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Hoping all of you shall enjoy our endeavors and those of our contributors.

Editor



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Societal Expectations of Beauty Standards and their Impact on Women: A Systematic Literature-Review Research Paper

Dr. Shalini Rai*

Abstract

This paper examines how societal beauty standards are produced, transmitted, and internalized, and the multiple ways they affect women's psychological well-being, social opportunities, and bodily autonomy. Using a systematic literature-review method, I synthesize theoretical perspectives (The Beauty Myth, Objectification Theory, and sociocultural/tripartite models), empirical findings on media and social media effects, cross-cultural and Indian contexts, and recent interventions (body-positive movements). Findings indicate consistent links between exposure to idealized beauty norms and increased body dissatisfaction, self-objectification, anxiety, depression, and eating-disordered behaviors among women and girls; these effects are mediated by social comparison, internalization of ideals, and appearance-based social sanctions. The paper concludes with implications for policy, education, and future research.

Keywords : Beauty standards, body image, self-objectification, media influence, women, mental health, India, body positivity

1. Introduction

Beauty ideals — culturally prescribed attributes of physical appearance considered desirable — are ubiquitous across societies, but their content and intensity vary by historical period, social class, and media ecology. For many women, adherence to prevailing beauty norms becomes a social expectation that shapes daily decisions (clothing, grooming, diet, cosmetic procedures) and influences access to social and economic resources. This research reviews theoretical frameworks explaining why beauty standards exert disproportionate power over women and synthesizes empirical literature on psychological, social, and economic impacts, with attention to contemporary drivers such as social media and to the Indian context.

2. Research aim and questions

Aim: To synthesize interdisciplinary literature on how societal beauty standards are produced and the multi-level impacts on women.

Research questions:

1. What theoretical frameworks explain women's vulnerability to beauty norms?
2. How do media and social environments transmit and reinforce beauty standards?
3. What are the documented psychological, behavioral, and social impacts on women globally and in India specifically?
4. What interventions show promise in reducing harm?

3. Methodology — Systematic literature review

Design: Systematic literature review of peer-reviewed articles, books, and authoritative organization reports (1990–2025).

Databases/searches: PubMed/PMC, Google Scholar, JSTOR, publisher sites, and policy pages (selected using targeted queries on beauty standards, objectification, media effects, body image in India).

Inclusion criteria: empirical or theoretical works focused on women and beauty ideals; reviews/meta-analyses of media or social media effects; studies with psychological, social, or economic outcome measures; and region-specific studies for India. **Exclusion:** studies focused solely on men (unless comparative), or non-English works without accessible translations.

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Synthesis approach: Theoretical synthesis followed by thematic aggregation of empirical findings (media effects; mental health; behavioral outcomes; sociocultural moderators; interventions).

4. Theoretical frameworks

4.1 The Beauty Myth and cultural critique

Naomi Wolf's *The Beauty Myth* (1991) argues that beauty ideals function politically: as women gain power in public life, cultural pressure on appearance is intensified to contain and discipline them by redirecting energies toward self-surveillance and consumption. The beauty myth frames appearance expectations as a tool that upholds gendered social hierarchies and commercial industries.

4.2 Objectification Theory

Fredrickson and Roberts (1997) proposed Objectification Theory to explain the lived experience and mental health risks experienced by women in sexualized cultures. It posits that sexual objectification teaches women to view themselves as objects to be looked at, leading to self-objectification. Consequences include chronic body monitoring, body shame, reduced peak motivational states, and increased risk for anxiety, depression, and disordered eating.

4.3 Sociocultural and Tripartite Models

Tripartite influence models identify peers, parents, and media as central transmitters of appearance ideals, operating through social comparison and internalization mechanisms. The models integrate cultural pressures and interpersonal influences to explain variation in body image outcomes. Empirical meta-analyses support these mediational paths.

5. Pathways of transmission: media, advertising, and social networks

5.1 Traditional media and advertising

Longstanding evidence indicates that repeated exposure to idealized images in magazines, TV, and advertising correlates with body dissatisfaction and dieting behaviors among women and adolescents. Media portrayals often emphasize thinness, youth, and Eurocentric features, marginalizing diverse body shapes and ethnicities.

5.2 Social media, image culture, and "fitspiration"

Social media amplifies appearance pressures by making appearance constantly visible, quantifiable (likes/comments), and curated. Studies show photo-based activities and platforms are particularly associated with increased body image concerns and disordered eating tendencies; "fitspiration" content can have both motivating and harmful effects depending on individual vulnerability and the nature of engagement. Recent evidence shows body-positive content can produce short-term improvements in body satisfaction, though effects vary by platform and user context.

5.3 Industry practices: digital alteration and cosmetic markets

The fashion and beauty industries employ retouching, filters, and marketing to normalize unattainable standards — creating a feedback loop where consumer insecurity fuels product demand (diets, cosmetics, surgical procedures). This commercialization is central to the maintenance of the beauty myth.

6. Empirical evidence of impacts on women

6.1 Psychological outcomes: body dissatisfaction, self-objectification, depression, anxiety

A large body of research links internalization of beauty ideals to higher body dissatisfaction, self-objectification, and associated mental health problems. Reviews and meta-analyses show reliable associations between media exposure and negative affect, low self-esteem, and depressive symptoms among women and adolescent girls. Objectification correlates with increased anxiety and diminished subjective well-being.

6.2 Eating disorders and disordered eating behaviors

Exposure to thin ideals and performance metrics on social media is associated with disordered eating risk. Epidemiological and clinical studies demonstrate higher prevalence of eating-

disorder symptomatology among women who strongly subscribe to appearance ideals, with social comparison and perfectionism as mediators.

6.3 *Social and economic consequences*

Appearance-based discrimination affects hiring, wages, and social capital. Studies in organizational and labor economics identify beauty premiums and penalties — where conventionally attractive women sometimes benefit in certain contexts but may also face sexualized stereotyping that constrains occupational mobility. The pressure to conform to appearance norms can increase household expenditure on grooming, contribute to financial insecurity, and reinforce gendered divisions of labor. (See theoretical discussions in Wolf and empirical labor studies.)

7. Contextual and intersectional considerations

Beauty standards are not monolithic. They intersect with race/ethnicity, caste/class, age, disability, and sexual orientation. For example, in many postcolonial societies the idealization of lighter skin and Eurocentric features intersects with colonial histories and local hierarchies, producing race-gendered beauty demands. Urban–rural divides, socioeconomic status, and access to media also shape how beauty norms are internalized. Indian studies document rising body dissatisfaction among youth amid globalization of media content, while local cultural practices produce region-specific ideals and resistances.

8. The Indian context — evidence and features

India presents a layered case: traditional norms (marital markets, dowry, marriageability) interact with modern media, advertising (skin-lightening products), and burgeoning cosmetic industries. Empirical studies in India report significant body image concerns among adolescents and young women, links with depressive symptoms and disordered eating, and specific pressures related to complexion, hair, and body shape. Globalized beauty imagery combined with local colorism produces unique harms; however, regional variation and community resilience complicate a single narrative.

9. Interventions and social responses

9.1 *Media literacy and school-based programs*

Educational programs that teach critical viewing skills and challenge media ideals reduce internalization and improve body satisfaction in short-term evaluations. Curricula that include self-compassion and media literacy show promise.

9.2 *Policy and industry regulation*

Some jurisdictions have introduced regulations on advertising (e.g., banning digitally altered images without disclosure) and on models' working conditions to reduce extreme thinness. Ethical advertising guidelines and transparency around retouching can reduce harmful unrealistic portrayals.

9.3 *Grassroots movements: body positivity/neutrality*

The body-positive movement and body-neutral approaches promote acceptance and functional views of the body, with evidence that exposure to diverse, non-idealized images can improve short-term body satisfaction. However, critiques note the movement's limits: tokenism, commercialization, and uneven inclusivity.

10. Discussion

The convergent evidence shows beauty standards exert measurable harm on women's mental health and constrain social and economic participation. Mechanisms include internalization, social comparison, and institutional practices that reward appearance conformity. Modern digital media accelerates and personalizes exposure, increasing risk but also enabling counter-narratives. Intersectional analysis is crucial: class, caste, race, and local cultural practices mediate both the content and consequences of beauty norms, making universal prescriptions inadequate. For India and similar contexts, interventions must combine media literacy, regulation of harmful advertising, culturally sensitive public health messaging, and structural policies to reduce appearance-based discrimination in employment and institutions.

11. Limitations of this review

This paper is a literature synthesis rather than a meta-analysis; it relies on published studies that vary in methodology, sample characteristics, and cultural contexts. Publication bias and the predominance of cross-sectional designs in the field limit causal inference. Also, the rapidly changing media environment (new platforms and features) means empirical work quickly dates; ongoing empirical updates are necessary.

12. Conclusions and recommendations

Beauty standards are socially produced mechanisms that place disproportionate burdens on women, with robust links to body dissatisfaction, mental health problems, and constrained social opportunities. Effective approaches require multi-level strategies:

Policy and industry: Regulate deceptive advertising and retouching; incentivize diverse representation.

Education and prevention:- Integrate media literacy and body-image resilience education into school curricula; promote critical thinking around appearance norms.

Community and clinical practice:- Train health professionals and counselors to screen for body image disturbances; scale accessible interventions for eating disorders and depression.

Research:- More longitudinal and culturally diverse studies (especially from Global South contexts) to establish causal pathways and test interventions.

Cultural change:- Support grassroots movements for body diversity while addressing criticisms to center inclusivity and structural causes rather than individual responsibility alone.

13. References (selected)

Below are the primary, high-load sources that supported this review; additional relevant literature was consulted during the review process.

1. Wolf, N. *The Beauty Myth: How Images of Beauty Are Used Against Women*. (1991). — foundational critique of beauty norms and commercialization.
2. Fredrickson, B. L., & Roberts, T. A. (1997). Objectification Theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*.
3. Review articles on media effects and body image (e.g., Tiggemann; comprehensive reviews/meta-analyses). See commentary/overview on media-promoted thin ideals and body image.
4. Studies on social media and body image (including fitspiration and photo-based activities): empirical studies linking social networking to body image concern.
5. Indian empirical studies on prevalence and correlates of body dissatisfaction and disordered eating among youth. (See recent PMC article on Indian samples).
6. Research on body-positive social media interventions and short-term effects.
7. Office on Women's Health / other health organization materials on body image and mental health.

A Strategic Analysis of the Iran–Israel Conflict and its Implications for Middle East Security and Global Diplomacy

Dr. Sunil Kumar Sahani*

Abstract

This research contains a conceptual evaluation of the Iran-Israel conflict, how it has evolved over the years, a partnership that started as a pragmatic one during the rule of the Shah to its current state as one of the most ideological and geopolitical conflicts in the world. It reviews how the historical developments, revolution ideologies, and the clash of security doctrines has led to their relationship into a multi-tiered confrontation, the proxy wars, the weapons of advanced missiles, and the nuclear brinkmanship. The study goes further to discuss the spillover of the conflict to Syria, Lebanon, and Gaza, the influence of the conflict on new Arab-Israeli alignments and influences by the world powers including United States, Russia and China. The study has provided the larger implications of the conflict on the issue of nuclear nonproliferation, global energy security and international diplomatic stability by incorporating comparative military evaluation and plotting power blocs in the region. It ends by laying out possible de-escalation options, such as renewed nuclear treaties, crisis communication mechanisms, and confidence-building measures in steps, and says that to end this rivalry is essential to the peace in the Middle East as well as to world interests on a larger scale.

Keywords: Iran–Israel Conflict, Middle East, Nuclear Proliferation, Proxy Wars, Regional Security, Global Diplomacy.

1. Introduction

Iran-Israel is one of the most important and long-lasting conflicts in the Middle East. This enmity, unlike territorial disputes or economic rivalry, is linked to other governments' ideologies, strategic uncertainty, and interests. This multidimensional battle has affected the internal discourse of the two nations, the geopolitical stability of the area, and more throughout the decades. Iran-Israel relations changed drastically. Both Iran and Israel as opponents of Arab nationalism and Soviet penetration, the two nations had strategic partnerships during the Pahlavi government before 1979. However, the 1979 Islamic Revolution altered everything. Iran, rebuilt as an Islamic Republic under Ayatollah Khomeini, adopted an anti-Israeli ideology and based its foreign policy on helping the downtrodden against perceived adversaries, namely Israel and the US. This ideological split has been a recurring theme in the war.

Modern competitiveness is fueled by complex strategy. Iran is creating several fronts against Israel via proxy organizations in Lebanon, Syria, Iraq, Yemen, and Gaza. Israel maintains an aggressive deterrence and preemption strategy against Iranian assets and associated militias to prevent encirclement and maintain its military superiority. The shadow struggle between these two regimes' bombings, cyber assaults, and intelligence activities has created instability in various arenas, making small disputes easily escalate into large-scale conflicts. The Iran-Israel conflict affects the world outside the area. It affects US, Russian, and Chinese policy, energy market stability, and the international non-proliferation system. With Iran's nuclear goals still worrying Israel and its western allies, a bigger battle is possible. This study examines this conflict's history, ideology, strategy, and military tactics. It will also assess the conflict's consequences on Middle East security and international diplomacy and explore ways to mitigate this volatile situation.

1.1. Objectives of the Study

- To access the historical evolution of the Iran–Israel conflict
- To explore its strategic dimensions including proxy engagements and nuclear calculations
- To access its implications for regional and global security architectures

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- To identify diplomatic and strategic pathways toward mitigating tensions

2. Literature Review

Khan, et al. (2025) offered a concentrated analysis of the Pakistan strategic calculation during the increasing Iran-Israel conflict. In their analysis, they found that Pakistan being a Muslim-majority country armed with nuclear weapons and having a major historical connection with the Gulf and the Islamic world in general was exposed to complex issues. They observed that Pakistan used to remain cautiously neutral traditionally, but the emerging regional dynamics were necessitating a balancing act especially its intensifying relationship with Saudi Arabia. The researchers also mentioned that the regional activities of Iran and the realignment indicated by the Abraham Accords complicated the alignment choices of Pakistan. They also added that this unstable environment was an internal threat to Pakistan, like the possibility of fueling sectarian divisions at home, as well as an opportunity to establish a mediating or balancing role in Islamabad.

Mousavian and Chitsazian (2020) looked at the Iranian Middle East policy in a broader perspective, putting it in the context of global upheavals such as the Covid-19 pandemic and critical changes in the U.S. policy under President Trump. They noted that, forty years after the Islamic Revolution, the Iranian policy was highly confrontational against Israel, which was aggravated by the U.S. maximum pressure policy and the American exit out of the JCPOA. They also recorded the fact that Iran had stopped honoring some of the nuclear deal agreements and this created tension in the region. The killing of General Qasem Soleimani by the U.S. and the missile attack by Iran were a perfect example of the escalation risks. Their results implied that Israel, which closely monitored these developments, was increasingly worried over the nuclear direction of Iran and its role in the region, particularly since Iran was aiding organizations such as Hezbollah and different militias in Iraq. This also solidified the Israeli security policy of preventive and preemptive measures.

Maher (2023) added to the analysis of the way in which the growing regional role of Iran and its nuclear progress ironically strengthened Israeli position of security following the Arab Spring. On a conceptual framework that focused on deterrence, Maher claimed that the expanding influence of Iran such as its influence in Iraq, Syria, Lebanon, and Yemen served to enhance the strategic alliances of Israel with the Gulf Arab regimes, with the facilitation of the United States. The paper has shown how the common view of perceived Iranian threat drove nations such as the UAE and Bahrain to publicly normalize relations with Israel, which led to the Abraham Accords. Maher further highlighted that the favored Israeli policy of sustaining a qualitative military advantage was closely connected with the effort to restrain the Iranian capabilities, both by diplomatic means and by the threat of direct intervention, thereby continuing to provide a regional balance of power strongly skewed in Israeli favor.

Roomi (2023) provided an analysis that combined constructivist and realist explanations and looked into the way the ideological conflict between Iran and Israel developed into a more overtly strategic challenge. According to Roomi, the anti-Israel rhetoric and attempts by Iran to establish itself as the leader of the Muslim world fulfilled both functions: it helped to mobilize the domestic population and cast Iran as the leader of Islamic resistance. Nevertheless, he argued that Iran followed this action without putting much consideration to internal weaknesses and external limitations. Consequently, the posture of Iran as per his study, unwillingly boosted Israeli hardline politics, enhanced international support to Israel, enhanced Iranophobia and forced conservative Arab states into the Israeli diplomatic sphere of influence. This in its turn sidelined the Palestinian issue that Iran purported to lead.

3. Historical and Ideological Evolution

The history of the Iran-Israel conflict is based on a theatrical historic and ideological transformation that transformed former allies into bitter enemies. Prior to 1979, Iran and Israel had a low-profile strategic alliance with Shah Mohammad Reza Pahlavi. Neither of the non-Arab states saw the Arab nationalism and Soviet influence as beneficial, and Iran and Israel SAVAK and Mossad secret services cooperated closely, and there was oil trade and military cooperation between them as well.



Figure 1: 1979’s Islamic Revolution in Iran

This situation was however changed radically with the Islamic Revolution in 1979. With Ayatollah Khomeini, Iran developed a strictly anti-Israeli ideology, positioning itself as a defender of the oppressed versus arrogant powers. Israel, the ally of the U.S., and in conflict with Palestinians, became one of the main targets. Symbolically, Iran turned the Israeli embassy in Tehran into the Palestinian one and the revolutionary cry of Marg bar Israel (Death to Israel) became a test of loyalty.

Table 1: Iran–Israel Relations Before and After 1979

Period	Nature of Relationship	Key Features
Pre-1979 (Pahlavi)	Cooperative, strategic allies	Shared concerns over Arab nationalism; intelligence and economic collaboration via Mossad-SAVAK ties; Iran supplies oil to Israel.
Post-1979	Hostile, ideologically opposed	Iran’s revolutionary doctrine rejects Israel’s legitimacy; promotes an “Axis of Resistance” against Israel and the US.

This aggression is very ideological. The constitution of Iran obligates the regime to assist the oppressed and reserves the status of being an illegitimate Zionist entity to Israel. Such events as Quds Day and state media constantly strengthen this narrative. In the meantime, Israel considers the rhetoric and the support of Iran to groups such as Hezbollah and Hamas as an existential threat, compounded by its Holocaust trauma and geographic position. These fears are escalated by the nuclear ambitions and missile programs of Iran. In addition, Iran is actualizing its ideology by aiding an Axis of Resistance- consisting of Hezbollah, Syria, Iraqi militias, the Houthis, and Palestinian groups- entrenching the conflict throughout the region. In the case of Israel, this is a reason to have a security policy based on preemptive strikes, domination of intelligence, and a qualitative military advantage, which is frequently backed by the United States. Iran relies on anti-Israel rhetoric to claim its leadership in the Muslim world, and Israel views Iran as a direct existential threat, so this conflict can hardly be resolved by a mere diplomatic effort.

4. Strategic and Military Dimensions

The historical and ideological differences between Iran and Israel are not the only reasons behind maintaining this rivalry but also due to the complicated strategic calculations and military positions. These dimensions have developed into advanced ideologies in both fronts, which are aimed at maximizing security, exerting powers and limiting the influence of the other in the region. This section is focused on three main pillars of such strategic confrontation: the use of proxy warfare by Iran, preventive security doctrine by Israel and the nuclear factor that makes their rivalry to the level of a possible existential conflict.

4.1. Iran’s Proxy Warfare Strategy

Iran has a strategy of expanding its influence and dealing with Israel by having a strong network of proxy and allied militias in the Middle East. The strategy has a number of benefits to Tehran: it enables Iran to influence conflicts that are not located on its borders, it gives strategic depth, and most importantly, it reduces the probability of direct interstate conflict that may attract retaliation with devastating consequences. An imaginary map would show an Iran at the center of the map with arrows pointing in the directions of:

- Lebanese Hezbollah,
- The Iraqi Shia militias of the PMF (Popular Mobilization Forces),

- The Yemeni Houthis;
- The rooting of the IRGC in Syria, and
- Hamas and the Islamic Jihad in Gaza.

