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The Learning Curve

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Editorial

Tapestries at work: Diversity and inclusion as the new norm

Dr. Kanika K. Ahuja¹ & Dr. Megha Dhillon²

In a world replete with glaring inequities, questions of social justice, diversity and inclusion are becoming increasingly significant. Socio-political forces such as immigration, globalization, conflict-based displacement and the discourse around human rights have caused these concepts to gain prominence, leading to several discussions on how we can foster greater acceptance for divergences. The ideas of diversity and inclusion tie in closely with the United Nation's 2030 Agenda for Sustainable Development (2030 Agenda), which seeks 'to realize the human rights of all.' This agenda embraces the principles of equality and non-discrimination, alongside a commitment to leaving no one behind and prioritizing the needs of the furthest behind.

Given that diversity and inclusion can have different meanings for different people, it may be beneficial to define both terms at the outset. Diversity has been defined as acknowledging, understanding, accepting, valuing, and celebrating differences among people with respect to age, class, ethnicity, gender, physical and mental ability, race, sexual orientation, spiritual practice, and public assistance status (Esty et al., 1995). Inclusion is understood as a process of responding to the different needs of all persons in order to enable their participation in learning, employment, services, cultures and communities. Authentic inclusion goes far beyond merely adding individuals who are 'different' with respect to race, ethnicity, gender or sexuality in a given setting or organization (Gonzalez & DeNisi, 2009). Rather it incorporates beliefs and perceptions that different individuals can make unique contributions and hence their full participation must be encouraged (Mor Barak, 2015).

The idea of pluralism is central to the acceptance of diversity and inclusion. The term itself has a number of meanings, although running across them are the ideas of variety and heterogeneity. According to the APA dictionary, pluralism in the philosophical sense is the

belief that ultimate reality is composed of more than one substance or fundamental kind of entity. In the social sense, pluralism refers to the existence of people having different religions, ethnic origins and cultural backgrounds. It must be noted that while the idea of diversity has recently come into vogue, plurality has been the natural order of the world for millennia. It is also well-known that the land we now call India, has always been pluralistic. Plurality has characterized this nation not only in terms of ethnicity, religion or language but also in terms of festivals, family systems, daily customs, traditions and spiritual practices. It can thus be assumed that many lessons with regard to diversity can be learned through the history of this land and its people.

Diversity and Inclusion in institutions: Advantages & Challenges

Currently, the two most common contexts for discussing inclusion are educational institutions and work places. An analysis of labor statistics and other data show workforces to have become more heterogeneous, presumably as an outcome of advances in women's and civil rights (Mor Barak & Travis, 2013). Over the last few decades, members of historically underrepresented groups have joined work spaces, earlier denied to them. Further, developments in economic policies, including India's acceptance of the New Economic Policy based on the principles of Liberalization, Privatization, and Globalization in 1991, led to the world's economies becoming more inter-connected. Subsequent technological developments, including the spread of the world wide web further augmented these inter-connections. With the changing paradigm, came the need for organizations to understand differences in cultural norms and ways of being.

Similar trends have occurred in the education sector, where students of varying cultures (Gollnick &

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Chinn, 2002) inhabit modern classrooms. Although there is little official data available on the topic, classrooms in the country now house students who speak different languages, belong to different religions and regions, and represent different class and caste dynamics. This has largely been the result of educational policies and practises (such as the Right to Education Act, Sarva Siksha Abhiyaan, and implementation of the EWS quota) embraced by the Indian state in the last 15 years and changing economic trends such as the growth of the country's middle-class. The Rights of Persons with Disability Act (2016) and the National Education Policy (2020) are also heavily inclined in favour of inclusion.

While the acceptance of inclusion both as a phenomenon and as a practise has been growing, there has also been a great deal of scepticism due to the complexities involved in managing diverse spaces. It is indeed difficult to accomplish genuinely inclusive processes in practice. Diverse workspaces and the desire to make them inclusive, creates at the very least the challenges of ensuring that company leaders understand the meaning of inclusion, training managers holding them accountable to show that inclusivity is a core competency and providing workers with safe spaces to voice their concerns. Creating inclusive classrooms necessitates teachers to employ teaching methods that are not only theoretically sound but also culturally sensitive. Teachers need to be equipped with skills to create learning spaces within which each student feels supported and is provided the best opportunity to learn (Richards, Brown & Forde, 2007). None of this is possible without adequate infrastructure and resources being provided to organizations and schools. In schools for instance, without additional resources, the nudge towards inclusion contains the risk of it being reduced to merely shifting special educational practices into the classroom (McLeskey & Waldron, 2007). Diversity, unless channelized positively also carries the threat of prejudice, discrimination and stereotyping. Without the wide-spread acceptance of diversity, there is always a risk of inter-personal and inter-group conflicts.

While diversity poses the above-mentioned challenges, the benefits that it offers are several and thus worth consideration. Workplace diversity can increase

the attractiveness of organizations to potential business partners, future employees, and society at large (Robinson & Dechant, 2017). Diversity also increases the available talent pool, job satisfaction, organizational commitment and retention rates (Shore et al., 2011), along with decreasing conflict, the intention to leave, stress, job withdrawal, and organizational turnover (Hopkins et al., 2010). "Diversity Matters" (2015), a report by McKinsey & Company dwells at length on how diversity within workplaces places corporations at an advantage. Their research looks at the relationship between the level of diversity (defined as a greater share of women and a more mixed ethnic/racial composition in the leadership of large companies) and company financial performance. The research was based on data collected from hundreds of organizations in the United States, Canada, United Kingdom, and Latin America. The analysis revealed a statistically significant connection between diversity and financial performance. The companies in the top quartile for gender diversity and racial/ethnic diversity were 15 percent and 35 percent more likely to have financial returns above their national industry median respectively. To ascertain causation, the researchers consulted additional evidence, and identified the most important factors driving better performance by companies with diverse executive teams and boards. These were found to be advantages in recruiting the best talent, increased employee satisfaction, improved decision making and stronger customer orientation.

Similar advantages have been witnessed, in the educational sector. In an analysis of co-teaching practises at the secondary level, general and special education teachers who co-taught in inclusive classrooms spoke of several benefits. For instance, improving feelings of belonging on campus improved the course grades of historically marginalized students (Walton & Cohen, 2007). In a more recent study (Murrar et al., 2020), students who felt that their peers treated them more inclusively performed better academically and reported an increased sense of belonging. Benefits for students with disabilities include elimination of the stigma of being in special education while students without disabilities receive enhanced individualized help through the collaboration between the special and general

education teachers. Other research has indicated significant improvements in the area of communication for students with disabilities who experience full-time placement in inclusive settings (Carter & Maxwell, 1998).

Preparing organizations and people for diverse settings

Given that fostering inclusion can pose challenges and elicit resistance, psychologists have attempted to understand how to best prepare people for functioning in diverse settings. A strategy that perhaps works is contact with dissimilar others, keeping in mind all the conditions necessary to reduce prejudice: equal status, common goals, cooperation, and institutional support (Allport, 1954). The jigsaw classroom, developed by Aronson in the 1970s is an example of a cooperative learning technique that has successfully reduced racial conflict and increased positive educational outcomes such as improved test performance, reduced absenteeism, and greater liking for school (Aronson, 2002). The use of self-managed teams in corporates, which allow people in different roles and functions to work together on projects as equals, can yield similar results. This may be explained by the optimal distinctiveness theory (Brewer, 1991), which believes that individuals strive for a balance between feelings of similarity among group members on one hand, and recognition of their unique characteristics as individuals on the other. Inclusion can therefore be fostered by achieving a balance between belonging to a group and being appreciated for idiosyncratic characteristics of individuals. As people feel that they are important members of the organization and that their unique talents are recognized and appreciated, feelings of inclusion increase (Shore et al., 2011). Hiring Diversity and Inclusion managers, too, can boost inclusion by creating social accountability. Their role should not only be to advise leadership and employees on best practices to foster a diverse, welcoming, and inclusive work environment, but also ask questions. In an experiment conducted in Israel (reported by Dobbin & Kalev, 2016), teachers in training graded identical compositions supposedly written by Jewish students with Ashkenazic names (European heritage) or with Sephardic names (African or Asian heritage). The latter typically come from

poorer families and perform worse in school. On an average, the teacher trainees gave the Ashkenazic essays Bs and the Sephardic essays Ds. However, when the teachers were told that they would have to discuss their grades with their peers, these differences vanished. The possibility of justifying their grades made the teachers evaluate the essays on its merits. Similarly, simply having a diversity manager who could ask questions from managers would prompt them to step back and consider everyone who is qualified instead of hiring or promoting the first people who come to mind. Forcing people and organizations to reflect on their own perspectives and diversity practices may help them become more aware of available alternatives and uncover unspoken assumptions and biases that guide their practices and theories. And finally, some research is pointing towards the role of empathy. While those with high empathy are sensitive towards the needs of diverse populations and thus internally motivated to respond without prejudice toward them, low empathy individuals may especially require diversity training to promote motivation and ultimately reduce prejudice (Lindsey et al., 2015).

Diversity training programs: Drivers for change

Diversity training (DT), currently a popular concept, may be defined as any program intended to promote positive inter-group contact, reduce prejudice and discrimination, and generally teach people from different backgrounds how to collaborate effectively (Bezrukova et al., 2012). Three common methods used to carry out DT are perspective taking, goal setting, and stereotype discrediting (Lindsey et al., 2015). The perspective taking strategy encourages individuals to imagine what it's like to be a member of a different group as a way of understanding how those experiences may be different from their own. Goal setting implores individuals to set personal goals that aim to improve diversity values and inter-group relations within their organization, for example to use more inclusive language. Finally, stereotype discrediting aims to reduce prejudice by confronting participants with their commonly held stereotypes towards marginalized groups.

According to one estimate (Dobbin & Kalev, 2016), nearly half of midsize companies use DT, as do nearly

all the Fortune 500. We see a similar trend in educational institutions as well. Numerous universities across the globe implement some form of diversity and inclusion programs, such as courses on ethnic studies (Greens, 2000), women studies (Case & Stewart, 2010), human sexuality (e.g., Mansoori-Rostam & Tate, 2017), panel presentations (McDermott et al., 2018), education and contact intervention (Ahuja et al., 2017); role playing (Hillman & Martin 2002), and community events that celebrate diverse cultures (Klak & Martin, 2003). Yet, research supporting the benefits of DT is mixed, at best (e.g., Cox, 2023; Green & Hagiwara, 2020; Paluck et al., 2021). While most trainees do believe that their skills for interacting with diverse populations have improved after training, there is no overwhelming evidence that DT exercises actually improve behaviours toward stigmatized groups (Kulik & Roberson, 2008). Psychology, anyways is replete with examples of attitude-behaviour inconsistency (Ahuja & Dhillon, 2018; LaPierre, 1934). Furthermore, the positive effects of diversity training rarely last beyond a day or two, and a number of studies suggest that it may even be counterproductive (Dobbin & Kaley, 2016; Dover et al., 2020). Unfortunately, programs on DT may often be a knee jerk reaction to highly publicized instances of bias. One such case was that of Starbucks, which closed down stores in 8000 locations to conduct a four-hour antibias training for 175,000 employees after an outrage following the arrest of its two Black customers allegedly loitering while waiting for an associate to arrive (Stewart, 2018).

Interestingly and encouragingly, the benefits of diversity education courses in educational institutions have been reported to be effective (e.g., Ahuja et al., 2019; Rudman et al., 2001), perhaps more so than in workplaces. The question that assumes significance then is what is it that educational institutions are doing where HR is failing? While there is no single best way, an appropriate and effective approach towards inclusion will depend on the degree of pressure for diversity, the type of diversity in question, and attitudes of the leadership. Firms that use DT for more representative recruitment and better grievance handling are designed to preempt lawsuits by policing managers' thoughts and actions, not effecting real change. Often DT courses are compulsory to attend for employees, resulting in annoyance and resistance. On

the other hand, colleges often rely on voluntary training, evoking the opposite response ("I chose to come, so I must be pro-diversity"). Newly introduced value-added courses under the New Education Policy (2020) in India on emotional intelligence may prove to be effective at empathy building. Recent evidence (Cox, 2023) indicates that bias habit-breaking programs are successful in enabling people to act as change agents and reduce bias, foster inclusion, and advance equity, both within themselves and their social contexts. The authors are optimistic and hopeful that these are steps in the right direction for meaningful lasting change.

References

- Ahuja, K.A., Dhillon, M., Juneja, A., Deepak, S. & Srivastava, G. (2019). Subverting heteronormativity: An intervention to foster positive attitudes toward homosexuality among Indian college students. *Journal of Homosexuality*, 66(6), 746-768. DOI: 10.1080/0091836 9.2018 . 1484230.
- Ahuja, K.K. & Dhillon, M. (2018). Whose environment is it anyway? A study of environmental attitudes and behaviour among Indian female college students. *IAHRW International Journal of Social Sciences Review*, 6(1), 67-72.
- Ahuja, K.K., Dhillon, M., Juneja, A. & Sharma, B. (2017). Breaking barriers: An education cum contact intervention to reduce mental illness stigma among Indian college students. *Psychosocial Intervention*, Vol. 26(2), 103-109. DOI:10.1016/j.psi.2016.11.003
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, Massachusetts: Addison-Wesley.
- Aronson, E. (2002). Building empathy, compassion, and achievement in the jigsaw classroom. In E. Aronson (Ed.). *Improving academic achievement* (pp. 209-225). Amsterdam: Elsevier.
- Bezrukova, K., Jehn, K., & Spell, C.S. (2012). Reviewing diversity training: Where we have been and where we should go. *The Academy of Management Learning & Education*, 11(2), 207-227. DOI:10.5465/amle.2008.0090

- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality & Social Psychology Bulletin*, 17(5), 475–482.
- Carter, M., & Maxwell, K. (1998). Promoting interaction with children using augmentative communication through a peer-directed intervention. *International Journal of Disability Development and Education*, 45, 75-96.
- Case, K. A., & Stewart, B. (2010). Changes in diversity course student prejudice and attitudes toward heterosexual privilege and gay marriage. *Teaching of Psychology*, 37(3), 172-177. <https://doi.org/10.1080/00986283.2010.488555>.
- Cox, W.T.L. (2023). Developing scientifically validated bias and diversity trainings that work: Empowering agents of change to reduce bias, create inclusion, and promote equity. *Management Decision*, 61(4), 1038- 1061. <https://doi.org/10.1108/MD-06-2021-0839>
- Dennis, V.H., Layton, D., & Prince, S. (2015). *Diversity Matters*. McKinsey & Company.
- Dobbin, F.R., & Kalev, A. (2016). Why diversity programs fail. *Harvard Business Review*, 94, 14.
- Dover, T.L., Kaiser, C.R., & Major, B. (2020). Mixed signals: The unintended effects of diversity initiatives. *Social Issues & Policy Review*, 14(1), 152-181. <https://doi.org/10.1111/sipr.12059>.
- Esty, K., Griffin, R., & Hirsch, M. S. (1995). *A manager's guide to solving problems and turning diversity into a competitive advantage: Workplace diversity*. Boston: Adams Media.
- Gollnick, D. M., & Chinn, P. C. (2002). *Multicultural education in a pluralistic society (6th ed.)*. Merrill Prentice Hall
- Gonzalez, J. A., & Denisi, A. S. (2009). Cross-level effects of demography and diversity climate on organizational attachment and firm effectiveness. *Journal of Organizational Behavior*, 30(1), 21–40. <https://doi.org/10.1002/job.498>
- Green T. L., & Hagiwara N. (2020, August 28). The problem with implicit bias training. *Scientific American*. <https://www.scientificamerican.com/article/the-problem-with-implicit-bias-training>
- Greens, E. (2000). Most colleges require diversity education. *The Chronicle of Higher Education*, 47(10), A 16.
- Hillman, J., & Martin, R. A. (2002). Lessons about gay and lesbian lives: A spaceship exercise. *Teaching of Psychology*, 29(4), 308-311. https://doi.org/10.1207/S15328023TOP2904_12
- Hopkins, K., Cohen-Callow, A., Kim, H.J., & Hwang, J. (2010). Beyond intent to leave: Using multiple outcome measures for assessing turnover in child welfare. *Children & Youth Services Review*, 32(10), 1380-1387. [OI:10.1016/j.childyouth.2010.06.006](https://doi.org/10.1016/j.childyouth.2010.06.006).
- Klak, T., & Martin, P. (2003). Do university-sponsored international cultural events help students to appreciate “difference”? *International Journal of Intercultural Relations*, 27(4), 445-465. [https://doi.org/10.1016/S0147-1767\(03\)00033-6](https://doi.org/10.1016/S0147-1767(03)00033-6)
- Kulik, C. T., & Roberson, L. (2008). Diversity initiative effectiveness: What organizations can (and cannot) expect from diversity recruitment, diversity training, and formal mentoring programs. In A. P. Brief (Ed.), *Diversity at work* (pp. 265–317). Cambridge University Press. <https://doi.org/10.1017/BO9780511753725.010>
- LaPiere, R.T. (1934). Attitudes vs. actions. *Social Forces*, 13(2), 230–237, <https://doi.org/10.2307/2570339>.
- Lindsey, A., King, E., Hebl, M., & Levine, N. (2014). The impact of method, motivation, and empathy on diversity training effectiveness. *Journal of Business and Psychology*, 30(3), 605-617. <https://doi.org/10.1007/s10869-014-9384-3>
- Mansoori-Rostam, S. M., & Tate, C. C. (2017). Peering into the “black box” of education interventions and attitude change: Audience characteristics moderate the effectiveness... and then only toward specific targets. *The Journal of Social Psychology*, 157(1), 1-15. <https://doi.org/10.1080/00224545.2016.1152211>
- McDermott, D. T., Brooks, A. S., Rohleder, P., Blair, K., Hoskin, R. A., & McDonagh, L. K. (2018). Ameliorating transnegativity: Assessing the immediate and extended efficacy of a pedagogic prejudice reduction intervention. *Psychology & Sexuality*, 9(1), 69-85. [10.1080/19419899.2018.1429487](https://doi.org/10.1080/19419899.2018.1429487).

- McLeskey, J., & Waldron, N. L. (2007). Making differences ordinary in inclusive classrooms. *Intervention in School and Clinic*, 42(3), 162-168.
- Mor Barak (2015). Inclusion is the key to diversity management, but what is inclusion? *Human Service Organizations Management*, 39(2), 83-88. DOI:10.1080/23303131.2015.1035599
- Mor Barak, M. E., & Travis, D. J. (2013). Socioeconomic trends: Broadening the diversity ecosystem. In *The Oxford handbook of diversity and work* (p. 393). Oxford University Press.
- Murrar, S., Campbell, M. R., & Brauer, M. (2020). Exposure to peers' pro-diversity attitudes increases inclusion and reduces the achievement gap. *Nature Human Behaviour*, 4(9), 889-897. <https://doi.org/10.1038/s41562-020-0899-5>
- Paluck, E.L., Porat, R., Clark, C.S., & Green, D.P. (2021). Prejudice reduction: Progress and challenges. *Annual Review of Psychology*, 72, 533-560. doi: 10.1146/annurev-psych-071620-030619.
- Richards, H. V., Brown, A. F., & Forde, T. B. (2007). Addressing diversity in schools: Culturally responsive pedagogy. *Teaching Exceptional Children*, 39(3), 64-68.
- Robinson, G. & Dechant, K. (1997). Building a business case for diversity. *The Academy of Management Executive*, 11(3), 21-31. <https://doi.org/10.5465/AME.1997.9709231661>.
- Robinson, G. & Dechant, K. (1997). Building a business case for diversity. *The Academy of Management Executive*, 11(3), 21-31. <https://doi.org/10.5465/AME.1997.9709231661>.
- Rudman L. A., Greenwald A. G., McGhee D. E. (2001). Implicit self-concept and evaluative implicit gender stereotypes: Self and ingroup share desirable traits. *Personality and Social Psychology Bulletin*, 27(9), 1164-1178. 10.1177/0146167201279009
- Shore, L.M., Randel, A.E., Chung, B.G., Dean, M.A., & Ehrhart, K.H., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for further research. *Journal of Management*, 37(4), 1262-1289. doi:10.1177/0149206310385943.
- Stewart, E. (19 May 2018). Starbucks says everyone's a customer after Philadelphia bias incident. *Vox.com*, Vox Media. www.vox.com/identities/2018/5/19/17372164/starbucks-incident-bias-bathroom-policy-philadelphia.
- UN Agenda 2030 - Directorate of Programme Co-ordination - www.coe.int. (n.d.). Directorate of Programme Co-ordination. Retrieved from <https://www.coe.int/en/web/programmes/un-2030agenda#:~:text=The%202030%agenda#:~:text=The%202030%>
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, 92(1), 82-96. <https://doi.org/10.1037/0022-3514.92.1.82>

The third way: Indian psychology's solution to the limitations of hedonism

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Abstract: Western psychology dominates the research, theory, and published works in modern psychology. Therefore, its theoretical limitations become limitations for the field as a whole. Hedonism is one of these restricting parameters which disallows certain research, theoretical, and therapeutic considerations. Here it is suggested that there are many more theories outside the realm of Western psychology that can be employed to approach psychology and the understanding of people. To create truly meaningful progress in research and psychology, researchers must be aware of other approaches and perspectives. Indian Psychology, with the three gunas, allows for a broader understanding of human beings. Understanding the sattvic guna allows and encourages research, theory and therapeutic systems that explore the importance of love, compassion, and self-transcendence.

Key Words: Indian psychology, gunas, hedonism, altruism, sattva

Psychology has long been dominated by the West. Henrich, Heine, and Norenzayan (2010) point out that this dominance by Western nations means that “96% of psychological samples come from countries with only 12% of the world’s population” (p. 61). This dominance in published research and theoretical psychology means that modern psychology is dominated by a very particular set of ideas, values, and research findings (Nisbett, 2003). To remedy this problem, we need to do more than just increase the amount of research conducted by non-Westerners. We need to seek out ideas from the psychologies of other areas in the world.

In this paper, we address the predominance of the Western value of hedonism and how it limits our understanding of human beings (Gantt, 2000; Reber, 2000). Indian Psychology is one of the most systematically developed non-Western psychologies and its view of the three gunas offers an alternative to the commonly embraced hedonistic limitation and allows for a broader understanding of mental health and human motivation.

The Limit of Hedonism

Hedonism, the seeking of pleasure and avoiding pain, is one of the most dominant ideas in modern

psychology (Whoolery & Wiggins, 2002). For example, Rule (1997) argues that hedonism “offers the best—and perhaps only—hope for meaningful progress in social science” (p. 79). Even behavior that appears to benefit others is interpreted as hedonistically motivated in most psychological theories, including dominant theorists like Sigmund Freud and Carl Rogers (Beyers & Peterson, 2000). This hedonistic assumption can be separated into naïve and sophisticated hedonism. Misra (2014) argues that Western Psychology draws on both forms of hedonism. Naïve hedonism involves the simpler calculation of seeking immediate pleasure or avoiding immediate suffering for the individual. The more sophisticated form of hedonism, referred to by Misra (2014) as eudaimonic, involves the striving for perfection, self-enhancement, and fulfillment of one’s potential. In the end, both are forms of hedonism because the ultimate end is the benefit of the individual self.

Hedonism can be viewed as limiting because it is exclusive, not allowing for any other motivation. Behavior that may be seen by most as loving, sacrificing, or even heroic must be re-interpreted as hedonistically motivated. Even rationality itself is interpreted as based on hedonic calculation (Gantt,

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2000). These ideas mean that love, self-sacrifice, and compassion are at best irrational if not entirely impossible. This may be why Western psychology teaches courses in sexuality and romantic love (assumed to be biologically and hedonistically motivated), but not courses in compassion or familial love. It may be surprising for most people because close, loving (non-hedonistic) relationships and belonging form an important basis for life. Indeed, in the only longitudinal study of its kind, the Harvard study found that close, loving relationships were the most important predictor of good physical and mental health (Vaillant, 2012).

The limiting nature of ideas like hedonism often show themselves in how our unquestioning commitment to the idea leads us to manipulate theories and ideas that are based in non-hedonistic systems. For example, much of modern psychology and therapy has embraced mindfulness as a method of self-improvement. These ideas surrounding mindfulness originate in a non-hedonistic system of thought from Indian and Buddhist roots. The original goals of mindfulness focus on letting go of the individual self, not enhancing it (Gunaratana, 2011). Indeed, the whole philosophy at the root of mindfulness meditation is loving-kindness toward others and a recognition that all we have comes from the kindness of others—not our own effort (Tegchok, 2006).

The Three Gunas

Indian psychology, while accounting for both naïve and sophisticated forms of hedonism, also has a third way that allows us to think and analyze outside the hedonistic box. Originating in the Sankya school of thought, there are three gunas that characterize human experience (Easwaran, 1985). These gunas are variously referred to as qualities, attributes, ways of being, or even types of faith (Aurobindo, 1992; Easwaran, 1985). The three gunas are: *tamas*, *rajas*, and *sattva* (also spelled *sattwa*). The Bhagavad Gita, originally written somewhere in the range of 400 BCE to 200 CE, lays out the basic qualities of each way of being, focusing on how they influence how human beings act, how they understand the world, even the kinds of foods they eat. The gunas are all present in a person at all times, though they vary in which predominates. “Their interplay is the dynamics of

personality” (Easwaran, 1985, p. 46).

