarianism-conservatism-traditionalism model. *Political Psychology*, 31(5), 685–715. <https://doi.org/10.1111/j.1467-9221.2010.00781.x>
- Duckitt, J., & Sibley, C. G. (2016). The dual process motivational model of ideology and prejudice. *The Cambridge Handbook of the Psychology of Prejudice*, 188–221. <https://doi.org/10.1017/9781316161579.009>

- Duriez, B., & Van Hiel, A. (2002). The march of modern fascism. a comparison of social dominance orientation and authoritarianism. *Personality and Individual Differences*, 32(7), 1199–1213. [https://doi.org/10.1016/s0191-8869\(01\)00086-1](https://doi.org/10.1016/s0191-8869(01)00086-1)
- Fasce, A., & Avendaño, D. (2020). Opening the can of worms: A comprehensive examination of authoritarianism. *Personality and Individual Differences*, 163, 110057. <https://doi.org/10.1016/j.paid.2020.110057>
- Fasce, A., & Avendaño, D. (2023). Left-wing identity politics and authoritarian attitudes: a correlational study of social media users. *Journal of Political Ideologies*, 30(1), 137–154. <https://doi.org/10.1080/13569317.2023.2246914>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191
- FBI. (2016, May 18). *Weather underground bombings*. FBI. <https://www.fbi.gov/history/famous-cases/weather-underground-bombings>
- Fiddick, L., & Bushell, C. (n.d.). CAD or Klutz: Is the unilateral lip curl an expression of moral contempt? [Unpublished manuscript]. James Cook University.
- Fiske, A. P. (1991). *Structures of social life: The four elementary forms of human relations*. Free Press.
- Glasius, M. (2018). What authoritarianism is ... and is not: A practice perspective. *International Affairs*, 94(3), 515–533. <https://doi.org/10.1093/ia/iyy060>

Government of Canada. (2023). *#Immigrationmatters: Canada's immigration track record*.

Canada.ca. <https://www.canada.ca/en/immigration-refugees-citizenship/campaigns/immigration-matters/track-record.html>

*Governing documents*. Conservative Party of Canada. (2024, April 5).

<https://www.conservative.ca/about-us/governing-documents/>

Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2012). Moral foundations theory. *Advances in Experimental Social Psychology*, 47, 55–130.

<https://doi.org/10.1016/b978-0-12-407236-7.00002-4> FIX

Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, 96(5), 1029–1046.

<https://doi.org/10.1037/a0015141>

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, 101, 366–385.

<http://dx.doi.org/10.1037/a0021847>

Guerra, V. M., & Giner-Sorolla, R. (2009). The community, autonomy, and divinity scale (cads):

A new tool for the cross-cultural study of morality. *Journal of Cross-Cultural Psychology*, 41(1), 35–50. <https://doi.org/10.1177/0022022109348919>

Guidetti, M., Carraro, L., & Castelli, L. (2021). Children's inequality aversion in intergroup contexts: The role of parents' social dominance orientation, right-wing authoritarianism and moral foundations. *PLoS ONE*, 16(12): e0261603.

<https://doi.org/10.1371/journal.pone.0261603>



- Hadarics, M., Kende, A. (2018). The dimensions of generalized prejudice within the dual-process model: The mediating role of moral foundations. *Current Psychology*, 37, 731–739.
- Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. Vintage Books.
- Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus*, 133(4), 55–66.  
<https://doi.org/10.1162/0011526042365555>
- Haidt, J., Koller, S. H., & Dias, M. G. (1993). Affect, culture, and morality, or is it wrong to eat your dog? *Journal of Personality and Social Psychology*, 65, 613–628
- Haidt, J., & Rozin, P. (2017). Two / how cultural psychology can help us see “Divinity” in a secular world. *Universalism without Uniformity*, 32–44.  
<https://doi.org/10.7208/chicago/9780226501710.003.0003>
- Harnish, R.J., Bridges, K.R. & Gump, J.T. (2018). Predicting economic, social, and foreign policy conservatism: The role of right-wing authoritarianism, social dominance orientation, moral foundations orientation, and religious fundamentalism. *Current Psychology*, 37, 668–679. <https://doi.org/10.1007/s12144-016-9552-x>
- Harrison, K. L. (2020). The Forgotten Center: An analysis into the disappearing moderate in a climate of increasing political polarization. *Inquires*, 12(9), 1–1. [https://doi.org/Harrison, K. L.](https://doi.org/Harrison,K.L.) (2020).

- Haslam & Fiske, N., & Fiske, A. P. (1999). Relational models theory: A confirmatory factor analysis. *Personal Relationships*, 6(2), 241–250. <https://doi.org/10.1111/j.1475-6811.1999.tb00190.x>
- Hume, D. (1753). *Essays and treatises on several subjects. containing an enquiry concerning the principles of morals*. A. Millar.
- Ilten-Gee, R., & Manchanda, S. (2021). Using social domain theory to seek critical consciousness with young children. *Theory and Research in Education*, 19(3), 235–260. <https://doi.org/10.1177/14778785211057485>
- Iyer, R., Koleva, S., Graham, J., Ditto, P., & Haidt, J. (2012). Understanding libertarian morality: The psychological roots of an individualist ideology. *PLoS ONE* 7(8): e42366. [doi:10.1371/journal.pone.0042366](https://doi.org/10.1371/journal.pone.0042366)
- Jensen, L. A. (1995). Habits of the heart revisited: Autonomy, community, and divinity in adults' moral language. *Qualitative Sociology*, 18(1), 71–86. <https://doi.org/10.1007/bf02393196>
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129(3), 339–375. <https://doi.org/10.1037/0033-2909.129.3.339>
- Kivikangas, J. M., Fernández-Castilla, B., Järvelä, S., Ravaja, N., & Lönnqvist, J-E. (2021). Moral foundations and political orientation: Systematic review and meta-analysis. *Psychological Bulletin*, 147(1), 55–94. <https://doi.org/10.1037/bul0000308>

Kugler, M., Jost, J. T., & Noorbaloochi, S. (2014). Another look at Moral Foundations Theory. *Social Justice Research*, 27, 413-431.