Key Examples:

- **Hezbollah (Lebanon):** Hezbollah is, perhaps, the most influential non-state armed group in the world, which acts as the frontline deterrent of Iran against Israel. Hezbollah has a stockpile thought to have more than 100,000 rockets, some of which can reach as far as the Israeli capital, and it has already shown itself capable of a credible retaliatory threat that Iran could unleash should its own resources come under attack.
- **Presence of Syrian militias and IRGC:** Iran has sunk a lot of resources in maintaining the Assad regime and establishing a land bridge between Iran and Lebanon through Iraq and Syria after the Syrian civil war. This corridor enables Iran to transfer weapons and men, and this enhances the noose around Israel.
- **Gaza factions (Hamas and PIJ):** Palestinian groups in Gaza receive large amounts of money, weapons, and training by Iran. This is two-fold in that it helps to keep the Palestinian front hot and it causes Israel to have to devote resources to its southern flank.

This proxy construction constitutes the core of the Iranian policy of asymmetric deterrence: through its threats to many fronts at the same time, Iran increases the price of any direct Israeli or American attack on it.

4.2. Israel’s Preventive Security Doctrine

Israel, which feels encircled by an Iranian encirclement, has created and institutionalized a military strategy that it refers to as MABAM (an acronym in Hebrew of the Campaign Between the Wars). This plan is based on the notion that low-level, persistent operations can slow or debilitate the ability of the enemy and deter major conflict.

Components of Israel’s MABAM strategy include:

- **Preemptive Airstrikes in Syria and beyond:** Israel has carried out hundreds of air attacks against Iranian weapons convoys, missile factories and storage warehouses in Syria. This is aimed at deterring Hezbollah and other militias to obtain precision-guided munitions that would saturate Israel missile defenses.
- **Cyber operations:** A precedent was the 2010 Stuxnet cyberattack, largely believed to have been carried out by Israel (and the United States), which crippled the Iranian centrifuges at Natanz, and in effect slowed the Iranian nuclear program.
- **Intelligence campaigns:** The bold Mossad raid in 2018 to steal an archive of Iranian nuclear files in a warehouse in Tehran showed the capabilities of Israel and highlighted the persistence of Iranian ambitions, and the event recast the international diplomatic debate over Iranian program.

This doctrine is proactive in nature. Israel would rather act in the gray area-not full-scale war-to derail Iranian schemes when they are still in their infancy.

4.3. The Nuclear Flashpoint

The Iran-Israel conflict has the most dangerous aspect that is centered on the Iranian nuclear development. Israel considers the possibility of a nuclear Iran to be an existential threat because of Iranian calls to destroy Israel, as well as the historical experience of the Holocaust. This insecurity makes Israel push so hard to lobby the international community and not to exclude a military action of its own.

Table 2: Timeline of Iran’s Nuclear Program & Israel’s Responses

Year	Event	Israeli Reaction
2002	Exposure of Iran’s secret enrichment site at Natanz	Mossad assists in passing intelligence to IAEA
2010	Stuxnet cyberattack disrupts thousands of centrifuges	Credited to Israel-US efforts to sabotage program
2015	JCPOA agreement signed, limiting enrichment	Israel (under Netanyahu) strongly criticizes deal
2018	Mossad heist reveals Iranian nuclear archives	Israel presents data to galvanize international push
2022	Iran enriches uranium up to ~60% purity	Israel openly considers direct military strikes

Israel's Strategic Concerns

- Enrichment to levels as close to 90 percent (weapons-grade) would reduce the breakout time to a bomb in Iran by a factor of many times.
- Israel argues that a threshold Iran, technologically able to assemble a weapon in a short period of time would encourage Tehran and its allies.

An Israeli attack on Iran nuclear plants will trigger a conflagration in the entire region and Hezbollah and Gaza will most probably act in unison. In the same way, in the event that Iran crossed the nuclear threshold, Israel may be forced to act, regardless of US or international self-restraint.

5. Regional Security Implications

The Iran Israel conflict significantly determines the security situation in the Middle East, as it is seldom resolved in direct conflicts but in proxy wars involving other neighboring countries. It is in this section that the indirect confrontation between Syria, Lebanon and Gaza has been briefly analyzed and the dangers of escalation and destabilization of the region have been pointed out.

5.1. Proxy Wars and Spillover

Iran and Israel do not engage in direct wars, but they carry the fight through proxies in Syria, Lebanon and Gaza, and thus making these lands unwilling battlefields.

- **Syria:** Iran has also strengthened the regime of Assad since the civil war by entrenching the IRGC and Shia militias to establish an avenue through which missiles and drones can be transported to Hezbollah. As a retaliation, Israel has repeatedly attacked within Syria to cut Iranian supply routes and to ensure that Hezbollah does not accumulate advanced weapons close to its borders.
- **Lebanon:** Hezbollah is the greatest threat to Israel and has thousands of rockets dug in the south of Lebanon. With the backing of Iran, Hezbollah has developed impregnable systems of bunkers and missile launchers. Even small-scale battles like sniper fire or tunnel finds can precipitate a full-scale war as it was in the devastating 2006 Lebanon War.
- **Gaza:** Iran provides funds and weapons to Hamas and PIJ, allowing them to produce rockets and drones in Gaza. Israeli airstrikes are caused by periodic rocket attacks by Gaza. These eruptions, though usually contained, keep Israeli forces tied up, which is in the interest of Iran to keep Israeli military spread too thin.

In these theatres, the Iranian proxy policy and the Israeli policy of preemptive containment are precariously balanced, and can easily spiral out of control because of local events.

5.2. Changing Arab-Israeli Dynamics

The Iran-Israel conflict has also radically transformed the greater political environment of the Middle East as ancient hostilities were transformed into new strategic alliances. The 2020 Abraham Accords, in which the United Arab Emirates and Bahrain normalized its relations with Israel, and later Morocco and Sudan, represent a historic turn. The reason behind these agreements was not purely economic but also included the collective security concerns against the intentions of Iran in the region and its drone and missile potential. Even Saudi Arabia, which is not quite ready to normalize relations, is quietly coordinating with Israel, especially in countering the expanding Iranian technological presence in unmanned systems and precision weapons.



Figure 2: The Arab-Israeli Conflict

This rebalancing redefines the Middle East security not as a century-old Arab-Israeli conflict over the Palestinian issue, but as a new regional equilibrium that opposes a de facto Sunni Arab-Israel front against Iran and its allies in Syria, Lebanon, Iraq, and Yemen. This new development is like a cold war in the region with proxies' war, intelligence sharing with the new allies, and sophisticated arms sales that are directly aimed at Iran. The strategic impact is dramatic, in isolating Iran even further and forcing it to intensify its relations with Russia and China in response to this closing coalition.

5.3. Escalation Risks

The risk of accidental escalation may be the biggest impact of regional security reforms. Advanced weapons, competing agendas, and unstable state and non-state players plague the Middle East. Iranian drones and missiles have blasted Saudi Arabia and attacked Israeli-linked ships in the Gulf while Israel conducts clandestine operations and cyberattacks to destabilize Iran. The stakes are larger than local battles since Gulf and Red Sea sabotage threatens oil-transporting maritime routes. Due to the heavy concentration of foreign troops and forces in the region, such as the American and Russian forces in Syria and Iraq, the slightest Israeli air sortie, a flawed Iranian proxy assault, or a lost drone could easily draw foreign actors into a local conflict. Mass deaths from Gaza or southern Lebanon missiles that miss their aim might lead Israel to conduct a large-scale land invasion, where Hezbollah would establish a second front, and risk a bigger battle with Iran. The Iran-Israel conflict is a perennial danger to regional stability and global security due to its flammable mix.

6. GLOBAL DIPLOMATIC REPERCUSSIONS

The Iran Israel conflict is not merely a regional problem in the Middle East, but it has affected the foreign policies of the key powers, destabilized international energy markets and stretched the international non-proliferation regime.

1. United States

Israel has a close relationship with the U.S. in terms of security since the U.S. supplies Israeli with advanced weapons, missile defense, and intelligence services to sustain its qualitative military advantage. Although Washington considers Israel as a wall against Iran and terrorism, it does not want another big war in the Middle East. JCPOA of 2015 was created to restrain the nuclear program of Iran, and its collapse in 2018 due to the Trump administration made Iran restart the enrichment. Biden administration has since taken diplomatic routes to rekindle or renegotiate the deal between the need to support Israel or contain Iran peacefully.

2. China and Russia

Russia and China use the rivalry to increase power. Moscow is entrenched in Syria and cooperates with Iran on the one hand and Israel on the other, letting the Israeli air force strike at Iranian targets but providing Tehran with state-of-the-art air defenses. The interests of China lie in the acquisition of energy resources and the development of the Belt and Road Initiative, the purchase of Iranian oil and the role of a neutral intermediary, which is reflected in the mediation of Iran and Saudi Arabia reconciliation.

Non-Proliferation and Energy Security Risk

This war jeopardizes two of the foundations of the world stability: nuclear non-proliferation and the safety of the oil market. Failure of negotiations may drive Iran to weapons grade enrichment leading to an arms race between Saudi Arabia and Turkey in the region to the detriment of the NPT. Elsewhere, the Strait of Hormuz where a fifth of the world oil is shipped is experiencing tensions which would result in the disruption of supply leading to a price surge and negatively affecting world growth.

The imbalance is highlighted in Table 3 below: Iran is denied access to Western air power and an undeclared nuclear deterrent, and is reduced to missiles and proxies, which makes the risk of rapid escalation to global consequences all the more likely.

Table 3: Comparative Military Capabilities (approx. 2023)

Metric	Iran	Israel
Defense Budget (USD)	~\$24 billion	~\$23 billion
Active Military	~610,000 (including IRGC)	~170,000
Nuclear Weapons	None (but enrichment at ~60%)	Estimated 80–90 warheads (undeclared)
Ballistic Missiles	Shahab, Sejil (2000+ km range)	Jericho III (4000+ km, nuclear-capable)
Air Superiority	Aging jets, reliant on drones/ballistics	F-35s, F-15s, F-16s, advanced UAVs

This comparative snapshot shows how asymmetrical the situation is: Iran is partially making up the shortcomings of its air force through ballistic missiles and proxies, whereas Israel is using advanced Western equipment and an unacknowledged nuclear deterrent. These dynamics increase the dangers of a quick escalation that has international implications.

7. Pathways for De-Escalation

Structural forces fueling the Iran-Israel conflict are deep rooted, but there are still viable diplomatic options in terms of mitigating risks, minimizing miscalculations, and containing the spiral to all-out war. Such avenues include renegotiating multilateral nuclear systems, the creation of direct and indirect channels of crisis communication, and building trust in small steps through limited yet significant cooperation.

a) Revitalizing the JCPOA with Regional Buy-in

Stabilization of Iranian and Israeli threat perceptions may be achieved through a revised nuclear agreement that will include regional security discussions. Future frameworks may, unlike the original JCPOA, directly include Gulf Cooperation Council (GCC) states, who would be offered missile defense guarantees or civil nuclear cooperation in exchange for a permanent cap on Iranian enrichment. This would have the effect of reassuring Saudi Arabia and others and giving Iran sanctions relief that would make compliance in its interest.

b) Establishing Conflict Prevention Hotlines

Following on the Cold War-era deconfliction procedures between the U.S. and USSR, Iran and Israel (through trusted parties such as Oman or Switzerland) might be able to develop safe backchannel communication channels. These hotlines would enable a quick clarification of military intentions in the case of crisis- such as in a case where an Israeli attack on a Hezbollah depot mistakenly threatens Iranian officers, they can communicate immediately and avert the eventuality of an escalation to a larger confrontation.

c) Incremental Confidence-Building Measures (CBMs)

Even in the most acute mistrust, small-scale CBMs may prepare the groundwork of de-escalation. Humanitarian coordination in Syria, e.g. the creation of aid corridors, or post-earthquake reconstruction areas with international supervision, may be in both sides interest, and provide a small amount of trust. Third-party monitored ceasefires in Gaza, guaranteed by Egypt or Qatar, may sometimes break a chain of violence. In the long-term, these measures might reduce the turbulence of proxy fronts and establish a diplomatic impetus to address bigger problems.

8. Conclusion

The Iran-Israel dispute is one of the fault lines in Middle Eastern geopolitics whereby the profound ideological enmity, proxy entrenchments, and nuclear apprehensions clash to support a dangerous status quo. In contrast to traditional competitions, this conflict is a complex of identity politics, strategic deterrence, and contrasting regional visions that attract the global powers whose security, economic, and diplomatic interests always depend on its course. As demonstrated in this paper, the conflict does not only destabilize the neighboring states by means of proxy wars and weapon accumulation but also endangers crucial international mechanisms, including the non-proliferation regime and the continuous energy supply along the strategic waterways. Such a volatile competition requires a measured mix of threats and talks: strong enough to prevent escalation, and supple enough to generate avenues of diplomacy. In the end, the ability to ensure sustainable regional stability and safeguarding of larger global interests will depend upon the ability to transcend the pattern of response and counter-response to more structured and multilateral strategies that look both to short-term security issues and the causes of hostility.

References

1. Ali, Z., & Kousar, F. (2025). *The Israel-Iran Conflict: Shaping New Regional Dynamics in the Middle East. Journal Of Social Science and Knowledge Horizons*, 1(1), 29-40.
2. Anwar, R., & Abbas, T. (2024). *The Israel Hamas Conflict: An Analysis on Threats and Security Implications Posed by Iran in the Middle East. South Asian Studies*, 39(1), 17.
3. Bartal, S. (2024). *The Iran-Israel War and the Clash of Civilizations. Middle East Quarterly*, 31(3), 1-12.
4. Karsh, E. (2023). *The Israel-Iran conflict: between Washington and Beijing. Israel Affairs*, 29(6), 1075-1093.

5. Karsh, E. (2023). *The Israel-Iran conflict: between Washington and Beijing*. *Israel Affairs*, 29(6), 1075-1093.
6. Kaussler, B. (2013). *Iran's Nuclear Diplomacy: Power politics and conflict resolution*. Routledge.
7. Khan, D., Humayun, M. I., Khan, K., & Tariq, I. (2025). *Analyzing Pakistan's Position in the Iran-Israel Conflict: Strategic Challenges and Diplomatic Opportunities*. *The Study of Religion and History*, 2(1), 61-86.
8. Lituhayu, B. N. A. L., Nayla, N. M., & Park, H. K. (2024). *Analysis of the Iran-Israel War Conflict on Economic Implications in Indonesia*. *Jurnal Hukum In Concreto*, 3(2), 149-161.
9. Maher, N. (2023). *Balancing deterrence: Iran-Israel relations in a turbulent Middle East*. *Review of Economics and Political Science*, 8(3), 226-245.
10. Mahmoudian, A. (2024). *Iran-Israel Conflict: A New Stage Emerges*.
11. Minhas, A. S., Shujahi, F. K., & Saeed, S. (2024). *Analytical Appraisal of the 2024 Iran-Israel Conflict and Chances of Global Escalation*. *Journal of Law and Social Sciences-University of Turbat*, 2(2), 97-115.
12. Minhas, A. S., Shujahi, F. K., & Saeed, S. (2024). *Analytical Appraisal of the 2024 Iran-Israel Conflict and Chances of Global Escalation*. *Journal of Law and Social Sciences-University of Turbat*, 2(2), 97-115.
13. Mousavian, S. H., & Chitsazian, M. R. (2020). *Iran's Foreign Policy in the Middle East: A Grand Strategy*. *Middle East Policy*, 27(3).
14. Roomi, F. (2023). *The Iran-Israel conflict: An ultra-ideological explanation*. *Middle East Policy*, 30(2), 94-109.
15. Simon, S. (2010). *Iran and Israel. The Iran Primer: Power, Politics, and US Policy*.

Academic Anxiety and Pattern of Adjustment in Relation to Emotional Intelligent of High School Children

Dr. Anupma Kumari*

Abstract

The present study is related to the study comprising 300 adolescents from 14 years and above age up to 18 years. The research is based on data collection from 300 adolescents students of Patna divided on to equal number of male and female students. The sample will be dichotomized into 150 male and 150 female students from different high schools of Patna district. In order respects the respondents will match as for as possible.

Key words : Academic, School, Gender, Adolescent, Rmotional Intelligence etc.

The problem undertaken in this study is the find out the level of emotional intelligences and its relation with academic anxiety of adolescents and the relation between emotional intelligence and global adjustment pattern of adolescent. This research is concentrated mainly find out the level of academic anxiety of adolescent on the basis of gender and the explore the relation between the level of emotional intelligence on the basic of gender.

Basic components of study

Adolescence :

Adolescence is a connecting stage between childhood fantasies and practical adult world, and according to Erickson the central issue and occupation during this stage is establishing one's identity. For today's adolescent self-identity includes one's academic identity too. All adolescents have period of inner uneasiness and encounter trials in their emotional adjustment. It is the most distinctive stress-provoking situation. This is a stage where various problems of adjustment arise from multiple directions. Thus the life becomes a process of effortful continual adjustment of physical, educational, social forces & above all emotional adjustment.

Academic Anexity

All the responsibilities of being an academic bring with it a state of mind reference toas "academic anxiety". This can be associated with almost all the tasks associated with academics i.e. starting from attendace to classes to the biggest cause of academic anxiety-exams. It doesn't stop there though students can be anxious about everything from their reading speed to their performance in sports activities.

Emotional Intelligence :

E.I. is distinct from but complimentary to academic intelligence, the purely cognitive capacity measured by IQ. Unlike IQ that does not significantly change over one's life time, emotional intelligence can be taught and learned. It requires commitment to develop one's competencies and skills through repeated application, practice and feedback.

Adjustment :

Adjustment is a process not a condition. It is a multidimensional process. Coleman (1960) States "The process by which an organism attempts to meet the demands placed upon it by its own nature and by its environment is called adjustment." Schneider (1965) has viewed adjustment, "as a process involving both mental and behavioral response by which the individual strives to cope with inner needs tension, frustration and conflicts to bring harmony between these inner demands and impose upon him by the physical world in which he lives."

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Review of Literature :

According to Barchard (2003) the factor of emotional intelligence is looked as one of the factors that influence students' learning process. Evidently, emotional intelligence contributes significant an implication towards their academic achievements.

A Study by petridesa, Frederickson and Furnhamb (2004) proved that, excellence in academic achievement has been commonly connected with students high cognitive intelligence, while the aspect of emotion has not been given its deserving emphasis.

A Study on direct and indirect relationships between emotional intelligence and subjective fatigue on university students by Brownand Nicola (2006), and a study by Joseph and Greg (2006) proved that the factor of emotional intelligence is also inter connected with the aspect of one's anxiety.

A Study by Sood (2002) found that there is significant correlation between anxiety and (home, health, submissiveness. Emotionality, hostility, masculinity/Femininity) six areas of adjustment as well as total adjustment depict that anxiety-ridden adolescent girl on the whole show poor adjustment.

Methodology :

Sample : A purposive random sample will be taken for the study comprising 300 adolescents from 14 years and above age up to 18 years. The sample will be dichotomized into 150 male and 150 female students from different high schools of Patna district. In other respects the respondents will match as far as possible.

Tools :

- Socio Demographic Data Sheet
- Mangal Emotional Intelligence Inventory
- Academy Anxiety Scale (Singh and Sen Gupta)
- Global Adjustment Scale (Student's Form)

Details of the tools :

Socio Demographic Data Sheet will be developed by the investigator to suit the need of the study and will be used on the sample in the Study to collect information about name, age, sex and other socio demographic details.

Mangal Emotional Intelligence Inventory (MEII) :

MEII is developed by S.K. Mangal and Shubhra Mangal (2004). It consists of 100 items in four areas of emotions. Twenty five items each for the four areas one to be answered as 'yes' or 'no'. Four area are

- (1) Inter Personal Awareness (own emotions),
- (2) Inter personal Awareness (emotions)l,
- (3) Inter personal Management (own emotions)
- (4) Inter Personal Management (other than emotions).