In his commentary on the Gita, Sri Aurobindo (1992) describes the three gunas: “*Tamas* is the principle and power of inertia; *Rajas* is the principle of kinesis, passion, endeavor, equilibrium and harmony (*ārambha*); *Sattwa* the principle of assimilation, equilibrium and harmony” (p. 57). *Tamas*, the lowest of the three gunas, is characterized by laziness, self-destructiveness, and vanity. The *tamasic* way of being is self-seeking, though in the most basic way. An avoidance of effort is combined with the self-oriented focus on self-benefit. The second guna, *Rajas*, is characterized by energy and desire. This is the way of being that leads us to act based on the desire for personal gain or benefit. The *rajasic* seeks enjoyments and possessions gained through effort. It seeks self-benefit, whether for gain, admiration, or even a belief in eternal blessing. All action is done for a purpose to benefit the self. *Sattva*, the final guna, is characterized by peacefulness, cheerfulness, and unity. The *sattvic* acts, not for the sake of self-benefit, but for the sake of others and for the work itself.

As we can see, the first of the two gunas, *tamas* and *rajas* belong to what Indian psychology considers the lower nature where we focus on doing “according to our desires” (Aurobindo, 1992, p. 522). The *rajasic* nature is higher than the *tamasic*. A society often benefits from people who seek self-benefit, recognition, and wealth. Modern medicine and other technologies are most often driven by the *rajasic*, desire-driven behavior of people motivated to develop knowledge and skills. *Rajasic* energy, then, can provide benefits to both the self and to others. “But in all, whatever law it may seem to admit, it follows really only the law of the lower self and ego, the restless, untired, self-devouring, and all-devouring mind” (Aurobindo, 1995, p. 573). Both of these gunas are forms of hedonism, ways of being that don’t allow for genuine compassion, affection, or love. They align with the basic assumption of hedonism found in Western psychology. However, this is not the end with Indian psychology—there is a third way, the *sattvic*.

The Third Way: Sattva

The *sattvic* guna, characterized by a sense of harmony and interconnection with other human beings and the

divine, is the third possibility that takes us beyond the hedonic limit we find in Western psychology. The sattvic way of being is free from attachment to the outcome of their actions, basing their decisions not on what will benefit or harm the self, but what is right. The rajasic person makes decisions between what to do or not to do, but not rightly. Unlike the sattvic, the rajasic makes decisions on what will benefit and harm the self, not on what is right. For the sattvic, it is important to understand that what might benefit or harm the self might not be what matters when we look at the whole. Therefore, to know what is right, we must look beyond self-interest. "Truth is not merely whatever our own personality is or creates...Beyond that personality there is, first, a universal being as well as a universal becoming of which ours is a little movement" (Aurobindo, 1992, p. 524). All actions must be understood in the larger web of being, of which ours is but a little movement. The web includes the needs of all other beings, including our close relations, our communities, and the world of all beings including in nature. Our needs and considerations are not unimportant, but in the sattvic way of being we see them for what they are, a little part of a much larger whole. One might contrast this self-decentering with the typical self-centering encouraged in most Western psychologies (see Rogers, 1947).

This self-transcendent aspect of the sattvic guna is also expressed by some non-mainstream Western psychologists like Viktor Frankl (1992). He argues that "being human always points, and is directed, to something, or someone, other than oneself...What is called self-actualization is not an attainable aim at all, for the simple reason that the more one would strive for it, the more he would miss it. In other words, self-actualization is possible only as a side-effect of self-transcendence" (p. 115). Frankl argues here that the purpose of the self is always directed outward, toward a work and to people outside oneself. Since human beings are not their own purpose, the only way to fulfill one's purpose is to seek the purposes of others.

To the Western mind, this self-transcendence and minimization of the individual may seem unpleasant and even counterproductive or counter-factual. Indian psychology does not minimize the challenge required of us to put away the selfish and become self-

disinterested. In his commentary on the Gita, Sri Aurobindo (1992) states that "this new movement is of the nature of a powerful adventure into the unknown or partly known, a daring development and a new conquest" (p. 520). The Bhagavad Gita itself teaches this through a metaphor, saying that the rajasic self-seeking seems like the best way to have the best life. The abandoning of one's own interest seems, on its face, to be a recipe for loss and unhappiness. However, the Gita teaches in 18:37-38 "That which seems like poison at first, but tastes like nectar in the end—this is the joy of sattva, born of a mind at peace with itself. Pleasure from the senses seems like nectar at the first but it is bitter as poison in the end. This is the kind of happiness that comes from the rajasic" (Easwaran, 1985, p. 260). Letting go of self-interest seems like poison, like we are being asked to abandon all of our desires and wants. However, this bitter-looking asceticism turns to the nectar we experience when we have harmony, peace of mind, and a sense of belonging and oneness. The seeming-nectar of the self-seeking rajas turns to poison when we find ourselves isolated, lonely, and disconnected. Tragically, these are common symptoms that underlay the psychological struggles of many Westerners (Hari, 2019).

What are the characteristics that we would expect of the person who develops and strengthens the sattvic way of being in themselves? Sri Aurobindo describes the sattvic person as having "high purity of the reason and will, an equal soul, a deep peace and calm, a wide sympathy and preparation of oneness, a reflection of the inner soul's divine gladness in the mind, life, and body" (1992, p. 532). The calculating nature we find in the tamasic and rajasic mind is reduced and "all the action of the perfected soul will be even such a constant divine giving of itself and its powers, an outflowing of the knowledge, light, strength, love, joy, helpful Shakti which it possesses in the Divine" (p. 534). The Bhagavad Gita describes the sattvic person as one who is "giving simply because it is right to give, without thought of return" (Easwaran, 1985, p. 248). Notice that all of these attributes describe a person who is out-flowing, giving, cheerful, and at peace. These kinds of characteristics are literally impossible in most of the theories in Western psychology, but are a genuine and desired way to be in the Indian tradition.

This perspective allows for Indian psychologists to study human characteristics like compassion, love, and non-hedonistic altruism. It also allows psychotherapists to evaluate and encourage such virtues.

What Indian Psychology Can Offer the West

As mentioned above, the limitations of a psychology restrained by a limited set of values is not just a question of the accuracy of its data. It also means that the ideas of that psychology limit the possibilities of how we understand human beings. The domination of hedonism in Western psychology can only be overcome by addressing the values that we find in other psychologies. Indian psychology, in this case, can open possibilities in research, theory, and practice that are not available in a psychology limited to the tamasic and rajasic gunas.

How can the sattvic possibility open up new research opportunities? Since hedonism has long been assumed, Western psychologists do not look for, or even allow for, evaluation of altruism and self-sacrifice. Researchers might study how altruistic and compassionate motivations and behaviors develop in childhood. They may study how the sattvic qualities influence a sense of belonging and interconnection with others. Since the sattvic way of being is now allowed as a possibility, researchers might study how those with higher levels of self-forgetfulness, loving-kindness, and unity-consciousness fare in their mental health compared to those with a more tamasic or rajasic way of being.

An acceptance of this third way from Indian psychology opens up new theoretical directions. While there are some genuine exceptions to hedonism-dominant theories (see Adler, 1964; Frankl, 1992), most ignore or reject the sattvic ways of being that are an important way of understanding human beings in Indian psychology. We might find personality theories and theoretical understandings of human beings that allow for, and even encourage, sattvic traits.

Another place in which this third way can influence what we do in Western psychology is in the field of psychotherapy. Western and American

theories of therapy and mental health are dominated by hedonistic values. In fact, in the author's research on current evaluations of mental health, not a single measure of mental health used in a therapeutic context included even one question evaluating a non-hedonistic characteristic. Items focused on decreasing negative personal symptoms and increasing personal positive emotions were instead dominant. If we can incorporate sattvic values, we can look directly at how altruism, kindness, love, and belonging influence our mental well-being. Some Indian psychologists directly address whether their patients are loving and kind to others or not. Varma (2014) directly addresses the sattvic values in a therapeutic context, arguing that the goals of therapy of Indian psychology go beyond ego strength and toward love. "Love has an extraordinary transformative power which can heal all breaches and wounds in our consciousness, and eventually liberate us from fear, guilt, and egoism" (p. 203).

Conclusion

Since Western psychology dominates the research, theory, and published works in modern psychology, its theoretical limitations become limitations for the field as a whole. Hedonism is one of these restricting parameters which disallows certain research, theoretical, and therapeutic considerations. Indian Psychology, with the three gunas, allows for a broader understanding of human beings. The sattvic guna allows for non-hedonistic conceptions of human beings. Understanding the sattvic way of being allows and encourages research, theory and therapeutic systems that explore the importance of love, compassion, and self-transcendence.

References

- Adler, A. (1964). *Social interest: A challenge to mankind*. New York: Capricorn Books.
- Aurobindo, S. (1992). *The Bhagavad Gita: With text, translation, and commentary in the words of Sri Aurobindo*. Sri Aurobindo Divine Life Trust.
- Aurobindo, S. (1995). *Essays on the Gita*. Lotus Press.
- Beyers, M. S. & Peterson, M.J. (2000). A contradiction

- in terms: Hedonistic altruism. *The General Psychologist*, 35, 78-80.
- Easwaran, E. (1985). *The Bhagavad Gita: Introduced and translated by Eknath Easwaran*. Nilgiri Press.
- Frankl, V. E. (1992). *Man's search for meaning*. Beacon Press.
- Gantt, E. (2000). Cognitive psychology, rationality, and the assumption of hedonism. *The General Psychologist*, 35, 82-86.
- Gunaratana, B. H. (2011). *Mindfulness in plain English*. Wisdom Publications.
- Hari, J. (2019). *Lost connections: Why you're depressed and how to find hope* (Reprint). Bloomsbury Publishing.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33, 61–135. <https://doi.org/10.1017/s0140525x0999152x>
- Misra, G. (2014). Psychology of emotions: Some cultural perspectives. In R.M.M. Cornelissen, G. Misra & S. Varma (Eds.). *Foundations and Applications of Indian Psychology* (pp. 205-222). New Delhi: Pearson Education.
- Nisbett, R. E. (2003). *The geography of thought: How Asians and Westerners think differently...and why*. New York: Free Press.
- Reber, J. (2000). Privileging hedonism: Confounds and consequences. *The General Psychologist*, 35, 80-82.
- Rogers, C. R. (1947). Some observations on the organization of personality. *American Psychologist*, 2, 358-368.
- Rule, J. B. (1997). *Theory and progress in social science*. Cambridge University Press.
- Tegchok, G. J. (2006). *The Kindness of Others: A Commentary on the Seven-Point mind Training*. Lama Yeshe Wisdom Archive.
- Vaillant, G. E. (2012). Surprising findings. *In triumphs of experience: The men of the Harvard grant study* (pp. 328–350). Harvard University Press. <https://doi.org/10.2307/j.ctt2jbxs1.13>
- Varma, S. (2014). Integral psychology: A new science of self, personality, and psychology. In R.M.M. Cornelissen, G. Misra & S. Varma (Eds.). *Foundations and Applications of Indian Psychology* (pp. 183-204). New Delhi: Pearson Education.
- Whoolery, M. & Wiggins, B. (2002). *Hedonism and its hold on education*. Presented at the annual conference of the American Association of Behavioral and Social Sciences

Keep thy friends close: Maintenance behaviours, gender differences and contingent self-esteem

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Abstract: Friendship holds a special significance for the kind of satisfaction, growth and support it provides. The impact of friendships intensifies as adolescents move to the stage of young adulthood since they have entered a developmental period characterised by greater independence. Whether friendships sustain or fade away, is determined by the needs they continue to fulfil. The aim of the present study was to determine whether friendship maintenance behaviours predict friendship contingent self-esteem. The study included 120 young adults (60 males and 60 females) ranging in age from 16 to 22 years, who were administered Friendship Maintenance Scale (FMS) (Oswald et al., 2004) and Friendship Contingent Self-Esteem Scale (FCSE) (Cambron et al., 2009). The nature and differences in perception of same-sex and opposite-sex friendships in men and women were also studied. This study, with its contradicting findings from previous studies, opens the door to fresh discourse on whether the shifting concept of gender and the societal landscape actually influence people's perceptions of friendships. The study may reflect how changing societal maps, fluid notions of gender, co-ed systems of education, and the distinctions between same-sex and opposite-sex friendships are changing.

Keywords: friendship, friendship maintenance, self-esteem, same sex friendships, opposite sex friendships

Friendships are considered crucial in one's life. Friends enrich one's lives, provide satisfaction (Demir & Weitekamp, 2007), help in socialization (Ferrer & Fugate, 2002), life adjustment and understanding societal norms (Berndt & Keefe, 1995).

Friendships have different roles and functions across developmental stages of one's life. While friendship during childhood meant sharing toys and playing parallel to each other, for teenagers and young adults, it is linked closely to trust and intimacy. Research also states that adults value work friendships more since they provide knowledge and awareness about things (Pica & Verno, 2010). For older adults, friendships improve their mental health and protect them from depressive thoughts and feelings of isolation (Blieszner et al., 2019).

People tend to befriend people who are mostly like them, having similar interests and traits (Fournet & Barrat, 2014). Studies also claim that people tend to become better friends with individuals of same sex than of opposite sex (Baumgarte & Nelson, 2009). This may stem from the fact that since the age of two,

individuals are grouped separately based on their sex, hence, friendships get confined to the divided groups only (Howes, 1988; Maccoby, 1998). Still, as people age, their opposite sex interaction also increases and they are able to form friendships with them as well (McDougall & Hymel, 2007). However, gender differences continue to persist in perception of friendships. Felmlee and colleagues (2012) showed in their study that women, in their friendships, hold stricter 'rules' or norms and higher expectations relating to trust and intimacy than men.

Maintaining Friendships

Like any other human relationship, friendships too turn sour and lose their effect. Wiseman (1986) talked about friendships as being fragile bonds because there is no actual social pressure to maintain them. Research highlights that individuals use similar maintenance behaviour in friendships like they do for other relationships, comparatively, they take less effort in friendship maintenance (Canary et al., 1993). Fehr (1996) talked about conflict resolutions in friendships which brought features like self-disclosure, honesty, and

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openness in the picture. It was Oswald and colleagues (2004) who defined friendship maintenance as behaviours involving strategies and routine behaviours used to sustain committed and satisfactory relationships. Four major traits were identified by them under friendship maintenance - interaction, positivity, supportiveness and openness.

Interaction entails spending time together and participating in collaborative activities. Being in close proximity is vital for friendships because it allows other qualities to shine. When people have best friends, they are more comfortable with other people and have better interpersonal happiness than those who find it difficult to form friendships.

Positivity includes the pleasant emotions, conversations and behaviours that benefit both individuals. Everyday contacts with another person result in feeling at ease and being emotionally happy (Holt-Lunstad et al., 2015). Furthermore, when something wonderful happens, we want to inform our best friend causing a convergence of emotions in which the buddy also receives a surge of positive sentiments (Anderson et al., 2003).

Supportiveness means that friends bring assurance and are available when we require assistance. It has been discovered that closest friends offer their support equally, resulting in a self-other agreement: when each friend considers their companion as an extension of themselves.

Openness is the stage at which both friends feel comfortable disclosing personal and sensitive information to one another.

In the present study, since the researchers are looking at gender difference as a crucial variable, how different genders perceive friendships and to what extent they engage in friendship maintenance behaviours will be explored.

Female friendships are higher in quality and self-disclosure which is believed to maintain that relationship (Leung, 2002). Also, compared to men, women show more relational maintenance behaviour when it comes to friendships (Demir et al., 2011; Oswald et al., 2004). When it came to comparison

related to homophily, men stated same sex and opposite sex friendships to be more or less similar while women regarded opposite sex friendships as less intimate and reliable.

History of Gender Differences in Friendship

The expectation that opposite-sex friendship (OSF) psychology will differ from SSF psychology is supported by compelling evolutionary theoretical grounds. Men experienced more adaptive issues in prehistoric environments related to hunting and warfare than did women, whereas women witnessed issues closely related to gathering and childcare (Silverman et al., 2007). Thus, men's same-sex friendship (SSF) psychology exhibits preferences for buddies engaging in conflict and hunting-related behaviours. On the other hand, the adaptive issue of finding trustworthy childcare has had an impact on female friendships. Most importantly, OSFs might have made better partners than friends, which again boils down to survival needs.

Research (Hays, 1989; Rose, 1984) shows that there can also be gender disparities in the usage of maintenance behaviours. Male friendships have also shown less reciprocity than female friendships between same-sex partners. For example, compared to male SSFs, female SSFs reported higher levels of closeness, acceptance, attachment, compassion and trust. Males claimed that engaging in same-sex interplay cost them time, frustration, and boredom.

Studies on cross-sex friendship maintenance practices have produced a range of results. For instance, Rose (1984) found that cross-sex friendships were less likely than same-sex friendships to report using maintenance techniques. On the other hand, the acceptance, effort, time, and commitment levels in male and female same-sex friendships were higher, as were the degrees of similar interests.

However, Monsour (2016) regarded that we had been poorly defining same-sex and opposite sex friendships, and do not understand their benefits truly. It is an artificial gender binary concept along the lines of which we are trying to create these differences and understand friendship. There is nothing natural and scientific about these differences, rather just sociological constructs.

Self-esteem and its link to friendship

Friendships with high self-esteem have various characteristics such as mutual affection and respect, and positive interactions outnumber negative ones more frequently. Disagreements don't endanger the friendship. Friendships with strong self-esteem are caring because they encourage intimacy and connection among the participants. Both friends feel secure and at ease.

Although friendships have significant effects on individuals, it can be harmful to one's mental health to base one's self-worth on the calibre of one's friendships. Having self-esteem that is reliant on one or more domains is known as contingent self-esteem, a concept first proposed by James (1890). Experiencing both positive and bad experiences in a particular domain can cause changes in overall self-esteem. The amount to which one regards relationships as part of oneself and self-esteem that is dependent on peer acceptance (Crocker & Knight, 2005) is also measured. Self-esteem that depends on how well friendships are going is known as friendship contingent self-esteem.

Present Study

Although there are a significant number of studies that demonstrate the differences between same-sex and opposite-sex friendships, there are very few that move beyond the single variable. Also, most of the research is quite old in the sociological context considering the increase in exposure and concept of equality among different genders. Thus, the researchers wanted to revisit those gender differences in friendship styles, maintenance and association with self-esteem.

The purpose of this study was also to assess the impact of friendship on one's self-esteem. Through the literature reviewed, the researchers could not find studies available on the subject in an Indian societal context for young-adults. Since friendships impact one's self-esteem in various ways, this study's findings will be crucial to understand the role of maintenance behaviours on one's self-esteem.

Objectives

- To study differences in male and female friendship maintenance patterns.
- To study the differences in friendship-contingent self-esteem between men and women.
- To study the nature and differences in perception of same-sex and opposite-sex friendships in men and women.

Hypotheses

- There will be no significant difference in friendship maintenance perceptions in men and women.
- There will be no significant difference in men and women's friendship maintenance perceptions of same-sex friendships.
- There will be a significant difference in men and women's friendship maintenance perceptions of opposite-sex friendships.
- There will be no significant difference in friendship contingent self-esteem in men and women.
- Friendship maintenance perception will predict friendship contingent self-esteem.

Method

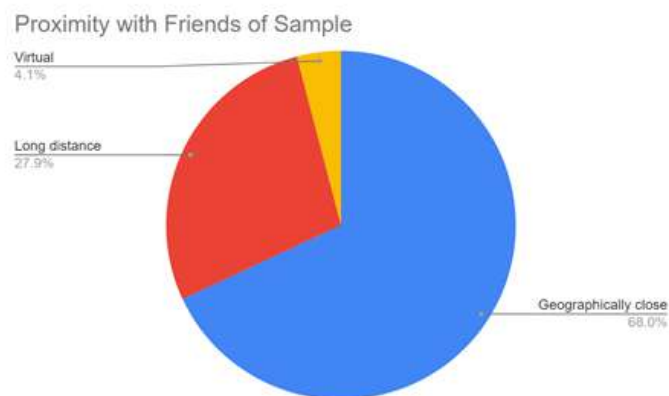
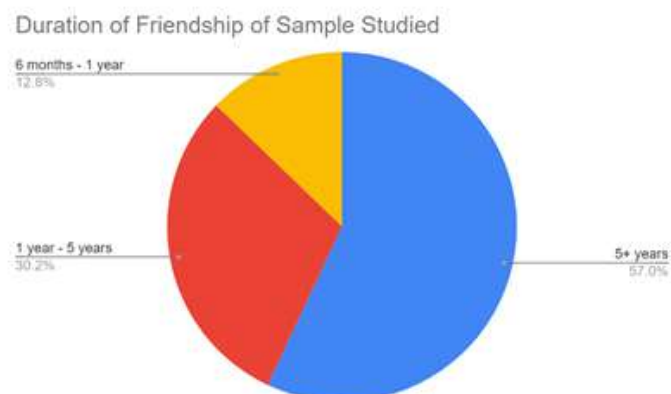
Participants

120 young adults (60 males and 60 females) between the age group of 16 to 22 years participated in the study. 30 males and 30 females filled the questionnaire keeping in mind a friend of the opposite sex, and same for same-sex friendship. A non-probability convenience sampling method was used. The questionnaire's link was distributed through internet groups. The participants were instructed to keep only one friend (either of same-sex or of opposite-sex) in mind while filling the questionnaire over Google Forms.

The mean age of the participants was 19.45 years, all residing majorly in Delhi, India.

Table 1*Demographic characteristics of the participants*

Gender	Friendship type	N	M
Male	Same-Sex	30	20
	Opposite-Sex	30	19.22
Female	Same-Sex	30	20.11
	Opposite-Sex	30	21.2

Figure 1*Proximity with Friends of the sample***Figure 2***Duration of Friendship of the sample*

Measures Used

This study made use of a questionnaire (google form) which consisted of questions related to friendship maintenance and the impact of friendship on one's self esteem.

Friendship Maintenance Scale (FMS) (Oswald et al., 2004). A 20-item questionnaire, FMS assesses friendship maintenance using four subscales - Positivity, Supportiveness, Openness and Interaction. The Cronbach alpha reliabilities for each subscale is high (Positivity - 0.92, Supportiveness - 0.90, Openness - 0.84, Interaction - 0.74). The participant is supposed to consider either their best or close friend who does not also fall under the category of their significant other to answer the items by rating along a 11 point Likert scale with anchors "never" (1) and "frequently" (11).

Friendship Contingent Self-Esteem Scale (FCSE) (Cambron et al., 2009). The FCSE scale is an eight-item scale with a 5-point Likert system (1= very little like me, 5= very much like me). While two of the items of the scale

come from pre-existing self-esteem scales, rest of the items were particularly constructed by the developers of the scale. The Cronbach alpha value was reported by the scale developers as .93, showing internal reliability. The scale also showed high validity with other measures of self-esteem and yet stood out distinct from other measures as well for being strictly friendship-contingent.

Analysis

t-tests for independent samples were run to study the differences between male and female friendship maintenance scores and friendship contingent self-esteem scores. Male versus female same-sex and male versus female opposite-sex data was also analysed through t-tests to see differences. Within same genders as well, same-sex versus opposite-sex data was examined to find significant differences. Lastly, a linear regression analysis was also done to see any relation between friendship maintenance and friendship-contingent self-esteem.

Results

Table 2

Independent samples t-test scores for differences in Same-Sex versus Opposite-sex friendship maintenance behaviour and contingent self-esteem in men and women

Variable	Mean (SD)		t (df=58)	
	Men	Women	Men	Women
Same sex friendship maintenance behaviour	158.33 (25.55)	168.90 (20.65)	.47	1.022
Opposite sex friendship maintenance behaviour	154.70 (34.08)	163.67 (18.97)		
Same sex Friendship contingent self esteem	15.10 (7.59)	16.83 (5.16)	2.47	.41
Opposite sex Friendship contingent self esteem	19.67 (6.71)	17.50 (7.26)		

The results showed no significant difference between same-sex and opposite-sex friendships of men as well as women on the variables of maintenance behaviour and self-esteem

Table 3

Impact of friendship maintenance perception on friendship contingent self esteem

Variable	B	ΔR^2	t	F
Friendship contingent self esteem	.04	.01	.48	.23

The regression analysis showed no significant impact of friendship maintenance perception on contingent self-esteem of the participants.

Discussion

Friendship is one of the closest ties that individuals have. Good quality friendships are crucial for a person's well-being because they promote intimacy and connection among those involved. The current study's objective was to look into young adults' friendship maintenance behaviours, understand how friendships impact one's self-esteem and how these dynamics come into play. The interplay of same-sex and opposite-sex friendships was studied, with the goal of determining whether there are any differences in maintenance behaviours. Lastly, an investigation was carried out to comprehend if friendship maintenance behaviour has an impact on friendship-contingent self-esteem.

Previous literature in this domain showed that gender differences exist in the use of maintenance behaviours (Hall et al., 2011; Hays, 1989; Oswald et al., 2004; Rose, 1984). Female same-sex friendships, for example, reported much higher degrees of intimacy, acceptance, attachment, compassion, self-disclosure, and trust than male same-sex friendships (Hays, 1989). In addition, when it comes to friendships, women exhibit greater relational maintenance behaviours than men (Demir et al., 2011). Also, when it comes to homophily comparisons, women perceive opposite sex friendships to be less intimate, less trustworthy, and less reliable as compared to men.