Lesschaeve, C. (2017). The predictive power of the left-right self-placement scale for the policy positions of voters and parties. *West European Politics*, 40(2), 357-377.  
<https://doi.org/10.1080/01402382.2016.1229088>

Lewis, H. S., & Lewis, V. (2023). *The myth of left and right: How the political spectrum misleads and harms America*. Oxford University Press.

Lourenço, O. (2014). Domain theory: A critical review. *New Ideas in Psychology*, 32, 1-17.  
<https://doi.org/10.1016/j.newideapsych.2013.08.001>

Love, S., & Sharman, R. (2024) Perceived grievance and individualising moralities: Exploring the psychological structure of left-wing authoritarianism. *Journal of Political Ideologies*.  
DOI: 10.1080/13569317.2024.2344755

Main, T. J. (2021). *The rise of illiberalism*. Brookings Institution Press.

Manson J. H. (2020). Right-wing authoritarianism, left-wing authoritarianism, and pandemic-mitigation authoritarianism. *Personality and individual differences*, 167, 110251.  
<https://doi.org/10.1016/j.paid.2020.110251>

Matsumoto, D., & Ekman, P. (1988). *Japanese and Caucasian facial expressions of emotion (JACFEE) and neutral faces (JACNeuF)*. Report available from Intercultural and Emotion Research Laboratory, Department of Psychology, San Francisco State University.

McCloskey, D. N. (2019). *Why liberalism works: how true liberal values produce a freer, more equal, prosperous world for all*. Yale University Press.

McFarland, S. G. (2005). On the eve of War: Authoritarianism, social dominance, and American students' attitudes toward attacking Iraq. *Personality and Social Psychology Bulletin*, 31(3), 360–367. <https://doi.org/10.1177/0146167204271596>

McPhee, P. (2002). *The French Revolution 1789-1799*. Oxford University Press.

Merriam-Webster. (n.d.). Authoritarian. In Merriam-Webster.com dictionary. Retrieved June 24, 2024, from <https://www.merriam-webster.com/dictionary/authoritarian>

Milfont, T. L., & Osborne, D. (2024). Examining relations between left-wing authoritarianism and environmentalism. *Journal of Environmental Psychology*, 95, 102275. <https://doi.org/10.1016/j.jenvp.2024.102275>

Miller, M. (2023, November 24). *2023 Annual Report to Parliament on Immigration*. Canada.ca. <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/annual-report-parliament-immigration-2023.html>

Milojev, P., Osborne, D., Greaves, L. M., Bulbulia, J., Wilson, M. S., Davies, C. L., & Sibley, C. G. (2014). Right-wing authoritarianism and social dominance orientation predict different moral signatures. *Social Justice Research*, 27, 149-174.

Narveson, J. (2000). Liberal-conservative: The real controversy. *Liberalism*, 19–40. [https://doi.org/10.1007/978-94-015-9440-0\\_2](https://doi.org/10.1007/978-94-015-9440-0_2)

Nucci, L. P. (2001). *Education in the Moral Domain*. <https://doi.org/10.1017/cbo9780511605987>

- Peng, Y. (2022). Give me liberty or give me COVID-19: How social dominance orientation, right-wing authoritarianism, and libertarianism explain Americans' reactions to COVID-19. *Risk Analysis*, 42, 2691–2703. <https://doi.org/10.1111/risa.13885>
- Pew Research Center. (2022, August 09). *As Partisan Hostility Grows, Signs of Frustration With the Two-Party System*. Pew Research Center.
- Pew Research Center. (2014, June 12). *Political polarization in the American public*. Pew Research Center - U.S. Politics & Policy.
- Piaget, J., Gabain, M., Piaget, J., & Piaget, J. (1965). *The moral judgement of the child*. Macmillan.
- Pinker, S. (2011). *The better angels of our nature: Why violence has declined*. Penguin.
- Pratto, F., Sidanius, J., Stallworth, L., & Malle, B. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741–763.
- Radkiewicz, P. (2020). Social and competitive threat as situational factors moderating relationships between moral judgments and different components of authoritarian ideology. *Current Psychology*, 41, 5883–5895.
- Rai, T. S., & Fiske, A. P. (2011). Moral psychology is relationship regulation: Moral motives for unity, hierarchy, equality, and proportionality. *Psychological Review*, 118(1), 57–75.
- Rayside, D. (2024). *Liberal Party of Canada*. *Encyclopedia Britannica*.  
<https://www.britannica.com/topic/Liberal-Party-of-Canada>