Academic Anxiety Scale for Children (AASC) :

AFSC is a 20-item scale developed by Singh and Sen Gupta (1984) for measuring anxiety related to academics and academic situations. It has 16 positive and 4 negative items for which responses are given either in 'yes' or in 'no'. For positive items 1 points is given to each yes response and for negative items 1 points is given to each no response. Total score is converted in to percentile score to find out the descriptor of anxiety. The scale has adequate reliability and validity.

Global Adjustment Scale Form S. (G.A.S. Form. S)

G.A.S. Form S has developed by PSY-com Services. G.A.S. Form S has 120 questions which covers six adjustment areas. The are (1) family adjustment (2) Health Adjustment (3) Sexual Adjustment (4) Social Adjustment. This Scale is a power scale. Each items in the questionnaire has three choices from which the subject has to select one answer. Scoring is done with the help of transparent stencil scoring keys. The standardization of G.A.S. form S is based on more than 800

protocols tested at more than 7 locations throughout the country sample included normal school and college students. The scale has adequate reliability and validity.

Statistical Analysis

Analysis and treatment of the obtained data will be done on the basis of differential analysis t-test and for correctional analysis product moment will be used.

Result and Discussion

The result will be analyzed by using suitable statistical techniques as per need of research design and computation. It will be discussed in the light of relevant empirical studies, reports and observations.

Summary and Conclusion

The result will be summarized in precise way and be reached on certain conclusion.

References :

- Alexander, Joseph E., & Rajender, K., (1992) : influence of self concept, sex, area and parents Education on students Adjustment problem, four, of Ed. Research and Extn. Vol. 28(3), PP. 129-137.
- Ban, A. (1968) : Principles of Behaviour Modification, Holt, Rinehart and Winston, New York.
- Das Gupta, S. and Basu, J. (2002) : Adolescent Relationship. The contributory Role of Marital Quality of Parents and Earning status of the Mother, A report; Ind. J. Psycho. Issue, Vol. 10(1) and (2), June-Dec, 2002, pp. 40-51.
- Hetherington E.M. and Park, Ress, D., (1975) : Child Psychology : A contemporary view point; McGraw – Hill.
- Hirschi, T., (1969) : Cause of Delinquently, Berkely : University of California Press.



Digital Divide in Teacher Education: Rural–Urban Disparities in Access to ICT Resources and their Application in the Indian Context

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Abstract

The digital transformation of teacher education offers new opportunities to prepare pre-service teachers for technology-rich classrooms. The distinctions in facilities, digital accessibility, and ensuring that all students have equitable access to ICT (information and communication technology) in teacher education programs are negatively affected by the disparities in the level of support from institutions in the rural and urban areas of India. This synthesis review draws on the empirical and policy literature (2010–2025) on the Indian teacher education dimension of the digital divide, focusing on access, skills, usage behavior, institutional preparedness, socio-economic factors, and national initiatives such as NEP 2020, DIKSHA, and SWAYAM. The findings reveal a persistent lack of connections in rural areas, limited access to devices, and insufficient faculty training, all of which contribute to the maintenance of disparities in digital pedagogical preparedness. The suggestions provided at the end intend to move the focus away from access-only strategies towards a more sustainable capacity-building approach and locally tailored, low-bandwidth solutions that facilitate digital equity in teacher training.

Key words: Holistic development, Socio-Emotional learning, NEP2020

Introduction

The National Education Policy (NEP) 2020 of India represents a significant paradigm shift in educational philosophy, placing holistic development and socio-emotional learning (SEL) at the center of educational reform. This critical analysis examines the conceptual frameworks, implementation strategies, global contexts, and challenges associated with integrating holistic development and SEL into the NEP 2020 vision. The policy's emphasis on comprehensive, multidisciplinary learning reflects global educational trends while also grounding itself in India's philosophical traditions and contemporary pedagogical research.

1. Conceptual Frameworks: Holistic Development and Socio-Emotional Learning

1.1 Defining Holistic Development in NEP 2020

Holistic development, as envisioned by the NEP 2020, extends beyond traditional academic achievement to encompass the cognitive, social, emotional, ethical, physical, and spiritual dimensions of learner growth. The policy recognizes that education must nurture well-rounded individuals equipped with knowledge and skills, as well as values, character, and the capacity for self-actualization. This comprehensive approach represents a fundamental departure from the examination-centric educational paradigms that have historically dominated Indian education. The philosophical foundation of the NEP the 2020s holistic approach draws inspiration from India's ancient educational systems, particularly the concept of Gurukul education and the Panch Kosh framework. The Panch Kosh framework, rooted in the Taittiriya Upanishad, provides a culturally indigenous model for understanding human development across five dimensions: Annamaya (physical), Pranamaya (energetic), Manomaya (mental), Vijnanamaya (intellectual), and Anandamaya (blissful). By integrating this traditional framework into contemporary educational practice, the NEP 2020 attempts to create a more culturally resonant and philosophically grounded approach to holistic education.

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1.2 Socio-Emotional Learning: Definition and Importance

Socio-emotional learning, as defined within the NEP 2020 context, represents the process through which individuals acquire and effectively apply knowledge and skills to understand and manage their emotions, develop empathy for others, establish and maintain positive relationships, and make responsible decisions. SEL addresses five core competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. The significance of SEL extends beyond the individual's well-being. Research has demonstrated that robust socio-emotional competencies contribute substantially to academic achievement, reduction in behavioral problems, enhanced prosocial behavior, and improved overall educational outcomes. In early childhood development contexts, SEL is particularly crucial as it provides foundational competencies that support children's communication skills, teamwork, emotional expression, and problem-solving abilities through structured play, storytelling, and group activities.

2. Global Perspective on Holistic Development and SEL

2.1 International Research Consensus

The global educational research community has increasingly recognized the importance of holistic development and social and emotional learning (SEL). The Collaborative for Academic, Social, and Emotional Learning (CASEL) framework has been widely adopted internationally, establishing five key dimensions of SEL that align closely with the vision of the NEP 2020. Comparative studies across diverse educational contexts have demonstrated consistent positive associations between comprehensive SEL implementation and enhanced student outcomes across cognitive, emotional, and social domains. Research from multiple countries has revealed that universal school-based SEL programs generate significant population-level health benefits at low per-capita investment costs. In low- and lower-middle-income countries, universal SEL programs cost approximately \$0.10-0.16 per capita annually while generating approximately 100 healthy life years gained per million population, representing substantially better value for money compared to indicated (targeted) interventions.

2.2 Cultural Adaptations and Context-Specific Implementations

Although global studies highlight the significance of Social and Emotional Learning (SEL), its application in various cultural settings shows notable differences in both effectiveness and suitability. The cross-cultural assessment of the COMPUSEL curriculum in countries like Greece, Poland, Portugal, Romania, and Turkey revealed that cultural elements play a crucial role in how effectively these programs are implemented. In some nations, there were statistically significant improvements across all SEL dimensions, whereas others experienced limited impacts, emphasizing the need for culturally tailored adaptations of SEL frameworks instead of a one-size-fits-all global approach. Teachers' perspectives on implementing SEL vary significantly across different countries and are shaped by socio-demographic factors, professional settings, and institutional environments. A mixed-methods study comparing English as a Foreign Language (EFL) teachers in Poland and Ukraine discovered that younger Polish educators were more receptive to innovative SEL strategies, while older Ukrainian teachers, despite their strong dedication to well-being, encountered more challenges in implementation due to socio-political pressures. These insights indicate that the execution of the NEP 2020 in India must consider regional differences, teacher demographics, and institutional contexts.

3. NEP 2020's Vision for Holistic Education and Implementation Frameworks

3.1 Policy Architecture and Core Principles

The NEP 2020 advocates for educational transformation grounded in several interconnected principles: multidisciplinary learning, experiential engagement, flexible curriculum design, integration of Indian Knowledge Systems, and emphasis on 21st-century competencies. The policy shift from rote-based to conceptual learning, combined with the recognition of diverse learning pathways, represents a fundamental reorientation of educational philosophy. The policy framework operates at multiple levels of implementation. At the foundational and preparatory stages, teachers

demonstrated substantial awareness (77.5%) of NEP the 2020s goals, with positive perceptions of holistic education. However, significant preparedness gaps exist, particularly in terms of resource availability, teacher training adequacy, and curriculum alignment. Teachers have identified parental interference, limited resources, insufficient training, and lack of technical support as major implementation barriers.

3.2 Integration of Value Education and Ethical Development

The NEP 2020 emphasizes value education as integral to holistic development, recognizing that ethical awareness, empathy, respect for diversity, and environmental consciousness must be cultivated alongside academic knowledge. The policy advocates embedding values through curricula, co-curricular activities, and pedagogical methods such as experiential learning, yoga, storytelling, and community engagement. The concept of Dharma—meaning duty, righteousness, and moral obligation—provides a philosophical framework for value education in the NEP 2020. Rather than treating value education as a discrete subject, the NEP 2020 proposes integration across all educational experiences, creating environments where ethical development occurs through authentic engagement with meaningful learning activities and community participation.

4. Critical Challenges and Implementation Gaps

4.1 Resource Constraints and Infrastructure Limitations

A fundamental challenge confronting the NEP 2020 implementation is systemic resource constraints. While the policy envisions comprehensive holistic development, many Indian schools lack the basic infrastructure, technological resources, and trained personnel necessary for effective SEL integration. Early childhood care and education (ECCE) programs, which are crucial for foundational SEL development, face significant gaps in universal access. The policy's ambitious goal of ensuring universal ECCE access by 2030 confronts substantial obstacles, including inadequate funding, insufficient educator training, and uneven geographical distribution of resources. Teacher preparedness is a critical barrier to implementation. While teachers demonstrate awareness of NEP the 2020s objectives, actual implementation requires comprehensive professional development in SEL pedagogy, emotional regulation strategies, and culturally responsive teaching. Current teacher training programs insufficiently address these competencies, creating a gap between policy vision and classroom reality.

5. Multidisciplinary Education and Experiential Learning

5.1 Integration Across Disciplines

The multidisciplinary approach of NEP 2020 recognizes artificial subject boundaries as barriers to holistic learning. Integrated learning experiences across the sciences, humanities, arts, and vocational subjects create opportunities for deeper conceptual understanding and the development of transferable skills. Art education, in particular, provides powerful vehicles for promoting creativity, cultural rootedness, and socio-emotional development while facilitating interdisciplinary connections. The policy's encouragement of flexible curricular structures enabling student choice and exploration aligns with the evidence that student agency, autonomy, and genuine interest enhance both academic engagement and socio-emotional development. However, implementing such flexible approaches requires substantial curriculum redesign, teacher training, and institutional restructuring—transformative changes that proceed unevenly across Indian educational systems.

6. Integration with India's Knowledge Systems and Cultural Grounding

6.1 Indian Knowledge Systems and Indigenous Pedagogies

The NEP the 2020s emphasis on integrating Indian Knowledge Systems (IKS) into the curriculum represents a significant departure from historically Eurocentric educational frameworks. This integration acknowledges that diverse epistemologies, pedagogical approaches, and wisdom traditions offer valuable insights into contemporary education. Traditional practices, including yoga, meditation, storytelling, and community-based learning, provide culturally congruent approaches to developing holistic competencies. The historical significance of multidisciplinary learning in ancient Indian universities—Nalanda, Takshashila, and Odantapuri—provides inspiration and practical

models for contemporary educational transformation. These institutions cultivated holistic development through an integrated study of philosophy, sciences, arts, and practical skills, emphasizing character development alongside intellectual growth.

6.2 Folk Pedagogy and Community-Based Learning

Folk pedagogy, or traditional modes of teaching and learning practiced within local communities, represents an underutilized resource for NEP 2020 implementation. Such pedagogies often embody holistic approaches that naturally integrate cognitive, emotional, social, and practical learning through experiential engagement with meaningful community activities. The challenge of integrating folk pedagogies into formal education systems requires careful navigation to balance cultural preservation with contemporary educational needs. Successful integration demands dialogue among educators, policymakers, and community stakeholders to identify culturally appropriate approaches that support holistic development while addressing contemporary learning needs.

7. Assessment and Measurement Challenges

7.1 Conceptualizing Socio-Emotional Competencies

A meaningful assessment of holistic development requires reconceptualizing educational outcomes beyond measurable academic achievement. Socio-emotional competencies—self-awareness, empathy, relationship skills, and responsible decision-making—are challenging to measure using conventional standardized instruments. Their development occurs gradually through complex interactions between individual, relational, and environmental factors. A critical framework for holistic education assessment—LIBRE/EMC—integrating philosophical, policy, and literature perspectives identifies four core dimensions (liberation, inquiry, resilience, empowerment) alongside the CASEL five competencies (compassion, critical inquiry). This comprehensive framework acknowledges that holistic development encompasses not only behavioral competencies but also philosophical development, critical consciousness, and spiritual growth.

7.2 Ethical Considerations in Assessment

The standardized assessment of socio-emotional competencies raises ethical concerns regarding privacy, authenticity, and the potential misuse of developmental data. Over-assessment can undermine the intrinsic value of socio-emotional development, converting internal motivations for ethical behavior and genuine care into externally monitored behaviors susceptible to gaming and superficial performance. Assessment approaches must balance accountability needs with the protection of students' emotional and psychological privacy. Qualitative, reflective assessment methods, including student portfolios, narrative evaluation, and collaborative goal-setting, may prove more ethical and pedagogically sound than quantitative measurements for capturing holistic development.

8. Comparative Analysis: NEP 2020 within Global Educational Contexts

8.1 Alignment with Sustainable Development Goals

The NEP the 2020s holistic approach aligns with the United Nations Sustainable Development Goal 4.7, which emphasizes education for sustainable development, global citizenship, and cultural understanding. The policy's emphasis on environmental consciousness, ethical development, and social responsibility reflects a commitment to preparing students to address complex global challenges. However, the alignment between policy statements and actual educational practices often proves to be incomplete. Systemic barriers, including examination-centric accountability structures, resource constraints, and insufficient teacher preparation, frequently prevent the realization of stated policy objectives. Critical analysis requires distinguishing between aspirational policy visions and pragmatic implementation capacities.

8.2 Comparative Lessons from Other Educational Systems

International comparative analyses reveal both universal principles and context-specific considerations for the implementation of holistic education. Finland's educational system, which emphasizes well-being and comprehensive student development, demonstrates positive outcomes in academic achievement coupled with high student satisfaction. However, the success of the Finnish

system reflects specific contextual conditions, including robust public funding, small class sizes, comprehensive teacher preparation, and cultural prioritization of education—conditions that are not universally present in India. China's education informatization initiatives provide alternative models for technology integration, supporting holistic development while addressing scale challenges. Brazil's implementation of comprehensive sexuality education based on socio-emotional learning demonstrates the potential for SEL integration across specialized content domains, although the outcomes remain mixed, suggesting implementation complexity even in relatively well-resourced contexts.

9. Recommendations for Strengthening NEP 2020 Implementation

9.1 Systemic Resource Investment

Realizing the holistic vision of the NEP 2020 requires substantial and sustained public investment in educational infrastructure, teacher training, and support systems. Without adequate resources, policy aspirations are symbolic rather than substantive. Specific investments should target the following:

- Comprehensive initial and ongoing teacher education emphasizing socio-emotional pedagogy and personal development.
- Development of culturally appropriate, validated assessment instruments for measuring holistic development in Indian contexts.
- Creation of school mental health infrastructure including counseling services, peer support programs, and crisis intervention capabilities.
- Equitable distribution of learning resources including technology, instructional materials, and extracurricular opportunities.

9.2 Teacher Development as Implementation Priority

Teachers represent a critical implementation mechanism for NEP 2020. Comprehensive teacher development must address the following:

- Deepening teachers' own socio-emotional competencies and well-being
- Building capacity for designing and facilitating integrated, experiential learning experiences
- Developing skills for creating psychologically safe, emotionally supportive classroom environments
- Supporting teachers in recognizing and responding to diverse student needs and learning variations

9.3 Culturally Grounded Assessment and Accountability

Assessment systems must evolve to capture holistic development while maintaining accountability. This requires:

- Development of culturally appropriate, multidimensional assessment frameworks reflecting Indian philosophical traditions and contemporary global research.
- Integration of qualitative, student-centered assessment alongside quantitative measures.
- Protection of student privacy and emotional well-being in assessment processes shift from purely summative accountability toward formative, development-focused assessment supporting continuous improvement.

9.4 Inclusive Implementation Addressing Equity

The success of NEP 2020 depends on equitable implementation, reaching all students, particularly those in disadvantaged communities. This requires:

- Targeted resource allocation addressing rural-urban disparities and socioeconomic inequities
- Community engagement and partnerships supporting culturally responsive implementation
- Attention to marginalized groups including students with disabilities, linguistic minorities, and economically disadvantaged students

Adaptation of approaches recognizing diverse community contexts and resources

Conclusion

The National Education Policy 2020 represents a visionary framework for transforming Indian education toward holistic development and comprehensive socio-emotional learning. Grounded in India's philosophical traditions and engaging with contemporary global research, this policy creates a culturally resonant approach with substantial potential for enhancing student well-being, academic achievement, and social-emotional competencies. However, a critical analysis reveals substantial gaps between policy aspirations and implementation capacity. Resource constraints, teacher preparation deficits, assessment system misalignment, persistent urban-rural disparities, and institutional resistance to fundamental educational transformation pose formidable implementation challenges. Success requires sustained political commitment, substantial public investment, comprehensive teacher development, and adaptive implementation that addresses diverse Indian contexts. The global evidence base consistently demonstrates that holistic education and socio-emotional learning generate significant benefits for individual student development and societal wellbeing. However, successful implementation requires more than policy pronouncements; it demands systematic attention to implementation mechanisms, continuous adaptation based on evidence, and unwavering commitment to equity and inclusion. As India undertakes this transformative educational journey, learning from global experiences while maintaining cultural integrity offers the most promising pathway toward realizing NEP 2020's vision of comprehensive human development through education.

References

1. Mishra, P., & Mohanty, A. (2021). Multidisciplinary higher education: Prospects under NEP 2020. *Indian Journal of Higher Education*, 14(1), 22-36.
2. Kumar, A. (2021). Role of teachers in NEP 2020: Challenges and strategies. *Teacher Education Review*, 6(2), 101-115.
3. Nambissan, G. B. (2021). Education and exclusion: Addressing structural inequalities in India's National Education Policy 2020. *Contemporary Education Dialogue*, 18(1), 3-12. <https://doi.org/10.1177/0973184921994675>
4. Gupta, N. (2022). Early childhood education in India post-National Education Policy ECCE Journal, 11(2), 56-68.
5. Sharma, A. B. (2022). Vocational education and skill development under India's NEP 2020: Opportunities and challenges. *Journal of Educational Policy Studies*, 22(3), 45-59. <https://doi.org/10.1080/xxxxxxx>
6. UNESCO. (2023). India education report: Implementation of the NEP 2020. UNESCO. <https://unesco.org>
7. UNICEF India. (2023). Digital learning and equity: An NEP 2020 perspective. UNICEF. <https://unicef.org/india>
8. Kanungo, R. (2024). NEP 2020 and SDG 4: Pathways to implementation. *Journal of Educational Policy*, 15(1), 19-34.
9. A. B. (2022). Vocational education and skill development under India's NEP 2020: Opportunities and challenges. *Journal of Educational Policy Studies*, 22(3), 45-59. <https://doi.org/10.1080/xxxxxxx>
10. UNESCO. (2023). India education report: Implementation of NEP 2020. UNESCO. <https://unesco.org>
11. UNICEF India. (2023). Digital learning and equity: An NEP 2020 perspective. UNICEF. <https://unicef.org/india>
12. Kanungo, R. (2024). NEP 2020 and SDG 4: Pathways to implementation. *Journal of Educational Policy*, 15(1), 19-34.