Today, the understanding of gender is changing. Considering the urban context specially, there is an extensive exposure to gender continuum, varied sexual

orientations and co-existence of these identities in shared physical spaces. The researchers hence were interested in studying the validity of friendship related constructs in today's time. The researchers proposed a few hypotheses in the current study that went against the existing literature, and wanted to see if they were held true or not.

The first hypothesis of the study stated that there will be no differences in men and women's scores on friendship maintenance scale. As can be seen in Table 3.3 and 3.4, this hypothesis was accepted. In contradiction to the existing literature (Demir et al., 2011; Oswald et al., 2004) which showed that women put in more effort in maintaining friendships than men, there was no difference found in the present study.

The second hypothesis of the study postulated that men and women will also not have any differences in friendship maintenance behaviour in same-sex friendships. On the contrary, the third hypothesis said that men and women will vary in their friendship maintenance behaviour when it comes to opposite-sex friendships. While the second hypothesis was against the existing literature, the third one was in line with the previous studies only because the researchers believed people still hold some biases and values in the Indian context when it comes to opposite-sex friendships. Interestingly, the second hypothesis was retained while the third one was proven false. The results showed no differences in scores in either kind of friendships. Previous findings by researchers (Gallagher et al., 2020; Hays, 1989; Rose, 1984) showed that women found trust and intimacy more in same-sex relationships as compared to opposite-sex friendships while only men did not find any such differences in their same sex friendships or opposite sex friendships.

Further, the fourth hypothesis stated that there would be no difference among men and women's friendship-contingent self-esteem scores.

Four out of five hypotheses of the present study bring out an idea that the perception of friendship (same sex or opposite sex friendships) among men and women is more or less similar and no statistical differences exist among them. These are in stark contrast to previous research. One may believe that previous research in this area is quite old and times have changed since then. But what has actually changed in the last two to three decades is the sociological map of our world. From becoming a globalized world to empowering women in every area of work, society has significantly reduced the gap between men and women, and thus, blurring the lines that separate their roles and identities. Discussions and reports from the World Bank (2011) and United Nations show that the wage gap between women and men has significantly reduced in low-income sectors because of globalization. Better job opportunities have been created for women worldwide. Speaking at a more micro-level, co-ed education has been implemented worldwide to bridge the gender difference in society. While Narwana and Rathee (2017) believe that only providing co-education is not enough to reduce the differences, it can be believed to have some effect.

If the researchers highlight the demographic of the sample, it will become evident that most of them belong to urban socio-cultural background, having studied in co-ed schools and colleges, having exposure to same sex and opposite sex friendships in their social environment. This can be attributed as a reason why they may not have perceived any differences in the two kinds of friendships. This continuous interaction between girls and boys since childhood reduces awkwardness and hesitation, thus, giving space to develop healthy friendships, without directly seeking the opposite-sex as a romantic or mating partner (Rose, 1984).

Over the years, differences have arisen in the way gender is perceived. Times have evolved and gender is now seen as a fluid concept and not just through the binary lens with which it was viewed in the past.

Gender identities or expressions that differ from their biological sex or from societal and cultural gender standards, are being reported by an increasing number of youngsters and adolescents. Some people identify as transgender, while others identify as nonbinary or gender flexible (Diamond, 2020). As stereotyped heteronormative gender norms weaken, this development enables for the expression of nonconforming gender neutrality (Gosling, 2018). Their gender identification or expression is protean in nature and can include one, several, or no gender. Thus, the binary systems can no longer explain friendship maintenance easily.

The last hypothesis was a unique addition by the researchers in this area of research as they addressed the question if friendship maintenance behaviour influences friendship-contingent self-esteem or not. The findings (Table 3.5) showed no significant result, hence, the hypothesis did not hold true.

One argument that could be given for the last finding can be associated with the fact that most of the participants in the study (68%) had friends living in close proximity to them (see Figure 2.1). Research by Preciado and colleagues (2012) suggests that the importance of distance in friendship weakens as individuals get older, and distance becomes more important for creating than for maintaining friendships. Still, one might ask if distance has to do anything with friendship maintenance behaviour and contingent self-esteem. The present research shows that individuals do not engage much in friendship maintenance behaviour in close-proximity friendships, thus, not leading to a high link with contingent self-esteem. One might even attempt to say that long distance might demand more effort and maintenance behaviour to continue friendships as seen in other research (Johnson et al., 2009). This gives way for further research in this area.

Limitations and Directions for Future Research

There are limitations to the present study with respect to understanding the friendship dynamics in the Indian context. There is a lot of disparity in the population with respect to factors like level of education, employment, personality factors, residence and there will always be differences in the urban and rural set up. The urban population has easy access to resources and

more interaction with the opposite sex.

Even after its limitations, the present study still brings a new discourse of discussion in the existing literature. It brings the idea that with the changing sociological map, norms and gender differences in the globalized world, the nature of friendships and people's perceptions of them are also evolving. Gender is no longer a binary construct, the exposure to other sexes is not an alien concept in urban and even rural settings, friendships are not confined to physically proximal spaces and has expanded to virtual and global spaces. Considering all these notions, the implication of the present study can be seen in the form of a transition from old research set in a different sociological landscape and the new world that is slowly unfolding. Future research can consider the above mentioned changes and see how friendship and its contingent self-esteem evolves in these new settings. The contrasting findings of this study shall give something to researchers to think about, and dwell into more reasons for these disparities in today's time.

Conclusion

The present study explored an age-old question of how men and women perceive friendships and make efforts in maintaining them. As dictated by previous literature, men and women differ in their maintenance behaviour and contingent self-esteem when it comes to same-sex and opposite-sex friendships. The results of the present study showed no such differences in maintenance behaviour and contingent self-esteem. Globalization, changing gender roles and reducing differences among men and women in education and workspaces could be the possible reasons. Also, the changing idea of 'gender' as a notion was also an attributable reason. Lastly, the sample being completely urban and having grown in proximity and exposure to opposite-sex relations, emerged as a reason for the findings and limitation to the study as well. This research, with its divergent findings from existing studies, gives a space for new discussions and studies on whether the changing idea of gender and sociological landscape actually influence the perception of friendships among people.

References

- Anderson, C., Keltner, D., & John, O. P. (2003). Emotional convergence between people over time. *Journal of Personality and Social Psychology*, 84(5), 1054–1068. <https://doi.org/10.1037/0022-3514.84.5.1054>
- Antill, J. K., & Cunningham, J. A. (1979). Self-esteem as a function of masculinity in both sexes. *Journal of Consulting and Clinical Psychology*. <https://doi.org/10.1037/0022-006x.47.4.783>
- Baumgarte, R., & Nelson, D. W. (2009). Preference for same- versus cross-sex friendships. *Journal of Applied Social Psychology*, 39(4), 901–917. <https://doi.org/10.1111/j.1559-1816.2009.00465.x>
- Berndt, T. J., & Keefe, K. (1995). Friends' influence on adolescents' adjustment to school. *Child Development*, 66(5), 1312–1329. <https://doi.org/10.2307/1131649>
- Blieszner, R., Ogletree, A. M., & Adams, R. G. (2019). Friendship in later life: A research agenda. *Innovation in Aging*, 3(1). <https://doi.org/10.1093/geroni/igz005>
- Cambron, M. J., Acitelli, L. K., & Steinberg, L. (2009). When friends make you blue: The role of friendship contingent self-esteem in predicting self-esteem and depressive symptoms. *Personality and Social Psychology Bulletin*, 36(3), 384–397. <https://doi.org/10.1177/0146167209351593>
- Canary, D. J., Stafford, L., Hause, K. S., & Wallace, L. E. (1993). An inductive analysis of relational maintenance strategies: Comparisons among lovers, relatives, friends, and others. *Communication Research Reports*, 10(1), 3–14. <https://doi.org/10.1080/08824099309359913>
- Crocker, J., & Knight, K. M. (2005). Contingencies of self-worth. *Current Directions in Psychological Science*, 14(4), 200–203. <https://doi.org/10.1111/j.0963-7214.2005.00364.x>
- Demir, M., Özdemir, M., & Marum, K. (2011). Perceived autonomy support, friendship maintenance, and happiness. *The Journal of*

- Psychology*, 145(6), 537–571. <https://doi.org/10.1080/00223980.2011.607866>
- Demir, M., & Weitekamp, L. A. (2007). I am so happy cause today I found my friend: Friendship and personality as predictors of happiness. *Journal of Happiness Studies*, 8(2), 181–211. <https://doi.org/10.1007/s10902-006-9012-7>
- Diamond, L. M. (2020). Gender fluidity and nonbinary gender identities among children and adolescents. *Child Development Perspectives*, 14(2), 110–115. <https://doi.org/10.1111/cdep.12366>
- Fehr, B. (1996). *Friendship processes*. Thousand Oaks, CA: Sage.
- Felmlee, D., Sweet, E., & Sinclair, H. C. (2012). Gender rules: Same-and cross-gender friendships norms. *Sex Roles*, 66(7-8), 518–529. <http://dx.doi.org/10.1007/s11199-011-0109-z>
- Ferrer, M., & Fugate, A. (2002). The importance of friendship for school-age children. *University of Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, EDIS*. Retrieved October 25 2022 from <http://purl.fcla.edu/UF/lib/FY545pdf>
- Fournet, J., & Barrat, A. (2014). Contact patterns among high school students. *PLoS ONE*, 9(9), e107878. <https://doi.org/10.1371/journal.pone.0107878>
- Gallagher, K. R., Burns, T.H., & Stuhlmacher, A.F. (2020). Keeping our friends close: Friendship maintenance through the roles of gender and negotiation. *Research Handbook on Gender and Negotiation*, 15-30. <https://doi.org/10.4337/9781788976763.00010>
- Gosling, J. (2018). Gender fluidity reflected in contemporary society. *Jung Journal*, 12(3), 75–79. <https://doi.org/10.1080/19342039.2018.1479080>
- Hall, J. A., Larson, K.A., & Watts, A. (2011). Satisfying friendship maintenance expectations: The role of friendship standards and biological sex. *Human Communication Research*, 37(4), 529–552. <https://doi.org/10.1111/j.1468-2958.2011.01411.x>
- Hays, R. T. (1989). The day-to-day functioning of close versus casual friendships. *Journal of Social and Personal Relationships*, 6(1), 21–37. <https://doi.org/10.1177/026540758900600102>
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality. *Perspectives on Psychological Science*, 10(2), 227–237. <https://doi.org/10.1177/1745691614568352>
- Howes, C. (1988). Same- and cross-sex friends: Implications for interaction and social skills. *Early Childhood Research Quarterly*, 3(1), 21–37. [https://doi.org/10.1016/0885-2006\(88\)90027-0](https://doi.org/10.1016/0885-2006(88)90027-0)
- James, W. (1890). *The Principles of Psychology*. New York: Henry Holt and Company. <http://dx.doi.org/10.1037/11059-000>
- Johnson, A. J., Becker, J., Craig, E.A., Gilchrist, E.S., & Haigh, M.M. (2009). Changes in friendship commitment: Comparing geographically close and long-distance young-adult friendships. *Communication Quarterly*, 57(4), 395–415. <https://doi.org/10.1080/01463370903313430>
- Leung, L. (2002). Loneliness, self-disclosure, and ICQ ("I seek you") use. *Cyberpsychology & Behavior*, 5(3), 241–251. <https://doi.org/10.1089/109493102760147240>
- Maccoby, E. E. (1998). The two sexes: growing up apart, coming together. *Choice Reviews Online*, 36(03), 36–1880. <https://doi.org/10.5860/choice.36-1880>
- McDougall, P. P., & Hymel, S. (2007). Same-Gender versus Cross-Gender Friendship Conceptions: Similar or Different? *Merrill-palmer Quarterly-journal of Developmental Psychology*, 53(3), 347–380. <https://doi.org/10.1353/mpq.2007.0018>
- Monsour, M. (2016). The hackneyed notions of adult "Same-Sex" and "Opposite-Sex" friendships. In M. Hojjat & A.Moyer (Eds.). *The Psychology of*

Friendships (pp. 59–74). Oxford University Press.

- Narwana, K., & Rathee, S. (2017). Gender dynamics in co-education schools: A comparative study of two schools in India. *Les Cahiers D'Outre-mer*, 70(276), 31–49. <https://doi.org/10.4000/com.8331>
- Oswald, D. L., Clark, E. M., & Kelly, C. (2004). Friendship maintenance: An analysis of individual and dyad behaviors. *Journal of Social and Clinical Psychology*, 23(3), 413–441. <https://doi.org/10.1521/jscp.23.3.413.35460>
- Pica, E., & Verno, K. (2010). The changing nature of friendships over the lifespan. *Modern Psychological Studies*, 17(2), 36–42.
- Preciado, P., Snijders, T. a. B., Burk, W. J., Stattin, H., & Kerr, M. (2012). Does proximity matter? Distance dependence of adolescent friendships. *Social Networks*, 34(1), 18–31. <https://doi.org/10.1016/j.socnet.2011.01.002>
- Rose, S. M. (1984). How friendships end: Patterns among young adults. *Journal of Social and Personal Relationships*, 1(3), 267–277. <https://doi.org/10.1177/0265407584013001>
- Silverman, I., Choi, J., & Peters, M. A. (2007). The Hunter-Gatherer theory of sex differences in spatial abilities: Data from 40 countries. *Archives of Sexual Behavior*, 36(2), 261–268. <https://doi.org/10.1007/s10508-006-9168-6>
- Wiseman, J. P. (1986). Friendship: Bonds and binds in a voluntary relationship. *Journal of Social and Personal Relationships*, 3(2), 191–211. <https://doi.org/10.1177/0265407586032005>
- World Bank. (2011). Globalization's impact on gender equality: What's happened and what's needed. In *World Development Report 2012* (pp. 254–278). World Bank. https://doi.org/10.1596/9780821388105_ch6

What makes you feel like an imposter: An investigation of caste discrimination and social support

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Abstract: Imposter literature has predominantly been Western, and looked into gender and racial discrimination. The present study aimed to understand impostorism in the Indian context with a more culturally informed framework of the Caste System, and also assess the role played by perceived social support (PSS) in mediating this relationship between caste discrimination and imposter phenomenon (IP). The sample was recruited through non-probability techniques, and comprised 168 university students in North India (aged 18-25), with 67 belonging to the Scheduled Castes (SC) and 101 to the General Caste (GEN) groups. The Clance Imposter Phenomenon Scale, Multidimensional Scale of Perceived Social Support, and the Everyday Discrimination Scale were administered, following which the data was analyzed using t-test for independent samples, linear regression, and mediation analysis. Results revealed (1) no significant association between IP and caste discrimination, (2) a significant difference among GEN and SC students in perceived social support, but not for IP or caste-discrimination, and (3) significant mediating role of PSS between caste-discrimination and impostorism. These findings suggest the need for more contextual frameworks, which consider socio-cultural factors, in understanding imposter phenomenon, especially among marginalized groups.

Keywords: imposter phenomenon, caste-discrimination, perceived social support, India, scheduled castes

‘Imposter phenomenon’ is described as the feeling of perceived fraudulence where people find it difficult to attribute their success to their own abilities despite many achievements and accolades, and believe themselves to have landed their roles through luck (Parkman, 2016). It can be detrimental to an individual’s well-being, causing clinically significant mental health consequences characterized by psychological distress (Cokley et al., 2017). Researchers have found that it may also have undesirable professional implications as it influences career attitudes and organizational behavior (Vergauwe et al., 2015).

While researchers have majorly adopted an individualistic approach in conceptualizing imposter phenomenon (IP) by examining it as a trait, there is a growing realization about larger social contexts characterized by the kind of structures and interactions that induce self-doubt about one’s abilities and worth (Feenstra et al., 2020). A person’s social position may play a role as people belonging to marginalized groups internalize the negative stereotypes associated with their group identities causing feelings of inadequacy

(Nadal et al., 2021). This has been defined as part of Tajfel’s (1979) social identity theory, which posits that an individual’s sense of identity is based on the groups they ‘identify’ with. For instance, Clance and Imes (1978) argued that negative societal messages about women and success cause them to seek alternative explanations for their accomplishments (such as fooling others). Similarly, students from ethnic minorities that are perceived as unintelligent may grapple with feelings of impostorism when they secure admissions to prestigious universities.

Discrimination and Imposter Phenomenon

Negative stereotypes may result in overt discrimination towards minority-status groups. How these behaviors are actually appraised by the individuals of that group is also of importance. Perceived discrimination occurs when individuals ‘perceive’ or ‘experience’ discrimination, which may fall outside the politico-legal definitions of discrimination (Straiton et al., 2019). Perceived discrimination has been linked to low self-esteem in marginalized minority groups, a factor which is implicated in the development of IP (Harris-

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Britt et al., 2007; Verkuyten, 1998).

Although limited, research has found higher prevalence of IP in women and in people of color, two groups which have faced considerable discrimination throughout history (McGregor et al., 2008; Villwock et al., 2016). Greater vulnerability to IP in women is related to their disadvantageous social position due to internalization of gender hierarchy within the society (Cokley et al., 2015).

While the existing literature establishes a link between IP and discrimination, it focuses mostly on experiences of minorities in American societies, being limited to gender and racial discrimination. This highlights a need for further research in the Indian context which also allows for the investigation of the caste system and its implications as a unique dimension related to discrimination.

Caste Discrimination in India

The caste system in India is a social hierarchy entered into by birth that places people into ranked castes called 'varnas' on the basis of their occupation, and further determines a person's access to wealth, power, and privilege. At the bottom of this hierarchy are Dalits, or the 'untouchables' as they were known historically – considered 'outcastes' and thus, not included in the four ranked castes of Brahmins, Kshatriyas, Vaishyas, and Shudras. Historically, the Dalits were subject to ostracization and discrimination. They could be charged for 'polluting' certain things such as temples with their presence, and were also subject to not only social but considerable economic deprivation. Along with strict rules against inter-caste interactions, especially in the case of marriages (Hampton, 2010), there also existed stringent barriers around the kind of occupations an individual from a specific caste could take up – thus, the untouchables were permanently resigned to degrading work, disallowing them to rise from their economic circumstances (Sana, 1993).

This led to widespread criticism and resistance, and concerted efforts were made in contemporary Indian history to address the social inequities produced by this system. While rapid modernization led to changes in social and cultural values, and various constitutional reforms were put in effect for abolishing untouchability

and for reserving seats in legislatures and government institutions, it cannot be said that this framework is entirely obsolete in the current Indian set-up. SCs continue to remain the largest deprived section of society (Sundaram & Tendulkar, 2003), and are subjected to discrimination, with crime rate against Dalits having a 66% increase in recent years (NCRB, 2017).

Caste Discrimination and IP: Perceived Social Support as a possible mediator

Social support is the existence or availability of people on whom we can rely, people who let us know that they care about, value, and love us" (Sarason et al., 1983). While received social support refers to supportive behaviors provided by social networks of an individual, perceived social support refers to the individual's perception of this support pertaining to its availability and level of satisfaction (Sarason, Sarason & Pierce, 1990). A line of research suggests that perceived social support could be altered due to individual experiences. Perceived discrimination may change the way people appraise the availability of social support causing an erosion in their perception of the social support. In this way, discrimination can be a predictor of low perceived social support (Hashemi et al., 2019).

The lack of social support has been found to be detrimental to the psychological well-being of the individual, with linkages to loneliness, alcohol use, major depression, posttraumatic stress disorder symptoms, and nonspecific psychological distress (Brewin et al., 2000, Finch et al., 1999; Lakey & Cronin, 2008). On the other hand, literature also suggests that high levels of perceived social support are linked to several desirable health outcomes such as increased quality of life and overall happiness (Kang et al., 2018; Wang et al., 2018). Perceived social support also plays an important role in stress-buffering. Stress theory posits that social support is a crucial resource for dealing with stressful situations (Lazarus & Folkman, 1984) and a lack of the same enhances an individual's susceptibility to emotional distress.

Certain marginalized social groups, such that of caste, may face what is known as minority status stress in the form of perceived discrimination, which can

have damaging effects on the person's psychological well-being. Williams and Mohammad (2009) suggest that everyday discrimination makes persistent demands which can exhaust the person's mental resources. The role of social support in mitigating the impact of these negative social interactions has been investigated, suggesting that social support can be utilized as a coping strategy to effectively deal with perceived discrimination as it serves a protective function by acting as a buffer against the associated negative outcomes (Itzick et al., 2017; Jackson et al., 2003)

Perceived social support has also been found to be linked to higher self-esteem (Budd et al., 2009), as well as higher levels of self-efficacy (Mengfei & Jiyeon, 2016). Since both these dimensions are related to IP, PSS may also influence the experience of imposter feelings. Although research on this subject matter is sparse, social support can be used as a coping strategy to manage imposter feelings by using social networks for feedback and recognition. Coryell et al. (2013) found that support from peers can enable an individual to combat feelings of imposterism by enhancing self-confidence.

The current problem: IP and PSS in SC students

A review of previous literature has found a high prevalence of imposter phenomenon in student populations across a variety of majors including psychology, engineering, medical, dental, nursing, and pharmacy students. IP was also related to adverse academic outcomes such as evaluation anxiety, low academic self-esteem and self-efficacy, and academic dishonesty (Parkman, 2016). Further, students from marginalized communities, such as ethnic minorities who reported as being racially discriminated against, have been found to experience higher levels of imposter feelings. Among African America college students, Cokley et al. (2013) found a positive association between IP and minority status stress – an amalgamation of race-related stressors such as racial discrimination and marginalizing comments.

One such group in the Indian context is that of the Scheduled Castes. Students belonging to this community face a number of challenges and are severely underrepresented in institutes of higher

education as even with lower cut-offs, they are unable to fill the quotas (Ministry of HRD, Government of India, 2015). Moreover, due to reservations, the individuals who do manage to get into prestigious universities are often subject to patronizing comments, and questioned about their admission being based on 'quota' rather than merit, inducing feelings of guilt, inferiority, and self-doubt.

Additionally, they face a host of unique challenges at these educational institutions. Tierney et al. (2018) spoke to and recorded the narratives of students from SC background. Many SC students brought up their economic shortcomings, highlighting the interplay of caste and class, and how their lack of material goods and access to certain technology due to their deprived backgrounds puts them at a disadvantage against their privileged upper-caste peers. Further, in interacting with professors and participating in classroom discussions, they seem to struggle with a language barrier due to poor proficiency in English and limited technical vocabulary. Moreover, being first-generation students, many cannot avail academic support from their kin, while conservative upper-class professors may also not provide empathy and support. While overt discrimination may be absent, there are several instances of social exclusion also because students preferred to stick to other SC peers and feel hesitant in approaching upper-caste seniors for guidance. This perceived lack of support further exacerbates problems.

Thus, in addressing the existing gaps in the current literature linking IP and discrimination, as being limited to racial and gender discrimination in the western socio-cultural set-up, the present study aims to investigate the relationship between discrimination and IP in the Indian context, specifically in consideration of caste-based discrimination by studying the experiences of students from the Scheduled Castes community. Further, in light of research suggesting a possible influence of discrimination on perceived social support and the latter's potential as a coping strategy against feelings of imposterism, it also focuses on investigating the mediating role played by it in the relationship between IP and caste-based discrimination.

With reference to the existing literature, the study adopted the following five hypotheses to test:

1. There will be a significant association between imposter phenomenon and caste-based discrimination as experienced by students across the two caste groups.
2. There will be a significant difference in imposter phenomenon between the Scheduled Castes and General Castes groups.
3. There will be a significant difference in caste-based discrimination between the Scheduled Castes and General Castes groups.
4. There will be a significant difference in perceived social support between the Scheduled Castes and General Castes groups.
5. There will be a significant mediating role played by perceived social support between caste discrimination and imposter phenomenon.

Method

Participants

The sample of the study consisted of 168 students (82.1% women, 15.5% men, and 2.4% non-binary) studying at universities only within India, aged between 18-25 ($M = 20$) and belonging to either the Scheduled Castes (SC) or General Castes (GEN) groups. Both undergraduate and postgraduate students were included in the present study. Students belonging to Scheduled Tribes (STs) and other backward classes (OBCs) were excluded from the sample. The study included a total of 101 GEN students and 67 SC students. 36.9% (SC = 14, GEN = 48) of the participants were from an upper-class economic background, 53% (SC = 42, GEN = 47) from the middle and 10.1% (SC = 11, GEN = 6) from the lower background. The participants were recruited using non-probability sampling techniques of purposive, convenience, and snowballing. Demographic details are also presented in Table 1 –

Table 1

Sociodemographic characteristics of participants

Demographics	SC (n=67)	GEN (n=101)	Total
	n	n	n(%)
Economic Background			
Upper-class	14	48	62 (36.9)
Middle-class	42	47	89 (53)
Lower-class	11	6	17 (10.1)
Educational Level			
Undergraduation	58	96	154 (91.67)
Postgraduation	9	5	14 (8.3)
Gender			
Men	12	14	26 (15.48)
Women	53	82	135 (80.36)
Non-binary	1	3	4 (2.38)

Measures

Clance Imposter Phenomenon Scale (CIPS; Clance & Imes, 1978). The CIPS is a 20-item scale that measures the extent to which a person experiences imposter feelings or worries about being a fraud. The items are rated on 5-point scale ranging from 1 (not true at all) to 5 (very true), with higher scores reflecting more intense imposter feelings. The CIPS has evidence for good reliability ($\alpha = .96$) and convergent validity in a gender and ethnically heterogeneous sample (Cokley et al., 2017; Mascarenhas et al., 2019).