- Reese, G. (2012). When authoritarians protect the earth-authoritarian submission and russelpro-environmental beliefs: A pilot study in Germany. *Ecopsychology*, 4(3), 232–236.  
doi:10.1089/eca.2012.0035
- Rockefeller, N. A. (2014). *The Future of Federalism*. Harvard University Press.
- Rotunda, R. (1986). *The Politics of Language: Liberalism as a ord and Symbol*. Chapman University.
- Rozin, P., Lowery, L., Imada, S., & Haidt, J. (1999). The CAD triad hypothesis: A mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal of Personality and Social Psychology*, 76(4), 574–586. <https://doi.org/10.1037/0022-3514.76.4.574>
- Rozin, P., Haidt, J., & McCauley, C. (1993). Disgust. In M. Lewis and J. Haviland (Eds.), *Handbook of emotions* (pp. 575–94). Guilford Press.
- Russell, J. A. (1991). The contempt expression and the relativity thesis. *Motivation and Emotion*, 15, 149-168.
- Russell, J. A., Suzuki, N., & Ishida, N. (1993). Canadian, Greek, and Japanese freely produced emotion labels for facial expressions. *Motivation and Emotion*, 17, 337-351.
- Ryan, T. J. (2016). No compromise: Political consequences of moralized attitudes. *American Journal of Political Science*, 61(2), 409–423. <https://doi.org/10.1111/ajps.12248>
- Sanders, A. (1986). The meaning of liberalism and conservatism. *Polity*, 19(1), 123–135.  
<https://doi.org/10.2307/3234862>

- Schaller, M. (2006). Parasites, behavioral defenses, and the social psychological mechanisms through which cultures are evoked. *Psychological Inquiry*, 17, 96–101.
- Schein, C., & Gray, K. (2018). The theory of dyadic morality: reinventing moral judgment by redefining harm. *Personality and Social Psychology Review*, 22(1), 32-70.  
<https://doi.org/10.1177/1088868317698288>
- Shweder, R. A. (2003). Toward a deep cultural psychology of shame. *Social Research: An International Quarterly*, 70(4), 1100–1129. <https://doi.org/10.1353/sor.2003.0035>
- Shweder, R. A., Much, N. C., Mahapatra, M., & Park, L. (1997). The "big three" of morality (autonomy, community, and divinity), and the "big three" explanations of suffering. In A. Brandt & P. Rozin (Eds.), *Morality and health* (pp. 119-169). New York: Routledge.
- Sidanius, J., & Pratto, F. (1999). *Social Dominance*.  
<https://doi.org/10.1017/cbo9781139175043>
- Skitka, L. J. (2010). The psychology of moral conviction. *Social and Personality Psychology Compass*, 4(4), 267–281. <https://doi.org/10.1111/j.1751-9004.2010.00254.x>
- Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, 88(6), 895–917. <https://doi.org/10.1037/0022-3514.88.6.895>
- Smetana, J. G. (1995). Morality in context: Abstractions, ambiguities and applications. In R. Vasta (Ed.), *Annals of child development: A research annual, Vol. 10, 1994* (pp. 83–130). Jessica Kingsley Publishers.
- Stone, W. F. (1980). The myth of left-wing authoritarianism. *Political Psychology*, 2(3/4), 3.

<https://doi.org/10.2307/3790998>

- Swan, E. (2021). "The personal is political!": Exploring the limits of Canada's feminist international assistance policy under occupation and blockade. *Canadian Foreign Policy Journal*, 27(1), 117-135. DOI: 10.1080/11926422.2020.1805340
- Terrizzi Jr., J. A., Shook, N. J., & McDaniel, M. A. (2013). The behavioral immune system and social conservatism: A meta-analysis. *Evolution and Human Behavior*, 34(2), 99-108.
- Tybur, J. M., Merriman, L. A., Hooper, A. E. C., McDonald, M. M., & Navarrete, C. D. (2010). Extending the behavioral immune system to political psychology: Are political conservatism and disgust sensitivity really related? *Evolutionary Psychology*, 8(4), 599-616. <https://doi.org/10.1177/147470491000800406>
- United States Holocaust Memorial Museum. (2021, November 5). *Introduction to the Holocaust*. United States holocaust memorial museum. <https://encyclopedia.ushmm.org/content/en/article/introduction-to-the-holocaust>
- U.S. Congress. Senate Committee on the Judiciary. (1975). *State department bombing by Weatherman Underground*. U.S. Government Printing Office. <https://archive.org/details/statedepartmentb00unit/page/2/mode/2up>
- Van Hiel, A., Duriez, B., & Kossowska, M. (2006). The Presence of Left-Wing Authoritarianism in Western Europe and Its Relationship with Conservative Ideology. *Political Psychology*, 27(5), 769–793. <http://www.jstor.org/stable/3792538>



Wyman, D. S. (2007). *The abandonment of the jews: America and the Holocaust, 1941-1945*.  
The New Press.

Zakharin, M., & Bates, T. C. (2023). Moral foundations theory: Validation and replication of the  
MFQ-2. *Personality and Individual Differences*, 214, 112339.  
<https://doi.org/10.1016/j.paid.2023.112339>

## **Appendix A**

### Demographics Questionnaire

1. What is your age in years?
2. Which sex were you assigned at birth?
3. What options best describes your current gender identity?
4. What best describes your current political identity?
5. I am an adherent of an organized religion: a religion with established institutions like churches, temples, etc. and religious officials like priests, imams, etc.
6. Thinking about your life these days, how often do you engage in religious practices (whether or not these happen within a religious institution, like a church, temple, mosque, etc.), apart from social obligations such as weddings or funerals? (1 = never, 6 = every week or more than once a week).

