

Neuropsychology Extended Essay.

Cognitive rigidity through socially hostile behaviours.

How do hostile sectarian narratives influence youth identity formation and moral absolutism in religious communities?

Qualitative observational research

Introduction

Morality is the human attempt to define what is right and wrong in thought and behavior. (Gert & Gert, 2002). Moral relativism holds that morality varies based on perspective, that there is no universal or absolute set of moral principles. Those who follow it generally say, "Who am I to judge?" For example, eating cows is moral in North America but immoral in India. This claims that any act can be right or wrong based on the values of the particular culture in which such an act occurs. At the same time, this justifies slavery and genocide solely due to culture and value, whatever may be right, important or desirable to the one carrying out such an act. (Gowans, 2021).

Moral realism is the philosophical belief that morals do exist. So, this is the claim that certain morals are simply true, the way a mathematical equation is true. We call a moral that genuinely exists a moral fact. Realists believe that moral facts aren't created by thought or social conventions but are part of the objective structure of the universe, so they'd argue that "murder is wrong" is an incorrect belief, not simply as a cultural preference, but that this alleged truth exists as an objective, universal fact, like how a child operating in the stage of moral realism would believe that a child who accidentally breaks three cups should be punished more than a child who breaks one cup on purpose. As another example, some cultures use chopsticks, but rather than seeing it as a cultural practice, it's framed as the norm and regarded as simply polite. (Sayre-McCord, 2015).

Moral absolutism is the view that certain actions are inherently right or wrong, regardless of context, suggesting that there are universal moral principles that apply to everyone at all times. Absolutists often criticize moral relativism by claiming it leads to chaos or moral decay, arguing that without absolute standards, societies cannot maintain order or shared values. This is a false dichotomy. Societies successfully build consensus on moral norms through dialogue, empathy, and mutual understanding rather than rigid absolutes. Absolutists might assert that these absolutes lead to stronger societies by providing a foundation for laws and ethics, ignoring the fact that they create inflexibility in addressing complex issues. For example, an absolute stance against lying disregards scenarios like lying to save lives. Human

intuitions are shaped by culture, upbringing, and circumstances, so they cannot conclusively prove the existence of universal absolutes. All three frameworks can be corrupted if misapplied, absolutism can justify oppression, realism can fuel moral dogmatism and relativism can excuse harmful practices under the guise of cultural or personal differences. (McCombs School of Business, 2013).

Moral pluralism is a sect of morality that recognizes how each framework may apply in different situations, that context matters with evidence-based morals that incorporate scientific and philosophical reasoning to address dilemmas. The system evolves as societies gain new knowledge to understand different perspectives hence protecting the rights and dignity of all individuals, avoiding oppression or exclusion. ("Moral Pluralism", 2022).

Yet, even with these frameworks at our disposal, moral reasoning often collapses into something far more treacherous, hostility disguised as righteousness. This is starkly evident in various online and real-life religious spaces where sects weaponize faith to justify hatred, mockery, and dehumanization of others. Belief gets tangled with guilt, pain, blind obedience and/or control. An unchallenged paradigm seen in toxically subjective interpretation across multiple faiths. Self-flagellation, lamentation with chains, control of sexuality, forced emotional displays, and indoctrination of children through fear all glorifies suffering and shames critical thinking. These individuals do not operate from empathy, pluralism, or realism, but rather from rigid absolutism twisted to serve sectarian supremacy. In these cases, morality is no longer about protecting human dignity, rather asserting in-group dominance under the pretense of divine approval.

This compendium explores how hostile sectarian narratives influence youth identity formation and moral absolutism in religious communities. We can see this throughout history, religion has been a cornerstone of personal and social identity construction. It has provided not only answers to existential questions but also a moral framework for interpreting and understanding the world. As individuals move through different stages of life, religious teachings often offer a stable set of values that help navigate the

complexities of personal development. From childhood, where moral and ethical codes are learned, to adulthood, where religious beliefs may offer solace during crises, religion impacts identity formation at multiple levels. Religious identity, like any group identity, is deeply tied to the social self, the part of the brain that governs in-group/out-group categorization, moral intuitions, and emotional salience. When individuals encounter opposing viewpoints or practices (such as differing sects, LGBTQ+ individuals, uncovered women), their brains may activate threat detection systems, perceiving the difference as not just a disagreement, but an attack on their core identity. (Trică, 2024)

Glorification Of Pain Through Indoctrination

During the 14th century, the bubonic plague was seen as divine punishment, activating threat-processing systems in the brain like the amygdala and anterior cingulate cortex. Rituals like self-flagellation served as maladaptive affect regulation which temporarily soothed existential anxiety. (Mindview Psychology, 2023). The Church's suppression of dissenting explanations had people cling to the idea that they needed to suffer in order to be saved. This belief was strengthened because people saw their faith as part of who they were, so questioning it felt like losing their identity. Essentially, the plague reveals how institutions can exploit fear and belief to preserve ideological dominance under the guise of spiritual salvation.