Everyday Discrimination Scale (EDS; William et al, 1997). A 9-item scale used to assess the frequency of routine, relatively subtle discriminatory experiences in everyday social situations. Responses are coded on a 6-point Likert scale, ranging from “almost every day” (6) to “never” (1), with higher scores indicating greater perceived discrimination. For the purpose of the present study, an additional clause regarding caste was added to the questionnaire: “Please keep in mind your caste while answering the following questions”. The EDS has demonstrated good internal consistency and validity over time, even in an Indian sample (Gonzalez et al., 2016; Khubchandani et al., 2018).

Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988). This 12-item scale measures the subjective assessment of an individual’s perceived social support from three sources: family, friends, and significant others. The responses are rated and scored on a 7-point Likert scale, with 1 = “very strongly disagree” and 7 = “very strongly agree”. A higher score reflects higher perception of social support. The scale has a high internal reliability of $\alpha = .88$ and has indicated good internal consistency in the previous studies (Koydemir et al., 2013; Tonsing et al., 2012).

Additionally, the online questionnaire also gathered details about the participants’ basic demographic details (age, gender and sexuality, disability status, annual family income, education qualification, and religion) after taking their informed consent.

Procedure and Design

The present study adopted a quantitative comparative design using the survey method of data collection. An online questionnaire (Google form) with all the measures for the study was circulated amongst students across universities/colleges in India. The form contained a cover page informing them about the details of the study, their rights as a participant, as well as the instructions on answering the questions. Their informed consent was taken before proceeding with the questions. Participants were recruited on the basis of purpose and convenience, along with the non-probability sampling technique of snowballing. The data obtained was coded by calculating scores on each individual scale for both the caste groups, and the average scores then statistically analyzed for comparison between groups, association, and mediation on SPSS version 28.0. Simple linear regression was done to assess the association between caste discrimination and IP, t-tests were carried out for independent means on all three constructs for both the groups (GEN and SC), and the mediating role of perceived social support was analyzed using PROCESS macro mediational analysis.

Results

Tables 2-4 along with Figure 1, present the results for each of the inferential analyses carried out in the present study.

Table 2

Simple linear regression analysis of caste discrimination and IP

Model	R Square	F	p-value
Caste Discrimination	.009	1.550	0.215

Simple linear regression analysis was carried out to check for association between caste-discrimination and imposter phenomenon among the entire sample of participants. The results of the same, as presented in Table 2, revealed that caste-discrimination does not

have a significant impact on the imposter feelings experienced by students, with a regression coefficient (R Square) of .009 and $p = .215$. Thus, the 0.9% of variance in imposter feelings attributable to caste-discrimination is not statistically significant at $p < 0.1$ level.

Table 3

Comparison of IP, PSS, and Caste Discrimination between SC and GEN participants

	Mean (SD)		t-value	p-value
	SC	GEN		
IP	62.19 (14.75)	66.12 (12.94)	-1.820	.071
PSS	57.46 (12.07)	63.64 (11.89)	-3.280	.001*
Caste Discrimination	19.73 (8.13)	18.60 (8.15)	.879	.381

Note: * $p < .001$

Table 3 presents the results of the independent samples t-test carried out to compare the mean scores of students in both SC and GEN groups on caste-discrimination, imposter phenomenon, and perceived social support. The results revealed no significant

difference between both the groups on imposter phenomenon and caste discrimination ($t = -1.820$, $p = .071$; $t = .879$, $p = .381$). However, for perceived social support, a statistically significant difference was observed between both the groups, with a t-value of -3.280 and $p < 0.001$.

Table 4

Mediation Analysis for Caste Discrimination and IP through PSS

	Coefficient	SE	t-value	p-value
Path A (Direct)	-.3927	.1134	-3.464	0.0007*
Path B (Direct)	-.2300	.0881	-2.611	0.0099**
Path C (Direct)	.0726	.1332	.5451	.5864

Note: * $p < .001$

** $p < 0.01$

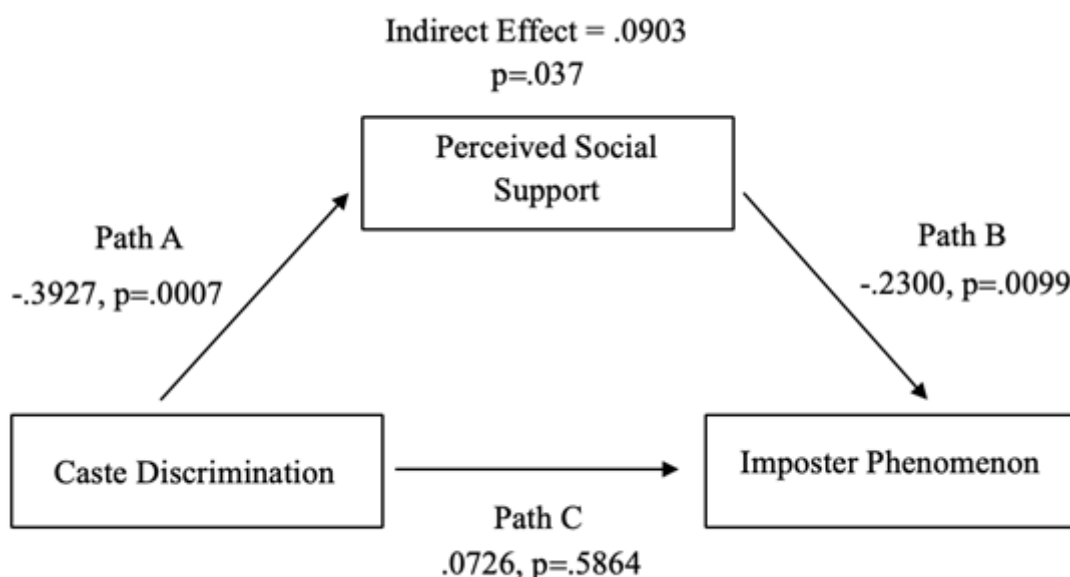
A mediational analysis using PROCESS macro was conducted to check for indirect effect of caste-discrimination on imposter phenomenon through perceived social support. Results of the same, as shown in Table 4, suggest a significant effect of perceived social support in mediating the indirect impact of caste-discrimination on impostorism among students,

with an indirect effect of .0903 significant at $p < 0.05$ level.

According to the criteria given by Hair et al. (2010), perfect mediation could be established between caste discrimination and IP through PSS in the present study since A and B effects are significant while path C is not. Figure 1 demonstrates this mediation model.

Figure 1

Mediation Analysis Model for Caste Discrimination and IP through PSS



Thus, even though a direct effect of caste-discrimination was not observed on students' imposter feelings, a perfect indirect effect with perceived social support as a mediator was present. The amount of social support was also differently perceived by both the SC and GEN groups, with SC students having significantly lower scores

Discussion

The study sought to investigate the contextual roots of imposter phenomenon and frame a culturally-informed model by studying imposter feelings in relation with discrimination and social support as experienced and perceived by students from the Scheduled and General Castes. A comparison of the descriptive statistics reports higher average scores on

IP ($M_{\text{GEN}}=66.12$, $M_{\text{SC}}=62.19$) and PSS ($M_{\text{GEN}}=63.64$, $M_{\text{SC}}=54.76$) among the GEN students than SC, but lower on caste discrimination ($M_{\text{GEN}}=18.6$, $M_{\text{SC}}=19.73$). The results revealed no significant association between caste-discrimination and imposter phenomenon, and no significant difference among SC and GEN groups on caste-discrimination and imposter feelings. Thus, these hypotheses were not accepted. However, perceived social support played a perfect mediating role between caste discrimination and imposter phenomenon, and was significantly different for SC and GEN students. While some of these findings contradict existing literature, it must be noted that the link between discrimination, imposter phenomenon, and perceived social support has not been studied so far in the Indian context.

Though there were no significant caste minority differences in imposterism and discrimination, perceived social support was significantly lower in SC students. Students from marginalized backgrounds face a myriad of challenges (Tierney et al., 2018), therefore, social support may play an important role in shaping their experiences at educational institutions. Since material support is a crucial aspect of perceived social support, taking into consideration that the number of students from an upper and middle-class background were higher for the GEN group as compared to the SC group, this may also explain higher PSS among GEN.

Expressions of discrimination may not always be overt and are much less prevalent at institutes of higher education in urban areas (Leo & Panigrahi, 2021), from where the sample was primarily derived, which might have reduced the difference in perception of the same among SC and GEN students. Moreover, since EDS does not specifically measure caste-discrimination, the participants' appraisal of the discrimination they experience could have been influenced by their gender since majority of the sample (80.36%) comprised of women. Comparable IP scores in GEN as opposed to SC may also be attributed to a higher percentage of women as they are more likely to experience IP (McGregor et al., 2008).

The dynamics of impostor phenomenon suggest that individuals' perceptions can vary and are shaped by external factors (Clance & Imes, 1978). Social support can act as an active coping strategy in managing one's imposter feelings as it allows one alternative perspective to review their perceived limitations, receive feedback on their performance, and also focus on the successes (Pervez et al., 2021). Alternatively, social support may also become a source of stress in cases of negative or ambivalent experiences while seeking social support from peers (Gardner et al., 2019). Thus, individual experiences of perceived discrimination may alter the appraisal of availability of social support (Hashemi et al., 2019). In the present study as well, perceived social support was observed to have a significant mediating role in explaining the impact discrimination has on imposter phenomenon. Thus, it can be suggested that perceived social support helps in establishing a casual pathway between caste-

discrimination and imposter phenomenon among students.

Though no statistically significant association could be established between caste-discrimination and imposter feelings directly, this can be attributed to limitations in measurement approach since the EDS does not have provisions for assessing culture-bound experiences of caste discrimination in everyday life.

Further, it is possible that students from minority castes minimize their perceived discrimination in order to feel more in control of their social worth. Ruggiero and Taylor (1997) established that minority group students hold a greater tendency towards the same due to the perceived consequences of high performance, and social control and self-esteem.

Moreover, according to the Rejection-Identification Model (Branscombe, Schmitt, & Harvey, 1999), perceived discrimination may enhance in-group identification which has been shown to act as a buffer against negative outcomes related to discrimination by serving a protective function for the individual's well-being, especially self-esteem. This may have played a role in the relationship as being related to both perceived discrimination and imposter phenomenon.

Examination of perceived discrimination as of a personal or group nature is also of relevance. Personal versus group discrimination can influence the self-esteem of an individual in different ways (Bourguignon et al., 2006) where the former is related to low self-esteem and the latter to higher levels of self-esteem. These discrepancies may influence the relationship between perceived discrimination and IP of which self-esteem is an important component.

Limitations and Future Directions

In the present study the questionnaire was built using standardized scales used in English, therefore limiting the sample to only the English speakers. The scale used for assessing caste-based discrimination was not designed specially to measure caste discrimination in an Indian context, thus may have altered the obtained results. Further, it is needed that research methods other than survey be utilized for investigating the discriminatory experiences of marginalised students

where Focus Group Discussions or interviews could elicit elaborate subjective descriptions of the participants' experiences

Additionally, the in-group identification of SC students may also be assessed to understand the extent of internalization of negative stereotypes associated with their social group which could help explain the levels of imposter phenomenon as well as its relationship with perceived discrimination. Discrimination may also be measured for both the personal and group dimension in order to better examine how group identity plays into perceived discrimination.

The study also identified perceived social support as a predictor of better college/university experiences for minority caste students by allowing them to cope with their impostorism. Therefore, university/college intervention programs can target the creation of peer support programs or groups for the student body overall. Recommendations can also be made to college counselors working with caste-minority students to address the common stressors experienced by individuals who are not a part of the dominant group on campus.

Conclusion

The present study observed a significant role played by perceived social support in mediating the impact discriminatory attitudes and behaviors have on university students' imposter feelings, also indicating how the experiences of marginalized students at educational institutions are shaped by a dynamic interplay of complex socio-cultural factors. Our findings highlight the need for more culturally-sound contextual frameworks for conceptualizing Imposter Phenomenon, which has largely been individualized in Western literature. Such frameworks could offer more contextual interventions, and structural and effective solutions for combating imposter feelings.

References

- Bernard, D. L., Hoggard, L. S., & Neblett, E. W., Jr. (2017). Racial discrimination, racial identity, and imposter phenomenon: A profile approach. *Cultural Diversity and Ethnic Minority Psychology, 24*(1). <http://dx.doi.org/10.1037/cdp0000161>
- Bernard, D. L., Lige, Q. M., Willis, H. A., Sosoo, E. E., & Neblett, E. W. (2017). Imposter phenomenon and mental health: The influence of racial discrimination and gender. *Journal of Counseling Psychology, 64*(2), 155–166. <https://doi.org/10.1037/cou0000197>
- Bourguignon, D., Seron, E., Yzerbyt, V., & Herman, G. (2006). Perceived group and personal discrimination: Differential effects on personal self-esteem. *European Journal of Social Psychology, 36*(5), 773–789. <https://doi.org/10.1002/ejsp.326>
- Branscombe, N. R., Schmitt, M., & Harvey, R. J. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology, 77*(1), 135–149. <https://doi.org/10.1037/0022-3514.77.1.135>
- Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology, 68*(5), 748–766. <https://doi.org/10.1037//0022-006x.68.5.748>
- Budd, A., Buschman, C., & Esch, L. (2009). The correlation of self-esteem and perceived social support. *Undergraduate Research Journal for the Human Sciences, 8*(1).
- Clance, P. R. (1985). *The imposter phenomenon: Overcoming the fear that haunts your success*. Atlanta, GA: Peachtree.
- Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice, 15*(3), 241. <http://dx.doi.org/10.1037/h0086006>

- Cokley, K., Awad, G., Smith, L., Jackson, S., Awosogba, O., Hurst A., Stone, S., Blondeau, L., & Roberts, D. (2015). The roles of gender stigma consciousness, impostor phenomenon and academic self-concept in the academic outcomes of women and men. *Sex Roles: A Journal of Research*, 73(9), 414–426. <https://doi.org/10.1007/s11199-015-0516-7>
- Cokley, K., McClain, S., Enciso, A., & Martinez, M. (2013). An examination of the impact of minority status stress and impostor feelings on the mental health of diverse ethnic minority college students. *Journal of Multicultural Counseling and Development*, 41(2), 82–95. <https://doi.org/10.1002/j.2161-1912.2013.00029.x>
- Cokley, K., Smith, L., Bernard, D., Hurst, A., Jackson, S., Stone, S., Awosogba, O., Saucer, C., Bailey, M., & Roberts, D. (2017). Impostor feelings as a moderator and mediator of the relationship between perceived discrimination and mental health among racial/ethnic minority college students. *Journal of Counseling Psychology*, 64(2), 141–154. <https://doi.org/10.1037/cou0000198>
- Coryell, J. E., Wagner, S., Clark, M. C., & Stuessy, C. (2013). Becoming real: Adult student impressions of developing an educational researcher identity. *Journal of Further and Higher Education*, 37(3), 367–383. <https://doi.org/10.1080/0309877X.2011.645456>
- Crime in India - 2017. (2021). National Crime Records Bureau (Ministry of Home Affairs). Retrieved October 15, 2022, from <https://ncrb.gov.in/en/crime-india-2017-0>
- Finch, J. F., Okun, M. A., Pool, G. J., & Ruehlman, L. S. (1999). A comparison of the influence of conflictual and supportive social interactions on psychological distress. *Journal of Personality*, 67, 581–621.
- Feenstra, S., Begeny, C. T., Ryan, M. K., Rink, F., Stoker, J. I., & Jordan, J. (2020). Contextualizing the Impostor “Syndrome.” *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.575024>
- Gardner, R. C., Bednar, J., Stewart, B. A., Oldroyd, J. B., & Moore, J. P. (2019). “I must have slipped through the cracks somehow”: An examination of coping with perceived impostorism and the role of social support. *Journal of Vocational Behavior*, 115, 103337. <https://doi.org/10.1016/j.jvb.2019.103337>
- Guan, M., & So, J. (2016). Influence of social identity on self-efficacy beliefs through perceived social support: A social identity theory perspective. *Communication Studies*, 67(5), 588–604. <https://doi.org/10.1080/10510974.2016.1239645>
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. (2010). *Multivariate Data Analysis* (ed.): Pearson Prentice Hall.
- Hampton, A. (2010). *The Untouchables*. Home-CSU, Chico.
- Harris-Britt, A., Valrie, C. R., Kurtz-Costes, B., & Rowley, S. J. (2007). Perceived racial discrimination and self-esteem in African American youth: Racial socialization as a protective factor. *Journal of Research on Adolescence*, 17(4), 669–682. <https://doi.org/10.1111/j.1532-7795.2007.00540.x>
- Harvey, J. C., & Katz, C. (1985). *If I'm so successful, why do I feel like a fake: The impostor phenomenon*. New York: St. Martin's Press.
- Hashemi, N., Marzban, M., Sebar, B., & Harris, N. D. J. (2019). Acculturation and psychological well-being among Middle Eastern migrants in Australia: The mediating role of social support and perceived discrimination. *International Journal of Intercultural Relations*, 72, 45–60. <https://doi.org/10.1016/j.ijintrel.2019.07.002>
- Itzick, M., Kagan, M., & Tal-Katz, P. (2018). Perceived social support as a moderator between perceived discrimination and subjective well-being among people with physical disabilities in Israel. *Disability and Rehabilitation*, 40(18), 2208–2216. <https://doi.org/10.1080/09638288.2017.1331380>
- Jackson, J.S., Williams, D.R. Torres, M., Rockville, A., & Maney, M.D. (2003). Social Stressors, Personal and Social Resources, and Their Mental Health Consequences. Incomplete
- Gardner, R. C., Bednar, J., Stewart, B. A., Oldroyd, J. B., & Moore, J. P. (2019). “I must have slipped through the cracks somehow”: An examination of coping with perceived impostorism and the role of

- Kang, H., Park, M., & Wallace, J. P. (2016). The impact of perceived social support, loneliness, and physical activity on quality of life in South Korean older adults. *Journal of Sport and Health Science*, 7(2), 237–244. <https://doi.org/10.1016/j.jshs.2016.05.003>
- Khubchandani, J. A., Soni, A., Fahey, N., Raithatha, N., Prabhakaran, A., Byatt, N., Simas, T. a. M., Phatak, A. G., Rosal, M. C., Nimbalkar, S., & Allison, J. J. (2018). Caste matters: perceived discrimination among women in rural India. *Archives of Women's Mental Health*, 21(2), 163–170. <https://doi.org/10.1007/s00737-017-0790-1>
- Koydemir, S., Şimşek, Ö., Schütz, A., & Tipandjan, A. (2013). Differences in how trait emotional intelligence predicts life satisfaction: The role of affect balance versus social support in India and Germany. *Journal of Happiness Studies*, 14(1), 51–66. <https://doi.org/10.1007/s10902-011-9315-1>
- Lakey, B., & Cronin, A. (2008). Low social support and major depression. *Elsevier EBooks*, 385–408. <https://doi.org/10.1016/b978-0-08-045078-0.00017-4>
- Lazarus, R., & Folkman, S. (1984) *Stress Appraisal and Coping*. New York: Springer.
- Lige, Q. M., Peteet, B. J., & Brown, C. M. (2016). Racial identity, self-esteem, and the impostor phenomenon among African American college students. *Journal of Black Psychology*, 43(4). <http://dx.doi.org/10.1177/0095798416648787>
- Leo, I., & Panigrahi, D. (2021). Caste discrimination and social change in India. *Journal of Social Responsibility, Tourism and Hospitality (JSRTH)* ISSN 2799-1016, 1(02), 1-6.
- Mak, K. K. L., Kleitman, S., & Abbott, M. J. (2019). Impostor phenomenon measurement scales: A systematic review. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.00671>
- Mascarenhas, V. R., D'Souza, D. C., & Bicholkar, A. (2018). Prevalence of impostor phenomenon and its association with self-esteem among medical interns in Goa, India. *International Journal of Community Medicine and Public Health*, 6(1), 355. <https://doi.org/10.18203/2394-6040.ijcmph20185272>
- McGregor, L. N., Gee, D. E., & Posey, K. E. (2008). I feel like a fraud and it depresses me: the relation between the imposter phenomenon and depression. *Social Behavior and Personality*, 36(1), 43–48. <https://doi.org/10.2224/sbp.2008.36.1.43>
- Ministry of Human Resource Development Government of India. (2015). *Annual Report 2014-15*. https://www.education.gov.in/sites/upload_files/mhrd/files/documentreports/Part1.pdf
- Nadal, K. L., King, R., Sissoko, D. R. G., Floyd, N., & Hines, D. (2021). The legacies of systemic and internalized oppression: Experiences of microaggressions, imposter phenomenon, and stereotype threat on historically marginalized groups. *New Ideas in Psychology*, 63, 100895. <https://doi.org/10.1016/j.newideapsych.2021.100895>
- Parkman, A. (2016). The imposter phenomenon in higher education: Incidence and impact. *Journal of Higher Education Theory & Practice*, 16(1), 51-60. https://doi.org/10.1111/hea.12061_11
- Pervez, A., Brady, L. L., Mullane, K., Lo, K. D., Bennett, A. A., & Nelson, T. A. (2021). An empirical investigation of mental illness, impostor syndrome, and social support in management doctoral programs. *Journal of Management Education*, 45(1), 126-158. <https://doi.org/10.1177/1052562920953195>
- Ruggiero, K. M., & Taylor, D. S. (1997). Why minority group members perceive or do not perceive the discrimination that confronts them: The role of self-esteem and perceived control. *Journal of Personality and Social Psychology*, 72(2), 373–389. <https://doi.org/10.1037/0022-3514.72.2.373>
- Sana, A. (1993). The caste system in India and its consequences. *International Journal of Sociology and Social Policy*, 13(3/4), 1–76. <https://doi.org/10.1108/eb013170>
- Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). Traditional views of social support and their impact on assessment. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 9–25). New York: Wiley.

- Sarason, I. G., Levine, H. M., Basham, R. B., & Sarason, B. R. (1983). Assessing social support: The Social Support Questionnaire. *Journal of Personality and Social Psychology*, 44(1), 127–139. <https://doi.org/10.1037/0022-3514.44.1.127>
- Straiton, M.L., Aambø, A.K. & Johansen, R. (2019) Perceived discrimination, health and mental health among immigrants in Norway: the role of moderating factors. *BMC Public Health* 19, 325. <https://doi.org/10.1186/s12889-019-6649-9>
- Sundaram, K., & Tendulkar, S. D. (2003). Poverty among social and economic groups in India in 1990s. *Economic and Political Weekly*, 38(50), 5263–5276.
- Tajfel, H., Turner, J. C., Austin, W. G., & Worchel, S. (1979). An integrative theory of intergroup conflict. In M. J. Hatch, & M. Schultz (Eds.), *Organizational identity: A reader* (pp. 33–47). Oxford Press.
- Tierney, W. M., Sabharwal, N. S., & Malish, C. (2019). Inequitable structures: Class and caste in Indian higher education. *Qualitative Inquiry*, 25(5), 471–481. <https://doi.org/10.1177/1077800418817836>
- Tonsing, K. N., Zimet, G. D., & Tse, S. (2012). Assessing social support among South Asians: The multidimensional scale of perceived social support. *Asian Journal of Psychiatry*, 5(2), 164–168. <https://doi.org/10.1016/j.ajp.2012.02.012>
- Vergauwe, J., Wille, B., Feys, M. et al. (2015) Fear of being exposed: The trait-relatedness of the impostor phenomenon and its relevance in the work context. *Journal of Business Psychology*, 30, 565–581. <https://doi.org/10.1007/s10869-014-9382-5>
- Verkuyten, M. (1998). Perceived discrimination and self-esteem among ethnic minority adolescents. *Journal of Social Psychology*, 138(4), 479–493. <https://doi.org/10.1080/00224549809600402>
- Villwock, J. A., Sobin, L. B., Koester, L. A., & Harris, T. M. (2016). Impostor syndrome and burnout among American medical students: A pilot study. *International Journal of Medical Education*, 7, 364–369. <https://doi.org/10.5116/ijme.5801.eac4>
- Wang, J., Mann, F., Lloyd-Evans, B. et al. (2018) Associations between loneliness and perceived social support and outcomes of mental health problems: a systematic review. *BMC Psychiatry*, 18, 156. <https://doi.org/10.1186/s12888-018-1736-5>
- Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: evidence and needed research. *Journal of Behavioral Medicine*, 32(1), 20–47. <https://doi.org/10.1007/s10865-008-9185-0>
- Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. H. (1997). Racial differences in physical and mental health. *Journal of Health Psychology*, 2(3), 335–351. <https://doi.org/10.1177/135910539700200305>
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52(1), 30–41. https://doi.org/10.1207/s15327752jpa5201_2

Attaining Peace? Exploring self-harm behaviour in religious and non-religious contexts

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Abstract : Self-harm behaviour which is prevalent among various cultural/religious groups is considered to be normative and is viewed as an attempt to attain inner peace, contentment and relief. On the other hand, similar behaviour among individuals engaging in it for 'non-religious' purposes tends to be stigmatized and viewed as psychopathological. The present study sought to compare and contrast self-harm practices performed in religious and non-religious contexts, in terms of its emotional, physiological and situational antecedents and consequences. Self-harm behaviour in Islamic, Buddhist and Hindu religious texts was examined, and in-depth qualitative interviews were carried out with four young adults who had previously engaged in self-harm. Data obtained from both sources was thematically analysed, and it was observed that both practices are similar with respect to their goals and perceived affective outcomes: by providing the person with a cathartic experience, irrespective of the context, such behaviour aims to restore inner peace and enable the individual to seek psychological repentance. However, important differences were also observed, particularly with respect to the 'lasting' effects of the relief that is obtained. The study seeks to open up a dialogue about the coping value of self-harm behaviour both in religious and non-religious contexts, subsequently reduce the taboo associated with such activity, and facilitate psycho-education for alternatives to achieve psychological relief.