## **Appendix B**

### RWA Scale

- 1. It's great that many young people today are prepared to defy authority (R).**
2. What our country needs most is discipline, with everyone following our leaders in unity.
- 3. Students at high schools and at university must be encouraged to challenge, criticize, and confront established authorities (R).**
4. Obedience and respect for authority are the most important virtues children should learn.
5. Our country will be great if we show respect for authority and obey our leaders.
- 6. People should be ready to protest against and challenge laws they don't agree with (R).**
- 7. People should be allowed to make speeches and write books urging the overthrow of the government (R).**
- 8. The more people there are that are prepared to criticize the authorities, challenge and protest against the government, the better it is for society (R).**
- 9. People should stop teaching children to obey authority (R).**
10. The real keys to the "good life" are respect for authority and obedience to those who are in charge.
11. The authorities should be obeyed because they are in the best position to know what is good for our country.
12. Our leaders should be obeyed without question.
- 13. Nobody should stick to the "straight and narrow." Instead people should break loose and try out lots of different ideas and experiences (R).**
14. The "old-fashioned ways" and "old-fashioned values" still show the best way to live.
15. God's laws about abortion, pornography, and marriage must be strictly followed before it is too late
- 16. There is absolutely nothing wrong with nudist camps (R).**

17. This country will flourish if young people stop experimenting with drugs, alcohol, and sex, and pay more attention to family values.

**18. There is nothing wrong with premarital sexual intercourse (R).**

**19. Traditional values, customs, and morality have a lot wrong with them (R).**

**20. Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else (R).**

21. The radical and sinful new ways of living and behaving of many young people may one day destroy our society.

22. Trashy magazines and radical literature in our communities are poisoning the minds of our young people.

23. It is important that we preserve our traditional values and moral standards.

**24. People should pay less attention to the bible and the other old-fashioned forms of religious guidance, and instead develop their own personal standards of what is moral and immoral (R).**

**25. Strong, tough government will harm and not help our country (R).**

26. Being kind to loafers or criminals will only encourage them to take advantage of your weakness, so it's best to use a firm, tough hand when dealing with them.

**27. Our society does NOT need tougher government and stricter laws (R.)**

28. The facts on crime and the recent public disorders show we have to crack down harder on troublemakers, if we are going to preserve law and order.

**29. Our prisons are a shocking disgrace. Criminals are unfortunate people who deserve much better care, instead of so much punishment (R).**

30. The way things are going in this country, it's going to take a lot of "strong medicine" to straighten out the troublemakers, criminals, and perverts.
31. We should smash all the negative elements that are causing trouble in our society.
32. The situation in our country is getting so serious, the strongest methods would be justified if they eliminated the troublemakers and got us back to our true path.
- 33. People who say our laws should be enforced more strictly and harshly are wrong. We need greater tolerance and more lenient treatment for lawbreakers (R).**
- 34. The courts are right in being easy on drug offenders. Punishment would not do any good in cases like these (R).**
35. What our country really needs is a tough, harsh dose of law and order.
- 36. Capital punishment is barbaric and never justified (R).**

*1 - 12: Conservatism, 13 - 24: Traditionalism, 25 - 36: Authoritarianism, R = Reverse-keyed*

## **Appendix C**

### LWA Scale



1. The rich should be stripped of their belongings and status.
2. Rich people should be forced to give up virtually all of their wealth.
3. If I could remake society, I would put people who currently have the most privilege at the very bottom.
4. Canada would be much better off if all of the rich people were at the bottom of the social ladder.
5. When the tables are turned on the oppressors at the top of society, I will enjoy watching them suffer the violence that they have inflicted on so many others.
6. Constitutions and laws are just another way for the powerful to destroy our dignity and individuality.
7. The current system is beyond repair.
8. We need to replace the established order by any means necessary.
9. Political violence can be constructive when it serves the cause of social justice.
10. Certain elements in our society must be made to pay for the violence of their ancestors.
11. Schools should be required by law to teach children about our country's history of racism, classism, sexism, and homophobia.
12. Anyone who opposes gay marriage must be homophobic.
13. Deep down, just about all conservatives are racist, sexist, and homophobic.
14. People are truly worried about terrorism should shift their focus to the nutjobs on the far-right.
15. The “old-fashioned ways” and “old-fashioned values” need to be abolished.
16. Radical and progressive moral values can save our society.
17. All political conservatives are fools.

18. I cannot imagine myself becoming friends with a political conservative.
19. Conservatives are morally inferior to liberals.
20. It is important that we destroy the West's nationalist, imperialist values.
- 21. I try to expose myself to conservative news sources (R).**
- 22. There is nothing wrong with Bible camps (R).**
23. Classroom discussions should be safe places that protect students from disturbing ideas.
24. University authorities are right to ban hateful speech from campus.
25. I should have the right not to be exposed to offensive views.
26. To succeed, a workplace must ensure that its employees feel safe from criticism.
27. We must line up behind strong leaders who have the will to stamp out prejudice and intolerance.
28. When we spend all of our time protecting the right to “free speech” we're protecting the rights of sexists, racists, and homophobes at the cost of marginalized people.
29. I am in favor of allowing the government to shut down right-wing internet sites and blogs that promote nutty, hateful positions.
30. Colleges and universities that permit speakers with intolerant views should be publicly condemned.
31. Getting rid of inequality is more important than protecting the so-called “right” to free speech.
32. Right-wing talk radio, and other conservative media outlets should be prohibited from broadcasting their hateful views.
- 33. Even books that contain racism or racial language should not be censored (R).**
- 34. I don't support shutting down speakers with sexist, homophobic, or racist views (R).**

**35. Neo-Nazis ought to have a legal right to their opinions (R).**

*R = Reverse-keyed (21, 22, 26, 33, 34, 35).*

## **Appendix D**

### The Liberty Foundation Scale

*Economic Liberty*

1. People who are successful in business have a right to enjoy their wealth as they see fit
2. Society works best when it lets individuals take responsibility for their own lives without telling them what to do.
3. The government interferes far too much in our everyday lives.
4. **The government should do more to advance the common good, even if that means limiting the freedom and choices of individuals. (R)**
5. Property owners should be allowed to develop their land or build their homes in any way they choose, as long as they don't endanger their neighbors.
6. I want my nation to stay clear of treaties that will limit our freedom to act in our own interest.
7. **I want my nation to join international treaties that will benefit the world, even when those treaties will require my nation to give up some sovereignty and control. (R)**

*Lifestyle Libertarianism*

1. I think everyone should be free to do as they choose, so long as they don't infringe upon the equal freedom of others.
2. People should be free to decide what group norms or traditions they themselves want to follow.