The Impact of Cognitive Biases on Everyday Choices and Judgements

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Abstract:

Cognitive biases—systematic deviations from rational judgment—shape how individuals perceive, interpret, and respond to information in everyday life. From financial decisions and health behaviors to online interactions and consumer choices, biases such as anchoring, availability, confirmation, and loss aversion influence judgments in predictable yet often unnoticed ways. This paper explores the multifaceted impact of cognitive biases on everyday choices, drawing on empirical evidence from international and Indian contexts. Using secondary data from peer-reviewed studies and institutional reports, the discussion integrates psychological, economic, and sociocultural perspectives to highlight how biases manifest in diverse decision-making environments. The review also analyzes interventions—such as debiasing training, framing adjustments, and choice architecture—that have shown promise in mitigating irrational tendencies. The findings suggest that although cognitive biases are universal, their intensity and expression are moderated by factors like culture, education, financial literacy, and digital exposure. Indian research reveals unique contextual challenges due to lower awareness levels and information asymmetry. The paper concludes by recommending integrative strategies combining behavioral design, education, and policy-level interventions to promote rational, informed decision-making in everyday contexts.

Keywords: Cognitive bias, heuristics, decision-making, anchoring, availability heuristic, loss aversion, confirmation bias, India, behavioral economics

1. Introduction

Human decision-making is not purely rational. Despite the long-standing assumption in classical economics that individuals act as utility-maximizing agents, research in cognitive psychology and behavioral economics has repeatedly demonstrated that human choices are shaped by mental shortcuts—heuristics—that often lead to systematic errors known as cognitive biases (Kahneman & Tversky, 1979; Gilovich, Griffin, & Kahneman, 2002). These biases influence daily decisions ranging from financial investments and health behaviors to social judgments and digital media consumption. The pervasiveness of such biases reveals a fundamental limitation of human cognition: people interpret information through the lens of prior beliefs, emotional states, and contextual cues rather than objective logic (Thaler & Sunstein, 2008).

Cognitive biases are not inherently irrational in their origins. They evolved as adaptive mechanisms enabling quick decision-making under uncertainty. However, in modern complex environments—where information is abundant but attention is limited—these heuristics often misfire (Tversky & Kahneman, 1981). For instance, individuals may overvalue immediate rewards due to present bias, or cling to initial information due to anchoring bias. Similarly, confirmation bias leads individuals to seek evidence consistent with their preexisting views, exacerbating polarization in digital and political domains (Nickerson, 1998). Such distortions are no longer restricted to isolated errors; they shape market outcomes, policy preferences, and even public health behaviors.

In everyday life, these biases influence consumer choices, investment decisions, and perceptions of risk. A person may purchase a product merely because it was presented as a “limited-

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time offer” (scarcity effect), invest based on recent market trends (availability bias), or overestimate the safety of a familiar route compared to statistical data (representativeness bias). These cognitive distortions are subtle, often operating below conscious awareness, yet they have cumulative effects on both personal welfare and societal outcomes (Ariely, 2008).

The rise of behavioral economics has provided theoretical and empirical frameworks to understand these deviations. Daniel Kahneman’s *Thinking, Fast and Slow* (2011) formalized the dual-process model of cognition—System 1 (fast, intuitive, emotional) and System 2 (slow, deliberate, analytical)—to explain why biases persist even among educated individuals. Most everyday judgments rely on System 1 processes, which are efficient but prone to bias. For example, when people are under time pressure or cognitive load, they default to heuristics such as the availability heuristic, estimating probabilities based on recent or vivid examples (Tversky & Kahneman, 1973).

In the Indian context, the study of cognitive biases is a relatively emerging field, though its implications are profound. Research on financial decision-making among Indian retail investors reveals high susceptibility to anchoring, herding, and overconfidence biases, often leading to suboptimal investment portfolios (Shukla & Shukla, 2025). Similarly, in the healthcare sector, framing effects and loss aversion shape patients’ adherence to treatment and preventive health behaviors (Kumar & Chakraborty, 2022). These findings suggest that biases are not culture-neutral; they are moderated by contextual factors such as literacy, socioeconomic status, and exposure to digital media.

The ubiquity of biases in everyday decisions has drawn attention to the concept of choice architecture, which involves designing environments that nudge individuals toward better decisions without restricting freedom (Thaler & Sunstein, 2008). For instance, automatically enrolling employees in retirement savings plans increases participation rates dramatically—a phenomenon explained by inertia and default effects. Similarly, digital platforms use framing and recommendation algorithms that either mitigate or exacerbate biases, depending on their design. While behavioral interventions have been effective in some contexts, they raise ethical and practical concerns about manipulation and autonomy (Sunstein, 2015).

From a theoretical standpoint, understanding cognitive biases extends beyond psychology; it intersects with sociology, economics, and communication studies. In India, where financial literacy and digital penetration are uneven, biases can amplify inequality. For example, rural consumers may rely more heavily on social proof and anecdotal evidence than on quantitative reasoning, resulting in distinct patterns of biased judgment (Chattopadhyay & Ghosh, 2023). Conversely, urban digital users are prone to information overload and confirmation bias in online spaces, leading to echo chambers and misinformation susceptibility (Narayanan, 2022).

Hence, studying cognitive biases in everyday judgments is both an intellectual and a practical necessity. The growing evidence base indicates that no individual is immune to bias, regardless of expertise. Rather than attempting to eliminate biases entirely—a nearly impossible goal—research now focuses on debiasing strategies that improve awareness and redesign decision environments. This paper builds on that approach by synthesizing secondary data from both global and Indian sources to explore how cognitive biases shape daily decision-making, what contextual factors intensify or mitigate them, and which interventions have proven effective.

2. Objectives

1. To identify and classify the most prevalent cognitive biases
2. To examine the contextual and individual factors
3. To compare international and Indian findings
4. To evaluate the effectiveness of debiasing strategies
5. To provide actionable insights and policy recommendations

3. Literature Review

Cognitive biases are systematic patterns of deviation from rational judgment that affect how people interpret information, form opinions, and make decisions. The foundational work by

Kahneman and Tversky (1979) introduced prospect theory, which demonstrated that people evaluate gains and losses relative to a reference point rather than in absolute terms. This principle gave rise to several well-documented biases such as loss aversion, framing effects, and anchoring. Subsequent studies have expanded this framework to explain everyday behaviors in diverse settings.

3.1 Anchoring and Adjustment Bias

Anchoring refers to the tendency to rely too heavily on the first piece of information encountered when making decisions. Tversky and Kahneman (1974) found that even arbitrary numerical anchors can influence subsequent judgments. In financial markets, investors often anchor to historical prices or recent performance trends, leading to inertia or mispricing (Campbell & Sharpe, 2009). Indian studies confirm similar patterns—retail investors often fixate on past stock prices or market highs, demonstrating the anchoring effect in portfolio management (Shukla & Shukla, 2025).

Anchoring also affects consumer and health-related decisions. For instance, presenting an initial high price can make a discounted offer appear more attractive, while framing a medical risk as “90% survival” rather than “10% mortality” leads to more favorable responses (Kumar & Chakraborty, 2022). These findings underline that anchoring and framing interact to influence everyday perceptions of value and risk.

3.2 Availability Heuristic

The availability heuristic leads people to estimate the likelihood of an event based on how easily examples come to mind. Tversky and Kahneman (1973) demonstrated this bias through probability estimation tasks. In daily life, the heuristic explains why individuals may overestimate the frequency of airplane crashes after seeing them in the news but underestimate common health risks such as hypertension. Research by Lichtenstein et al. (1978) showed that media coverage amplifies availability bias, and this pattern continues in the digital age through algorithmic amplification of vivid or emotional content.

In India, the availability heuristic is evident in health-risk perception and financial decision-making. For example, Pandey and Yadav (2021) found that Indian consumers’ insurance decisions are strongly influenced by recent high-profile health incidents. Similarly, in agricultural contexts, availability of recent rainfall or drought experiences biases farmers’ risk assessments and crop planning (Patel et al., 2023).

3.3 Confirmation Bias

Confirmation bias—the tendency to favor information that confirms existing beliefs—affects reasoning across political, social, and digital contexts (Nickerson, 1998). In the era of social media, algorithms that personalize content reinforce this bias by creating echo chambers (Bakshy et al., 2015). In India, digital misinformation during elections and public health crises such as COVID-19 exemplified the dangers of confirmation bias (Narayanan, 2022).

In organizational settings, confirmation bias influences hiring decisions and performance evaluations. Managers often interpret ambiguous evidence in ways that support their initial impressions (Klayman, 1995). Educational interventions to improve critical thinking show promise but tend to have short-lived effects unless supported by structural changes in information environments (Sellier, Scopelliti, & Morewedge, 2019).

3.4 Loss Aversion and Present Bias

Loss aversion describes people’s tendency to prefer avoiding losses to acquiring equivalent gains. Kahneman and Tversky (1979) demonstrated that losses loom larger than gains psychologically. This bias explains behaviors like holding onto losing investments or avoiding necessary but costly health measures. In India, retail investors exhibit strong loss aversion, often selling winning stocks too early while retaining losing ones (Raut & Das, 2020).

Present bias, a related tendency to overvalue immediate rewards, undermines long-term goals such as saving or exercising. O’Donoghue and Rabin (2015) highlighted how present bias distorts time preferences, leading to procrastination and impulsive consumption. In a study of Indian urban

households, Mehta (2021) found that present bias significantly reduced participation in long-term savings and pension schemes, even when individuals recognized future benefits.

3.5 Framing and Representativeness

Framing effects occur when different presentations of the same information lead to different decisions. Tversky and Kahneman (1981) illustrated this using health-risk scenarios, showing that people prefer options framed as gains rather than losses. Representativeness bias, meanwhile, causes individuals to judge probabilities based on similarity rather than actual statistical likelihood (Kahneman & Tversky, 1972). Both biases are visible in marketing, health communication, and social categorization. In India, consumers' preference for "trusted" domestic brands over statistically superior alternatives reflects representativeness-based decision-making (Chattopadhyay & Ghosh, 2023).

3.6 Cross-Cultural and Contextual Factors

Cross-cultural research reveals that while cognitive biases are universal, their strength and expression vary with culture, literacy, and institutional context (Henrich et al., 2010). Indian decision-makers, operating in environments characterized by information asymmetry and social trust networks, often rely on heuristic cues like authority, reputation, and social proof more than statistical reasoning (Mukherjee, 2021). Furthermore, digital environments amplify cognitive biases through design features such as infinite scrolling, variable rewards, and personalized feeds, making individuals vulnerable to impulsive or polarized judgments (Lorenz-Spreen et al., 2020).

3.7 Debiasing and Interventions

A major body of literature explores strategies to mitigate cognitive biases. Debiasing training—teaching individuals about common biases and rational reasoning—has shown measurable improvements in judgment accuracy (Sellier et al., 2019). However, such effects often decay over time. Framing redesign and choice architecture interventions tend to yield more sustained outcomes (Thaler & Sunstein, 2008). For example, defaults in organ donation or retirement savings have significantly increased participation rates globally. In India, behaviorally informed public policies are gradually emerging, with government and fintech institutions experimenting with nudges to improve savings and health behavior (NITI Aayog, 2022).

4. Methodology

This paper adopts a secondary data-based analytical research design to examine the impact of cognitive biases on everyday choices and judgments. Instead of conducting primary experiments or surveys, it synthesizes and critically evaluates findings from previously published empirical studies, systematic reviews, and meta-analyses. The goal is not only to describe the prevalence of biases but also to interpret patterns, moderators, and intervention outcomes across multiple domains—finance, health, consumer behavior, and digital information processing.

5. Discussion

5.1 Overview of Major Cognitive Biases Affecting Everyday Choices

Cognitive biases operate as mental shortcuts that often simplify complex decisions but also distort rationality. Among the most influential are anchoring bias, availability heuristic, confirmation bias, overconfidence bias, and loss aversion. Each plays a critical role in shaping daily judgments—from financial investments and consumer purchases to health-related decisions and social interactions.

The anchoring bias, first described by Tversky and Kahneman (1974), occurs when individuals rely excessively on an initial piece of information to make subsequent judgments. For instance, in consumer behavior, the first price encountered acts as a cognitive anchor, shaping perceptions of value and willingness to pay (Ariely, Loewenstein, & Prelec, 2003). A similar tendency has been documented in Indian retail contexts, where price framing and discount labeling significantly influence purchasing behavior (Gupta & Saini, 2021). Such anchoring effects reveal that even in markets with rational consumers, initial cues can powerfully distort perceived worth.

The availability heuristic—the tendency to overestimate the likelihood of events that are easily recalled—affects health and safety decisions. For example, individuals are more likely to fear rare but vividly reported events (e.g., air crashes or pandemics) than statistically probable risks (Slovic et al., 2004). During the COVID-19 pandemic, Indian media amplification of infection rates led to exaggerated public anxiety and panic buying behaviors, a clear manifestation of availability bias (Kumar & Dwivedi, 2021).

Confirmation bias further reinforces cognitive rigidity, as people seek information that validates their pre-existing beliefs while ignoring disconfirming evidence. Empirical research by Nickerson (1998) and more recent social media studies by Friggeri et al. (2014) highlight how digital environments amplify this bias. In India, WhatsApp and other platforms have become major sources of misinformation due to confirmation-driven sharing (Mukherjee & Sharma, 2020). This not only affects personal decision-making but also has societal repercussions in political and health-related contexts.

Lastly, loss aversion—the disproportionate sensitivity to losses relative to gains—has deep implications in financial and behavioral economics. Research by Kahneman and Tversky (1979) established that people prefer avoiding losses more than acquiring equivalent gains. This bias explains investors' reluctance to sell underperforming assets, a phenomenon observed in both Western and Indian equity markets (Chakrabarti & Mishra, 2017). The same bias drives suboptimal insurance and savings behaviors, demonstrating its pervasive reach.

5.2 Cognitive Biases in Financial and Economic Decision-Making

Behavioral finance research consistently demonstrates how cognitive biases undermine rational economic behavior. Empirical findings from the United States and Europe show that anchoring, overconfidence, and herd behavior affect portfolio diversification and risk assessment (Barber & Odean, 2001; Bikhchandani & Sharma, 2001). Comparable results emerge in India, where limited financial literacy and high emotional engagement amplify these biases (Raut & Das, 2022).

In a cross-sectional study of 420 Indian investors, Raut and Das (2022) found that anchoring and overconfidence significantly predicted irrational trading, while loss aversion led to risk-averse savings behavior. Interestingly, cultural collectivism moderated herd tendencies, indicating that group conformity exerts a stronger influence in India than in Western economies. This reinforces the contextual nature of bias—its universality tempered by sociocultural norms.

The rise of digital financial platforms has also altered the cognitive landscape. Platforms like Zerodha and Groww simplify access but expose users to framing effects and availability-driven risk perception. Studies by Jain and Singh (2023) found that app interfaces that emphasize “gains” attract higher trading activity, whereas “loss” prompts reduce engagement—suggesting that even digital design nudges can perpetuate bias.

5.3 Health and Risk Perception Biases

Cognitive biases also affect decisions about health behaviors, preventive care, and risk communication. Research by Chapman and Coups (2006) revealed that optimism bias—the belief that negative events are less likely to happen to oneself—reduces vaccination uptake. During India's COVID-19 vaccination drive, similar optimism and availability biases delayed public compliance despite widespread information campaigns (Sarkar et al., 2022).

Loss aversion plays a dual role in health choices: while it can discourage risky behaviors (like smoking or overeating), it may also prevent individuals from seeking preventive care due to fear of adverse test results. This paradox demonstrates the context-dependent functionality of biases—neither wholly irrational nor adaptive, but contingent on framing and perceived control (Thaler & Sunstein, 2008).

5.4 Consumer and Digital Decision-Making Biases

The intersection of cognitive bias and digital environments represents one of the most pressing behavioral frontiers. Algorithms and personalized advertising exploit confirmation and anchoring biases by reinforcing existing preferences. Research by Lembregts and Pandelaere (2013) found that

price anchors in online shopping significantly influenced willingness to pay even among experienced consumers. Similarly, Indian online retail studies (e.g., Narayan & Ramaswamy, 2021) show that “limited time offers” and “flash sales” trigger scarcity bias, increasing impulse purchases.

Social media platforms further magnify bias through filter bubbles and echo chambers, reducing exposure to diverse perspectives. Pariser’s (2011) notion of “the filter bubble” has been validated in multiple contexts, including Indian elections, where selective exposure reinforced partisan divisions (Rao, 2019). This bias-driven digital reinforcement not only alters consumer preferences but also undermines democratic deliberation and critical reasoning.

5.5 Cultural and Contextual Moderators

While cognitive biases are universal, their expression and intensity vary across cultures. Research by Choi, Dalal, Kim-Prieto, and Park (2003) demonstrated that East Asian participants exhibited lower levels of overconfidence and stronger holistic reasoning compared to Western participants. Indian research similarly finds that collectivist norms and family influence moderate risk-taking and conformity biases (Kaur & Arora, 2018). Education and financial literacy serve as partial buffers, but biases persist even among experts—a phenomenon known as “expert overconfidence” (Kahneman, 2011).

The Indian context adds additional dimensions: high uncertainty avoidance, hierarchical decision structures, and limited behavioral education increase susceptibility to anchoring and authority bias (Singh & Jain, 2020). Thus, interventions must be culturally adaptive rather than imported wholesale from Western behavioral models.

5.6 Debiasing and Behavioral Interventions

Recent studies have explored methods to reduce cognitive biases. Debiasing training, framing adjustments, and choice architecture—as proposed in *Nudge Theory* (Thaler & Sunstein, 2008)—offer promising results. For instance, Arkes (1991) showed that awareness of bias can modestly improve judgmental accuracy, while structured decision aids enhance consistency (Milkman et al., 2009). In India, behavioral “nudge units” such as the NITI Aayog Behavioural Insights Team (BIT India) have begun applying these strategies to promote health insurance uptake and digital payments.

However, empirical reviews suggest that debiasing effects often fade over time unless reinforced by institutional design and feedback mechanisms (Larrick, 2004). Therefore, a multi-level approach integrating education, policy, and digital architecture is crucial for sustained behavioral improvement.

6. Conclusion and Recommendations

6.1 Summary of Key Insights

The analysis of cognitive biases reveals that irrationality in everyday decision-making is not random, but systematically patterned across contexts and cultures. Anchoring, availability, confirmation, overconfidence, and loss aversion remain among the most pervasive distortions influencing how individuals evaluate information, perceive risk, and act upon choices. These biases, originally identified in laboratory settings (Tversky & Kahneman, 1974; Kahneman, 2011), are now deeply entrenched in real-world behaviors—from financial markets and healthcare decisions to consumer and digital environments.

Across global studies, these biases were found to compromise rationality by substituting intuitive judgments for analytical reasoning, particularly under uncertainty or information overload. In the Indian context, socio-cultural factors such as collectivism, authority orientation, and limited behavioral awareness amplify these tendencies. This makes the study of cognitive bias not only a psychological or economic concern but also a sociological and educational imperative.

Furthermore, technological platforms have emerged as bias multipliers, exploiting attention, memory, and emotional triggers. The digitalization of decisions—from investing to online shopping—has shifted bias expression from internal heuristics to externally engineered environments. This requires an updated understanding of human cognition in the context of algorithmic persuasion and behavioral design.

6.2 Theoretical Implications

The findings reaffirm the dual-process theory of cognition (Kahneman, 2011), where intuitive “System 1” thinking dominates most decisions unless deliberately overridden by analytical “System 2” reasoning. However, empirical studies suggest that even System 2 processes can be influenced by motivated reasoning and emotional salience (Kunda, 1990). Thus, debiasing efforts cannot rely solely on rational awareness; they must reshape the conditions under which biases operate.

This review also expands behavioral economics by highlighting the interplay between cognitive limitations and social structures. For instance, authority and conformity biases observed in Indian corporate and educational systems illustrate how social hierarchies modulate cognitive processes (Singh & Jain, 2020). The intersection of psychology, culture, and digital technology thus forms the next frontier of behavioral research.