Keywords: self-harm, religion, inner peace, culture, qualitative research.

Self-harm or self-injury may be defined as "intentional and repeated self-aggressive activity, subjectively performed to relieve 'emotional malaise,' without the intention of committing suicide, getting sexual pleasure (somasochism), or pursuing some aesthetic goals (body art)" (Brossard, 2014, p. 558). It typically involves cutting, burning, or hitting oneself, and such behaviour can cause significant psychological and physical distress to not just the person engaging in it, but also to those close to them (Nock, 2010; Rani, et al., 2014). Brunner et al. (2014) further found a strong positive correlation between self-harm and various risk-taking behaviours such as substance abuse and sexual risk taking, along with other mental health difficulties, including instability of mood and anxiety (Holliday, 2020). Self-mutilating behaviours are also a key risk factor in completed suicide (Holliday, 2020; Klonsky et al., 2013).

Most authors within the field of academia believe that the act of self-harm is looked upon as taboo, primarily because as a behaviour, it intuitively goes against the core human values and drives associated with self-preservation (Linehan, 1993; Pembroke et

al., 1998; Ryan et al., 1997; Vivekananda, 2000). Even within the domain of clinical psychology and psychiatry, self-harming behaviour is often attributed to numerous mental illnesses, and individuals engaging in the same are judged as being irrational and clinically symptomatic. The attitudes contribute to stigmatization and negative biases directed towards who engage in self-harm (McAllister, 2003; Van der Kolk et al., 1991). Rayner and Warner (2003) discuss how in situations of illness, individuals are normatively expected to attempt to get better- hence, in this sense, self-harming behaviour is viewed as purposeful attempts to inflict 'sickness' on ones' self. Further, according to an 'illness model' (as proposed by such disciplines), individuals who engage in self-harming behaviour are frequently hospitalized, which arguably only contributes to the problem by pathologizing such behaviour. This 'professionalizes' the issue and enables the clinician to become the expert who views the person as disordered and in requirement of clinical intervention (Johnstone, 1997; McAllister, 2003).

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Interestingly, there are many cultural practices and religious traditions (including Hinduism, Buddhism and Judaeo-Christianity) that sanction, and even promote self-harming behaviour that would otherwise be considered pathological, by considering such acts as devotional or as part of religious protests (Cid, 2016; Kelly, 2011; Wilson, 2012). For instance, the ritual of self-mutilation and self-immolation at the Vajresvari Temple in Kangra, Himachal Pradesh (India) has been a common religious practice carried out for the Goddess Sakti, the first wife of Shiva. Devotees believe that by engaging in this practice, one has a greater chance of meeting the Goddess ('Darshan') (Cid, 2016). Further, Buddhist traditions sanction suicide and self-harming behaviour if the motivation behind such acts involves helping others (Bendall & Rouse, 1971; Grosseohme & Springer, 1999; Kelly, 2011). Another example pertains to Muslim Shia men, who are known to engage in self-flagellating during the festival of Muharram, using knives, blades and chains; some individuals even cover themselves with mud and light bonfires, and this practice is considered to be a symbol of struggle against oppression, tyranny and injustice (Bagadiya, 2017). These studies show that self-harming behaviours are prevalent in various religions as a way to attain inner peace, contentment and relief.

Objectives of the Present Study

Numerous studies have identified self-harming behaviour as an inter, as well as intra-coping mechanism, which aims to relieve individuals of their distress and other negative emotions (such as helplessness, hopelessness, and neglect). While self-harm behaviour which is carried out in religious and cultural contexts may be viewed as "learned way(s) of coping with life and a way of maintaining status in a very difficult institution or sub-culture", when carried out in non-religious contexts, such acts are viewed as symptoms of pathology (Rayner & Warner, 2003, p. 309; Ross & McKay, 1979). The present study sought to compare and contrast perspectives associated with self-harming in both, religious and non-religious contexts and associated themes pertaining to both kinds of phenomena. Further, it argues that while the normative value attached to the behaviour in both contexts significantly differs, both seek to serve the same purpose for the person engaging in it; self-harm behaviour, irrespective of whether carried out in the

name of cultural tradition or personal distress, is performed as a means of achieving catharsis, psychological relief, and respite.

Method

Part I: Analysis of secondary data

With respect to secondary data, self-harm practices prevalent in three different religious contexts, i.e., Buddhism, Islam and Hinduism were reviewed and subsequently analysed. These texts sought to focus on self-harm practices within that particular religious community in terms of what the behaviours consist of, the purpose they serve for the individual, and the rationale behind engaging in those activities. After a thorough literature review, nine texts were selected as being the main sources of secondary data (three per religion). Buddhism practices pertaining to self-harm were explored via the work of Budny et al. (1991), Kelly (2011) and Kieschnick (2000); Islamic self-harm rituals were explored by examining texts authored by Khan et al. (2014), Hegland (2008) and Daryae & Malekzadeh (2014); and finally, Hindu self-mutilation practices were examined through sources produced by Cid (2016), Kolamkuzhyil (2016) and Bates (2006). The aforementioned texts were only included in the study after all authors unanimously agreed that they provided a comprehensive overview of the self-harm practices prevalent in each of the religious contexts. Further, since the method of analysis chosen was a deductive thematic analysis technique, where-in the core ideas/notions to be explored under each religion was pre-decided, it was ensured that the texts selected for the purpose of the study adequately captured those themes.

Part II: Collection and Analysis of Primary Data

Participants

The sample for the study consisted of four young adults of ages ranging between 19-22 years. Convenience and purposive non-probability sampling techniques were used to identify individuals who (a) had engaged in self-harm, (b) were of age 19 years or above, and (c) were willing to share their experiences of indulging in self-harm. The participants belonged to the upper-middle socio-economic status, resided in urban areas, and were pursuing undergraduate or postgraduate degrees.

Further demographic details of the participants, along with the number of times and the means through which they engaged in self-harm, can be seen in Table 1.

Table 1

Demographic details of participants

Participant	Age	Gender	Number of times participant engaged in self-harm	Means of engaging in self-harm
A	19	Male	3	Cutting using a razor
B	22	Female	2	Cutting using a razor, burning one's skin
C	21	Female	1	Cutting using a razor
D	20	Female	4	Cutting using a razor and hitting one's self

Design, Tools and Procedure

After a thorough literature review, a semi-structured interview was designed and used as a tool for the study. The interview aimed to elicit the experiences of self-harm and to understand the emotional, physiological and situational antecedents and consequences of engaging in the behaviour. The questions sought to explore the various positive and negative emotions experienced before and after the act of self-harming, what participants believed motivates someone to self-harm repeatedly and the relation of self-harm with peace. Informed consent was elicited from the participants, and they were debriefed post the interview process.

Data Analysis

After completing data collection, the interviews were transcribed and analysed using an inductive thematic analysis technique. As part of this, the authors first familiarised themselves with the transcribed content, following which codes were generated that captured similarities, differences and important features of the data, across all four participants. Supporting each of the codes were multiple verbatim accounts of what the

participants had experienced, with respect to the nature of their self-harm behaviour. Finally, various codes were integrated meaningfully to form a theme, with each theme serving as an 'umbrella' account of experiences and ideas that the data reflected.

Results

Part I- Insights from Secondary Data

Through the use of a deductive analysis technique, the themes that were collaboratively discussed and narrowed down to be explored included- looking at the construct of self-harm behaviour as understood by the religion, the acceptable and sanctioned practices performed, religious motivations and reasons for engaging in the prescribed behaviours, perceived outcomes of performing the self-harm activities, whether the nature of the behaviour was individualistic or collectivistic, and lastly, the notion of 'after-life' and spiritual transcendence as held by that religious context.

Buddhism. Buddhist teachings largely discourage the acts of hurting oneself or others. However, the religion does sanction certain self-injuring behaviours

(including burning or cutting parts of one's body, walking on fire and pricking parts of one's body to obtain blood) aimed at ending others' suffering. Other reasons for engaging in self-injuring tasks are facilitation of spiritual practice, attainment of spiritual merit ('Punya') or to follow the vow of "Imitating the Buddhas". Buddhists believe that such self-injuring acts not only show one's devotion but also bring people closer to enlightenment and re-birth in the Heavens. Such acts are engaged in amid the process of contemplation and solitude, individually, and not in a group setting. The ultimate aim of these acts is to gain entry into the Pure Land and reach the state of Nirvana.

Islam. Self-flagellation and harming behaviours are carried out in the Shi'a sect of the Muslim community as a part of Muharram rituals. Self-injuring acts ('Matam') include chest/breast beating which are publicly performed during chanting, self-flagellation through the use of flails and razors ('Zanjeer Zani') and head beating, which is done during "Majalis" on the 10th day of the festival. These self-injuring acts are a way of expressing devotion to God ('Allah'), a way to protest against injustices and a way to honour Husayn who is considered as the legitimate political authority. The self-harm ultimately helps people to appease God and enables the Shias assert their identity as a separate sect of Islam. The practice is done in a group/collectivistic setting, where the Matam rituals and behaviours are performed along with mourning chants ('Nohas') which are sung in a group. Death in Islam is perceived to be a transition from one's current existence to a future life, based on the nature of one's deeds in the current life.

Hinduism. Sacrifices are a common part of Hindu rituals ('Yajna'). The basic essence behind any sort of sacrifice is the abandonment of the material world and attainment of salvation to reach Heaven ('Swarga'). Some of the self-injuring sacrifices performed include gashing, piercing/cutting of tongues, hook-swinging and walking on fire. These self-injuring acts are done to impress Gods and Goddesses like Shiva and Dev Bakbani (Kali). Fulfilment of desires, thanking the Gods, and getting closer to God to attain enlightenment are some other reasons that drive devotees to engage in these self-harming acts. It is believed that those who sacrifice the most in their lives

with purest devotion reach the heavenly world. The acts of sacrifice are performed individually by the sacrificer. However, these sacrifices are always performed in rituals where the family of the sacrificer, the priests and sometimes even the community needs to be present. The ultimate aim of these acts is to transcend spiritually.

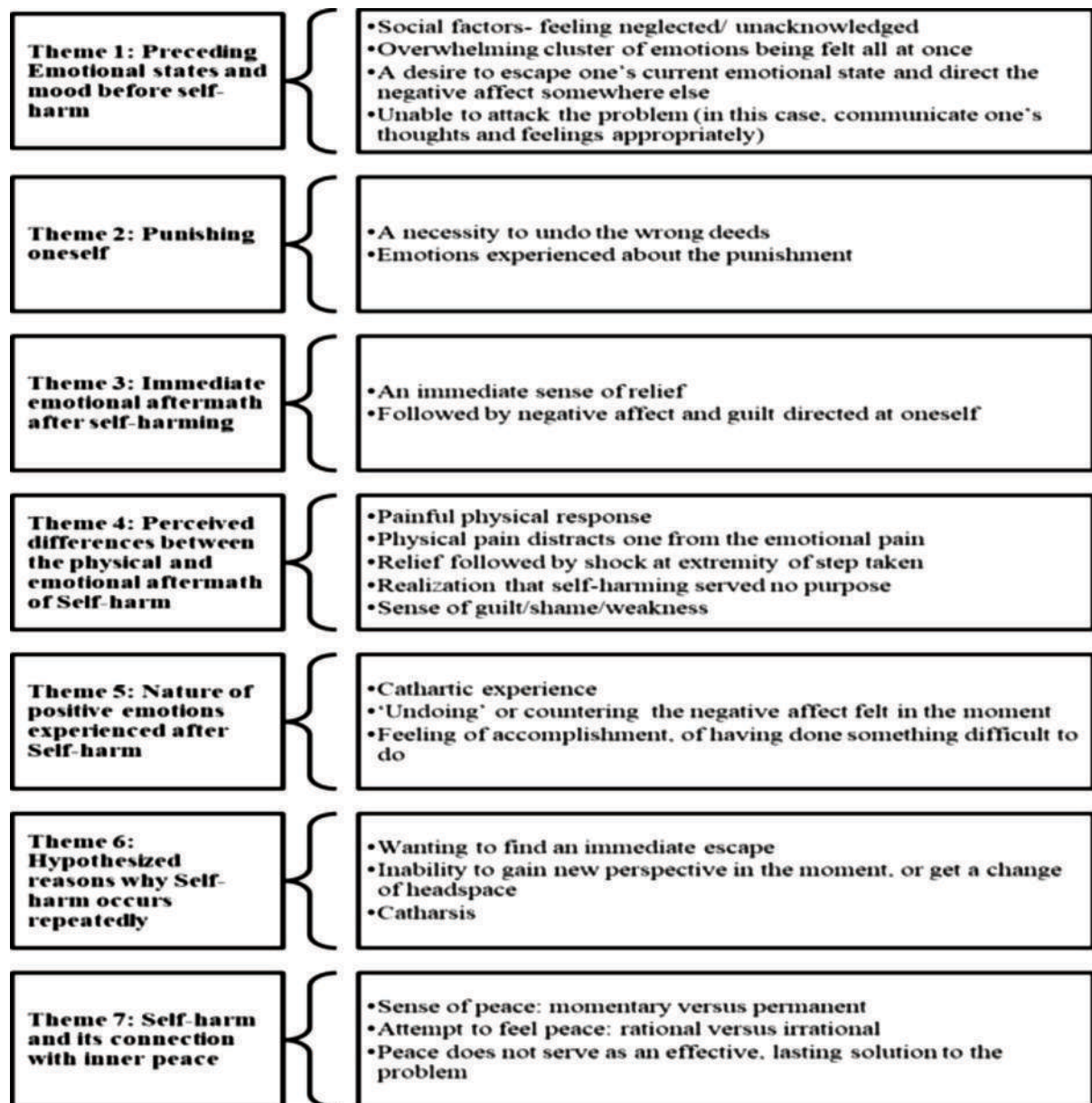
Part II- Analysis of Primary Data

Figure 1 highlights the seven major themes and their corresponding codes that were derived from the inductive thematic analysis of primary data. The first theme pertained to the emotions participants experienced prior to engaging in self-harm, and the results indicated that these were often characterised by intense negative feelings, the perceived inability to address the root cause of these feelings (or the feelings itself) in an adaptive way, and a sense of social isolation. This further tied into the second theme revolving around a desire to punish the self, in an attempt to overcome or deal with the negative emotions being experienced. Themes three and four focused on the act of self-harm itself, and its immediate impact on the individual, physically and psychologically. Due to the painful physical impact of the behaviour, participants reported an immediate (and positive) distraction from the emotional turmoil being experienced; however, this tended to be short-lived, as they soon experienced feelings of guilt, shock and shame for having taken such a step. However, as reflected in themes five and six, it may be noted that the initial and instant relief obtained after self-harming was something that was cherished, and was described as emotionally cathartic. Interestingly, even though shame is later experienced for hurting one's self, in the moment, some participants even experienced a sense of pride and accomplishment for being able to carry out such an act, especially after knowing that it might momentarily allow them to cognitively dissociate from their difficult circumstances. Hence, the anticipation of instantly being able to escape from their negative thoughts and emotional states in the moment was reported as being a tentative reason for the repetitive nature of such activity. Finally, the seventh theme centred on the perceived link between self-harm and peace, and how even though peace was a definitive consequence, it was almost always short-lived and not permanent; yet, despite having experienced and knowing this,

participants would find it difficult to control the urge to self-harm the next time they felt like engaging in it, as they irrationally believed that unlike the previous time(s), the sense of relief would be more pervasive and long-lasting this time round.

Figure 1

Themes emerging from the inductive thematic analysis of primary data



Discussion

The present study sought to explore patterns of self-harm in religious and non-religious contexts, and develop a comparison of the behaviours/experiences pertaining to the same. It proposed that both acts ultimately seek to serve as sources of inner peace, even though one is considered normatively acceptable and

the other is viewed as a symptom of psychopathology. The study employed a qualitative design and made use of data generated via four interviews administered on adults who had self-harmed, as well by analysing data relevant to self-mutilation behaviour in Buddhist, Hindu, and Islamic religious contexts. Interestingly, along with similarities, various differences also

emerged with respect to the experience of participating in such behaviour in both contexts, as discussed below.

Similarities between the experience of self-harming for religious and non-religious purposes. There are a variety of similarities that may be observed when it comes to the nature and experience of self-harm in religious as well as non-religious contexts. Both behaviours have an underlying common set of affective, physiological, and cognitive components that prompt the person to resort to self-injurious activity, which is then followed by certain consequences and responses that were previously envisaged and sought to be attained.

As a means of distracting one's self from negative emotions. In both contexts, individuals engaging in self-harm behaviour tend to do so with the aim of distracting themselves from certain undesirable or negative emotions being experienced in the present (such as guilt, distress and anxiety), which are perceived as being extremely difficult to overcome. One of the participants, while talking about the emotional state they experienced prior to self-harming-particularly the desire to escape and free one's self of the emotions being felt, stated- *"I just wanted to do something...I wanted to take action about those feelings (and) address them in some way, and I felt quite helpless...."* This finding is supported by work done by Stanickeet al. (2018) which indicates that one of the major reasons people indulge in self-harm is to enable them to better control feelings which they find difficult to manage and deal with. In the case of Buddhist monks, numerous instances suggest that cutting off the testicles and penis is a means to prevent one's self from getting distracted by sexual temptation, in order to better focus on spiritual practice (Favazza, 1996; Kelly, 2011). Both situations highlight a commonly experienced state before engaging in self-harm- that of feeling incapable of handling the intensity of emotions felt in the present, as well as an extreme desire to distract one's self from them. Further, in both cases, individuals feel incapable of addressing the problem from which their negative emotions stem, in a 'direct' fashion, which results in them resorting to self-harm, as an indirect means to cope. For instance, when asked about the emotional/cognitive states preceding the act of harming themselves, one participant stated, *"I*

wanted the people to realise that they had hurt me". The participant, instead of attempting to confront the individuals responsible for the same, engaged in self-harming behaviour as a means of resolving the issue and unpleasant emotions being experienced. Similarly, the self-harm ('*Matam*') rituals performed by the Shi'a community during Muharram seek to serve as an instance of standing up against the suffering brought upon them by the Sunni community (Khan et al., 2014).

Commonly observed repetitive or cyclic nature of the behaviour. Self-harming, in both religious and non-religious contexts, is often engaged in multiple times on the basis of the underlying belief that it will lead to/result in an outcome that is desired by the individual. In the case of the participants, when asked what motivated them to engage in the behaviour on multiple occasions, the major factors with respect to the same revolved around the knowledge of the fact that the experience would be cathartic, accompanied by a desire to find an immediate escape from one's current state of being, and the inability to gain better perspective (in the moment). One participant stated, *"Yes I am expecting the same (outcome), or I have a certain goal in mind, and you know, I'm doing this (self-harming) because I want to feel this"*. Interestingly, studies indicate that repetitive self-harming tendencies serve as reinforcement to continue doing so, hence indicating that the behaviour promotes its cyclic nature (Gordon et al., 2010). In the case of religious rituals, self-harming behaviour is often performed routinely, as in the case of the Shi'a community of Muslims- flagellation, chest and head beating and cutting is collectively done every year on the tenth day of Muharram. In this case too, the same outcome is envisaged before the performing of the act- that of honouring their identity as a distinct community, remembering and mourning the death of Husayan and making efforts to appease God (Khan et al., 2014; Wilson, 2012).

Element of punishment and need to 'undo' wrong deeds. A common desire experienced by individuals with a desire to self-harm, is that of wanting to punish themselves and rectify, or 'undo' their perceived wrong actions and deeds (Edmondson et al., 2016; Kumar et al., 2004; Osuch et al., 2014). One participant stated, *"I found it necessary for me...you know, to punch or punish*

myself sometimes..."; further, the idea of having successfully 'punished' themselves, in turn provides another source of emotional satisfaction and contentment (as stated by a participant- *"I immediately feel, okay, fine, this is a punishment for whatever bad, whatever wrong I had done"*). The same is apparent in the religious context as well, as in the case of Hinduism, where people engage in self-harm and mutilation to express their devotion, as well as attain spiritual transcendence so as to not take re-birth (by attaining 'Moksha') (Kolamkuzhyil, 2016). A case can also be put forth with respect to the practice of Matam and associated rituals in Muslim communities, where the Shi'a sect members seek to vicariously re-live the death and suffering of Husayan who was killed by the Sunni sect, as a means of honouring him (Khan et. al, 2014).

Emotional relief, catharsis and sense of accomplishment experienced, despite physical pain.

Despite the act of self-harm being physically painful in nature, the persons engaging in it tend to report a sense of emotional relief and experience of catharsis post the experience (Stanicke et al., 2018). With respect to the immediate emotional aftermath, one participant stated *"I felt calm, in a way. You know, like, my mind was blank for five minutes and after that I was like okay, fine...I felt very calm after some time"*. Another participant also expressed the cathartic value of the experience and stated, *"That pain just made me feel as if I've relieved some kind of pressure"*. Studies show that self-harming behaviour may often be perceived as "warm", and even comforting, prompting the individual to experience desires to engage in the same whenever distressed (Edmondson, et al., 2016; Klonsky, 2009; Polk & Liss, 2009). Even within the religious context, self-harming enables the individuals involved to emotionally unburden themselves, as in the case of the Muslim practice of collectively beating themselves while mourning the death of Husayan. Further, a sense of accomplishment is evident in the case of the Buddhist tradition of "blood writing", where monks dutifully copy scriptures by mixing their blood with ink, and believe that they have derived merit from the same, which has important consequences for their present and future lives.

Differences in religious and non-religious self-injuring acts. Aside from the similarities highlighted

above, the experience of self-harming may have different characteristics and properties based on the context, i.e., religious versus non-religious settings. Highlighted below are some differences observed with respect to the nature of the experience.

Perceived goals attained by engaging in the self-injuring acts and the subsequent appraisal of the decision. It has been observed that individuals who engage in self-harm for non-religious purposes do so when they are overwhelmed by their emotions, and further, wish to escape from them (as stated by one participant- *"I just wanted to do something...I wanted to take action about those feelings"*). On the other hand, religious reasons for engaging in it are the appeasement of God for favours and attainment of salvation. While non-religious self-injuring acts are to help one's self, the religious ones may aim to end other's sufferings as is seen in Buddhism- *"...a true Bodhisattva might sacrifice his body and life in order to end the suffering of others, bring peace and happiness to others..."* (Bendall & Rouse, 1971; Kelly, 2011, p. 305; Shih, 1994). Further, most participants stated that they felt self-harming served no purpose following the act- *"But then later on, you know it, doesn't really help that much- I mean like whatever I was feeling before cutting I still do...those feelings usually return"*. On the other hand, the religious consequences of engaging in self-harm (attainment of peace/ enlightenment) are usually more long-lasting and pervasive (Budny et al., 1991; Hope, 1967; Kelly, 2011; Kolamkuzhyil, 2016). Another difference pertained to the difference in emotions experienced after the act is performed, where in non-religious contexts, some participants reported experiencing shock, guilt and shame (*"This was not what it was supposed to be, and you know, this is not how things should have gone"*), while in religious contexts those engaging in self-harming behaviour experience a more long lasting sense of contentment and satisfaction, as they believe that their actions have enabled them to move towards enlightenment and God (Bendall & Rouse, 1971; Cid, 2016; Kelly, 2011; Kolamkuzhyil, 2016; Wilson, 2012).

Acceptability of the self-harming behaviour. With respect to self-harm behaviour carried out in non-

religious contexts, it has been observed that the experience of the same is often prompted by, and also characterized by psychological states of loneliness and a sense of perceived irrationality; this is evident by the statements provided by one participant, regarding how they felt before they engaged in self-harm- *“So I felt quite stupid, I felt quite...uh I felt quite unneeded...”*, as well as that reported by another participant after engaging in the act- *“it doesn’t feel like it was good, I mean it doesn’t feel nice- it feels it makes you feel weak from inside..”*. Research estimates that over 80% of individuals who self-harm often do so to exert some form of interpersonal influence, suggesting that these individuals face a perceived sense of emotional distance and feeling of being unloved, and even post the act feel and internalise the stigma associated with the behaviour (Edmondson et al., 2016). On the other hand, the practice of self-harming in religious contexts often enables the individuals engaging in the same to establish themselves as a distinct community, experience feelings of closeness and a strong sense of identification. For instance, self-flagellation in Islam is done in a group setting and helps the Shia’s assert their identity as a separate sect of Islam. Further, it helps them stand against the suffering caused to them by the Sunni sect (Khan et al., 2014). With respect to the perceived rationality associated with the behaviour, self-injuring acts pertaining to a greater good and appeasement of God are culturally sanctioned and even encouraged in such contexts, hence leaving the persons performing the same with a sense of accomplishment and satisfaction (Bates, 2006; Cid, 2016; Dames & Joyce, 1913; Hegland, 2008; Kelly, 2011; Wilson, 2012).

Conclusion- Attainment of Peace: A Temporary aftermath or permanent solution?