*R = Reverse-keyed (4, 7)*

## **Appendix E**

MFQ-2

1. Caring for people who have suffered is an important virtue.

2. The world would be a better place if everyone made the same amount of money.
3. I think people who are more hardworking should end up with more money.
4. I think children should be taught to be loyal to their country.
5. I think it is important for societies to cherish their traditional values.
6. I think the human body should be treated like a temple, housing something sacred within.
7. I believe that compassion for those who are suffering is one of the most crucial virtues.
8. Our society would have fewer problems if people had the same income.
9. I think people should be rewarded in proportion to what they contribute.
10. It upsets me when people have no loyalty to their country.
11. I feel that most traditions serve a valuable function in keeping society orderly.
12. I believe chastity is an important virtue.
13. We should all care for people who are in emotional pain.
14. I believe that everyone should be given the same quantity of resources in life.
15. The effort a worker puts into a job ought to be reflected in the size of a raise they receive.
16. Everyone should love their own community.
17. I think obedience to parents is an important virtue.
18. It upsets me when people use foul language like it is nothing.
19. I am empathetic toward those people who have suffered in their lives.
20. I believe it would be ideal if everyone in society wound up with roughly the same amount of money.
21. It makes me happy when people are recognized on their merits.
22. Everyone should defend their country, if called upon.
23. We all need to learn from our elders.

24. If I found out that an acquaintance had an unusual but harmless sexual fetish I would feel uneasy about them.
25. Everyone should try to comfort people who are going through something hard.
26. When people work together toward a common goal, they should share the rewards equally, even if some worked harder on it.
27. In a fair society, those who work hard should live with higher standards of living.
28. Everyone should feel proud when a person in their community wins in an international competition.
29. I believe that one of the most important values to teach children is to have respect for authority.
30. People should try to use natural medicines rather than chemically identical human-made ones.
31. It pains me when I see someone ignoring the needs of another human being.
32. I get upset when some people have a lot more money than others in my country.
33. I feel good when I see cheaters get caught and punished.
34. I believe the strength of a sports team comes from the loyalty of its members to each other.
35. I think having a strong leader is good for society.
36. I admire people who keep their virginity until marriage.

*Scoring: Average each of the following items to get six scores corresponding with the six foundations.*

*Care = 1, 7, 13, 19, 25, and 31*

*Equality = 2, 8, 14, 20, 26, and 32*

*Proportionality = 3, 9, 15, 21, 27, and 33*



*Loyalty* = 4, 10, 16, 22, 28, and 34

*Authority* = 5, 11, 17, 23, 29, and 35

*Purity* = 6, 12, 18, 24, 30, and 36

## **Appendix F**

### Shweder's Codes Attitude Measurement

#### *Autonomy Code Descriptions*

1. Under this moral code, an action is morally wrong if it directly harms another person or infringes upon their rights or freedoms as an individual. To decide if an action is wrong, you think about factors such as harm, rights, justice, freedom, fairness, individualism, and the importance of personal choice and liberty.

#### *Community Code Descriptions*

1. Under this moral code, an action is morally wrong if it involves failing to fulfill one's duties within a community or to uphold the social hierarchy within the community. To decide if an action is wrong, you think about factors such as duty, role-obligation, respect for authority, loyalty, group honor, interdependence, and the preservation of the community.

#### *Divinity Code Descriptions*

1. Under this moral code, an action is morally wrong if it disrespects the sacredness of God, causes impurity, or leads to degradation of oneself or others. To decide if an action is wrong, you think about factors such as sin, religion, and protection of the world from spiritual defilement. (*Rozin et al.'s description*)
2. Under this moral code, an action is morally wrong if it disrupts the harmony, unity, or shared well-being of the group. To decide if an action is wrong, you think about factors such as belonging, mutual care, and the preservation of bonds that sustain the group. Actions are evaluated based on whether they honor the shared values and interconnectedness that define the group's identity. (*Social unity version*)
3. Under this moral code, an action is morally wrong if a person disturbs the natural environment. To decide if an action is wrong, you think about whether an action pollutes

or destroys the natural environment; whether the action endangers the plants and animals that normally live in an area; whether the action leaves the environment worse off than before the person acted. The natural environment should be returned to and preserved in its original state, regardless of whether it inconveniences people to do so. (*Environmental version*)

## **Appendix G**

### Harm Measures

*Community Violations*

1. A healthy 18 year old refuses to give up their seat on a bus to a crippled old lady.
2. Someone doesn't go to their own mother's funeral.
3. Someone burns the Canadian flag

*Autonomy Code Violations*

1. Someone puts cyanide in a container of yogurt at a grocery store.
2. Someone steals a purse from a blind person.
3. A man comes home drunk and beats his wife.