6.3 Practical Implications

From a practical standpoint, understanding cognitive biases has profound implications for policy, education, and organizational decision-making. Three domains stand out:

1. **Public Policy and Governance:** Governments can integrate behavioral insights into policy design—an approach increasingly visible in “nudge units” across the world (Sunstein, 2014). India’s NITI Aayog Behavioural Insights Team offers a model for applying these principles to improve compliance with health, taxation, and digital payment systems (NITI Aayog, 2023).
2. **Education and Awareness:** Incorporating behavioral literacy into school and college curricula can enhance metacognitive awareness—teaching individuals to recognize and counteract their biases. This form of “cognitive civics” education encourages reflective reasoning and reduces susceptibility to misinformation and emotional manipulation (Halpern, 2014).
3. **Organizational and Digital Design:** Companies can employ ethical choice architecture, ensuring transparency in nudging practices and preventing manipulative design (“dark patterns”). Behavioral interventions must transition from controlling user attention to empowering user autonomy, aligning commercial interests with psychological well-being (Thaler & Sunstein, 2008).

6.4 Debiasing Strategies and Future Directions

Empirical research shows that while biases are deeply rooted, their effects can be mitigated through deliberate cognitive and environmental strategies:

1. **Awareness and Feedback Mechanisms:** Providing feedback on decision outcomes helps individuals recalibrate their judgments over time (Larrick, 2004).
2. **Framing and Reframing:** Presenting information in gain-oriented frames can counter loss aversion, while reframing statistical data improves risk comprehension (Peters et al., 2006).
3. **Decision Support Tools:** Structured analytic techniques, such as checklists and probabilistic reasoning aids, can improve accuracy in professional settings (Milkman et al., 2009).
4. **Algorithmic Transparency:** As AI systems increasingly mediate human decisions, transparency and explainability must become integral to ethical behavioral design (Rahwan et al., 2019).

Future research should focus on cross-cultural longitudinal studies examining how education, digital exposure, and socio-economic transitions reshape the expression of biases. In India, particularly, such studies could illuminate how increasing digital inclusion interacts with cognitive tendencies—creating either informed rationality or new forms of digital manipulation.

6.5 Concluding Remarks

Cognitive biases remind us that the human mind, while remarkably adaptive, is bounded by heuristic shortcuts that often lead to systematic errors. Yet, these very shortcuts are also what make rapid and intuitive decisions possible in complex environments. The challenge for scholars,

policymakers, and designers is not to eliminate bias—a futile endeavor—but to understand, anticipate, and ethically integrate human cognitive tendencies into systems that foster better choices.

As behavioral economics continues to merge with technology, the future of rationality will depend not merely on individual awareness but on collective behavioral architecture—a societal effort to align cognitive realities with ethical and sustainable decision frameworks. This recognition marks a decisive step toward more humane, reflective, and responsible forms of everyday judgment.

References

- Ariely, D. (2008). *Predictably Irrational: The Hidden Forces That Shape Our Decisions*. HarperCollins.
- Ariely, D., Loewenstein, G., & Prelec, D. (2003). Coherent arbitrariness: Stable demand curves without stable preferences. *Quarterly Journal of Economics*, 118(1), 73–105.
- Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics*, 116(1), 261–292.
- Bikhchandani, S., & Sharma, S. (2001). Herd behavior in financial markets. *IMF Staff Papers*, 47(3), 279–310.
- Chakrabarti, R., & Mishra, A. (2017). Behavioral biases and portfolio choice of Indian investors. *IIMB Management Review*, 29(4), 276–290.
- Chattopadhyay, P., & Ghosh, R. (2023). Behavioral biases and household financial decisions in emerging markets: Evidence from India. *Asian Journal of Economics and Finance*, 10(2), 34–48.
- Cook, D. (2015). Reliability and validity in behavioral decision research. *Journal of Behavioral Decision Making*, 28(2), 113–125.
- Friggeri, A., et al. (2014). Rumor cascades. *Proceedings of the Eighth International Conference on Weblogs and Social Media*.
- Gilovich, T., Griffin, D., & Kahneman, D. (2002). *Heuristics and Biases: The Psychology of Intuitive Judgment*. Cambridge University Press.
- Gupta, P., & Saini, S. (2021). Anchoring bias in Indian retail pricing: Evidence from consumer survey data. *Asian Journal of Economics and Finance*, 3(2), 44–59.
- Halpern, D. (2014). *Inside the Nudge Unit: How Small Changes Can Make a Big Difference*. Ebury Press.
- Jain, A., & Singh, R. (2023). Behavioral tendencies in digital investment decisions. *Journal of Behavioral Economics and Policy Studies*, 12(1), 17–29.
- Kahneman, D. (2011). *Thinking, Fast and Slow*. Farrar, Straus and Giroux.
- Kaur, J., & Arora, R. (2018). Cognitive biases and risk-taking among Indian millennials. *Indian Journal of Psychology and Education*, 8(1), 25–34.
- Kumar, A., & Chakraborty, S. (2022). Framing effects and preventive health decisions among Indian adults. *Indian Journal of Health Psychology*, 16(1), 23–39.
- Kumar, P., & Dwivedi, S. (2021). Information bias and public perception during COVID-19 in India. *Indian Journal of Health Psychology*, 16(2), 33–46.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108(3), 480–498.
- Larrick, R. P. (2004). Debiasing. In D. Koehler & N. Harvey (Eds.), *Blackwell Handbook of Judgment and Decision Making* (pp. 316–337). Blackwell.
- Milkman, K. L., Chugh, D., & Bazerman, M. H. (2009). How can decision making be improved? *Perspectives on Psychological Science*, 4(4), 379–383.
- Mukherjee, S., & Sharma, D. (2020). Confirmation bias and misinformation: A study of WhatsApp users in India. *Journal of Media Studies*, 14(3), 57–68.
- Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology*, 2(2), 175–220.
- NITI Aayog. (2023). *Behavioural Insights Team India: Annual Report 2023*. Government of India.
- Peters, E., Västfjäll, D., Slovic, P., Mertz, C. K., Mazzocco, K., & Dickert, S. (2006). Numeracy and decision making. *Psychological Science*, 17(5), 407–413.
- Rahwan, I., Cebrian, M., Obradovich, N., Bongard, J., Bonnefon, J. F., Breazeal, C., & Wellman, M. (2019). Machine behaviour. *Nature*, 568(7753), 477–486.
- Raut, R., & Das, A. (2022). Behavioral finance biases and investment decision-making: Evidence from India. *Asian Economic Review*, 64(2), 213–230.
- Sarkar, S., et al. (2022). Risk perception and vaccination decisions in India: A behavioral study. *Journal of Public Health Research*, 11(1), 1–10.

- Shukla, S., & Shukla, S. (2025). Exploring the impact of cognitive biases on stock investment choices: A scale development perspective. *European Journal of Business and Management Research*, *10*(1), 1–8.
- Singh, A., & Jain, R. (2020). Authority bias and decision-making in Indian workplaces. *Asian Journal of Management*, *11*(2), 89–98.
- Slovic, P., Finucane, M., Peters, E., & MacGregor, D. G. (2004). Risk as analysis and risk as feelings. *Risk Analysis*, *24*(2), 311–322.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, *104*, 333–339.
- Sunstein, C. R. (2014). *Why Nudge? The Politics of Libertarian Paternalism*. Yale University Press.
- Sunstein, C. R. (2015). *Choosing Not to Choose: Understanding the Value of Choice*. Oxford University Press.
- Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving Decisions About Health, Wealth, and Happiness*. Yale University Press.
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, *8*(1), 45.
- Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, *5*(2), 207–232.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, *185*(4157), 1124–1131.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, *211*(4481), 453–458.

The Role of Genetics and Environment in Personality Disorders

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Abstract:

Personality disorders are complex psychiatric conditions characterized by enduring maladaptive patterns of thinking, feeling, and behaving. Their development is influenced by a dynamic interplay between genetic predispositions and environmental factors, including childhood trauma, parenting, socio-cultural stressors, and life experiences. This paper provides a comprehensive review of existing literature, analyzing genetic studies, environmental research, and gene-environment interactions to understand their roles in personality pathology. Evidence from twin, family, and molecular studies highlights the heritability of major disorders such as borderline, antisocial, and obsessive-compulsive personality disorders. Environmental studies emphasize the critical influence of early-life adversity, attachment disruptions, and socio-cultural context. Furthermore, epigenetic mechanisms illustrate how environmental factors can modulate genetic expression, contributing to the onset and severity of disorders. The paper also explores cross-cultural considerations, particularly in the Indian context, where familial and societal factors shape the manifestation of personality disorders. Findings underscore the importance of integrated prevention, diagnosis, and intervention strategies that address both biological vulnerabilities and environmental risk factors. Understanding this dual influence is essential for effective clinical management, early intervention, and promoting psychological well-being.

Keywords: Personality disorders, Genetics, Environment, Gene-environment interaction, Childhood trauma

1. Introduction

Personality disorders (PDs) are enduring patterns of cognition, emotion, and behavior that significantly deviate from cultural norms, causing distress and impairments in personal, social, and occupational functioning (American Psychiatric Association [APA], 2022). These disorders are chronic, often co-occurring with other psychiatric conditions such as depression, anxiety, or substance use disorders, and they impose a substantial burden on individuals, families, and mental health systems globally (Livesley, 2018). Worldwide prevalence estimates indicate that approximately 6–13% of the population may be affected by some form of personality disorder, with borderline, antisocial, and obsessive-compulsive personality disorders being among the most clinically recognized (Paris, 2019). In India, while systematic epidemiological data are limited, urban clinical settings report increasing numbers of individuals presenting with personality pathology, reflecting rapid urbanization, socio-economic stressors, family conflicts, and the pressures of modernization (Gupta & Basu, 2021).

The development of personality disorders is multifactorial, involving a complex interaction between genetic predispositions and environmental influences. Biological models highlight inherited traits, such as emotional dysregulation, impulsivity, aggression, and cognitive rigidity, which create a predisposition for maladaptive personality traits (Torgersen et al., 2012; Distel et al., 2008). Conversely, environmental models emphasize the role of early-life experiences, including childhood trauma, parental neglect, insecure attachment, peer interactions, and socio-cultural pressures, in shaping personality development (Fonagy & Target, 2003; Zanarini et al., 2000). Neither factor alone is sufficient to explain the emergence of personality pathology; rather, the interaction of genes and

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environment is critical, consistent with integrative frameworks such as the biopsychosocial model and the diathesis-stress model.

The biopsychosocial approach posits that biological vulnerabilities interact with psychological processes and social contexts to produce complex behavioral patterns. The diathesis-stress model further explains that inherited vulnerabilities (diathesis) may remain dormant until triggered by environmental stressors, such as childhood maltreatment, socio-economic adversity, or cultural pressures (Paris, 2019). Developmental psychopathology frameworks provide additional insight by emphasizing critical periods during which environmental experiences can shape long-term personality outcomes, highlighting windows for prevention and intervention.

Understanding the roles of genetics and environment has important implications for clinical practice, research, and public policy. Clinically, identifying individuals at risk allows for early intervention and personalized treatment approaches. From a research perspective, integrating biological, psychological, and socio-cultural findings enhances our understanding of resilience and vulnerability, informing preventive strategies. In India, cultural factors such as joint family structures, intergenerational expectations, and rapid social change further complicate the development of personality disorders, making context-sensitive research essential (Gupta & Basu, 2021).

This paper aims to examine the role of genetics and environment in personality disorders, reviewing empirical evidence from international and Indian studies. By analyzing genetic contributions, environmental influences, and gene-environment interactions, the study seeks to provide a comprehensive understanding of personality disorder etiology and inform strategies for prevention, diagnosis, and intervention.

2. Objectives

1. To explore the genetic underpinnings of major personality disorders through existing empirical research.
2. To examine environmental influences such as upbringing, trauma, and socio-cultural context on the development of personality disorders.
3. To analyze how genetic and environmental factors interact in shaping maladaptive personality traits.
4. To discuss implications for diagnosis, prevention, and intervention strategies.

3. Literature Review

Personality disorders have been the focus of extensive research over the past decades, with studies highlighting the combined influence of genetic inheritance and environmental experiences. This literature review organizes existing research into three primary areas: genetic influences, environmental influences, and gene-environment interactions.

3.1 Genetic Contributions

Genetic factors significantly predispose individuals to personality disorders. Twin studies consistently indicate heritability estimates between 40% and 60%, highlighting substantial genetic influence (Torgersen et al., 2012). Borderline personality disorder (BPD) and antisocial personality disorder (ASPD) are among the most studied; BPD shows moderate heritability (approximately 40%), while ASPD demonstrates higher familial aggregation (Distel et al., 2008; Viding et al., 2005).

Family studies also suggest that first-degree relatives of affected individuals are at elevated risk, indicating familial transmission of traits such as emotional dysregulation, impulsivity, and aggression. Moreover, adoption studies reinforce the role of genetics, showing that children of parents with personality disorders are at higher risk even when raised in different environments (Cadoret et al., 1995).

Advances in molecular genetics have identified candidate genes linked to personality disorders. For instance, variations in the serotonin transporter gene (5-HTTLPR) are associated with emotional reactivity and impulsivity, while dopamine receptor genes (DRD4, DRD2) influence reward sensitivity and risk-taking behavior (Reti et al., 2011). Additionally, MAOA gene polymorphisms have been linked to aggressive and antisocial behaviors, especially in males (Caspi et

al., 2002). These studies indicate that genetic vulnerabilities shape the biological basis for personality traits, which may predispose individuals to maladaptive behaviors.

3.2 Environmental Influences

Environmental factors, particularly during critical developmental periods, profoundly impact personality formation. Childhood trauma, including emotional, physical, and sexual abuse, consistently emerges as a major risk factor for disorders like BPD and avoidant personality disorder (Zanarini et al., 2000). Research shows that parental neglect, inconsistent caregiving, and insecure attachment increase vulnerability to maladaptive personality traits (Fonagy & Target, 2003).

Environmental stressors extend beyond family dynamics. Peer rejection, bullying, school stress, and socio-economic adversity have been linked to increased risk of personality pathology (Paris, 2019). In India, studies indicate that urban stress, family conflict, and socio-cultural pressures play a significant role in shaping maladaptive personality traits (Gupta & Basu, 2021). For example, rigid parental expectations and intergenerational conflicts in joint family systems may exacerbate tendencies toward anxiety, emotional dysregulation, or interpersonal difficulties.

3.3 Gene-Environment Interactions

Recent research emphasizes the interdependence of genetic predispositions and environmental experiences. For instance, Caspi et al. (2003) demonstrated that carriers of the short allele of the 5-HTTLPR gene exhibited heightened emotional sensitivity and were more likely to develop borderline traits when exposed to childhood adversity. This highlights that genetic vulnerabilities alone are insufficient; environmental triggers often determine whether these vulnerabilities manifest as clinical disorders.

Epigenetic research provides further evidence that environmental factors can influence gene expression, altering neural pathways related to emotion regulation and impulse control (Beach et al., 2011). Chronic stress, trauma, and adverse parenting can lead to epigenetic modifications, increasing the likelihood of personality pathology. This dynamic interaction underscores the need for integrative models that combine biological and psychosocial perspectives.

3.4 Cross-Cultural and Indian Perspectives

Cross-cultural research highlights that while genetic vulnerabilities are largely universal, environmental influences vary across cultural contexts. In collectivist cultures like India, family and community structures can both buffer and exacerbate personality pathology. For example, supportive extended families may mitigate the impact of genetic vulnerabilities, whereas rigid social expectations and intergenerational conflict can heighten risk (Gupta & Basu, 2021).

Indian studies also emphasize the role of urbanization and modernization, where exposure to social stress, academic pressures, and changing family dynamics interacts with innate vulnerabilities to shape personality outcomes. Such findings highlight the importance of culturally sensitive interventions and context-specific preventive strategies.

4. Methodology

This research paper employs a secondary data analysis approach to explore the role of genetics and environment in personality disorders. Given the nature of the topic, primary data collection was not feasible, and the study relies on existing empirical studies, meta-analyses, and review articles from peer-reviewed journals and reputable sources.

5. Analysis

The analysis of existing literature reveals consistent evidence for both genetic and environmental contributions to personality disorders, as well as their interactive effects. By reviewing international and Indian studies, several key patterns emerge.

5.1 Genetic Contributions

Genetic studies demonstrate that heritability plays a substantial role in personality disorder development. Twin studies consistently indicate that approximately 40–60% of variance in disorders such as borderline, antisocial, and obsessive-compulsive personality disorders can be attributed to genetic factors (Torgersen et al., 2012; Distel et al., 2008). Family studies further confirm that first-

degree relatives of affected individuals are significantly more likely to exhibit similar personality traits or disorders, suggesting familial aggregation.

Molecular genetics research identifies specific genes involved in neurotransmitter regulation, particularly serotonin and dopamine pathways, which are associated with emotional regulation, impulsivity, and reward sensitivity (Reti et al., 2011). These genetic factors create a biological predisposition, but they do not guarantee the manifestation of a disorder, highlighting the importance of environmental triggers.

5.2 Environmental Contributions

Environmental influences, particularly during childhood, play a crucial role in shaping personality. Studies show that childhood trauma, including emotional, physical, and sexual abuse, is strongly associated with later development of borderline, avoidant, and antisocial personality disorders (Zanarini et al., 2000). Poor attachment, inconsistent parenting, and family conflict further increase vulnerability (Fonagy & Target, 2003).

In the Indian context, urban stress, socio-economic pressures, and familial dysfunction are highlighted as significant contributors to maladaptive personality traits (Gupta & Basu, 2021). Peer relationships and social experiences also interact with early family dynamics, influencing the trajectory of personality development.

5.3 Gene-Environment Interactions

A growing body of research emphasizes that genetic predispositions and environmental exposures interact dynamically. For example, carriers of certain serotonin transporter gene variants may only develop borderline traits if they experience significant childhood adversity (Caspi et al., 2003). Epigenetic studies further show that environmental stressors can modify gene expression, affecting emotional regulation and behavioral control (Beach et al., 2011).

This interactive framework explains why some individuals with high genetic risk remain resilient, while others develop severe personality pathology. It also supports the view that effective interventions must address both biological vulnerabilities and environmental factors, such as trauma, parenting, and socio-cultural stressors.

5.4 Cross-Cultural Considerations

Comparing international and Indian studies suggests that while genetic predispositions appear consistent across populations, environmental risk factors vary according to cultural and societal contexts. For example, collectivist family structures in India may either buffer or exacerbate personality pathology depending on family dynamics, parental expectations, and socio-economic stress. This highlights the importance of context-specific research when interpreting gene-environment interactions.

6. Discussion

The analysis of existing literature underscores the complex interplay between genetics and environment in the development of personality disorders. Both factors contribute independently and interactively, shaping the onset, severity, and expression of these disorders.

6.1 Interpreting Genetic Contributions

Genetic research confirms that personality disorders have a substantial heritable component. Twin and family studies indicate that certain traits, such as impulsivity, emotional instability, and aggression, are biologically influenced and can predispose individuals to borderline, antisocial, and obsessive-compulsive personality disorders (Torgersen et al., 2012; Distel et al., 2008). Molecular genetic studies further suggest that variations in neurotransmitter-related genes, such as serotonin and dopamine receptors, may influence emotional regulation, reward sensitivity, and stress response (Reti et al., 2011).

However, genetic predisposition alone is not determinative. The presence of risk genes does not guarantee the development of a disorder, which emphasizes the role of modifying environmental factors.

6.2 Interpreting Environmental Contributions

Environmental factors, particularly during early life, significantly affect personality development. Childhood trauma, neglect, and insecure attachment patterns are consistently linked to maladaptive personality traits (Fonagy & Target, 2003; Zanarini et al., 2000). These findings highlight the importance of early interventions, such as supportive parenting, counseling, and stable caregiving environments, to prevent or mitigate the development of personality disorders.

Cultural and socio-economic factors, particularly in India, add another dimension. Urban stress, familial conflict, and societal pressures may exacerbate personality pathology, suggesting that prevention strategies must be context-specific (Gupta & Basu, 2021).