From the analysis of the interviews and secondary data collected, it was observed that there exist a variety of similarities and differences in acts of self-harm performed in religious and non-religious contexts. While three participants reported that the feelings of peace and contentment that followed self-harm behaviour was temporary and short-lived, the fourth participant asserted that the same was perceived to be stable and relatively long-lasting (as does happen in religious contexts as well). An interesting feature of the self-harming behaviour performed in non-religious

contexts are the associated emotions of shame, guilt and panic that arise after the act has occurred (*“I just cut and there was so much blood and that very instant I started to think that why am I doing this...”*). The same, however, is not the case with respect to self-harming behaviour in religious contexts, where the peace experienced is not overcome with emotions of guilt and anxiety. While research does highlight the existence of the positive physiological affect experienced after self-harming behaviour, one may note that there is indeed a degree of pathology and stigma associated with such activity, which individuals present in non-religious contexts are consciously or unconsciously aware of (Steggals, 2015). A possible explanation pertaining to the feeling of shock and shame associated with the behaviour in non-religious contexts may stem from this very understanding of the behaviour being regarded as non-normative and culturally unacceptable/unsanctioned, as opposed to activities that stem from ‘well recognized’ and culturally acceptable practices. While studies are increasingly recognizing the role of self-harm as reportedly being a positive experience for individuals, which ultimately serves a variety of self-reported adaptive functions, the varying levels of normative acceptability largely determine the nature of this experience of peace, along with its classification into the broad domain of psychopathology or ‘cultural/religious traditions’. (Edmondson et al., 2016).

Implications, Limitations and Directions for Future Research

In conclusion, the present study sheds light on how there are various similarities and differences in self-harm behaviour, when carried out in religious and non-religious contexts. While one prominent similarity pertains to the positive affect and psychological state the concerned individuals (in both contexts) experience post carrying out the behaviour, a major difference lies in how long the aforementioned sense of relief/peace lasts. When carried out for religious purposes, the peaceful state is more pervasive and long-lasting, as it serves as a clear ‘means to an end’ (in terms of attaining spiritual consequences), while on the other hand, when engaged in for non-religious purposes, the sense of relief is short-lived as it is done to rid the self of momentary distress. Implications of these findings include spurring a dialogue about the coping value of

self-harm behaviour both in religious and non-religious contexts, subsequently reducing associated taboo with 'pathological' manifestations of the behaviour, and facilitating psycho-education for alternatives to achieve psychological relief.

The limitations of study pertain to the size and nature of the sample, which was restricted, but could be larger and more inclusive to study gender differences and persons from different socio-economic strata as well. Second, while only three prominent religions were analysed through their texts, future work may examine other cultural frameworks and traditions that focus on self-harm behaviour, and how such practices may help expand the notion in question. Third, other forms of data may be collected and analysed, such as quantitative information via the use of surveys or in-depth case studies which will help enrich the amount and kind of data being collected and analysed. Much like any other human experience, self-harm behaviour needs to be studied from a multi-dimensional socio-cultural lens, in order to gain a more comprehensive understanding of such activity, and how it can deeply impact the lives of the people who choose to participate in it with hopes of attaining (permanent or temporary) peace.

References

- Bagadiya, T. (2017, October 1). *Why Shia men practise self-harm during Muharram*. Youth Ki Awaaz. <https://www.youthkiawaaz.com/2017/10/muharram/>
- Bates, C. (2006). Human sacrifice in Colonial Central India: Myth, Agency, and representation. In C. Bates (Ed.), *Beyond Representation: Colonial and Postcolonial Constructions of Indian Identity*, (pp. 1-54). OUP India.
- Bendall, C., & Rouse, W. (1971). *Siksa Samuccaya: A compendium of Buddhist doctrine, compiled by Santideva chiefly from the early Mahayana sources*. Motilal Banarsidas Publishers.
- Brossard, B. (2014). Fighting with oneself to maintain the Interaction Order: A Sociological Approach to Self-Injury Daily Process. *Symbolic Interaction*, 37(4), 558-575. <https://doi.org/10.1002/symb.118>
- Budny, P. G., Regan, P. J., Riley, P., & Roberts, A. H. (1991). Ritual burns- The Buddhist tradition. *Burns*, 17(4), 335-337. [https://doi.org/10.1016/0305-4179\(91\)90051-h](https://doi.org/10.1016/0305-4179(91)90051-h)
- Brunner, R., Kaess, M., Parzer, P., Fischer, G., Carli, V., Hoven, C. W., Wasserman, C., Sarchiapone, M., Resch, F., Apter, A., Balazs, J., Barzilay, S., Bobes, J., Corcoran, P., Cosman, D., Haring, C., Iosuec, M., Kahn, J., Keeley, H., & Wasserman, D. (2014). Life-time prevalence and psychosocial correlates of adolescent direct self-injurious behaviour: A comparative study of 11 European countries. *Journal of Child Psychology and Psychiatry*, 55(4), 337-348. <https://doi.org/10.1111/jcpp.12166>
- Cid, A. J. (2016). Blood for the Goddess. Self-mutilation rituals at Vajresvari Mandir, Kangra. *Indialogs*, 3, 37-55. <https://doi.org/10.5565/rev/indialogs.41>
- Dames, M. L., & Joyce, T. A. (1913). Note on a Gandhara relief representing the story of King Sivi. *Man*, 13, 17-19. <https://doi.org/10.2307/2787921>
- Daryaee, T., & Malekzadeh, S. (2014). The performance of pain and remembrance in late antique Iran. *The Silk Road*, 12, 57-64.
- Edmondson, A. J., Brennan, C. A., & House, A. O. (2016). Non-suicidal reasons for self-harm: A systematic review of self-reported accounts. *Journal of Affective Disorders*, 191, 109-117. <https://doi.org/10.1016/j.jad.2015.11.043>
- Favazza, A. R. (1996). *Bodies under Siege: Self-mutilation and body modification in culture and psychiatry*. Johns Hopkins University Press.
- Gordon, K. H., Selby, E. A., Anestis, M. D., Bender, T. W., Witte, T. K., Braithwaite, S., Van Orden, K. A., Bresin, K., & Joiner, T. E. (2010). The reinforcing properties of repeated deliberate self-harm. *Archives of Suicide Research: Official Journal of the International Academy of Suicide Research*, 14(4), 329-341. <https://doi.org/10.1080/13811118.2010.524059>
- Grossoehme, D. H., & Springer, L. S. (1999). Images of God used by self-injurious burn patients.

- B u r n s , 2 5 (5) , 4 4 3 - 4 4 8 .
[https://doi.org/10.1016/S0305-179\(99\)00016-9](https://doi.org/10.1016/S0305-179(99)00016-9)
- Hegland, M. E. (2008). Flagellation and fundamentalism: (trans)forming meaning, identity, and gender through Pakistani women's rituals of mourning. *American Ethnologist*, 25(2), 240-266. <https://doi.org/10.1525/ae.1998.25.2.240>
- Holliday, R., Brennan, C., & Cottrell, D. (2020). Understanding adolescents' experiences of self-harm: Secondary analysis of family therapy sessions from the SHIFT trial. *Archives of Suicide Research*, 24 (sup1), 190-203. <https://doi.org/10.1080/13811118.2018.1501448>
- Hope, M. (1967). The reluctant way: self-immolation in Vietnam. *Antioch Review*, 27(2), 149-163.
- Johnstone, L. (1997). Self-Injury and the psychiatric response. *Feminism and Psychology*, 7(3), 421-426. <https://doi.org/10.1177/0959353597073025>
- Kelly, B. D. (2011). Self-immolation, suicide and self-harm in Buddhist and Western traditions. *Transcultural Psychiatry*, 48(3), 299-317. <https://doi.org/10.1177/1363461511402869>
- Khan, S., Chaudhry, W. L., & Badshah, I. (2014). Ethnographic study of Muharram rituals in a Punjabi village in Pakistan. *Journal of Asian Civilizations*, 37(2), 181-196
- Kieschnick, J. (2000). Blood writing in Chinese Buddhism. *Journal of the International Association of Buddhist Studies*, 23(2), 177-14.
- Klonsky, D. E., May, A. M., & Glenn, C. R. (2013). The relationship between non-suicidal self-injury and attempted suicide: Converging evidence from four samples. *Journal of Abnormal Psychology*, 122(1), 231-237. <https://doi.org/10.1037/a0030278>
- Klonsky, E. (2009). The functions of self-injury in young adults who cut themselves: clarifying the evidence for affect-regulation. *Psychiatry Research* 166 (2 - 3) , 260 - 268 .
<https://doi.org/10.1016/j.psychres.2008.02.008>
- Kolamkuzhyil, T. M. (2016). *The Concept of a Sacrifice in Christianity and in Hinduism: A Comparative Study*. [MA thesis]. University of Luzern
- Kumar, G., Pepe, D., & Steer, R. A. (2004). Adolescent psychiatric inpatients' self-reported reasons for cutting themselves. *The Journal of Nervous and Mental Disease*, 192(12), 830-836. <https://doi.org/10.1097/01.nmd.0000146737.18053.d2>
- Linehan, M. (1993). *Cognitive-Behavioral Treatment of Borderline Personality Disorder*. The Guilford Press.
- McAllister, M. (2003). Multiple meanings of self-harm: A critical review. *International Journal of Mental Health Nursing*, 12(3), 177-185. <https://doi.org/10.1046/j.1440-0979.2003.00287.x>
- Nock, M. K. (2010). Self-injury. *Annual Review of Clinical Psychology*, 6(1), 339-363. <https://doi.org/10.1146/annurev.clinpsy.12.1208.131258>.
- Osuch, E. A., Ford, K. A., Wrath, A. J., Bartha, R., & Neufeld, R. W. J. (2014). Functional MRI of pain application in youth who engaged in repetitive non-suicidal self-injury vs. psychiatric controls. *Psychiatry Research: Neuroimaging*, 223(2), 104-112. <https://doi.org/10.1016/j.psychresns.2014.05.003>
- Pembroke, L., Smith, A., & the National Self-Harm Network (1998). *Minimising the damage from self-harm: The guide for friends, relatives and advocates going with a person who self-harms to an accident and emergency department*. National Self Harm Network.
- Polk, E., & Liss, M. (2009). Exploring the motivations behind self-injury. *Counseling Psychology Quarterly*, 22(2), 233-241. <https://doi.org/10.1080/09515070903216911>
- Rani, M., Rani, Y., & Meena, M. C. (2014). Self-inflicted injuries- An overview. *Journal of Forensic Medicine & Toxicology*, 31(2), 6-8.

- Rayner, G., & Warner, S. (2003). Self-harming behaviour: From lay perceptions to clinical practice. *Counselling Psychology Quarterly*, 16(4), 305-329. <https://doi.org/10.1080/0951507032000156862>
- Ross, R.R. & McKay, H.B. (1979). *Self-Mutilation*. Lexington, MA: Heath.
- Ryan, J., Clemmett, S., & Snelson, A. (1997). Role of a psychiatric liaison nurse in an A & E department. *Accident and Emergency Nursing*, 5(3), 152-155. [https://doi.org/10.1016/s0965-2302\(97\)90010-2](https://doi.org/10.1016/s0965-2302(97)90010-2)
- Shih, H. (1994). *Upasakasila-sutra: The Sutra on Upasaka precepts (BDK English Tripitaka 45-II)*. Numata enter for Buddhist Translation and Research.
- Stanicke, L. I., Haavind, H., & Gullestad, S. E. (2018). How do young people understand their own self-harm? A meta-synthesis of adolescents' subjective experience of self-harm. *Adolescent Research Review*, 3, 173-191. <https://doi.org/10.1007/s40894-018-0080-9>
- Steggals, P. (2015). *Making sense of self-harm- The cultural meaning and social context of non-suicidal self-injury*. Springer
- Van der Kolk, B., Perry, C., & Herman, J. (1991). Childhood origin of self-destructive behaviour. *American Journal of Psychiatry*, 148(12), 1665-1671. <https://doi.org/10.1176/ajp.148.12.1665>
- Vivekananda, K. (2000). Integrating models for understanding self-injury. *Psychotherapy in Australia*, 7(1), 18-25.
- Wilson, L. (2012). Starvation and self-mutilation in religious traditions. In *Oxford Handbook of Religion and Violence* (pp. 242-249). Oxford University Press.

To be or not to be : A comparative study of psychological well-being among users and non-users of dating apps and their frequency of use

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Abstract : Swipe-Based Dating Apps (SBDAs) have become an integral part of our world today, acting as one of the primary sources of seeking and developing interpersonal relationships. With a plethora of such opportunities available virtually, the consequences related to an individual's well-being become crucial to study. Thus, the present study aimed to explore the differences in levels of Psychological Well-being (PWB) between users of Swipe-Based Dating Apps and non-users in the Indian context. Moreover, the frequency of usage of SBDA was also hypothesized to have an impact on the levels of PWB. 250 young adults between the ages of 18-25 years were recruited for this study using convenience sampling. The measure used was the Psychological Well-being (PWB) Scale (Ryff, 1995). The findings of the study indicated a lack of significant difference in PWB levels between users and non-users of SBDAs. Additionally, no differences were found in levels of PWB based on frequency of usage. Limitations and possible directions for future research are also discussed.

Keywords: dating apps, well-being, frequency of use, tinder, India

The advent of the internet and social media has permanently changed the way our lives work. One of the many impacts of the internet can be observed in the way people find love and companionship with the emergence of online dating and dating apps. These apps, usually made for the specific purpose of “dating” or finding partners function like other social media applications, with the added feature of swiping left or right on potential applicants. Each user has a profile that other users can approve or reject by swiping the screen to the right or the left. While initially these applications were considered destructive and seen negatively - as seen by the highly viewed New York Post story called “Tinder Is Tearing Society Apart” (Riley, 2015), these applications are now widely accepted as a good way to meet people (Smith & Anderson, 2016). These SBDAs have found a large database of users in India as well. According to statista.com, the number of users is expected to amount to 28.41 million Indian users in the online dating segment, making India the second-largest market for the same.

Many studies have focused on the motivations behind the usage of SBDAs (Chisom, 2021; Joshi et al., 2020; Sumter et al., 2017). As nurturing healthy and trustworthy romantic relationships can enhance

people's quality of life (Gable et al., 2004), individuals look for such opportunities on online dating applications. One research (Bonilla-Zorita et al., 2020) found that personality correlates such as neuroticism, sociability, sensation-seeking, and sexual permissiveness are related to greater use of online dating services. Studies have also examined the effect of using SBDAs on body image, self-esteem, and clinical mental health outcomes (Blake et al., 2022; Cacioppo et al., 2006; Strubel & Petrie, 2017). Online dating is a convenient way to form meaningful connections and long-term relationships, but not everyone has a positive experience. A study by Woerner (2022) revealed that dating app facilitated sexual violence (DAFSV) frequency was associated with higher depression and anxiety symptoms, higher loneliness, lower self-esteem, and lower perceived control. Research on the benefits of using dating apps is relatively scarce, but it has been stressed that these tools are making life and relationships easier for many people worldwide (Castro & Barrada, 2020). Studies focusing on users of SBDAs have shown that frequency of usage also has significant linkages with mental health. For instance, a study by Holtzhausen et al (2020) found a significantly higher rate of psychological distress among daily users.

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Psychological well-being and Swipe Based Dating Apps (SBDA)

Few studies have examined the association between SBDAs and mental health outcomes (Holtzhausen et al., 2020; Langert, 2021; Portingale et al., 2022). One study by Holtzhausen and colleagues (2020) found significantly higher rates of psychological distress, anxiety, and depression in users of dating apps as compared to non-users. Another study by Zervoulis and colleagues (2019) focused on gay dating apps and found a lower sense of community, higher levels of loneliness, and lower levels of satisfaction with life in frequent users of dating apps. A survey conducted by the Pew Research Center on 4,860 US adults saw that 57% of the users had an overall positive experience. 35% of dating app users said that online dating made them feel more pessimistic; on the other hand, 29% of the users believed that it had left them feeling more optimistic (Vogels, 2020).

Most studies conducted on dating apps and mental health have focused on general well-being and body image. Studies conducted in the Indian context have focused on body image, and motivations behind usage and have focused specifically on the LGBTQ+ community (Bhan, 2021; Bhatia, 2020; Singh et al., 2021). Relationship needs and the need for belongingness (and lack thereof) form an important aspect of psychological well-being. To our limited knowledge, no study has specifically focused on the comparison of psychological well-being in users and non-users of SBDAs. Despite a large database of SBDA users in India, there is a serious lack of research in this domain in India. It is hence necessary to address this literature gap and examine the relationship between psychological well-being and usage (or non-usage) of SBDAs in the Indian context. Based on the literature reviewed, our study proposes the following hypotheses:

H₁ - There will be a significant difference in the levels of Psychological Well-Being (PWB) of Swipe-Based Dating App (SBDAs) users and non-users.

H₂ - There will be a significant difference on Psychological Well-being (PWB) between the various groups categorised according to the frequency of usage of Swipe-Based Dating App (SBDAs).

Method

Sample

The sample was recruited through convenience sampling and consisted of 250 participants (Males = 93, Females = 152, Non-binary/Gender Fluid = 5). A non-probability sample was used since dating apps still hold a negative connotation in India. Stigma is attached to the use of dating apps due to many reasons like the belief that these apps are only used to seek sexual fulfilments, the fear of getting catfished or stalked online, the disapproval of parents to use such apps, and so on. Hence, the sample was obtained by directly reaching out to users and non-users of these apps.

The age range of the sample was 18-25 years. Participants belonged to different parts of India, with majority of the sample residing in Gujarat and New Delhi. 125 participants were users of SBDAs while 125 were non-users. Users were operationalized as those participants who had used any dating app within the past six months, and non-users those who had not.

Design

A survey design was followed in the present study. Psychological Well Being (PWB) was treated as a dependent variable that was affected by the usage of Swipe-Based Dating App (SBDAs) (Independent Variable).

Measures

Demographic profile. A demographic questionnaire was circulated alongside the standardised tools. Questions included email address, age, gender, sexual orientation, and current state of residence. The questionnaire also included basic information on SBDAs usage. First, the participants were asked if they had used any dating app within the past six months and were segregated accordingly, into users and non-users. For users, the questionnaire also included a question on the frequency of SBDAs usage (almost never, once a month, multiple times a month, once a week, multiple times a week, every day) (Holtzhausen et al., 2020).

Psychological Well-Being Scale (Ryff & Keyes, 1995). The current study utilised the short version of the

Psychological Well-being (PWB) Scale developed by Ryff (1995). This scale consists of 18 items using a 7-point scale (1 = strongly agree; 7 = strongly disagree). The scale has six subscales - Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life, and Self-acceptance, with three questions in each of the subscales. The statements were negatively and positively framed. For this study, only the total score was considered. Higher scores indicated higher levels of psychological well-being. Satisfactory psychometric properties have been reported by the authors using American data (Ryff, 1995). The Cronbach's alpha for the current sample was 0.69.

Procedure

The items of the scale were transcribed into a google form and were disseminated to individuals over a one-month period (December 2022 - January 2023). Prior permission was obtained from relevant authorities to use the measures. Participants were recruited mainly through different social media platforms like WhatsApp and Instagram. The form link was also circulated on different swipe-based dating apps like Hinge and Bumble through personal profiles. Consent was obtained at the beginning of the questionnaire and confidentiality of personal information was assured. Data analysis was carried out using Statistical Package for Social Sciences (SPSS) version 23.

Results

Table 1

t test Comparing Psychological Well-being Among Users and Non-users

Variable	n	Mean	SD	t value	p value
Users	125	92.34	11.28	.509	.611
Non-users	125	93.12	12.79		

For assessing the second hypothesis (H2), a one-way ANOVA between groups was performed using SPSS 23, to find the differences between the frequency of usage of SBDA users and their Psychological Well-Being. The independent variable was the Frequency of usage having six levels (Almost never, Once a month,

A total of 250 participants completed the online form. The sample was equally divided into users and non-users (125 participants in each). Out of the total sample, the majority were females (n=153, 61%). In the 'users' category, the distribution included 55 females, 66 males and 5 participants in the 'other' section. Whereas in the category of 'non-users', the participants included 98 females, 26 males and 1 from the 'other' section. Among those who used SBDAs (n = 125), 19.2% of them used the SBDA almost never (n = 24) or once a month (n = 24). 17.6% of the users used the app multiple times a month (n = 22) while 26.4% used it multiple times a week (n = 33). Only 14 SBDA users (11.2%) used it once a week and 0.06% (n = 8) used the SBDA every day.

An independent sample t-test was conducted using SPSS 23 to examine if there was a significant difference in Psychological Well Being (PWB) (Dependent Variable) of Swipe-Based Dating App (SBDAs) users and non-users (Independent Variable). The Shapiro-Wilk test was performed on the data (n = 250) with its results indicating values >0.05 (0.490 and 0.491 for non-users and users respectively), proving the normality of the data. A statistically insignificant difference was seen in the Psychological Well-Being of SBDAs users and non-users (t = .509, p = .611), rejecting the first hypothesis (H1). Table 1 summarises the above findings.

Multiple times a month, Once a week, Multiple times a week, Everyday) whose influence was studied on the dependent variable Psychological Well-Being (PWB). Table 2 summarises the research findings.

Table 2*Descriptive Statistics of Frequency of Usage and Psychological Well-Being*

Frequency of Use	n	Mean	Std. Deviation
Almost Never	24	95.21	13.30
Once a Month	24	88.54	14.86
Multiple Times a Month	22	94.82	12.13
Once a Week	14	90.64	13.86
Multiple Times a Week	33	93.55	10.31
Everyday	8	98.50	12.87
Total	125	93.12	12.79

Table 3*One Way Analyses of Frequency of Use and PWB scores*

	df	f value	p value
Between groups	5	1.227	.301

Normality tests on the data (n=125) revealed that the statistic values (-.176 and .430 for Skewness and Kurtosis, respectively) were less than an absolute value of 2.0, indicating that the data was normally distributed. The p-value obtained from conducting one-way ANOVA was .301 (>0.05). Thus, the second hypothesis (H2) that 'There will be a significant difference on Psychological Well-being (PWB) between the various groups categorised according to the frequency of usage of Swipe-Based Dating App (SBDAs)' was also rejected.

Discussion

Considering the increase in dating app users and the lack of previous research focusing on mental health outcomes of dating app usage in the Indian context, it is important to explore the effect of the usage of dating applications on well-being. The current study aimed to explore the differences in psychological well-being

between the users and non-users of swipe-based dating apps. Additionally, the study also explored whether the frequency of usage of swipe-based dating apps (SBDAs) users influenced their Psychological Well-being (PWB).

Our first hypothesis that there will be a significant difference in the levels of psychological well-being of SBDA users and non-users was rejected (Table 1). This implies that there were no significant differences in the well-being of SBDA users and non-users. Nevertheless, multiple studies have indicated a relationship, mostly a negative one between usage of SBDAs and psychological well-being (Salaric, 2022; Singh et al., 2021; Zervoulis et al., 2019). Studies have shown that users of dating apps report higher levels of distress, depression, anxiety, loneliness, all of which can influence the person's overall psychological well-being. While the findings of our study are surprising, there may be few explanations for the same.

One possible explanation could be the motives behind the usage of these apps. SBDAs can be used for multiple reasons - finding long lasting and meaningful relationships, for short-term dating, to find friends, for hooking up and only sexual reasons and even for entertainment. Bartsch and Oliver (2016) found that well-being may be influenced when individuals use SBDAs to fulfil their social, physical, and psychosocial needs or use it as a tool for entertainment experiences. Seeing online dating mainly as an act of joy and entertainment might positively affect users' well-being. However, seeing it as a form of building a relationship might imply a greater negative effect on users' wellbeing (Langert, 2021). Hence, if the individuals' motive for using the app is met, their psychological well-being levels may increase; however, if they are unable to make use of the apps for their motives, their psychological well-being levels may decrease. Since the present study did not tap the motives of using the SBDAs- whether it is the formation of a connection, or a temporary date for fun, entertainment or sex, it is difficult to understand the lack of effect of usage of SBDA on PWB.

Previous studies have also found that usage of dating apps can lower self-image and self-esteem due to rejection and lack of matches on the SBDAs (Marston et al., 2020; Salaric, 2022; Strubel & Petrie, 2017). However, these apps do not have the feature of a direct, confrontative rejection. There is no form of absolute negative feedback in these apps - even if a person swipes left (i.e., rejects) on a person, the said person has no direct way of knowing this since the users are only made aware of the matches, and not the rejections. Orosz et al. (2016) found that any self-esteem enhancing experience of dating app usage might be temporary and has no or a relatively small effect on one's global self-esteem. Another reason could be the very importance of dating apps in the individual's life. It is possible that by itself, usage or non-usage of SBDAs cannot account for increasing or decreasing an individual's psychological well-being. Other situational factors in the person's life may play a higher or an overpowering role in influencing overall levels of well-being. The effects may also differ depending on the cultural context and norms surrounding dating in different societies (Chen et al., 2020). Research by Chandra and Priya (2020) analysing self-presentation of Indian individuals on

dating apps found that none of the participants revealed the reason for using dating apps. A possible reason for this could be the social desirability in expressing intentions of casual sex, as premarital sex is against the existing social norms in India (Chakraborty, 2019). This is in contrast to a study done in the United States, which found that 17.9% of women and 33.1% men reported using dating platforms for hook-ups (Lykens et al., 2019).