*Divinity Code Violations*

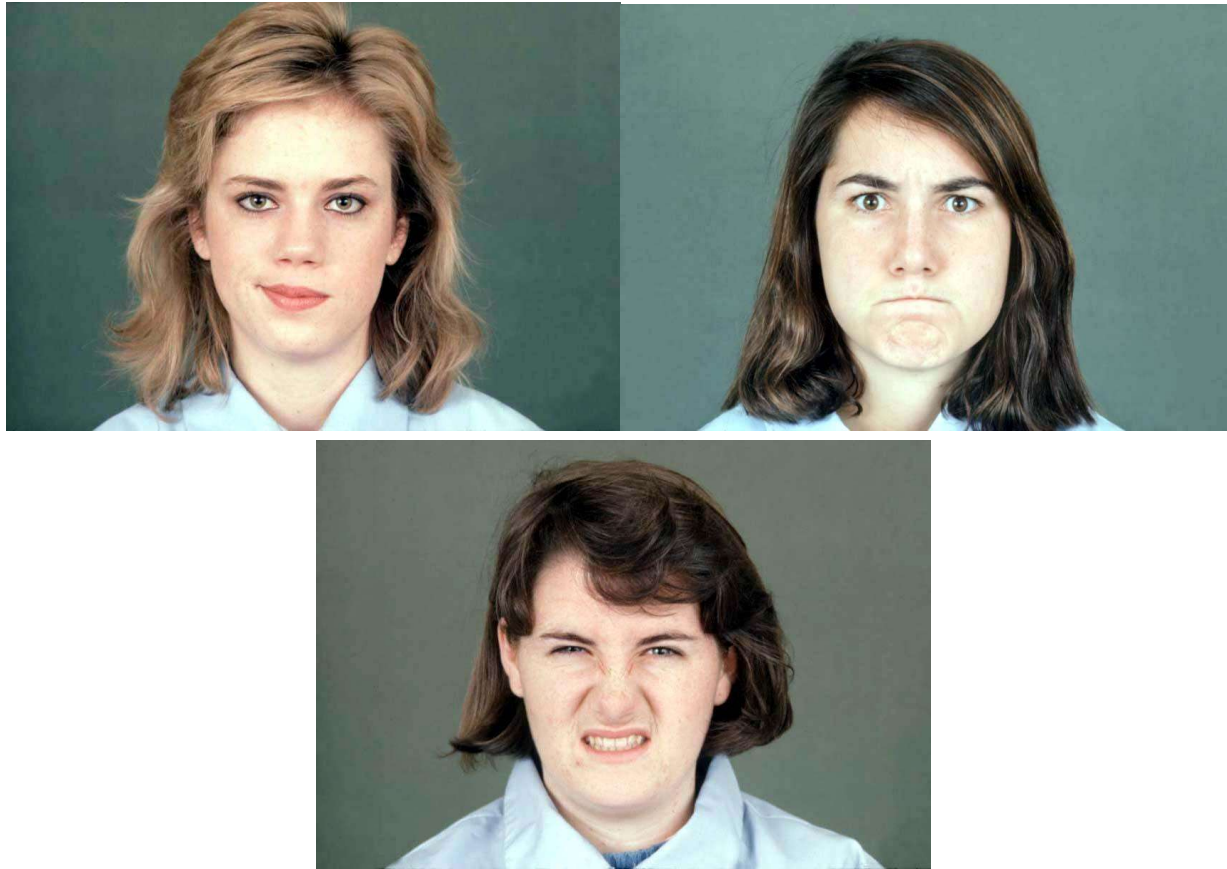
1. A man buys a raw chicken from the supermarket, once home, he masturbates into it.  
(*Sexual divinity*)
2. A happily married woman performs sex acts online to earn some extra money to pay for her children's tuition. (*Sexual divinity*)
3. A 70 year old male has consensual sex with a 20 year old female. (*Sexual divinity*)
4. You bite into an apple with a worm in it. (*core disgust*)
5. You eat a piece of rotten meat (*core disgust*)
6. While walking barefoot in your yard, you step on your dog's feces. (*core disgust*)
7. Someone changes their vehicle's oil, and then pours it into the sewer. (*environmental divinity*)
8. While camping at a provincial park, someone uses soap and shampoo products in a lake.  
(*environmental divinity*)
9. Someone revs their dirtbike through a forest, making noise and leaving tire marks.  
(*environmental divinity*)