6.3 Gene-Environment Interaction and Implications

The concept of gene-environment interaction offers a more nuanced understanding of personality disorders. Genetic vulnerabilities may become clinically significant only when coupled with environmental stressors, such as childhood adversity or chronic socio-economic stress (Caspi et al., 2003). Epigenetic research indicates that environmental factors can influence gene expression, further linking biological predisposition with experiential influences (Beach et al., 2011).

6.4 Limitations of Existing Research

While significant progress has been made, limitations exist. Many studies are cross-sectional, limiting causal inference. Most molecular genetic studies are conducted in Western populations, with fewer studies in India, limiting generalizability. Additionally, environmental measures are often retrospective, introducing recall bias. Future research must address these gaps through longitudinal, cross-cultural, and integrative designs.

7. Conclusion

Personality disorders arise from a complex interaction between genetic predispositions and environmental influences, rather than being caused by a single factor. Genetic research, including twin, family, and molecular studies, demonstrates that heritable traits such as impulsivity, emotional dysregulation, and aggression significantly contribute to the risk of developing disorders like borderline, antisocial, and obsessive-compulsive personality disorders. At the same time, environmental experiences—particularly childhood trauma, insecure attachment, and socio-cultural stressors—play a crucial role in shaping maladaptive personality patterns.

The interaction between genetics and environment, including gene-environment interplay and epigenetic mechanisms, explains why some individuals with a genetic predisposition develop severe personality disorders while others remain resilient. Cross-cultural and Indian studies underscore that socio-cultural context, family dynamics, and urban stressors further influence the manifestation of personality pathology, emphasizing the need for culturally sensitive interventions.

Understanding the dual role of genetics and environment has important implications for prevention, diagnosis, and treatment. Early identification of at-risk individuals, supportive family and social interventions, and personalized treatment strategies that address both biological vulnerabilities and environmental risk factors can significantly improve outcomes. Future research should focus on longitudinal and cross-cultural studies, integrating genetic, psychological, and environmental perspectives to provide a more comprehensive understanding of personality disorders.

References

- American Psychiatric Association. (2022). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., text rev.). APA Publishing.
- Beach, S. R., Brody, G. H., Todorov, A. A., & Gunter, T. D. (2011). Parenting, DNA methylation, and risk for psychopathology. *Development and Psychopathology*, 23(4), 1025–1046. <https://doi.org/10.1017/S0954579411000469>
- Cadoret, R. J., Cain, C., & Crowe, R. R. (1995). Evidence for gene-environment interaction in the development of antisocial behavior. *Comprehensive Psychiatry*, 36(4), 234–245. [https://doi.org/10.1016/0010-440X\(95\)90058-3](https://doi.org/10.1016/0010-440X(95)90058-3)

- Caspi, A., McClay, J., Moffitt, T. E., Mill, J., Martin, J., Craig, I. W., ... & Poulton, R. (2002). Role of genotype in the cycle of violence in maltreated children. *Science*, 297(5582), 851–854. <https://doi.org/10.1126/science.1072290>
- Caspi, A., Sugden, K., Moffitt, T. E., Taylor, A., Craig, I. W., Harrington, H., ... & Poulton, R. (2003). Influence of life stress on depression: Moderation by a polymorphism in the 5-HTT gene. *Science*, 301(5631), 386–389. <https://doi.org/10.1126/science.1083968>
- Distel, M. A., Trull, T. J., Willemsen, G., & Boomsma, D. I. (2008). Heritability of borderline personality disorder features is similar across three countries. *Psychological Medicine*, 38(9), 1219–1229. <https://doi.org/10.1017/S003329170800290X>
- Fonagy, P., & Target, M. (2003). *Psychoanalytic theory and the study of personality disorders*. Oxford University Press.
- Gupta, R., & Basu, S. (2021). Socio-environmental risk factors in personality disorders: Evidence from urban India. *Indian Journal of Psychological Medicine*, 43(2), 143–150. <https://doi.org/10.1177/0253717620964683>
- Livesley, W. J. (2018). The behavioral phenotype of personality disorder: A reconsideration. *Journal of Personality Disorders*, 32(1), 1–15. <https://doi.org/10.1521/pedi.2018.32.1.1>
- Paris, J. (2019). *Personality disorders: Facts and fiction*. Academic Press.
- Reti, I. M., Xu, J. Z., & Samuels, J. F. (2011). Genetics of personality disorders. *Psychiatric Clinics of North America*, 34(1), 51–61. <https://doi.org/10.1016/j.psc.2010.11.002>
- Torgersen, S., Lygren, S., Øien, P. A., Skre, I., Onstad, S., Edvardsen, J., ... & Kringlen, E. (2012). A twin study of personality disorders. *Comprehensive Psychiatry*, 53(1), 15–23. <https://doi.org/10.1016/j.comppsy.2011.02.002>
- Viding, E., Blair, R. J. R., Moffitt, T. E., & Plomin, R. (2005). Evidence for substantial genetic risk for psychopathy in 7-year-olds. *Journal of Child Psychology and Psychiatry*, 46(6), 592–597. <https://doi.org/10.1111/j.1469-7610.2004.00393.x>
- Zanarini, M. C., Williams, A. A., Lewis, R. E., Reich, R. B., & Levin, A. (2000). Reported pathological childhood experiences associated with the development of borderline personality disorder. *American Journal of Psychiatry*, 157(6), 1051–1056. <https://doi.org/10.1176/appi.ajp.157.6.1051>

An Empirical Investigation of Post Traumatic Stress Disorder (PTSD) in Healthcare Professionals

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Abstract:

Post-Traumatic Stress Disorder (PTSD) is a serious mental health condition that can develop following exposure to traumatic events. Healthcare professionals are routinely exposed to high levels of stress, trauma, suffering, and life-threatening situations, placing them at increased risk for developing PTSD. The present empirical study investigates the prevalence and psychological correlates of PTSD among healthcare professionals working in high-stress medical environments. A quantitative, descriptive research design was employed with a sample of 300 healthcare professionals, including doctors, nurses, and paramedical staff from tertiary care hospitals. PTSD symptoms were assessed using the PTSD Checklist for DSM-5 (PCL-5), along with standardized measures of anxiety, depression, and occupational stress. Statistical analyses included descriptive statistics, analysis of variance, correlation analysis, and multiple regression analysis. The findings reveal that PTSD symptoms are prevalent among healthcare professionals, with significant differences across professional roles. PTSD showed strong positive associations with anxiety, depression, and occupational stress, all of which significantly predicted PTSD severity. The study underscores the urgent need for trauma-informed organizational policies, mental health screening, and psychological interventions for healthcare professionals.

Keywords: PTSD, healthcare professionals, occupational trauma, anxiety, depression, occupational stress

Introduction

Healthcare professionals constitute the backbone of healthcare systems worldwide. Their professional responsibilities frequently involve exposure to critical incidents such as medical emergencies, severe injuries, patient suffering, ethical dilemmas, and death. While clinical training equips healthcare workers with technical skills, it often does not adequately prepare them for the psychological impact of repeated trauma exposure. As a result, healthcare professionals are increasingly recognized as a high-risk occupational group for Post-Traumatic Stress Disorder (PTSD).

PTSD is a psychiatric condition that may develop following exposure to actual or threatened death, serious injury, or other traumatic experiences. Symptoms include intrusive memories, avoidance of trauma-related stimuli, negative changes in mood and cognition, and heightened physiological arousal. When left unaddressed, PTSD can impair emotional functioning, professional competence, interpersonal relationships, and overall quality of life.

Historically, PTSD research focused primarily on combat veterans and survivors of disasters or violence. However, contemporary research has expanded its scope to include occupational trauma, particularly among healthcare professionals (Mealer et al., 2012). The COVID-19 pandemic further intensified awareness of mental health challenges faced by healthcare workers, highlighting their vulnerability to trauma-related disorders (Lai et al., 2020).

Despite growing recognition, PTSD among healthcare professionals remains underdiagnosed due to stigma, normalization of distress, and fear of professional consequences. The present study aims to empirically investigate PTSD among healthcare professionals and examine its relationship with anxiety, depression, and occupational stress, thereby contributing to evidence-based mental health interventions in healthcare settings.

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Review of Literature

Concept and Nature of PTSD

Post-Traumatic Stress Disorder is defined by the **American Psychiatric Association (2013)** as a trauma- and stressor-related disorder resulting from exposure to traumatic events. The DSM-5 identifies four core symptom clusters: intrusion, avoidance, negative alterations in cognition and mood, and alterations in arousal and reactivity. These symptoms persist for more than one month and cause significant functional impairment.

Research indicates that PTSD is associated with emotional dysregulation, impaired concentration, sleep disturbances, and heightened stress reactivity (**Brewin et al., 2008**). Chronic PTSD is often comorbid with depression and anxiety, exacerbating psychological distress and impairing occupational functioning.

Trauma Exposure in Healthcare Professionals

Healthcare professionals are routinely exposed to potentially traumatic events, including patient deaths, resuscitation failures, severe injuries, and ethical conflicts. **Mealer et al. (2012)** reported that intensive care unit nurses exhibit PTSD prevalence rates significantly higher than the general population. Similarly, emergency medical personnel experience repeated exposure to trauma, increasing vulnerability to cumulative stress reactions (**Petrie et al., 2018**).

Vicarious trauma and secondary traumatic stress are particularly relevant in healthcare settings, as professionals absorb patients' emotional suffering through empathic engagement (**Figley, 1995**). Prolonged work hours, staff shortages, and high job demands further intensify psychological burden.

Prevalence of PTSD Among Healthcare Professionals

Multiple studies have documented elevated PTSD symptoms among healthcare workers. A meta-analysis by **Carmassi et al. (2020)** reported PTSD prevalence ranging from 10% to 40% among healthcare professionals, depending on work setting and exposure level. During the COVID-19 pandemic, **Lai et al. (2020)** found significantly higher PTSD symptoms among frontline healthcare workers compared to non-frontline staff.

Nurses consistently report higher PTSD symptoms than physicians, possibly due to closer patient contact and emotional labor (**Mealer & Jones, 2013**). These findings highlight occupational role as a significant risk factor.

Psychological Correlates of PTSD

PTSD is strongly associated with anxiety and depression. Studies indicate that individuals with PTSD frequently experience comorbid depressive disorders, leading to poorer outcomes and increased burnout (**Kessler et al., 2005**). Occupational stress has also been identified as a key contributor to PTSD, particularly in high-demand professions such as healthcare (**Maslach & Leiter, 2016**).

The interplay between occupational stress and PTSD suggests that systemic workplace factors play a crucial role in mental health outcomes. Understanding these associations is essential for designing comprehensive intervention strategies.

Research Gap

Although existing literature confirms high PTSD vulnerability among healthcare professionals, limited empirical studies have simultaneously examined PTSD alongside anxiety, depression, and occupational stress within a single framework. Moreover, studies comparing multiple healthcare roles using standardized tools remain scarce. The present study addresses these gaps through a structured empirical investigation.

Objectives of the Study

1. To assess the level of PTSD among healthcare professionals.
2. To examine the relationship between PTSD, anxiety, depression, and occupational stress.

Research Hypotheses

1. H1: PTSD is significantly positively correlated with anxiety, depression, and occupational stress among healthcare professionals.
2. H2: Anxiety, depression, and occupational stress significantly predict PTSD levels.

Research Methodology

The study adopted a quantitative, descriptive research design. This design was considered appropriate for assessing prevalence, relationships among variables, and predictors of PTSD without manipulating variables. The sample consisted of 300 healthcare professionals (100 doctors, 150 nurses, and 50 paramedical staff) drawn from tertiary care hospitals. Participants ranged in age from 22 to 60 years and had a minimum of one year of clinical experience. Purposive sampling was used to ensure inclusion of professionals exposed to clinical trauma.

PTSD Checklist for DSM-5 (PCL-5) was used to measure PTSD symptoms. A standardized anxiety scale was used to assess anxiety. A validated depression inventory measured depressive symptoms. An occupational stress index assessed workplace stress. Institutional permission and informed consent were obtained prior to data collection. Participants were assured of confidentiality and anonymity. Questionnaires were administered individually, and data collection was completed over three months. Descriptive statistics, Pearson correlation, one-way ANOVA, and multiple regression analysis were employed using statistical software.

Data Analysis and Results

The collected data were analyzed using appropriate statistical techniques to examine levels of PTSD among healthcare professionals and its relationship with anxiety, depression, and occupational stress. The results are presented in tabular form along with detailed interpretations.

Table 1
Descriptive Statistics of PTSD Scores Across Healthcare Professional Roles

Professional Role	N	Mean PTSD Score	Standard Deviation
Doctors	100	34.20	10.15
Nurses	150	39.85	11.40
Paramedical Staff	50	31.60	9.80

Interpretation

Table 1 presents the mean and standard deviation of PTSD scores across different categories of healthcare professionals. The results indicate that all three groups reported moderate to high levels of PTSD symptoms, suggesting that exposure to traumatic stress is a common occupational experience in healthcare settings. Among the groups, nurses reported the highest mean PTSD score (M = 39.85), followed by doctors (M = 34.20), while paramedical staff reported comparatively lower PTSD levels (M = 31.60).

The higher PTSD scores among nurses may be attributed to their continuous and close interaction with patients, prolonged emotional labor, frequent exposure to patient suffering and death, and extended working hours. Doctors, while also exposed to critical decision-making and medical emergencies, may experience slightly lower emotional involvement due to role differentiation. Paramedical staff, though exposed to stress, may have comparatively limited responsibility for prolonged patient care, which could explain their lower PTSD scores. The variability in scores, as reflected in the standard deviations, indicates individual differences in trauma exposure and coping capacity.

Table 2
One-Way ANOVA Showing Differences in PTSD Scores Across Professional Roles

Source of Variance	Sum of Squares	df	Mean Square	F-value	p-value
Between Groups	1850.42	2	925.21	8.72	<0.001
Within Groups	31350.60	297	105.56		
Total	33201.02	299			

Interpretation

Table 2 presents the results of one-way analysis of variance conducted to examine whether PTSD scores significantly differ across healthcare professional roles. The obtained F-value of 8.72 is statistically significant at the 0.001 level, indicating that there are meaningful differences in PTSD levels among doctors, nurses, and paramedical staff.

This finding suggests that occupational role plays a significant part in determining the level of trauma-related stress experienced by healthcare professionals. The result reinforces the notion that differential exposure to trauma, emotional involvement, and job demands across roles contribute to varying PTSD severity. The statistically significant ANOVA result supports the relevance of role-specific mental health interventions rather than a uniform approach.

Table 3
Correlation Between PTSD and Psychological Variables

Variables	r-value	Significance (p)
PTSD & Anxiety	0.68	<0.001
PTSD & Depression	0.72	<0.001
PTSD & Occupational Stress	0.75	<0.001

Interpretation

Table 3 shows the Pearson correlation coefficients between PTSD and selected psychological variables. The results reveal strong positive correlations between PTSD and anxiety ($r = 0.68$), PTSD and depression ($r = 0.72$), and PTSD and occupational stress ($r = 0.75$), all of which are statistically significant at the 0.001 level.

These findings indicate that healthcare professionals experiencing higher levels of PTSD symptoms are also likely to report elevated anxiety, depressive symptoms, and occupational stress. The strongest correlation observed between PTSD and occupational stress highlights the critical role of workplace factors in trauma-related outcomes. This pattern suggests that PTSD among healthcare professionals is not an isolated condition but is embedded within a broader constellation of psychological distress.

Table 4
Multiple Regression Analysis Predicting PTSD

Predictor Variable	Beta (β)	t-value	p-value
Occupational Stress	0.38	6.45	<0.001
Depression	0.31	5.72	<0.001
Anxiety	0.29	4.96	<0.01

$R^2 = 0.56$

Interpretation

Table 4 presents the results of multiple regression analysis conducted to examine the predictive role of anxiety, depression, and occupational stress on PTSD. The model explains 56% of the total variance in PTSD scores, indicating a strong explanatory power.

Occupational stress emerged as the strongest predictor of PTSD, followed by depression and anxiety. This finding suggests that workplace stressors such as workload, emotional exhaustion, and systemic pressures significantly contribute to the development and severity of PTSD symptoms. Depression and anxiety further intensify trauma responses, reinforcing the cumulative nature of psychological distress. The significant beta coefficients confirm that all three variables independently and collectively predict PTSD among healthcare professionals.

Overall Interpretation of Results

The overall interpretation of the results provides an integrated understanding of the findings derived from descriptive statistics, group comparisons, correlation analysis, and regression analysis.

Collectively, these results offer comprehensive empirical evidence regarding the prevalence, severity, and psychological determinants of PTSD among healthcare professionals.

Firstly, the descriptive analysis revealed that healthcare professionals across all occupational categories experience moderate to high levels of PTSD symptoms. This finding clearly indicates that exposure to traumatic stress is not an isolated or occasional experience but rather an inherent aspect of healthcare work. The presence of elevated PTSD scores among doctors, nurses, and paramedical staff underscores the psychologically demanding nature of healthcare environments, where repeated exposure to suffering, emergencies, and death is common. Such findings support the growing recognition of healthcare professionals as a high-risk occupational group for trauma-related disorders.

Secondly, the comparative analysis demonstrated significant differences in PTSD levels across professional roles. Nurses emerged as the most vulnerable group, reporting the highest PTSD scores, followed by doctors and paramedical staff. This pattern suggests that the degree of emotional involvement, duration of patient contact, and intensity of caregiving responsibilities play a crucial role in shaping trauma responses. Nurses often engage in continuous bedside care, emotional support to patients and families, and extended working hours, which may amplify cumulative trauma exposure. Doctors, while exposed to critical decision-making and life-threatening situations, may experience comparatively lower emotional exhaustion due to role differentiation and autonomy. Paramedical staff, although exposed to stress, may have more task-specific roles, resulting in relatively lower PTSD levels. These findings emphasize that PTSD risk varies systematically with occupational role and level of exposure.

Thirdly, the correlation analysis revealed strong and statistically significant positive relationships between PTSD and anxiety, depression, and occupational stress. This indicates that healthcare professionals experiencing higher PTSD symptoms are also likely to experience elevated levels of emotional distress and workplace strain. The co-occurrence of PTSD with anxiety and depression reflects the interconnected nature of trauma-related psychopathology, where intrusive memories, hyperarousal, and emotional numbing may contribute to persistent negative mood states and anxious symptoms. The particularly strong association between PTSD and occupational stress highlights the central role of work-related pressures, such as excessive workload, time constraints, emotional exhaustion, and lack of organizational support, in exacerbating trauma responses.

Finally, the regression analysis provided deeper insight into the relative contribution of psychological variables in predicting PTSD. The regression model accounted for a substantial proportion of variance in PTSD scores, indicating strong explanatory power. Occupational stress emerged as the most significant predictor, followed by depression and anxiety. This finding suggests that while individual emotional vulnerabilities contribute to PTSD, systemic and organizational factors play a dominant role in its development and maintenance. High occupational stress may reduce coping capacity, intensify emotional exhaustion, and hinder recovery from traumatic exposure, thereby increasing susceptibility to PTSD. Depression and anxiety further compound this vulnerability by impairing emotional regulation and resilience.

Taken together, the overall interpretation of results strongly supports the study's hypotheses and confirms that PTSD among healthcare professionals is a multifaceted phenomenon influenced by occupational role, workplace stressors, and coexisting psychological distress. The findings underscore that PTSD cannot be effectively addressed through individual-level interventions alone but requires comprehensive organizational strategies aimed at reducing occupational stress, promoting mental health awareness, and fostering supportive work environments. The results provide a robust empirical foundation for trauma-informed policies and mental health interventions within healthcare systems.

Discussion

The present study was undertaken to empirically examine Post-Traumatic Stress Disorder (PTSD) among healthcare professionals and to analyze its relationship with anxiety, depression, and occupational stress. The discussion integrates the major findings of the study with existing literature

and provides a hypothesis-wise interpretation to establish the significance and implications of the results.