Our second hypothesis focused on the difference between the frequency of usage and psychological well-being of SBDA users. Table 2 focuses on the descriptive statistics concerning the different levels of frequency of usage of SBDAs among the users and their PWB scores. Out of all the six subcategories, interestingly, the one with the highest number of participants was the 'Multiple times a week', whereas the category with the least number of participants was 'Everyday'. Table 3 sheds light on the results obtained after carrying out one-way ANOVA on the concerned sample. As a result, the second hypothesis of the study was also rejected. This indicates that the frequency of usage has no impact on the psychological well-being of the individual. This finding was also inconsistent from past studies which have found that increased usage of dating apps results in lowered self-esteem, body image issues, and overall well-being (Holtzhausen et al., 2020; Langert, 2021). The current study measured frequency in broad terms (multiple times a week, once a month, and so on) instead of a specific count. This, hence, includes a range of users, from those who may install the SBDA once every month and uninstall it after their needs have been met, to those who use it diligently as and when they feel the need to. Accordingly, a difference in psychological well-being cannot be accounted for by the difference in frequency of use; rather, the specific number of hours used per day may be a better indicator for psychological well-being.

Limitations and Future Directions

The present study, despite consisting of a relatively wider sample, did not take into consideration the many mediating and contextual factors that may play a role in influencing a person's psychological well-being (such as presence of a mental illness, experience of a recent traumatic event particularly with reference to SBDAs and so on), be it a user or a non-user. Perhaps, future

research can expand the objectives of the current research, throwing light on such factors thereby also providing specific directions to the research. For the users of SBDAs, the study was restricted to individuals who had used any of these applications in the last six months. However, it did not control all the other possible conditions that may have directly affected the validity of the sample (for example participants who uninstalled applications despite falling in the time-limit). Thus, it can be inferred that the study did not have a robust exclusion criterion, which might have impacted our results. The findings of the present research can nonetheless act as a base for future studies, exploring the expectancies, motivations involved in SBDAs usage, types of interpersonal relationships that exist on SBDAs and their possible impact on PWB. Further research on this topic may also benefit from using more stringent measures and accounting for factors like participants' educational levels, occupations, socioeconomic status, urban or semi-urban living conditions, independent or family living arrangements. Future researchers may also benefit from using multiple variables and scales instead of using a single psychometric scale. A qualitative method can also be used to better explore these variables and their interrelations. Finally, like most research, the current study also uses convenience sampling and fails to thoroughly account for the population it is supposed to characterise. This form of sampling hence exposes the study to different forms of biases and can lead to a severe underrepresentation of different and relatively inaccessible populations, especially from rural parts of India.

Conclusion

The objective of the current study was to explore differences in the Psychological Well-being (PWB) of Swipe-Based Dating Apps (SBDAs) users and non-users, along with assessing the relationship between frequency of usage of SBDAs users and their PWB. The findings revealed an insignificant relationship, suggesting no difference in the levels of PWB among users and non-users of SBDAs. Moreover, the frequency of usage of the SBDAs was also seen to have no effect on PWB. These results hint towards the possibility of the mediation of various other unexplored factors in relation to SBDA use which can be responsible for changes in psychological well-being.

References

- Bartsch, A., & Oliver, M. B. (2017). Appreciation of meaningful entertainment experiences and eudaimonic well-being. In L. Reinecke & M. B. Oliver (Eds.), *The Routledge handbook of media use and well-being: International perspectives on theory and research on positive media effects* (pp. 80–92). Routledge/Taylor & Francis Group.
- Bhan, T. (2021). A comparative study of mental health parameters in dating app users and non - users. *The International Journal of Indian Psychology*, 9(4), 1604-1622. DOI: 10.25215/0904.154
- Bhatia, R. (2020). *Study of analysis of psychological impact of dating apps in the minds of young adults* [Unpublished Bachelor's Thesis]. Navrachana University.
- Blake, K., Portingale, J., Giles, S., Griffiths, S., & Krug, I. (2022). Dating app usage and motivations for dating app usage are associated with increased disordered eating. *Journal of Eating Disorders*, 10(1). <https://doi.org/10.1186/s40337-022-00693-9>
- Bonilla-Zorita, G., Griffiths, M. D., & Kuss, D. J. (2020). Online dating and problematic use: A systematic review. *International Journal of Mental Health and Addiction*, 19(6), 2245–2278. <https://doi.org/10.1007/s11469-020-00318-9>
- Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkley, L. C., & Thisted, R. A. (2006). Loneliness as a specific risk factor for depressive symptoms: Cross-sectional and longitudinal analyses. *Psychology and Aging*, 21(1), 140–151. <https://doi.org/10.1037/0882-7974.21.1.140>
- Castro, N., & Barrada, J. R. (2020). Dating apps and their sociodemographic and psychosocial correlates: A systematic review. *International Journal of Environmental Research and Public Health*, 17(18), 6500. <https://doi.org/10.3390/ijerph17186500>
- Chakraborty, D. (2019). Components affecting intention to use online dating apps in India: A

- study conducted on smartphone users. *Asia-Pacific Journal of Management Research and Innovation*, 15(3), 87–96. <https://doi.org/10.1177/2319510x19872596>
- Chandra, A., & Priya, M (2020). Self-presentation of males and females in an online dating application: A profile analysis from north India. *Indian Journal of Health, Sexuality & Culture*, 6(1), 65-72. <https://doi.org/10.5281/zenodo.3929230>
- Chen, B. B., Vansteelandt, K., & Van de Vijver, F. J. (2020). Dating and romantic relationships in adolescence and young adulthood: Cultural perspectives. In J. E. Maddux (Ed.), *Social psychological foundations of culture* (pp. 389-408). Taylor & Francis.
- Chisom, O. (2021). Effects of modern dating applications on healthy offline intimate relationships during the COVID-19 pandemic: A review of the Tinder dating application. *Advances in Journalism and Communication*, 9(1), 12-38. <https://doi.org/10.4236/ajc.2021.91002>
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, 87(2), 228–245. <https://doi.org/10.1037/0022-3514.87.2.228>
- Holtzhausen, N., Fitzgerald, K., Thakur, I., Ashley, J., Rolfe, M., & Pit, S. W. (2020). Swipe-based dating applications use and its association with mental health outcomes: A cross-sectional study. *BMC Psychology*, 8(1). <https://doi.org/10.1186/s40359-020-0373-1>
- Joshi, G., Rais, S., Ann, M., & Mishra, I. (2020). Online dating: A motivated behavior during pandemic. *Indian Journal of Health, Sexuality & Culture*, 6(2), 22-32. <http://dx.doi.org/10.5281/zenodo.4295667>
- Langert, L. (2021). *Finding love or self-affirmation? Exploring online dating applications usage and its multifaceted consequences on users' well-being* [Unpublished Master's thesis]. University of Twente.
- Lykens, J. E., Pilloton, M., Silva, C. L., Schlamm, E., Wilburn, K., & Pence, E. (2019). Google for sexual relationships: Mixed-methods study on digital flirting and online dating among adolescent youth and young adults. *JMIR Public Health and Surveillance*, 5(2), e10695. <https://doi.org/10.2196/10695>
- Marston, H. R., Niles-Yokum, K., Earle, S., Gomez, B., & Lee, D. J. (2020). OK Cupid, stop bumbling around and match me Tinder: Using dating apps across the life course. *Gerontology and Geriatric Medicine*, 6, 2333721420947498. <https://doi.org/10.1177/2333721420947498>
- Orosz, G., Toth-Király, I., Bothe, B., & Melher, D. (2016). Too many swipes for today: The development of the Problematic Tinder Use Scale (PTUS). *Journal of Behavioral Addictions*, 5(3), 518–523. <https://doi.org/10.1556/2006.5.2016.016>
- Portingale, J., Fuller-Tyszkiewicz, M., Liu, S., Eddy, S., Liu, X., Giles, S., & Krug, I. (2022). Love me Tinder: The effects of women's lifetime dating app use on daily body dissatisfaction, disordered eating urges, and negative mood. *Body Image*, 40, 310–321. <https://doi.org/10.1016/j.bodyim.2022.01.005>
- Riley, N. S. (2015, August). *Tinder is tearing society apart*. New York Post. <https://nypost.com/2015/08/16/tinder-is-tearing-apart-society/>
- Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, 4, 99–104. <https://doi.org/10.1159/000353263>
- Salaric, P., Cain, R., Zitkus, E., & Visch, V. (2022). Tinder and heartbeats: Wellbeing in the use of dating applications. *DRS2022: Bilbao*, 25. <https://doi.org/10.21606/drs.202.543>
- Singh, D. K., Suri, V. R., & Shukla, J. (2021). *Understanding the digital technology use amongst LGBTQ+ adults in India for well-being* [Unpublished Bachelor's Thesis]. Indraprastha Institute of Information Technology. <http://repository.iiitd.edu.in/xmlui/handle/123456789/982>
- Smith, A. & M. Anderson (2016, February). *5 Facts about Online Dating*. Pew Research Center. https://internet.psych.wisc.edu/wp-content/uploads/532-Master/532-UnitPages/Unit-06/Smith_Pew_OnlineDating_2016a.pdf

- Strubel, J., & Petrie, T. A. (2017). Love me Tinder: Body image and psychosocial functioning among men and women. *Body Image*, 21, 34–38. <https://doi.org/10.1016/j.bodyim.2017.02.006>
- Sumter, S. R., Vandenbosch, L., & Ligtenberg, L. (2017). Love me Tinder: Untangling emerging adults' motivations for using the dating application Tinder. *Telematics and Informatics*, 34(1), 67–78. <https://doi.org/10.1016/j.tele.2016.04.009>
- Vogels, E. A. (2020, February). 10 facts about Americans and online dating in 2019. Pew ResearchCenter. <https://www.pewresearch.org/fact-tank/2020/02/06/10-facts-about-americans-and-online-dating/>
- Woerner, J. (2022). College students' experiences of dating app facilitated sexual violence and associations with mental health symptoms and well-being. *PsyArXiv*. <https://doi.org/10.31234/osf.io/y6uka>
- Zervoulis, K., Smith, D. S., Reed, R., & Dinos, S. (2019). Use of 'gay dating apps' and its relationship with individual well-being and sense of community in men who have sex with men. *Psychology & Sexuality*, 11(1–2), 88–102. <https://doi.org/10.1080/19419899.2019.1684354>

Fear fuels workplace motivation: Exploring workplace fear of missing out and masculinity contest culture in India

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Abstract : The concept of Workplace FoMO is relatively new in the domain of psychological research. Defined and investigated in the western context for the first time in 2019, there is no existing literature on the construct in the Indian context, a country with one of the largest demographic dividends. The present study aimed to explore workplace FoMO and its relationship to workplace motivation as mediated by the masculinity contest culture, and further investigated gender-related differences that lie therein. Data was collected from 98 working employees (64 males, 34 females) on the three variables through the Workplace FoMO scale, Multidimensional work motivation scale and masculinity contest culture scale. The data was analysed using correlation, independent sample t-tests, regression and mediation analysis. The results indicated a significant positive correlation between workplace FoMO and workplace motivation. Furthermore, workplace motivation was predicted by workplace FoMO and Masculinity Contest Culture and a partial mediation was found. However, no gender differences were reported in the experience of Workplace FoMO and Workplace motivation. The results of the present study, being the first of its kind in the Indian context, can be leveraged to enhance employee motivation and alter management practices to utilise FoMO as a constructive solution rather than an abrasive element within an organisation.

Keywords: Workplace FoMO, workplace motivation, masculinity contest culture, gender differences, employee performance

India, a country that worships multiple Goddesses for prosperity, happiness and love, brings its own paradox to life, as it ranks 135 out of 146 countries in the World Economic Forum's Global Gender Gap Report (2022). Such inequality in India arises from the social construct of unequal power in a relationship. Consequently, there is a clear norm of male dominance and female subjugation in various areas of life, including the workplace (Esteve-Volart, 2004). Even though women have historically been working in various domains, their contribution is often disregarded or disguised as their 'responsibility as a good woman' who must cook, clean and take care of the family. Gender disparity in employment implies treating women (or men) differently because of characteristics that are not related to their merit or the requirements of the job (Kaushik et al., 2014). As per a report published by Minnesota Advocates for Human Rights in Bulgaria (1999), women are hired for low-paying, stagnant jobs that are referred to as "Traditional" women's jobs with fewer opportunities for advancement (Michael, 2007).

Since culturally learnt expectations are reinforced and influenced by the surrounding social structure that invalidates and undermines women's attempts to be effective, influential, and powerful, a woman leader stimulates a different reaction than a male leader. Researchers (e.g., Badura et al., 2018) have long discovered that when people think "leader," they tend to think "male," and that this finding cuts across many cultural boundaries. These findings are reproduced in professional settings too. According to a Deloitte Global report, in India, just 17.1% of board positions were held by women in 2021.

Fear of Missing Out (FoMO)

Often, the work done by women is overlooked and goes unrecognised which demonstrates the implications of the self-determination theory (SDT) (Deci & Ryan, 2000). This theory postulates that individuals are motivated to grow when their innate psychological needs of connection, competence and autonomy are fulfilled. Fear of Missing Out (FoMO), a relatively

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newer psychological phenomenon, has been conceptualized in terms of STD by Przybylski et al. (2013) as a “pervasive apprehension that others might be having rewarding experiences from which one is absent”. It may lead the individual to feel a deeper sense of social inferiority, loneliness, or intense rage. The fulfilment of this social acceptance desire leads to enhanced feelings of meaning (Lambert et al., 2013), positive emotional experiences (Baumeister & Leary, 1995), and life satisfaction (Sheldon & Bettencourt, 2002). Alternatively, thwarting the need to belong leads to stress and negative affect (Beekman et al., 2016).

Marsh et al. (2022) suggest that FoMO is a significant maladaptive aspect of technology. With the increased use of social media and other digital tools post-pandemic, the work-life orientation has experienced a significant shift and established a culture of work from home. With this vast virtual space, FoMO can also be applied to employee worries and behaviours (Farivar & Richardson, 2021).

Workplace FoMO

When applied to the workplace, Budnick et al. (2020) define workplace FoMO as “a pervasive apprehension that, relative to other employees, one might miss valuable career opportunities when away or disconnected from work.” It is manifested as the fear of missing opportunities for rewarding experiences like building professional relationships, gaining valuable information, and contributing to key organizational decisions and projects.

This recent phenomenon, FoMO at the workplace has been explored by a limited number of studies. Research conducted by Hoşgör et al. (2021) found that higher levels of FoMO were positively associated with higher levels of perceived work overload among nurses. Additionally, higher FoMO levels are negatively associated with lower levels of overall information security awareness at the workplace (Hadlington et al., 2020). This construct becomes a double-edged sword for working mothers. The findings of a study by Miliopoulou and Kapareliotis (2021) give insight into mothers' ‘double-sided FoMO’ of important work opportunities and significant events in their children's lives, which in turn raises anxiety and

frustration, ‘experienced as personal rather than as situational’.

Workplace Motivation and Gender Gap

Not only does gender disparity in the workplace influence workplace FoMO, but it has also been demonstrated to impact work motivation among employees. Pinder (1998) defined work motivation as “a set of energetic forces that originates both within as well as beyond an individual's being, to initiate work-related behaviour, and to determine its form, direction, intensity and duration”. A direct relationship between higher levels of job motivation and improved organizational performance has been found (Grant, 2008; Halbesleben & Bowler, 2007). Irrespective of the sexual identity of the person, both men and women seek positions and jobs with development and training opportunities that would thereby allow them to advance to greater levels (Maxwell & Broadbridge, 2017).

Ayub and Rafif (2011) found a significant gender difference in work motivation. Multiple studies have shown that discriminatory treatment of women at the workplace leads to reduced positive psychological constructs. Female employees expect equal treatment from the organisation, and when that expectation is not met, job motivation and satisfaction suffer (Brief & Barsky, 2000; Miner-Rubino & Cortina, 2006). Memon and Jena (2017) found reduced motivational levels in women who experienced gender inequality at their workplace in India. Equally skilled at their job, female employees want to contribute and have their presence felt in the organisation like the male employees, the lack of which leads to negative impacts. Etzkowitz and Ranga (2011) suggested that, when their skills are being utilised, women in STEM fields feel fulfilled; otherwise, they lose motivation, and may even contemplate leaving their jobs. Additionally, women value a welcoming setting and are usually concerned with prestige, challenge, job security, task importance, cooperative environments, and their working conditions, while men are concerned predominantly with earnings, responsibilities, and promotions (Hofstede, 2001). Some studies demonstrate negligible gender differences in workplace motivation (Dubinsky et al., 1993; Deci & Ryan, 2014). In line with these findings, Pearson and Chatterjee (2002) found gender

uniformity in job motivation where men and women shared similar attitudes to development opportunities, relationships with managers, high earnings, skill usage, work autonomy, appealing living areas, etc.

Masculinity in the Workplace

Gender attributes are known to influence the larger context of the organisation itself. Masculinity Contest Culture (MCC) was introduced by Berdahl et al. (2018) to describe a dysfunctional organizational culture in which stereotypically masculine characteristics are honoured. It has four dimensions- (1) Show no weakness (avoiding display of vulnerability, denying any mistakes), (2) Strength and stamina (valuing physical strength, working for extreme hours), and (3) Put work first (prioritising work over other obligations, where taking breaks is viewed a sign of non-commitment), and (4) Dog-Eat-Dog (hypercompetitive environment with lack of trust in anyone). Both men and women are required to demonstrate their "manhood" in workplaces, to be awarded with rewards and positions of power. However, mostly, all is not well if you choose to embrace 'femininity' as those who don't live up to the severe expectations are likely to suffer the consequences in the form of abuse, social rejection, and ridicule. This is a double-edged sword because women and men from oppressed groups may be ridiculed for acting in a domineering manner that is deemed "masculine" and hence only appropriate for upper-class men (Livingston & Pearce, 2009; Rudman et al., 2012).

MCC is associated with a number of negative outcomes, including stress, work/life conflict, intent to job search, greater burnout and turnover intentions, and lesser organizational dedication, harassment and poorer psychological well-being (Matos et al., 2018; Glick et al., 2018; Workman-Stark, 2020). Koc et al. (2021) reported that the impact of MCC on organizational outcomes did not differ between men and women. According to Glick et al. (2018), masculinity contest workplaces were experienced as hostile, socially negative, unsatisfying, and personally detrimental by both men and women.

In an attempt to explore these further, the present

study aimed to explore the relationship between Workplace FoMO and Motivation and investigate if there exist any gender differences among professionals in the Indian context with the following hypotheses

Hypotheses

The following hypotheses about workplace FoMO, Workplace motivation and masculinity contest culture at the workplace were tested in light of the existing literature.

1. Workplace FoMO and workplace motivation will be positively and significantly related.
2. There will be a significant relationship between workplace FoMO and masculinity contest culture at workplace.
3. There will be a significant relationship between workplace motivation and masculinity contest culture.
4. There will be significant difference in the workplace motivation of men and women.
5. There will be significant difference in the workplace FoMO of men and women.
6. Workplace FoMO and masculinity at workplace will be statistically significantly related with workplace motivation.
7. Masculinity at workplace will mediate the relationship between workplace FoMO and Workplace motivation.

Method

Design

This study adopted a quantitative approach to study the relationship between the specified variables and report any observed differences between the two gender groups involved in the sample. Data was collected using an online one-shot survey from May 2022 to August 2022 using non probability sampling techniques. The survey included standardised questionnaires for measuring workplace motivation, workplace FoMO and Masculinity context culture. The obtained data was subjected to inferential statistical techniques of

correlation, regression, t-test and mediation analysis.

Sample

The two main inclusion criteria for the sample were that the respondent must fall in the age group of 25- 40 years and must have been employed for more than 2 years. The participants were recruited through convenience and snowball sampling. A total of 105 responses were collected. 7 responses were excluded because they did not meet the inclusion criteria. The final sample of the study included 98 working employees (65.31% males and 34.69% females) from different areas of industries

including IT, manufacturing, banking, consulting and medical in the Indian workplace setting. The average age of employees was 30.14 years (SD = 4.53) who worked an average of 46 hours (SD= 12.35) per week with an average current job tenure of 2.56 years. Shapiro-Wilk test was performed to establish that the data formed a normal distribution. Since the CalcW (Shapiro-Wilk test statistic) was greater than 0.05 the data was normally distributed and fit for further analyses (King & Eckersley, 2019) (Refer to Table 1)

Table 1

Measures

Tests of Normality (Shapiro Wilk – CalcW)

Variables	Gender	p-value
Workplace FoMO	Male	0.111
	Female	0.563
Workplace Motivation Male		0.173
	Female	0.952

Note: Normally distributed at $p > 0.05$

Multi-Dimensional Work Motivation Scale Developed by Gagné et al. (2013), MWMS is based on the self-determination theory. It has 19 items spread across the five dimensions of amotivation, extrinsic regulation (social and material), identified regulation, and introjected regulation. The stem for the scale is “*why do you or would you put efforts into your current job.*” The responses are scored on a 7-point Likert scale where 1 = “not at all” to 7= “completely”. This measure has a strong reliability ($\alpha = 0.80$) and decent convergent and discriminant validity with Cronbach’s $\alpha > 0.80$ (Gagne et al., 2014).

Masculinity Contest Culture scale Developed by Glick et al. (2018), this assesses workplace culture in terms of masculinity contest norms of showing no weakness, strengths and stamina, putting work first and dog-eat-dog. It is originally a 20-item scale, but for the purposes of this study, the shortened version of the scale (8 items) was utilised. The stem for the scale is “In my

work environment”. The responses are scored a 5-point Likert scale with 1 for (not at all true for my work environment) to 5 (entirely true of my work environment). The established reliability of the scale is 0.90 (Koc et al., 2021)

Workplace Fear of Missing Out scale Developed by Budnick et al. (2020), this scale measures workplace FoMO along the two dimensions of information exclusion and relational exclusion. It is a 10-item scale with a stem “When I am absent or disconnected from work...”. The responses are scored on a 5-point Likert scale ranging from 1 = Strongly disagree to 5 = Strongly agree. The reliability of the scale is satisfactory ($\alpha = 0.80$) (Budnick et al., 2021).

Procedure

The period of data collection was from May 2022 to August 2022. An online questionnaire was circulated among the working population according to the

criteria mentioned above in the Indian workplace setting. The Google form contained an introduction page, informed consent form, basic demographic information and the three standardised instruments – Workplace Motivation Scale, Masculinity contest culture scale and workplace FoMO scale. Each scale was scored by the researchers as per the guidelines provided by the test constructors. Inferential statistical techniques were utilised on SPSS version 26.0. Ninety eight responses were included in the analysis.

Results

A range of inferential statistical techniques were used to analyse the results. These are discussed below.

Table 2

Correlational analysis of WFoMO, WM and MCC (N = 98)

Variable	n	M	SD	1	2	3
1. Workplace Motivation	98	69.897	17.204	-		
2. Workplace FoMO	98	30.479	9.157	.318**	-	
3. Masculinity contest culture	98	19.112	7.4817	-.0504	-.1135	-

Note:

****Correlation is significant at $p < 0.01$**

0.715 at $\alpha = 0.05$). Additionally, no significant differences in the experience of workplace FoMO between men and women employees were reported ($t = -1.264$, $p = 0.210$ at $\alpha = 0.05$)

Table 3

Comparison of WFoMO and WM between men and women employees

	Mean (SD)		t-value	p-value
	Men	Women		
Workplace FoMO	29.656 (9.443)	32.029 (8.512)	-1.264	0.210
Workplace Motivation	70.328 (18.679)	69.088 (14.245)	0.367	0.715

Table 2 revealed that workplace motivation and workplace FoMO are positively and significantly correlated at $\alpha = 0.01$ with $r = 0.318$. Using Cohen's conventions (1988), a correlation coefficient of 0.318 is considered a moderate correlation. Furthermore, the correlation between workplace motivation and Masculinity contest culture (MCC) at workplace and workplace FoMO and MCC were found insignificant at $p < 0.05$.

Table 3 shows the results of the independent sample t-test to compare the experience of workplace FoMO and Workplace motivation separately among men and women employees. Results revealed no significant differences in levels of workplace motivation between men and women ($t = 0.367$, $p =$

Multiple regression analysis (Table 4) was run to predict workplace motivation from masculinity contest culture and workplace FoMO. These variables statistically significantly predicted workplace motivation, $F(2, 95) = 11.648$, $p < 0.001$, $R^2 = 0.197$. Both variables, workplace

FoMO and masculinity contest culture, predicted workplace motivation for employees in the Indian workplace setting.