## **Appendix H**

### Facial Expressions

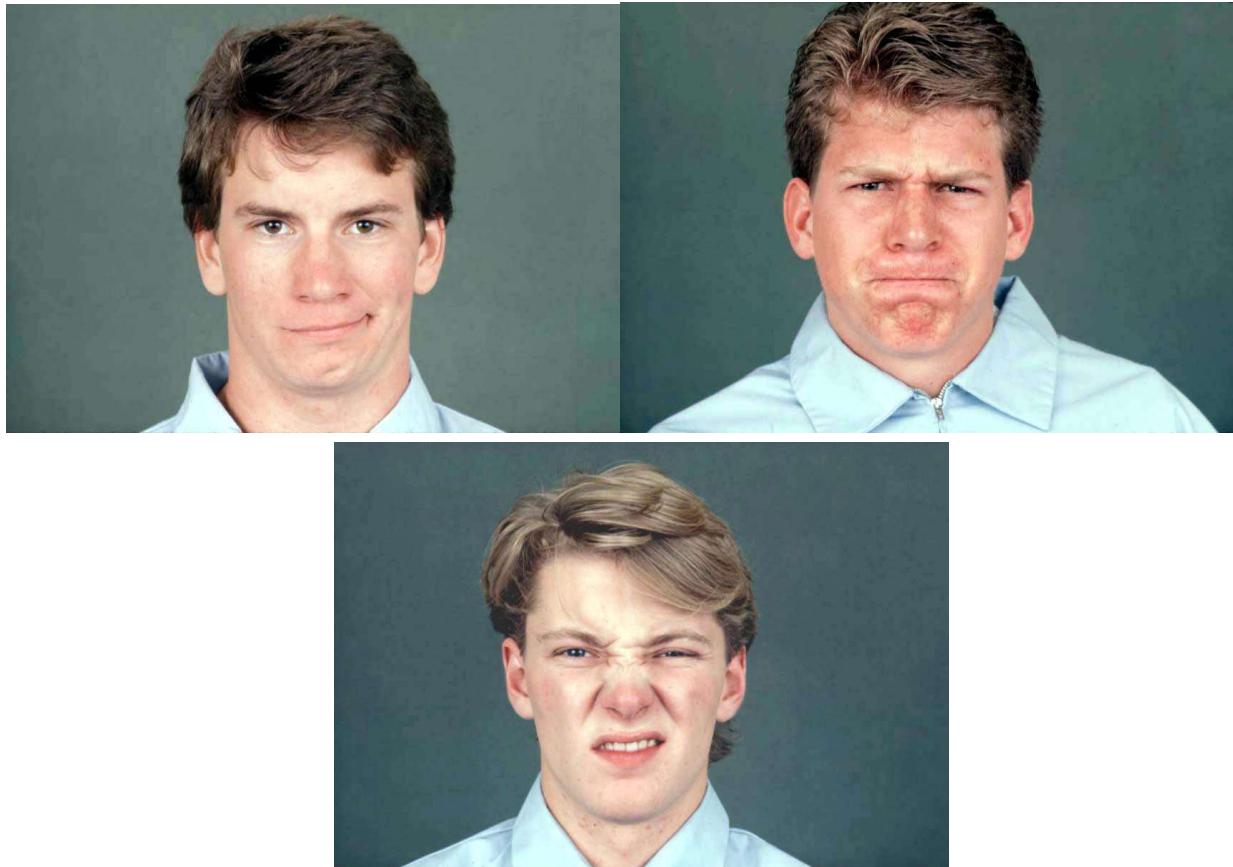
*Order: unilateral lip curl (“contempt”), anger ,disgust (bottom)*