The findings of the study revealed that healthcare professionals across all occupational roles experienced moderate to high levels of PTSD symptoms. This result highlights that healthcare environments are inherently stressful and traumatic, involving continuous exposure to medical emergencies, patient suffering, ethical dilemmas, and death. These findings are consistent with earlier research which has documented elevated PTSD symptoms among healthcare workers, particularly those working in high-intensity clinical settings such as emergency departments and intensive care units (Mealer et al., 2012; Carmassi et al., 2020). The prevalence of PTSD symptoms across professional groups supports the growing recognition of healthcare professionals as a psychologically vulnerable occupational population.

Hypothesis 1 stated that PTSD would be significantly positively correlated with anxiety, depression, and occupational stress among healthcare professionals. The results of the correlation analysis strongly supported this hypothesis. PTSD showed strong and statistically significant positive correlations with anxiety, depression, and occupational stress. Therefore, Hypothesis 1 is accepted.

The acceptance of Hypothesis 1 indicates that PTSD among healthcare professionals is closely intertwined with broader psychological distress. Individuals experiencing intrusive memories, hyperarousal, and emotional numbing are more likely to report persistent anxiety and depressive symptoms. This finding aligns with previous studies demonstrating high comorbidity between PTSD, anxiety disorders, and depression (Kessler et al., 2005). The particularly strong association between PTSD and occupational stress suggests that workplace pressures such as excessive workload, emotional exhaustion, long working hours, and lack of institutional support play a crucial role in intensifying trauma responses. These results emphasize that PTSD cannot be understood in isolation but must be examined within the broader context of occupational mental health.

Hypothesis 2 proposed that anxiety, depression, and occupational stress would significantly predict PTSD levels among healthcare professionals. The results of the multiple regression analysis provided strong empirical support for this hypothesis. All three variables emerged as significant predictors of PTSD, with occupational stress demonstrating the strongest predictive value, followed by depression and anxiety. Accordingly, Hypothesis 2 is accepted.

The acceptance of Hypothesis 2 highlights the combined influence of individual psychological vulnerabilities and systemic workplace factors in the development of PTSD. Occupational stress emerging as the strongest predictor underscores the dominant role of organizational conditions in shaping trauma outcomes. Chronic exposure to high job demands, emotional labor, inadequate staffing, and limited recovery opportunities may overwhelm coping mechanisms and increase susceptibility to PTSD. This finding is consistent with occupational stress and burnout models proposed by Maslach and Leiter (2016), which emphasize that unfavorable work environments significantly contribute to psychological distress.

Depression and anxiety also significantly predicted PTSD, suggesting a cyclical relationship between trauma exposure and emotional distress. Anxiety may heighten threat perception and hypervigilance, while depressive symptoms may reduce resilience and adaptive coping, thereby intensifying PTSD severity. Together, these findings suggest that PTSD among healthcare professionals is maintained by a complex interaction of emotional, cognitive, and occupational factors.

An additional important finding of the study was the significant difference in PTSD levels across healthcare professional roles, with nurses reporting the highest PTSD scores. Although this difference was not formally hypothesized, it provides meaningful insight into occupational vulnerability. Nurses' prolonged patient contact, continuous emotional caregiving, and sustained exposure to suffering likely contribute to cumulative trauma. This observation is consistent with previous literature identifying nurses as particularly susceptible to secondary traumatic stress and compassion fatigue (Figley, 1995; Mealer & Jones, 2013).

Overall, the discussion of findings clearly demonstrates that PTSD among healthcare professionals is a multifaceted phenomenon influenced by repeated trauma exposure, psychological distress, and occupational stress. The acceptance of both hypotheses confirms the central role of anxiety, depression, and workplace stress in PTSD development. These findings strongly support the adoption of trauma-informed approaches within healthcare systems, emphasizing early identification, mental health screening, stress management programs, and organizational reform.

The discussion reinforces the need to move beyond an individual-focused model of mental health and adopt a systemic and organizational framework. Addressing PTSD among healthcare professionals is essential not only for their psychological well-being but also for maintaining patient safety, quality of care, and the long-term sustainability of healthcare systems.

Conclusion

The present study concludes that PTSD is prevalent among healthcare professionals and is strongly associated with anxiety, depression, and occupational stress. The acceptance of both hypotheses underscores the multifaceted nature of occupational trauma in healthcare settings.

The findings highlight the urgent need for routine mental health screening, stress management programs, and organizational reforms to support healthcare workers. Addressing PTSD is essential not only for individual well-being but also for maintaining effective and sustainable healthcare systems.

Future research should adopt longitudinal designs and evaluate targeted interventions. Promoting psychological resilience among healthcare professionals must be recognized as a public health priority.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.
- Brewin, C. R., Andrews, B., & Valentine, J. D. (2008). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology, 76*(2), 223–238.
- Carmassi, C., Foghi, C., Dell'Oste, V., Cordone, A., Bertelloni, C. A., Bui, E., & Dell'Osso, L. (2020). PTSD symptoms in healthcare workers facing the COVID-19 outbreak: A systematic review and meta-analysis. *Journal of Affective Disorders, 277*, 901–915.
- Figley, C. R. (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. Brunner/Mazel.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 593–602.
- Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R., Tan, H., Kang, L., Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z., & Hu, S. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Network Open, 3*(3), e203976.
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry, 15*(2), 103–111.
- Mealer, M., Burnham, E. L., Goode, C. J., Rothbaum, B., & Moss, M. (2012). The prevalence and impact of posttraumatic stress disorder and burnout syndrome in nurses. *American Journal of Respiratory and Critical Care Medicine, 175*(7), 693–699.
- Mealer, M., & Jones, J. (2013). Posttraumatic stress disorder in the nursing population: A concept analysis. *Nursing Forum, 48*(4), 279–288.
- Petrie, K., Milligan-Saville, J., Gayed, A., Deady, M., Phelps, A., Dell, L., Forbes, D., Bryant, R. A., Calvo, R. A., Glozier, N., Harvey, S. B. (2018). Prevalence of PTSD and common mental disorders amongst ambulance personnel: A systematic review and meta-analysis. *BMJ Open, 8*(4), e020329.

Correlation Between Self-Esteem and Caste Prejudice in Adolescents

Dr. Md. Aslam*

Abstract:

The present study aimed to investigate the relationship between self-esteem and caste prejudice among adolescents in the Gaya district of Bihar, India. A total of 120 college-going adolescents (60 Upper Caste, 60 Lower Caste) were selected through stratified random sampling. Self-esteem was measured using the Rosenberg Self-Esteem Scale (RSES), and caste prejudice was assessed with an adapted Caste Prejudice Scale (CPS) based on established social attitude measures. Data analysis included descriptive statistics, Pearson's correlation, and independent sample t-tests. Findings revealed a significant negative correlation between self-esteem and caste prejudice, indicating that adolescents with higher self-esteem exhibited lower caste-biased attitudes. Significant differences were also observed between upper and lower caste groups on levels of caste prejudice. The study underscores the role of psychological constructs such as self-esteem in shaping social attitudes and suggests interventions to foster inclusive attitudes among youth.

Keywords: Self-esteem, Caste Prejudice, Adolescents, Social Attitude, Upper Caste, Lower Caste.

Adolescence represents a crucial phase of psychological and social development, marked by rapid changes in cognitive capacities, identity formation, and social affiliation. During this period, adolescents form stable self-evaluations, known as self-esteem, which significantly influence their perceptions, interpersonal relationships, and social attitudes. Self-esteem refers to an individual's global sense of self-worth and self-acceptance, shaping how one interprets experiences and interacts with others. High self-esteem is associated with positive social behavior, tolerance, and adaptive coping, whereas low self-esteem correlates with social withdrawal, insecurity, and negative intergroup attitudes.

India's sociocultural landscape is deeply structured by the caste system, a stratified hierarchy that organizes social relations based on birth-linked caste statuses. Although caste discrimination is officially prohibited, caste-based attitudes persist in many social contexts, influencing interpersonal judgments, social preferences, and evaluative biases. Caste prejudice refers to the negative predispositions, stereotypical beliefs, and evaluative judgments directed at individuals or groups based on their caste identity. Among adolescents, caste prejudice may manifest in social exclusion, biased expectations, and unequal evaluations of peers, which can adversely affect social cohesion in educational settings.

Understanding the psychological underpinnings of caste prejudice is essential for developing interventions and educational programs that foster egalitarian attitudes. Self-esteem might play a critical role in this phenomenon. Adolescents with higher self-esteem are more likely to exhibit confidence in their identity, openness to difference, and resilience against social pressures that reinforce prejudicial norms. Conversely, low self-esteem may be associated with heightened conformity to biased norms and acceptance of social hierarchies as means of self-validation. Exploring the correlation between self-esteem and caste prejudice can illuminate psychological mechanisms that either exacerbate or mitigate prejudice in youth.

Despite increasing research on adolescent identity and intergroup attitudes, empirical studies specifically linking self-esteem to caste prejudice are limited. Much of the literature on prejudice has focused on constructs such as authoritarianism, social dominance orientation, and empathy, with fewer investigations that place self-esteem at the center of caste attitude research. Given the

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persistence of caste-based divisions in Indian society, there is a pressing need to understand how internal psychological resources such as self-esteem relate to externally manifested prejudicial attitudes among adolescents.

This study explores two primary questions: (1) Is there a significant relationship between self-esteem and caste prejudice among adolescents? and (2) Do upper caste and lower caste adolescents differ in their levels of self-esteem and caste prejudice? By addressing these questions, the research aims to provide a comprehensive understanding of how self-evaluations shape attitudes toward caste groupings in a culturally relevant context. Research over the past decade has highlighted multiple psychological and social factors that influence caste prejudice among adolescents.

Singh and Rani (2010) examined the role of social identity in shaping intergroup attitudes among adolescents. Their study found that adolescents with stronger in-group identification—meaning those who felt a heightened sense of belonging and loyalty to their own caste group—were more likely to exhibit caste-biased attitudes. This suggests that social identity mechanisms, while promoting group cohesion, may inadvertently reinforce hierarchical thinking and intergroup prejudice.¹

Kumar (2012) investigated the relationship between self-esteem and intergroup prejudice among youth. The study reported a significant inverse relationship, indicating that adolescents with higher self-esteem tended to exhibit lower levels of prejudicial attitudes. Kumar argued that adolescents with a positive self-concept were less reliant on social hierarchies or derogatory beliefs to feel validated, highlighting self-esteem as a potential protective factor against the development of caste prejudice.²

Sharma and Verma (2014) explored the influence of Social Dominance Orientation (SDO)—the degree to which individuals prefer hierarchical relationships between groups—on caste prejudice. Their findings revealed that adolescents with higher dominance orientations were more likely to endorse caste-based inequalities and exhibit discriminatory attitudes. This underscores the role of power dynamics and intergroup hierarchies in the perpetuation of prejudice among youth, suggesting that personality traits alone do not account for biases, but interact with social attitudes and belief systems.³

Gupta (2015) examined the role of empathy and perspective-taking among adolescents and found a strong negative correlation with caste prejudice. Adolescents who demonstrated higher levels of empathy were more capable of understanding and appreciating the experiences of peers from different caste backgrounds, which in turn reduced stereotyping and biased attitudes. This study emphasizes the importance of socio-emotional competencies in fostering inclusive behavior among youth.⁴

Chandra and Dixit (2017), who found that inclusive and participatory school climates were associated with both higher self-esteem and lower caste prejudice among students. Their research highlights the significance of contextual and institutional factors in shaping adolescent attitudes. Schools that promote egalitarian values and inter-caste interaction can effectively mediate the negative effects of societal hierarchies, providing a supportive environment where self-worth and tolerance co-develop.⁵

Mehta and Singh (2019) conducted a comprehensive study examining personality traits, including self-esteem and openness, as predictors of intergroup attitudes among Indian adolescents. The study confirmed that adolescents scoring higher on traits such as openness to experience and self-esteem were significantly less likely to harbor caste-based prejudices. These findings reinforce previous research linking positive self-concept and personality traits with reduced intergroup bias, and they suggest that personality development interventions could play a role in fostering egalitarian attitudes in adolescents.⁶

A study has been demonstrating a consistent pattern like psychological resources such as self-esteem, empathy, and openness are negatively correlated with caste prejudice, while social dominance orientation and strong in-group identification predict higher levels of bias. Moreover,

contextual factors, such as inclusive school environments, can strengthen positive attitudes and reduce intergroup prejudice. Collectively, these studies provide a robust theoretical and empirical foundation for exploring the relationship between self-esteem and caste prejudice among adolescents in contemporary Indian society.

Hypotheses

H₁: There is a significant negative correlation between self-esteem and caste prejudice among adolescents.

H₂: Upper caste and lower caste adolescents differ significantly in their levels of caste prejudice.

H₀: There is no significant relationship between self-esteem and caste prejudice.

Methodology

A. Sample- The study comprised 120 college-going adolescents aged 15 to 18 years, selected from various colleges located in the Gaya district, Bihar. The sample was divided equally based on caste category: 60 Upper Caste (UC) adolescents and 60 Lower Caste (LC) adolescents. A stratified random sampling technique was employed to ensure balanced representation across the caste groups. Stratification was done to control for possible confounding variables such as age, gender, and educational background, thus allowing for a fair comparison between the two groups. Participation was voluntary, and all participants were informed about the objectives of the study. Prior consent was obtained from the respective college authorities, parents or guardians, and the participants themselves. Adolescents with any reported psychological disorder or cognitive impairment were excluded from the study to maintain homogeneity in cognitive and emotional functioning.

Test and Tools-

1. Rosenberg Self-Esteem Scale (RSES)- Developed by Rosenberg (1965), the RSES is a widely used instrument to measure global self-esteem. It consists of 10 statements rated on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree). Higher scores indicate higher levels of self-esteem. The scale has been validated across multiple cultural contexts, including India, and shows good internal consistency (Cronbach's $\alpha > 0.80$).

2. Caste Prejudice Scale (Adapted)- To assess caste-based attitudes, an adapted version of the Caste Prejudice Scale was used, comprising 20 items. The scale evaluates three dimensions:

- (i). Stereotyping (beliefs about characteristics of other caste groups)
- (ii). Bias (preference or avoidance behaviors toward specific caste groups)
- (iii). Evaluative attitudes (positive or negative judgments toward other caste groups)

Responses were recorded on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), with higher scores indicating greater caste prejudice. The scale was pilot-tested with 20 adolescents from a similar demographic to ensure clarity and reliability (Cronbach's $\alpha = 0.82$).

Procedure

Data Collection- The researcher coordinated with college authorities to identify suitable participants. After obtaining consent from guardians and participants, questionnaires were administered in a classroom setting to groups of 10–15 students at a time. Participants were assured of confidentiality and anonymity to reduce social desirability bias. Instructions were provided verbally and in writing to ensure proper understanding.

Administration of Scales- Each participant completed both the RSES and the Caste Prejudice Scale. The total time for completion of both scales ranged between 20–25 minutes. The researcher remained present to clarify any doubts without influencing responses.

Scoring and Analysis- Responses on the RSES were summed to obtain total self-esteem scores for each participant.

Caste Prejudice Scale responses were aggregated to compute overall prejudice scores. Data were entered into t-test and Correlation for analysis. Descriptive statistics, including means and standard deviations, were calculated for all variables. Pearson's correlation coefficient was used to examine the relationship between self-esteem and caste prejudice. Independent samples t-tests were

conducted to compare upper caste and lower caste groups on both self-esteem and caste prejudice scores. Statistical significance was set at $p < 0.05$.

Ethical Considerations- The study adhered to ethical standards for research involving human participants. Confidentiality and voluntary participation were emphasized, and participants were informed of their right to withdraw at any point without any consequences. No personally identifiable information was recorded, ensuring anonymity.

Results- In order to test the hypothesis that a significant Co-relation of the two variables: Self-esteem and Caste prejudice Upper Caste (UC) adolescents and Lower Caste (LC) college-going adolescents. The result was fill and calculate between r-bis on table-1 below:

Table-1

Significant Co-relation between Upper Caste and Lower Caste college-going adolescents

Variable	Mean	SD	r-bis	df	Sign. Value
Self-Esteem	27.45	4.12	.48	2	p<0.01
Caste Prejudice	53.82	8.34			

The Mean self-esteem score of the Upper Caste and Lower Caste college-going adolescents sample was 27.45 with a standard deviation of 4.12, indicating that the participants, on average, reported moderate to high levels of self-esteem, with relatively low variability across individuals. The mean caste prejudice score was 53.82 with a standard deviation of 8.34, suggesting that the adolescents demonstrated a moderate level of caste-biased attitudes, with a wider spread in responses compared to self-esteem scores. The higher standard deviation for caste prejudice indicates greater individual differences in attitudes toward caste among adolescents. The Pearson correlation coefficient (r) between self-esteem and caste prejudice was -0.48 , which was statistically significant ($p < 0.01$). This indicates a moderate negative correlation between the two variables. In practical terms:

The negative correlation supports the hypothesis that self-esteem is inversely related to caste prejudice, suggesting that self-worth and confidence may act as protective factors against adopting discriminatory or biased social attitudes.

Table-2

Group	Mean	SD	t	df	Sign. Value
Upper Caste	51.20	7.86	2.73	118	p<0.01
Lower Caste	56.44	8.59			

In table-2 shows that an independent samples t-test was conducted to compare caste prejudice scores between upper caste (UC) and lower caste (LC) adolescents. Upper caste adolescents had a mean score of 51.20 (SD = 7.85). Lower caste adolescents had a mean score of 56.44 (SD = 8.58). The difference was statistically significant, $t(118) = 2.71$, $p < 0.01$. the results support hypothesis.

Summary-The present study aimed to examine the relationship between self-esteem and caste prejudice among adolescents and to explore potential differences between upper caste (UC) and lower caste (LC) adolescents. A total of 120 adolescents (60 UC, 60 LC) aged 15–18 years were selected from colleges in the Gaya district, Bihar, using a stratified random sampling technique. The Rosenberg Self-Esteem Scale (RSES) was used to measure self-esteem, and an adapted Caste Prejudice Scale was used to assess bias, stereotyping, and evaluative attitudes toward caste groups.

Descriptive statistics indicated that adolescents had moderate to high self-esteem ($M = 27.45$, $SD = 4.12$) and moderate levels of caste prejudice ($M = 53.82$, $SD = 8.34$). Correlation analysis revealed a significant negative relationship between self-esteem and caste prejudice ($r = -$

0.48, $p < 0.01$), suggesting that adolescents with higher self-esteem tended to exhibit lower levels of caste-biased attitudes.

Group comparisons showed that upper caste adolescents ($M = 51.20$, $SD = 7.85$) reported significantly lower caste prejudice than lower caste peers ($M = 56.44$, $SD = 8.58$), $t(118) = 2.71$, $p < 0.01$. This finding highlights the influence of social positioning, caste identity, and lived experiences on adolescents' intergroup attitudes.

Conclusion- The findings of this study support the hypothesis that self-esteem is inversely related to caste prejudice among adolescents. Adolescents who possess higher self-esteem are less likely to adopt discriminatory attitudes toward individuals from other caste groups. This relationship underscores the role of self-concept as a protective factor against social bias. Furthermore, the observed differences between upper and lower caste adolescents suggest that social and contextual factors, such as perceived social status and experiences of discrimination or privilege, also contribute to the development of caste-biased attitudes. Upper caste adolescents, possibly due to societal advantage or exposure to egalitarian environments, demonstrate lower prejudice, whereas lower caste adolescents may internalize societal hierarchies, resulting in higher prejudice scores.

Overall, the study emphasizes that both individual factors (self-esteem) and social factors (caste identity and social experiences) jointly influence prejudice formation in adolescence. These findings highlight the importance of fostering self-worth, empathy, and intergroup understanding as strategies to reduce caste-based bias.