Across major world religions such as Christianity, Islam, Judaism, Hinduism, pain has often been glorified as a means of devotion and obedience. In theory, since religion gives a meaningful context to pain and suffering, participating in a religious worldview helps people cope with the suffering that occurs in ordinary life. (Norris, 2009.). While these practices may be historically and culturally significant, they often reflect a deeper neuropsychological pattern, the association of suffering with moral purity due to spiritual worth. Such doctrines, especially when directed at children or young adults, can produce long-term cognitive rigidity, emotional dysregulation, and moral absolutism.

The education a child receives at home, where parents are allowed to determine for their children what counts as truth and falsehood, right and wrong, has been distorted. Children have a human right not to have their minds crippled by exposure to other people's bad ideas and we as a society have a duty to

protect them from it. We should feel as much obliged to pass on to our children the best scientific and philosophical understanding of the natural world, to teach, for example, the truths of evolution and cosmology, or the methods of rational analysis, as we already feel obliged to feed and shelter them. (Coyne, 2020).

Empirical Cases:

In Christianity, especially within medieval Catholicism and some contemporary Filipino practices, self-flagellation and reenactments of the crucifixion are still performed as acts of penance. Participants are encouraged to experience Christ's suffering firsthand, reinforcing the message that pain equals purity and that bodily suffering brings one closer to God. Similarly, Pentecostal and revivalist movements often demand emotional intensity, crying, wailing, collapsing, to demonstrate faith, teaching children that spiritual legitimacy is measured by visible distress. (Why do some Catholics self-flagellate?, 2009).

Islamic traditions, particularly in some Shi'a communities, include rituals like 'zanjeer ka matam' (self-flagellation with chains), during mourning processions like 'Ashura'. Children are exposed to and sometimes emotionally coerced into these practices using phrases such as, "You won't feel pain because it's for God." or "You'll be divinely rewarded.". The brain responds to mental input as if it were real, what changes is the subjective appraisal, not the biological reality. This framing conditions children to override their distress responses, leading to cognitive dissonance and potential trauma bonding with religious identity. (Von Fricken, 2025).

In Hinduism, historical practices like 'sati' (widow immolation) and child marriage were culturally sanctified, associating suffering and self-erasure with feminine virtue. (Saha, 2016). Even today, caste-based exclusions persist in some regions, reinforcing hierarchical spiritual value through systemic marginalization. The glorification of sacrifice, especially among women and lower castes, mirrors broader patterns of religiously justified pain and obedience. (Preston, 2025).

Judaism, particularly in ultra-Orthodox sects, reflects similar psychological pressures. Children are often subjected to fear-based teachings involving divine punishment, and girls may be taught that modesty is a moral duty tied to the community's honor. (Taragin-Zeller, 2014). Boys may undergo intense Torah memorization rituals accompanied by shame-based discipline. These environments normalize obedience through guilt, fear, and suppressed emotion, often suppressing authentic self-regulation. (Fox, 2014).

Neuro-cognitive consequences

If an individual is repeatedly rewarded, socially or spiritually, for displays of sorrow, crying, or physical discomfort, this reinforces maladaptive neural pathways that associate distress with virtue. Moreover, dopaminergic reward systems in the brain, especially within tight-knit religious communities, can entangle spiritual self-worth with external validation. (Previc, 2006). This leads to performative religiosity. Such mechanisms mirror cognitive distortions seen in martyr complexes and compulsive moral behaviors. (Le Goy, 2023). Crucially, these patterns may also hinder emotional differentiation, the ability to recognize, regulate, and express diverse emotions. When grief and pain are continuously idealized, joy or questioning may be suppressed or framed as spiritually inferior. This results in a culture where suffering becomes currency, and emotional authenticity is replaced by communal expectations.

The glorification of pain through religious indoctrination is not unique to any one faith, it is a transcultural phenomenon where dissent is shamed. While such rituals may serve communal or symbolic functions, their neuropsychological impact, especially on adolescent minds, can be profound. A pragmatic, pluralistic lens does not delegitimize spirituality, it safeguards it from becoming a tool of coercion. Toxic guilt-induced metrics don't have to be accepted to respect bodily autonomy, the agency of individuals to mourn in their own way. Only by acknowledging these patterns across traditions can we begin to foster religious environments that nurture both faith and critical thinking.

Brain Development and Susceptibility to Extremist Narratives

Children and adolescents, whose prefrontal regions are still maturing, (particularly the vmPFC which plays a vital role in enabling skepticism and questioning of rigid or coercive narratives), are delicately vulnerable to indoctrination. Religious messaging, especially when presented as absolute or fear-based, can exploit underdeveloped or compromised cognitive guardrails. This produces difficulty in young individuals' ability to doubt or self-reflect, nearly diminishing their capacity for critical thinking by reinforcing authoritarian or group-based beliefs.

Adolescent brain development occurs unevenly. The prefrontal cortex, responsible for reasoning, planning, and self-control, matures slower than the amygdala, the brain's emotional center. As a result, youth often experience intense, amygdala-driven emotional turbulence. This heightened emotional reactivity can make them seek absolute certainty and simple moral frameworks, which violent fundamentalist groups are well-positioned to provide. It is precisely this process of transition to adulthood that renders youth to be akin to psychological putty in the hands of skilled extremist ideologues. Just as oxygen deprivation can impair prenatal development, a lack of emotional attachment or consistent caregiving can stunt a child's psychological resilience. Youth without stable role models in their family perceive the world differently from adults, even as they age. Personality, identity, and emotional regulation are strongly shaped by the early parent-child relationship. Those who endure dysfunctional or neglectful parental bonds often develop fragile identities and weak coping skills, leaving them ill-prepared for life's challenges.