*Caucasian Female:*

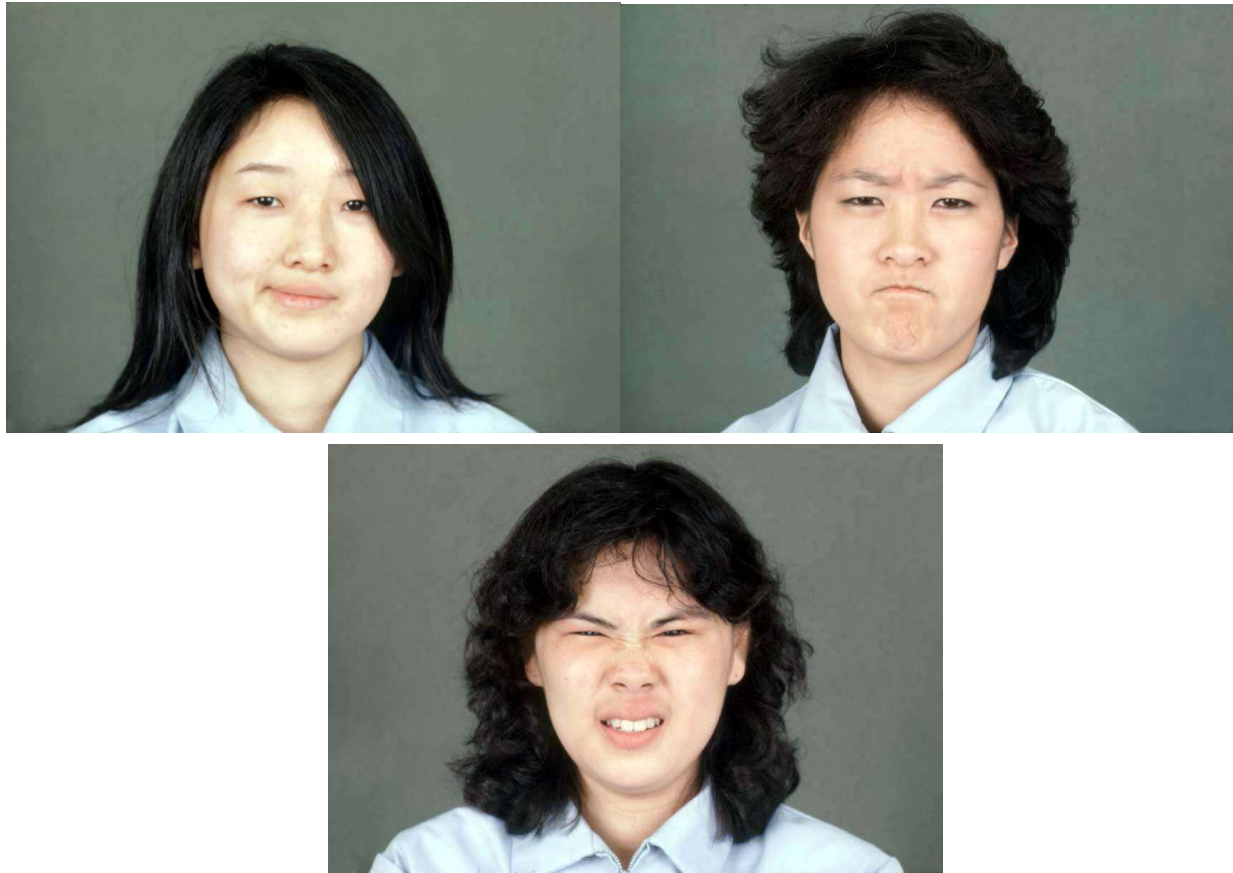




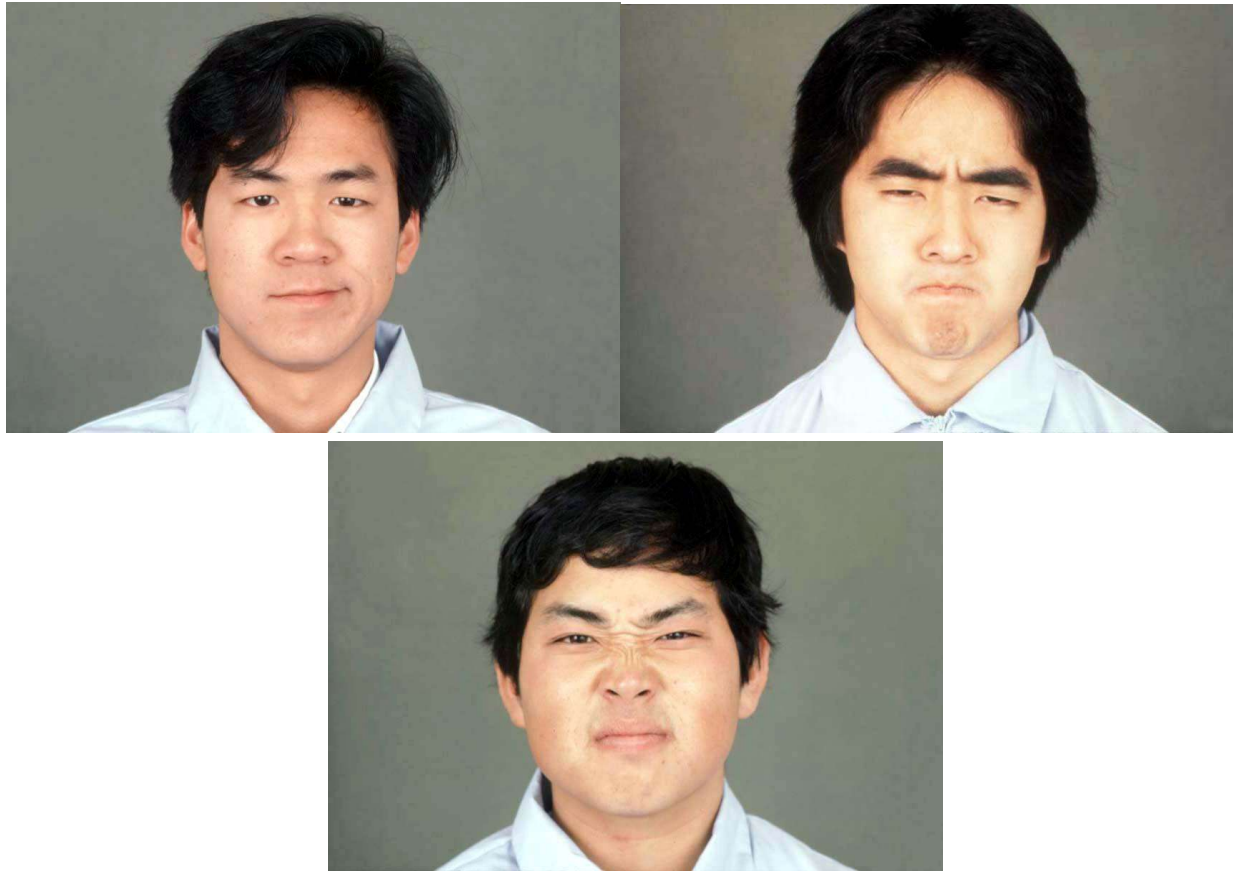
*Caucasian Male:*



*Japanese Female:*



*Japanese Male:*



**Appendix I**

Ethics Approval Letter



Research Ethics Board  
t: (807) 343-8283  
research@lakeheadu.ca

April 03, 2025

**Principal Investigator:** Dr. Laurence Fiddick  
**Student:** Shayan Munawar-Syed  
Social Sciences and Humanities\Interdisciplinary Studies - Orillia  
Lakehead University  
Orillia Campus  
500 University Avenue  
Orillia, ON L3V 0B9

Dear Dr. Laurence Fiddick and Shayan:

**Re: Romeo File No: 1471022**  
**Granting Agency: n/a**  
**Agency Reference #: n/a**

On behalf of the Research Ethics Board, I am pleased to grant ethical approval to your research project titled, "A Study of Individual Differences in Moral Values".

Ethics approval is valid until April 3, 2026. Please submit a Request for Renewal to the Office of Research Services via the Romeo Research Portal by March 3, 2026, if your research involving human participants will continue for longer than one year. A Final Report must be submitted promptly upon completion of the project. Access the Romeo Research Portal by logging into myInfo at:

<https://erpwp.lakeheadu.ca/>

During the course of the study, any modifications to the protocol or forms must not be initiated without prior written approval from the REB. You must promptly notify the REB of any adverse events that may occur.

Best wishes for a successful research project.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Pousa".

Dr. Claudio Pousa  
Chair, Research Ethics Board

/sb