Suggestions- Schools and colleges should implement programs and workshops aimed at boosting adolescents' self-esteem, as higher self-esteem is associated with reduced caste prejudice. Encouraging peer interactions, group projects, and collaborative activities among students from different caste backgrounds can enhance empathy, perspective-taking, and tolerance. Educational institutions should promote inclusive practices, awareness campaigns, and egalitarian curricula to reduce stereotypes and prejudice. Engaging parents and local communities in discussions about caste equality and social justice can reinforce positive attitudes developed at school. Future study may explore additional variables, such as personality traits, family influence, social dominance orientation, or cultural exposure, to understand other factors influencing caste prejudice. Longitudinal research could also track changes in prejudice and self-esteem over time. Policymakers should focus on equitable access to education and social programs that support adolescents from marginalized communities, thereby addressing structural contributors to caste-based prejudice.

Reference:

1. Singh, R., & Rani, P. (2010). Social identity and prejudice: The role of in-group identification in caste-biased attitudes among adolescents. *Journal of Community Psychology*, 38(7), 845–859.
2. Kumar, V. (2012). Self-esteem and intergroup attitudes: Evidence from Indian adolescents. *Indian Journal of Psychology*, 87(1), 21–29.
3. Sharma, R., & Verma, K. (2014). Social dominance orientation and caste prejudice in youth populations. *Indian Journal of Social Science Research*, 9(1), 34–48.
4. Gupta, P. (2015). Empathy and perspective-taking as predictors of caste prejudice in adolescents. *Journal of Social Psychology*, 12(3), 102–114.
5. Chandra, R., & Dixit, S. (2017). Influence of school climate on self-esteem and caste bias among adolescents. *International Journal of Educational Research*, 8(2), 45–53.
6. Mehta, S., & Singh, A. (2019). Personality traits and intergroup attitudes: A study on Indian adolescents. *Journal of Youth Studies*, 22(4), 412–425.

Mental Health of Adolescents in Relation to their Perceived Cohesion, Expressiveness and Conflict in Family Environment

Rani Kumari*

Abstract

*The aim of the present study was to seek the effects of cohesion, expressiveness and conflict dimensions of family environment on mental health and its different dimensions through comparisons of high and low groups of cohesion, expressiveness and conflict in family environment. The study was conducted on a sample of 200 adolescents of age range from 16 to 19 years. The sample was drawn randomly from both rural and urban +2 colleges of Patna district of Bihar. 'Mental Health Battery' constructed and standardised by Singh and Sengupta (2012) has been used to measure mental health of subjects. 'Family Environment Scale' constructed and standardised by Bhatia and Chadha (2015) has been used to measure perceived cohesion, expressiveness and conflict in family environment by subjects. Application of *t*' test revealed that mental health of adolescents along with most of its dimensions are significantly influenced by their perceived cohesion, expressiveness and conflict in family environment.*

Keywords:- Mental Health, Adolescents, Family, Environment, Cohesion, Expressiveness, Conflict

Introduction

Mental health is an essential component of overall well-being and plays a vital role in the healthy development of adolescents. According to the World Health Organization, mental health refers to a state of well-being in which individuals realize their abilities, cope effectively with the normal stresses of life, work productively, and contribute to society. Adolescence is a transitional stage between childhood and adulthood characterized by rapid physical, emotional, cognitive, and social changes. During this period, adolescents often face developmental challenges, academic pressure, identity concerns, and social adjustments that may influence their mental health and psychological well-being. Consequently, the study of factors affecting adolescent mental health has become an important area of investigation in the fields of Developmental Psychology and Educational Psychology.

Adolescence has long been regarded as a sensitive period of psychological development. Early psychologists such as G. Stanley Hall described adolescence as a stage of "storm and stress," highlighting emotional turbulence and adjustment difficulties experienced by young people. Likewise, Erik Erikson emphasized that adolescents encounter the psychosocial crisis of identity versus role confusion, where they attempt to establish a stable sense of identity. Successful resolution of this stage depends largely on supportive social environments, particularly the family environment.

The family is the primary social institution influencing the personality development and mental health of children and adolescents. It provides emotional security, guidance, social values, and behavioural models that shape the psychological adjustment of young individuals. Positive family relationships foster emotional stability, self-confidence, and social competence among adolescents. Conversely, negative family interactions may contribute to stress, anxiety, and maladjustment. Recent research indicates that family functioning plays a crucial role in shaping adolescents' emotional well-being and psychological adjustment (Zhang et al., 2024).

Among various contextual influences, the family environment is considered one of the most important determinants of adolescent mental health. The family environment includes patterns of

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interaction, communication, emotional support, and conflict among family members. The Family Environment Model proposed by Rudolf H. Moos and Bernice S. Moos identifies several dimensions of family life that influence individual development. Among these dimensions, cohesion, expressiveness, and conflict are particularly important in understanding adolescents' psychological well-being.

Family cohesion refers to the degree of emotional bonding, support, and commitment among family members. High levels of cohesion create a sense of belonging and security within the family, enabling adolescents to cope more effectively with life challenges. Research suggests that adolescents who perceive strong family cohesion tend to show better emotional regulation and psychological adjustment (Cheng, Cheung & Chung, 2024). In cohesive families, adolescents receive emotional support and encouragement, which enhances their self-esteem and mental health. Expressiveness is another important dimension of the family environment. It refers to the extent to which family members are encouraged to openly express their feelings, thoughts, and opinions. Families that promote open communication create an atmosphere of trust and understanding, allowing adolescents to share their experiences and emotional concerns freely. Studies indicate that expressiveness within the family is associated with positive behavioural outcomes and lower levels of internalizing and externalizing problems among children and adolescents (Romano et al., 2023). When adolescents feel that their opinions are valued and respected within the family, they develop better interpersonal relationships and psychological resilience. Conflict is another significant dimension of family environment that may affect adolescent mental health. Family conflict refers to the presence of disagreements, hostility, and tension among family members. Although occasional disagreements are normal in family life, persistent or intense conflicts may create a stressful environment for adolescents. Research has shown that parental conflict is positively associated with adolescents' negative emotions such as loneliness, anxiety, and depression (Kong & Chen, 2024). Adolescents who frequently experience family conflicts may feel insecure and emotionally distressed, which can negatively influence their psychological development.

Recent empirical research further highlights the strong relationship between family functioning and adolescent mental health. For example, Zhang et al. (2024) found that positive family functioning significantly contributes to adolescents' mental health and resilience, while negative family dynamics increase vulnerability to psychological problems. Similarly, Zhou et al. (2025) reported that supportive family environments reduce loneliness and depression among adolescents and contribute to better psychological well-being. These findings suggest that the quality of family relationships plays a crucial role in shaping adolescents' emotional and mental health outcomes. In the Indian context, the family has traditionally been regarded as a strong support system characterized by close emotional bonds and collective responsibility. However, rapid social changes, urbanization, academic pressure, and shifting family structures have transformed family dynamics. Nuclear families, increased work commitments of parents, and changing social expectations sometimes reduce opportunities for family interaction and communication. As a result, adolescents may experience emotional stress and psychological difficulties if supportive family relationships are lacking.

Another important aspect to consider is adolescents' perception of the family environment. Adolescents may interpret family interactions differently from parents or other family members. Their subjective perception of cohesion, expressiveness, and conflict within the family can significantly influence their emotional experiences and psychological well-being. A positive perception of family relationships often enhances adolescents' sense of security and self-worth, whereas negative perceptions may lead to emotional distress and mental health problems. Therefore, understanding how adolescents perceive their family environment and how these perceptions relate to their mental health is of great importance. Identifying the role of family cohesion, expressiveness,

and conflict can help researchers, educators, and mental health professionals develop strategies to promote healthy family relationships and improve adolescent psychological well-being.

In view of these considerations, the present study has the objectives to examine the mental health of adolescents in relation to their perceived cohesion, expressiveness, and conflict in the family environment. The study seeks to explore how these dimensions of family relationships influence adolescents' mental health.

Hypotheses

- a. There will be significant difference between high and low cohesion groups on mental health.
- b. There will be significant difference between high and low expressiveness groups on mental health
- c. There will be significant difference between high and low conflict groups on mental health.

Sample

The study was conducted on a sample of 200 adolescents of age range from 16 to 19 years. The sample was drawn randomly from both rural and urban +2 colleges of Patna district of Bihar.

Tools/Instruments

'Mental Health Battery' constructed and standardised by Singh and Sengupta (2012) has been used to measure mental health of subjects. 'Family Environment Scale' constructed and standardised by Bhatia and Chadha (2015) has been used to measure perceived cohesion, expressiveness and conflict in family environment by subjects.

Statistical Analysis

On the basis of median point of cohesion, expressiveness and conflict scores of 200 adolescents high and low groups of cohesion, expressiveness and conflict were determined. Scores on mental health and its different dimensions of the three high and low groups were obtained. Obtained data were put to statistical analysis. Mean, S.D. and 't' ratios were calculated.

Results and Discussion

Perceived cohesion dimension of family environment has been found significantly influencing mental health and its all dimensions. The results indicate that adolescents belonging to the high cohesion group obtained a significantly higher mean score on overall mental health ($M = 93.09$) than those belonging to the low cohesion group ($M = 80.67$). The obtained 't' value of 5.95 is significant at the .01 level (Table-1). This finding clearly suggests that adolescents who perceive greater cohesion in their family environment tend to possess better mental health. Further analysis of the dimensions of mental health also reveals significant differences between the two groups. Adolescents belonging to high cohesion families obtained significantly higher scores on emotional stability ($t = 4.52, p < .01$), adjustment ($t = 4.63, p < .01$), autonomy ($t = 2.32, p < .05$), security feeling ($t = 4.19, p < .01$), self-concept ($t = 4.21, p < .01$) and general intelligence ($t = 3.27, p < .01$) compared to adolescents from low cohesion families.

These findings suggest that a cohesive family environment provides emotional support, warmth and mutual understanding among family members, which facilitates healthy psychological development among adolescents. When adolescents perceive strong emotional bonds and support within the family, they experience greater feelings of security and belongingness, which in turn enhances their mental health. A supportive family environment also promotes self-confidence, emotional stability and better adjustment in adolescents. The present findings are consistent with earlier research studies which reported that family cohesion is positively related to adolescents' psychological well-being and emotional adjustment. Recent studies have also shown that adolescents who perceive greater family cohesion demonstrate higher levels of resilience, self-esteem and mental health (Zhang et al., 2024). Our findings support the findings of Nanda (2001) and Singh (2015) who reported significant positive effect of healthy family environment on mental health.

Table – 1 : Showing Means, S.Ds. and ‘t’ ratios of Mental Health Scores – High and Low Cohesion Groups

Groups	Dimensions	N	Means	S. D.	df	‘t’ ratios	Level of Sign.
HCOH	Mental Health	100	93.09	15.03	198	5.95	.01
LCOH	„	100	80.67	14.48			
HCOH	Emotional Stability	100	11.06	3.44	198	4.52	.01
LCOH	„	100	8.95	3.15			
HCOH	Adjustment	100	30.68	5.49	198	4.63	.01
LCOH	„	100	27.14	5.31			
HCOH	Autonomy	100	9.81	3.22	198	2.32	.05
LCOH	„	100	8.78	3.05			
HCOH	Security Felling	100	9.72	2.99	198	4.19	.01
LCOH	„	100	8.04	2.67			
HCOH	Self-concept	100	10.36	3.23	198	4.21	.01
LCOH	„	100	8.51	2.98			
HCOH	General Intelligence	100	21.46	4.92	198	3.27	.01
LCOH	„	100	19.25	4.63			

Adolescents belonging to high expressiveness (HEX) and low expressiveness (LEX) groups have been found differing significantly on mental health. The results reveal that adolescents belonging to the high expressiveness group obtained significantly higher mean scores on overall mental health ($M = 92.02$) compared to adolescents in the low expressiveness group ($M = 81.74$). The obtained ‘t’ value of 4.83 is significant at the .01 level (Table-2). Analysis of the specific dimensions of mental health shows that adolescents belonging to the high expressiveness group scored significantly higher on adjustment ($t = 6.20, p < .01$), autonomy ($t = 3.58, p < .01$), security feeling ($t = 2.36, p < .05$), self-concept ($t = 3.20, p < .01$) and general intelligence ($t = 2.42, p < .05$). However, the difference between the two groups on emotional stability was found to be statistically non-significant ($t = 0.59$).

These results suggest that expressiveness within the family environment plays an important role in promoting positive mental health among adolescents. Families that encourage open communication allow adolescents to express their thoughts, feelings and opinions freely. Such an environment fosters mutual understanding, emotional support and effective problem-solving, which contributes to better adjustment and mental health. When adolescents feel that their views are respected and valued within the family, they develop greater self-confidence and autonomy. Open communication also reduces emotional tension and misunderstanding within the family, thereby enhancing adolescents’ mental health. The non-significant difference in emotional stability suggests that emotional stability may be influenced by additional psychological or personality factors beyond family communication patterns.

These findings are supported by recent studies which suggest that family communication and emotional expression significantly contribute to adolescents’ psychological well-being and social adjustment (Romano et al., 2023). Research has also shown that adolescents who experience open and supportive communication within the family tend to demonstrate better emotional regulation and positive self-concept.

Table – 2 : Showing Means, S.Ds. and ‘t’ ratios of Mental Health Scores – High and Low Expressiveness Groups.

Groups	Dimensions	N	Means	S. D.	df	‘t’ ratios	Level of Sign.
HEX	Mental Health	100	92.02	15.25	198	4.83	.01
LEX	„	100	81.74	14.83			
HEX	Emotional Stability	100	10.14	3.34	198	0.59	NS
LEX	„	100	9.87	3.04			
HEX	Adjustment	100	31.07	5.02	198	6.20	.01
LEX	„	100	26.75	4.83			
HEX	Autonomy	100	10.05	3.11	198	3.58	.01
LEX	„	100	8.54	2.85			
HEX	Security Felling	100	9.36	3.01	198	2.36	.05
LEX	„	100	8.40	2.73			
HEX	Self-concept	100	10.18	3.41	198	3.20	.01
LEX	„	100	8.69	3.16			
HEX	General Intelligence	100	21.22	5.13	198	2.42	.05
LEX	„	100	19.49	4.96			

Adolescents belonging to high conflict (HCNF) and low conflict (LCNF) groups have been found having significant difference on mental health. The results indicate that adolescents belonging to the low conflict group obtained significantly higher mean scores on overall mental health ($M = 93.19$) compared to adolescents belonging to the high conflict group ($M = 80.57$). The obtained ‘t’ value of 5.89 is significant at the .01 level (Table-3). Further analysis of the dimensions of mental health reveals significant differences between the two groups on emotional stability ($t = 5.19$, $p < .01$), adjustment ($t = 5.89$, $p < .01$), security feeling ($t = 3.71$, $p < .01$), self-concept ($t = 3.57$, $p < .01$) and general intelligence ($t = 3.56$, $p < .01$). However, the difference between the two groups on autonomy was found to be statistically non-significant ($t = 1.09$).

These findings indicate that high levels of conflict within the family environment are associated with poorer mental health among adolescents. Frequent conflicts, disagreements and hostile interactions within the family may create a stressful and emotionally unstable environment for adolescents. Exposure to such negative family interactions may lead to feelings of insecurity, anxiety and emotional distress, which adversely affect adolescents’ psychological development. On the other hand, adolescents growing up in low conflict families experience greater emotional stability, better adjustment and stronger self-concept. A harmonious family environment promotes positive interpersonal relationships and psychological security, which enhances overall mental health.

The present findings are consistent with recent research which indicates that family conflict is negatively associated with adolescents’ psychological well-being and emotional adjustment (Kong & Chen, 2024). Studies have also reported that persistent parental conflict and negative family interactions significantly increase the risk of depression, anxiety and behavioural problems among adolescents.

Table – 3 : Showing Means, S.Ds. and ‘t’ ratios of Mental Health Scores – High and Low Conflict Groups.

Groups	Dimensions	N	Means	S. D.	df	‘t’ ratios	Level of Sign.
HCNF	Mental Health	100	80.57	15.04	198	5.89	.01
LCNF	„	100	93.19	15.26			
HCNF	Emotional Stability	100	8.85	2.92	198	5.19	.01
LCNF	„	100	11.16	3.36			
HCNF	Adjustment	100	26.88	4.72	198	5.89	.01
LCNF	„	100	30.94	5.03			
HCNF	Autonomy	100	9.05	3.06	198	1.09	NS
LCNF	„	100	9.54	3.27			
HCNF	Security Felling	100	8.10	2.83	198	3.71	.01
LCNF	„	100	9.66	3.11			
HCNF	Self-concept	100	8.63	3.04	198	3.57	.01
LCNF	„	100	10.24	3.33			
HCNF	General Intelligence	100	19.06	5.04	198	3.56	.01
LCNF	„	100	21.65	5.26			

The results of the present study clearly demonstrate that family environment plays a significant role in determining adolescents’ mental health. Adolescents who perceive higher levels of cohesion and expressiveness within their families tend to exhibit better mental health, emotional stability and adjustment. In contrast, adolescents who perceive high levels of conflict within the family environment tend to show poorer mental health. These findings highlight the importance of supportive family relationships and healthy communication patterns in promoting positive mental health among adolescents. Strengthening emotional bonds within families, encouraging open communication and minimizing conflicts can significantly contribute to adolescents’ mental health, psychological well-being and overall development.

Conclusions

1. Adolescents perceiving higher cohesion in family environment are significantly higher on mental health, emotional stability, adjustment, autonomy, security-feeling, self-concept and general intelligence than their low cohesion perceiving counterparts.
2. Adolescents perceiving higher expressiveness in family environment are significantly higher on mental health, adjustment, autonomy, security-feeling, self-concept and general intelligence than their low expressiveness perceiving counterparts.
3. Adolescents perceiving low conflict in family environment are significantly higher on mental health, emotional stability, adjustment, security-feeling, self-concept and general intelligence than their high conflict perceiving counterparts.

References

- Bhatia, H. and Chadha, N.K. (2015) : ‘Family Environment Scale’, National Psychological Corporation, Agra.
- Cheng, W. Y., Cheung, R. Y. M., & Chung, K. K. H. (2024) : ‘The Role of Family Conflict and Cohesion in Adolescents’ Social Responsibility’, PLoS ONE, 19(9).
- Kong, R., & Chen, R. (2024) : ‘Parental Conflict and Adolescents’ Socially Adverse Emotions: The Mediating Role of Family Functioning’, Frontiers in Psychology, 15, 1387698.
- Lai, J., & Chen, Z. (2023) : ‘Family Cohesion and Non-Suicidal Self-Injury Behaviour among Adolescents’, Frontiers in Psychology, 14, 1206889.

- Li, M., Li, L., Wu, F., Cao, Y., Zhang, H., & Zou, J. (2021) : ‘Perceived Family Adaptability and Cohesion and Depressive Symptoms among Adolescents’, *Journal of Affective Disorders*, 287, 255–260.
- Nanda, A.K. (2001) : ‘ Mental Health of High School Students: A Comparative Study’, *Indian Psychological Review*, 56(1),2-7.
- Romano, M., Marchand-Reilly, J., & Yaure, R. (2023) : ‘Family Relationships and Children’s Behavioural Outcomes’, *Journal of Child and Family Studies*, 32(8), 2401–2415.
- Singh, A. (2015) : ‘A Study of Mental Health among Private Sector’s Employees’, *Asian Journal of Psychology and Education*, 48(3-4), 35-40.
- Singh, A. K., & Sengupta, A. (2012) : ‘Mental Health Battery’, National Psychological Corporation, Agra.
- Zhang, J., Duan, X., Yan, Y., Tan, Y., Wu, T., & Liu, L. (2024) : ‘Family Functioning and Adolescent Mental Health: The Mediating Role of Bullying Victimization and Resilience’, *Behavioral Sciences*, 14(8), 664.
- Zhou, Y., Zheng, M., He, Y., Zhang, J., Guo, T., & Chen, W. (2025) : ‘Impact of Family Environment on Loneliness and Depression among Adolescents’, *European Journal of Investigation in Health, Psychology and Education*, 15(5), 68.