Such youth may become "hungry" for external sources of validation by ideals, groups, or leaders that promise connection, purpose, and self-worth. An unconscious quid-pro-quo. Extremist ideologues, often particularly through social media, can exploit this need by presenting themselves as sources of strength and belonging. From a neurological perspective, adolescence is a period of heightened brain plasticity, making youth especially vulnerable to ideological influence. Immersion in environments that promote prejudice against out-groups can leave lasting marks on the brain, particularly in the hippocampus, a key structure in the limbic system that encodes emotionally charged memories. Experiences of discrimination,

economic marginalization, or repeated exposure to hostile stereotypes become stored as enduring emotional memories.

Freud's concept of "critical periods" helps explain this persistence. During such developmental windows, the brain's architecture becomes relatively solid. Once these periods close, beliefs and attitudes learned during them tend to resist change. Therefore, we can say neural pathways established under the influence of hatred and prejudice often concrete, fostering lifelong "us versus them" thinking. Youth shaped in such environments may grow into adults who are self-righteous, prejudiced, and condemning of outsiders, their worldview reinforced by the narratives and stories absorbed during formative years. This illustrates how hostile cultural environments erode resilience against the siren calls of extremist ideologies.

(Ramakrishna, 2016).

Neuroplasticity And Intervention

Despite better cognitive, intellectual, and reasoning abilities than children, adolescents are not simply "mini-adults" and despite immature emotion regulation, inexperience, and dependence on caregivers, adolescents are not overgrown children. Instead, they are in a distinct developmental stage that facilitates the adaptive transition from a state of dependence on caregivers to one of relative independence. Youth are often at the forefront of new ideas, impassioned defenders of ideals, and fervid leaders. However, along the quest for autonomy, the very same characteristics that catalyze independence may lead adolescents to stumble into harmful behaviors, ones that have been the focus of our society's perception of the teenage years. (Steinberg, 2014).

The radicalization of our youth isn't just about increased callous emotionality of the brain, rather, it also harbors in empathetic individuals who either become emotionally numb or whose empathy becomes highly selective (in-group leaning prejudice). If emotional biases, suppression, or social dynamics distort how individuals apply it, fundamentalist or authoritarian ideology isn't far from fostering dehumanizing

and violent behavioral tendencies, as justifying it can be enough to push over the edge. (Lavenne-Collot et al., 2022).

The brain is remarkably malleable. In response to new experiences, social interactions, and learning opportunities, the brain reshapes and refines itself adaptively to fit the needs of the individual. Although plasticity during this window renders the adolescent more vulnerable to negative influence, it's an ideal time to positively influence or redirect problem behaviors. Structured programs nurturing social-emotional learning curricula and trustworthy adults can model prosocial behaviors, adaptive coping strategies, and moral decision-making. Not unlike how mentorship programs provide guidance and alternative narratives to counteract harmful messaging.

Reinforcing adaptive neural pathways by rewarding prosocial actions and effort, not just outcomes, through recognition, or positive feedback loops has the same effect. Activities that encourage exposure to cultural diversity also happen to further strengthen prefrontal-amygdala connectivity, enhancing emotional regulation and critical evaluation of information. As for negative early experiences such as neglect or abuse, interventions such as therapy, minor mindfulness acts like journaling, redirection of strong emotions to hobbies like debate or wrestling can help adolescents restructure maladaptive neural patterns. In essence, stable routines beside supportive communities reinforce positive conduct in adolescents by strengthening executive function networks, and reducing impulsive or maladaptive behaviors.

Conclusion

A study even revealed that individuals with extremist attitudes tend to perform poorly on complex mental tasks, struggling to complete psychological tests that require intricate mental steps. People who endorse

violence to protect their ideological group also possess poor emotion regulation skills, high impulsivity, and seek thrilling sensations. (Zmigrod, 2022). Sensical, considering they're willing to harm innocents for the sake of a doctrine. Poor capacities to process complex information, and difficulty with emotion regulation can make an individual more susceptible to simple and absolutist solutions, as well as being highly emotionally-evocative.

Disseminating this information with policymakers and counterextremism practitioners who work with at-risk communities can allow us to pre-emptively offer educational programs that promote cognitive flexibility and emotion regulation support. This should have downstream effects on their psychological resistance in the face of radicalization, having been imperative steps for societies that wish to champion peace and security for all.

This research underscores this 'leakage' of inadequate bigoted frameworks, disclosing on how it's somewhat of a cycle propelling hateful individuals forward with no cogs seeming to set friction, unless we make it to be so. By appreciating that the adolescent brain is sponge-thirsty and receptive for new knowledge rather than one that is of strictly nefarious intent, we can redirect social awareness of this significant period of life. Recognizing the power of youth, empowers the youth.

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