A mediation analysis using PROCESS macro was conducted to assess the mediating role of masculinity contest culture (Mas) on the linkage between workplace FoMO (WFOMO) and Workplace motivation (WM). The results (see Table 5) revealed

Table 4

Multiple linear regression analysis

Variables	B	Beta	t-value	p-value
Constant	43.940		7.374	<0.001*
Workplace FoMO	.373	.198	2.015	0.047*
Masculinity contest Culture	.764	.332	3.371	0.001
	R= .444	R ² = .197	F= 11.648	p<0.001

Dependent variable: Workplace Motivation

that the total effect of workplace FoMO on workplace motivation was significant (Beta = 0.5967, $t = 3.2817$, $p = 0.0014$) at $p < 0.05$. With the inclusion of masculinity contest culture (Mas), the impact of workplace FoMO on workplace motivation is significant as well (Beta = 0.3728, $t = 2.0147$, $p = 0.0468$) at $p < 0.05$. The indirect effect of workplace FoMO on workplace motivation through masculinity contest culture was found significant with an effect size of 0.2238 at $p < 0.05$. Since, both the direct and indirect effects are significant, partial mediation (Baron & Kenny, 1986)

between the variables can be established, also called complementary mediation (Zhao et al., 2010)

Discussion

The present study aimed to explore workplace FoMO and its relationship to workplace motivation as mediated by the masculinity contest culture, and further investigated gender-related differences that lie therein. Applying multiple inferential statistics techniques, the findings revealed a significant positive correlation

Table 5

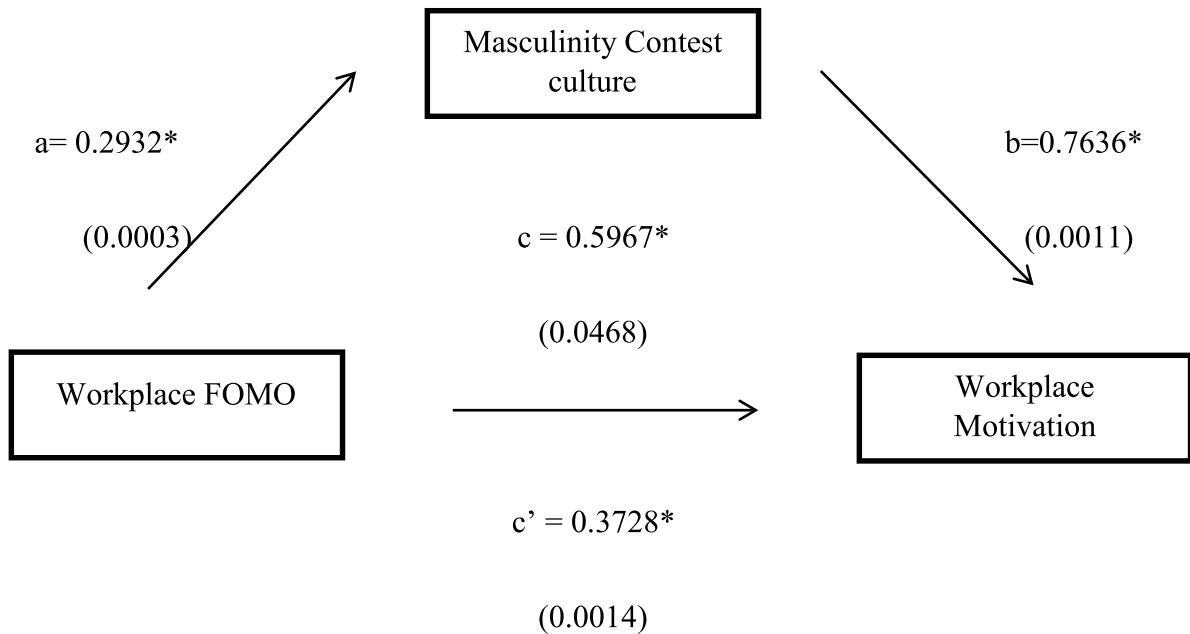
Mediation Analysis for Workplace FoMO and Workplace motivation through Masculinity contest culture

	Coefficient	SE	t-value	p-value
Path A	0.2932	0.0778	3.7666	0.0003
Path B	0.7636	0.2265	3.3710	0.0011
Path C' (Direct effect)	0.3728	0.1851	2.0147	0.0468
Path C (Total effect)	0.5967	0.1818	3.2817	0.0014

Note: Results significant at $p < 0.05$

Figure 1

Mediation Analysis model for Workplace FOMO and Workplace Motivation through Masculinity contest Culture.



Note: Results significant at $p < 0.05$

between workplace motivation and workplace FoMO. It implies that when an employee is afraid to miss out on work opportunities, their motivation to work proactively increases to bridge that gap. This result is in line with the hypothesis and previous literature that suggest that an increase in the workplace FoMO would subsequently increase the employee's motivation to work. Similarly, Budnick et al. (2020) found that higher levels of workplace FoMO predicted higher reports of work burnout and message-checking behaviours to remain informed (i.e., reduce information exclusion apprehensions). Moreover, it has also been proven that employees try to reduce informational exclusion, which is a component of workplace FoMO, by learning more, to compensate for the time when one is not present. Hence, the fear of informational exclusion leads to higher motivation which is in line with the present

hypothesis (Reinders, 2022). The influence of age and tenure of the employees on workplace motivation has been investigated in previous research. The present sample is relatively young (mean age = 30 years) and Akkermans and Tims (2017) found that younger employees were more likely to engage in proactive behaviours, such as seeking out new challenges and opportunities for growth in the workplace which may be related with the motivational aspect of workplace FoMO. Furthermore, the tenure of employees in their present organisation affects their engagement. A Forbes article published in 2019 highlighted that up until two years of tenure, employees tend to be most engaged, which may be a possible explanation for the positive correlation between WFoMO and WM since the average tenure of the present sample is

2.56 years.

Further, through regression analysis, masculinity at the workplace was found to be significantly related with workplace motivation. Extrinsic motivation originates from an individual's physical environment; money and verbal rewards that are mediated outside of a person are examples of extrinsic motivation (Deci, 1972). Because MCC at work value competition and individual performance, it is possible that they will drive extrinsic motivation. However, Eskildsen et al. (2010) found that the less masculine a society is, the greater is the score on everyday work and motivation. Similarly, Maswadeh and Zumot (2021) reported that a humanistic approach to discipline influences work motivation by acknowledging every member of the organisation as an average person with flaws, shortcomings, and mistakes. This contrasts with an MCC, where displaying vulnerability and acknowledging mistakes is strongly discouraged.

The results also revealed no significant differences in levels of workplace motivation between men and women. This could indicate the progressive and explicit gender diversity policies that companies have introduced as a part of their organisational culture which enhanced focus to create more equitable spaces. Previous literature suggests that women employees experience a drop in the levels of their job satisfaction and job motivation when they do not receive equitable treatment from their company (Kannan, 2005; Miner-Rubino & Cortina, 2006). Hence, the lack of differential levels of job motivation may suggest the more equitable practices that companies are adopting nowadays. This can be observed in the gender workforce parity between multiple companies in India like Info Edge (41% women employees), PepsiCo (40% Women Managers), Zomato (50% Women Directors), TCS (44% women managers) and so on. Other studies also offer support for the findings of the present research and demonstrate negligible gender differences in workplace motivation (Deci & Ryan, 2014). For instance, Pearson and Chatterjee (2002) found gender uniformity in job motivation where men and women shared the same attitudes to development opportunities, work autonomy, high earnings, skill usage, appealing living areas, relationships with managers, etc.

Additionally, no significant differences in the experience of workplace FoMO between men and women employees were reported. Previous researches attempting to determine the impact of gender on the construct of

workplace FoMO have not reported significant differences suggesting that workplace FoMO may be experienced by anyone who works for an organisation, irrespective of their gender (McKee et al., 2022). It is interesting to note, high scores were observed on the workplace FoMO scale for both men and women employees. This consistency of scores across both genders may be reasoned by the connection between FoMO and the human need for social connection and engagement as social animals. Since socialising with co-workers is a daily activity, it is possible for anyone, regardless of gender, to feel as though they are missing out on something significant when they are not doing so.

Finally, the findings also revealed that masculinity at the workplace mediated the relationship between workplace FoMO and workplace motivation. This suggests that the masculinity contest culture (MCC) is often displayed by male and female employees alike in an organisational setting as it is conventionally the trademark of a good and driven employee. This behaviour, in turn, enhances workplace motivation and workplace FoMO by creating a culture which propagates and promotes competitiveness and dominance. The sense of urgency and hustle culture created by such an environment can be instrumental in providing opportunities of professional engagement that make it more likely for employees to experience FoMO and thereby increase their workplace motivation to 'compete' amongst themselves. This stands in contrast to the previous literature which states that as MCC does not foster a positive social identification with one's organisation, it leads to a reduction in employee motivation levels (Koc et al., 2021).

Limitations

Since an English medium survey was used for data collection, social desirability associated with self-report measures can be considered a key constraint while also introducing a language barrier for employees who don't have adequate grasp over the language. Additionally, the sample size of the study was less than 100, and the sampling technique used for data collection was non-probability. These

factors affect the representativeness of the sample and reduce the generalizability of the findings. A limitation on demographic information was also noted. The participants did not specify the type of company they work for, for instance a fortune 500 or start-up. This could have some influence on the workplace motivation of the employees. Lastly, in order to enhance the methodological rigor in the future, checking assumptions related with multiple regression may be useful apart from just determining the normality.

Future directions and implications

The research in the direction of Workplace FoMO can be furthered by looking into sector specific factors or undertaking comparisons like public vs. private sectors, Physical Workplace vs. Hybrid cultures organisation that might motivate employees to work better due to FoMO. The impact of age and tenure of the employees on the experience of WFoMO and Workplace Motivation can also be investigated. Additionally, while motivation is one side of the coin, it can be useful to investigate the health-related costs of experience workplace FoMO like stress, anxiety, burnout and physical health outcomes such as cardiovascular disease and immune dysfunction. Research could examine the cost implications for employers, such as increased healthcare utilization and absenteeism, as well as potential interventions to mitigate the negative effects of workplace FoMO on employee health and productivity. Furthermore, individual differences can be explored using self-esteem that may give a fuller picture of cost-benefit analysis of leveraging FoMO in the workplace. Future studies can also focus on including more variables like leadership styles, impact of hybrid culture and organisational citizenship behaviour to further the infant concept of workplace FoMO in psychological research. In order to enrich findings, data can be collected both qualitatively and quantitatively in the future to report subjective experiences of employees and longitudinal studies on WFoMO may be done to determine causality. Lastly, it may be beneficial for the generalisation of results in the Indian context to ascertain the reliability of the scales used. The results of the present study, if utilised appropriately, can have considerable implications for the organisational practices. It may be leveraged to

enhance employee motivation and alter management practices to utilise FoMO as a constructive solution rather than an abrasive element. For instance, a manager can strive to strike the delicate balance of paying just enough attention to and including the employees to make them feel engaged but also limiting the communication in the workplace enough to inspire curiosity. Other social incentives may be formulated along similar lines to employ workplace FoMO as an asset for desired outcomes.

Conclusion

The present study attempts to add to the limited literature on workplace FoMO in the Indian workplace context while also establishing a partial meditational relationship between workplace FoMO and motivation through Masculinity contest culture. Considering how this construct is in its infancy in the domain of psychological research, it provides further impetus to investigate the same in greater depth and establish its relationship with other organisation – related variables as well.

References

- Akkermans, J., & Tims, M. (2017). Crafting your career: How career competencies relate to career success via job crafting. *Applied Psychology*, 66(1), 168–195. <https://doi.org/10.1111/apps.12082>.
- Albers, K. (2020). *Always on mentality: The effects of workplace telepressure on health and motivation of the Dutch young workforce: Examining the moderating role of workplace FoMO and social comparison orientation* [MA thesis]. Utrecht University. <https://studenttheses.uu.nl/bitstream/handle/20.500.12932/36173/Albers%20%285487102%29%20thesis.pdf?sequence=1&isAllowed=y>
- Ayub, N., & Rafif, S. (2011). The relationship between work motivation and job satisfaction. *Pakistan Business Review*, 13(2), 332–347. https://www.researchgate.net/profile/Nadia-Ayub-2/publication/342864521_The_Relationship_between_Work_Motivation_and_Job_Satisfaction/links/5f09592a299bf18816128c8b/The-Relationship-between-Work-Motivation-and-Job-Satisfaction.pdf#page=128

- Badura, K. L., Grijalva, E., Newman, D. A., Yan, T. T., & Jeon, G. (2018). Gender and leadership emergence: A meta-analysis and explanatory model. *Personnel Psychology*, 71(3), 335-367. <https://doi.org/10.1111/peps.12266>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental drive. *Psychological bulletin*, 117(3), 497-529.
- Beekman, J. B., Stock, M. L., & Marcus, T. (2016). Need to belong, not rejection sensitivity, moderates cortisol response, self-reported stress, and negative affect following social exclusion. *The Journal of social psychology*, 156(2), 131-138. <https://doi.org/10.1080/00224545.2015.1071767>
- Berdahl, J. L., Cooper, M., Glick, P., Livingston, R. W., & Williams, J. C. (2018). Work as a masculinity contest. *Journal of Social Issues*, 74(3), 422-448. <https://doi.org/10.1111/josi.12289>
- Brief, A. P., & Barsky, A. (2000). Establishing a climate for diversity: The inhibition of prejudiced reactions in the workplace. *Research in Personnel and Human Resources Management*, 19, 91-129.
- Budnick, C. J., Rogers, A. P., & Barber, L. K. (2020). The fear of missing out at work: Examining costs and benefits to employee health and motivation. *Computers in Human Behavior*, 104, 106161. <https://doi.org/10.1016/j.chb.2019.106161>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Deci, E. L. (1972). The effects of contingent and noncontingent rewards and controls on intrinsic motivation. *Organizational Behavior and Human Performance*, 8(2), 217-229. [https://doi.org/10.1016/0030-5073\(72\)90047-5](https://doi.org/10.1016/0030-5073(72)90047-5)
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. https://doi.org/10.1207/S15327965PLI1104_01
- Deci, E. L., & Ryan, R. M. (2014). The importance of universal psychological needs for understanding motivation in the workplace. In M. Gagné (Ed.), *The Oxford handbook of work engagement, motivation, and self-determination theory* (pp. 13-32). Oxford University Press. <https://psycnet.apa.org/record/2014-24108-002>.
- Deloitte. (2021). 2021 *Global Impact Report*. Retrieved August 14, 2022, from <https://www.deloitte.com/content/dam/assets-shared/legacy/docs/about/2022/gx-about-deloitte-global-report-full-version-2021.pdf>
- Dubinsky, A. J., Jolson, M. A., Michaels, R. E., Kotabe, M., & Lim, C. U. (1993). Perceptions of motivational components: Salesmen and saleswomen revisited. *Journal of Personal Selling & Sales Management*, 13(4), 25-37. <https://www.tandfonline.com/doi/abs/10.1080/08853134.1993.10753965>
- Eskildsen, J., Kristensen, K., & Gjesing Antvor, H. (2010). The relationship between job satisfaction and national culture. *The TQM Journal*, 22(4), 369-378. <https://doi.org/10.1108/17542731011053299>
- Esteve-Volart, B. (2004). Gender discrimination and growth: Theory and evidence from India. *LSE STICERD Research Paper No. DEDPS42*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1127011
- Etzkowitz, H., & Ranga, M. (2011). Gender dynamics in science and technology: From the "leaky pipeline" to the "vanish box". *Brussels Economic Review*, 54(2/3), 131-147.
- Farivar, F., & Richardson, J. (2021). Workplace digitalisation and work-nonwork satisfaction: The role of spillover social media. *Behaviour & Information Technology*, 40(8), 747-758. <https://doi.org/10.1080/0144929x.2020.1723702>

- Fridchay, J., & Reizer, A. (2022). Fear of Missing out (FoMO): Implications for employees and job performance. *The Journal of Psychology*, 156(4), 257–277. <https://doi.org/10.1080/00223980.2022.2034727>
- Gagné, M., Forest, J., Vansteenkiste, M., Crevier-Braud, L., Van Den Broeck, A., Aspel, A. K., Bellerose, J., Benabou, C., Chemolli, E., Güntert, S. T., Halvari, H., Indiyastuti, D. L., Johnson, P. A., Molstad, M. H., Naudin, M., Ndao, A., Olafsen, A. H., Roussel, P., Wang, Z., & Westbye, C. (2014). Multidimensional Work Motivation Scale: Validation evidence in seven languages and nine countries. *European Journal of Work and Organizational Psychology*, 24(2), 178–196. <https://doi.org/10.1080/1359432x.2013.877892>
- Glick, P., Berdahl, J. L., & Alonso, N. M. (2018). Development and validation of the masculinity contest culture scale. *Journal of Social Issues*, 74(3), 449–476. <https://doi.org/10.1111/josi.12280>
- Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, 93(1), 48. <https://doi.org/10.1037/0021-9010.93.1.48>
- Hadlington, L., Binder, J., & Stanulewicz, N. (2020). Fear of missing out predicts employee information security awareness above personality traits, age, and gender. *Cyberpsychology, Behavior, and Social Networking*, 23(7), 459–464. <https://doi.org/10.1089/cyber.2019.0703>
- Halbesleben, J. R., & Bowler, W. M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology*, 92(1), 93. <https://psycnet.apa.org/doi/10.1037/0021-9010.92.1.93>
- Hofstede, G. H., & Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage Publications.
- Hoşgör, H., Coşkun, F., Çalışkan, F., & Gündüz Hoşgör, D. (2021). Relationship between nomophobia, fear of missing out, and perceived work overload in nurses in Turkey. *Perspectives in Psychiatric Care*, 57(3), 1026–1033. <https://doi.org/10.1111/ppc.12653>
- Kannan, R. (2005). Theories of motivation—J Stacey Adams—equity theory on job motivation. Retrieved on 30th October, 2022, from www.geocities.com/kstability/learning/management/equity.htm
- Kaushik, N., Sharma, A., & Kumar Kaushik, V. (2014). Equality in the workplace: A study of gender issues in Indian organisations. *Journal of Management Development*, 33(2), 90–106. <https://doi.org/10.1108/JMD-11-2013-0140>
- King, A. P., & Eckersley, R. J. (2019). Inferential statistics IV: Choosing a hypothesis test. *Statistics for Biomedical Engineers and Scientists*, 147–171. <https://doi.org/10.1016/b978-0-08-102939-8.00016-5>
- Koc, Y., Gulseren, D., & Lyubykh, Z. (2021). Masculinity contest culture reduces organizational citizenship behaviors through decreased organizational identification. *Journal of Experimental Psychology: Applied*, 27(2), 408–416. <https://doi.org/10.1037/xap0000351>
- Lambert, N. M., Stillman, T. F., Hicks, J. A., Kamble, S., Baumeister, R. F., & Fincham, F. D. (2013). To belong is to matter: Sense of belonging enhances meaning in life. *Personality and Social Psychology Bulletin*, 39(11), 1418–1427. <https://doi.org/10.1177/0146167213499186>
- Livingston, R. W., & Pearce, N. A. (2009). The teddy-bear effect: Does having a baby face benefit black chief executive officers?. *Psychological Science*, 20(10), 1229–1236. <https://doi.org/10.1111/j.1467-9280.2009.02431.x>
- MacArthur, H. V. (2019, September 25). Why tenure matters for employee engagement. *Forbes*. <https://www.forbes.com/sites/hvmacarthur/2019/09/25/why-tenure-matters-for-employee-engagement/>
- Marsh, E., Vallejos, E. P., & Spence, A. (2022). The

- digital workplace and its dark side: An integrative review. *Computers in Human Behavior*, 128, 107118. <https://doi.org/10.1016/j.chb.2021.107118>
- Maswadeh, S., & Zumot, R. (2021). The effect of total quality management on the financial performance by moderating organizational culture. *Accounting*, 7(2), 441-450. <http://dx.doi.org/10.5267/j.ac.2020.11.007>
- Matos, K., O'Neill, O., & Lei, X. (2018). Toxic leadership and the masculinity contest culture: How "win or die" cultures breed abusive leadership. *Journal of Social Issues*, 74(3), 500-528. <https://doi.org/10.1111/josi.12284>
- Maxwell, G. A., & Broadbridge, A. M. (2017). Generation Ys' employment expectations: UK undergraduates' opinions on enjoyment, opportunity and progression. *Studies in Higher Education*, 42(12), 2267-2283. <https://doi.org/10.1080/03075079.2016.1141403>
- McKee, P. C., Budnick, C. J., Walters, K. S., & Antonios, I. (2022). College student Fear of Missing Out (FoMO) and maladaptive behavior: Traditional statistical modeling and predictive analysis using machine learning. *PLOS ONE*, 17(10), e0274698. <https://doi.org/10.1371/journal.pone.0274698>
- Memon, N. Z., & Jena, L. K. (2017). Gender inequality, job satisfaction and job motivation: Evidence from Indian female employees. *Management and Labour Studies*, 42(3), 253-274. <https://doi.org/10.1177/0258042X17718742>
- Michael, A. (2007). Women at workplace. HRD Newsletter, 23(3), 27-28.
- Minnesota Advocates for Human Rights. (1999). Sex discrimination and sexual harassment in the workplace in Bulgaria. https://www.theadvocatesforhumanrights.org/Res/sexharas_2%202020.PDF
- Miliopoulou, G. Z., & Kapareliotis, I. (2021). The toll of success: Female leaders in the "women-friendly" Greek advertising agencies. *Gender, Work & Organization*, 28(5), 1741-1765. <https://doi.org/10.1111/gwao.12636>
- Miner-Rubino, K., & Cortina, L. M. (2006). Observed incivility toward women at work: The role of organizational justice. In *APA/NIOSH Work, Stress and Health Conference, Miami*.
- Murdoch, J. (2021). Measuring the relationship between workplace opportunities and motivation among women in the technology industry. *Fields: Journal of Huddersfield Student Research*, 7(1), 1-18. <https://search.informit.org/doi/10.3316/informit.990547403217961>
- Pearson, C. A., & Chatterjee, S. R. (2002). Gender variations in work goal priorities: A survey of Chinese managers. *International Journal of Management*, 19(4), 535-543.
- Pinder, C. C. (1998). Work motivation in organizational behavior. Upper Saddle River, NJ: Prentice-Hall.
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in human behavior*, 29(4), 1841-1848. <https://doi.org/10.1016/j.chb.2013.02.014>
- Reinders, E. (2022). *The association between workplace fear of missing out and work engagement and motivation to learn, and the moderating role of mindfulness*. [MA Thesis]. Utrecht University.
- Research With Fawad. (2022, March 9). 5. Hayes Process Macro - Model 4 | #Mediation Analysis with Single Mediator [Video]. YouTube. <https://www.youtube.com/watch?v=91murZMlieg>
- Roberts, J. A., & David, M. E. (2020). The social media party: Fear of missing out (FoMO), social media intensity, connection, and well-being. *International Journal of Human-Computer Interaction*, 36(4), 386-392. <https://doi.org/10.1080/10447318.2019.1646517>
- Rudman, L. A., Moss-Racusin, C. A., Phelan, J. E., & Nauts, S. (2012). Status incongruity and backlash effects: Defending the gender hierarchy motivates prejudice against female leaders. *Journal of*

- Experimental Social Psychology*, 48(1), 165-179.
<https://doi.org/10.1016/j.jesp.2011.10.008>
- Sheldon, K. M., & Bettencourt, B. A. (2002). Psychological need-satisfaction and subjective well-being within social groups. *British Journal of Social Psychology*, 41(1), 25-38.
<https://doi.org/10.1348/014466602165036>
- Uyanık, G. K., & Güler, N. (2013). A study on multiple linear regression analysis. *Procedia - Social and Behavioral Sciences*, 106, 234-240.
<https://doi.org/10.1016/j.sbspro.2013.12.027>
- Workman-Stark, A. (2020). Countering a masculinity contest culture at work: the moderating role of organizational justice. *International Journal of Organization Theory & Behavior*, 24(1), 6-23.
<https://doi.org/10.1108/IJOTB-11-2019-0132>
- World Economic Forum. (2022). *Global Gender Gap Report 2022*. Retrieved January 7, 2023, from https://www3.weforum.org/docs/WEF_GGGR_2022.pdf?_gl=1*1ish6f8*_up*MQ..&gclid=CjwKCAiAuaKfBhBtEiwAht6H76a2olZPLKpc3WvPu1RkmTw8fWeCQWfR13xSb869iAvC92Nw4DeVZR0CUjAQAvD_BwE
- Worthley, R., MacNab, B., Brislin, R., Ito, K., & Rose, E. L. (2009). Workforce motivation in Japan: An examination of gender differences and management perceptions. *The International Journal of Human Resource Management*, 20(7), 1503-1520. <https://doi.org/10.1080/09585190902983421>
- Zacharias, T., Rahawarin, M. A., & Yusriadi, Y. (2021). Cultural reconstruction and organization environment for employee performance. *Journal of Ethnic and Cultural Studies*, 8(2), 296-315.
<https://doi.org/10.29333/ejecs/801>
- Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206. <https://doi.org/10.1086/651257>

Examining the psychological underpinnings of Chernobyl and after

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Abstract : A safety test in Reactor No. 4 at the Vladimir Lenin Power Plant near Pripyat, Ukraine, in the early hours of 26 April, 1986, led to one of the worst nuclear disasters in history. The ensuing events included attempts to control the information available regarding the explosion. The current study analyses the accident at Chernobyl in light of the psychological factors that played a role in causing it, and in the aftermath. The material analysed includes a report on an international conference (IAEA) where the incident was discussed at length, an interview with Valery Legasov, a key person in the dealing of the aftermath, and tape recordings left by him before his death, and a journalistic article on the concealment mechanisms employed by the State. The method of analysis was thematic analysis, and the key points that emerged are secrecy, obedience, power dynamics, avoidance of panic, and various patterns of information dissemination. The themes show how a pattern of concealment and emphasis on fixed roles and hierarchy may have played a role in causing the incident at Chernobyl, and how the fallout was navigated. The study shows the role of psychological factors in the functioning of institutions, when dealing with disasters and emergencies, including decision-making, risk management, information management, and international relations.

Keywords: obedience, secrecy, mass panic, power dynamics, Chernobyl

If history is understood as an account of human pasts, it can also be thought of as a record of human behaviours and their consequences. As put by Gergen (1973), the concern of psychology is to study human behaviour, and “theories of social behaviour are primarily reflections of contemporary history” (p. 309). He also points out that a social psychologist works to derive laws of behaviour that can then be applied to understand the interaction between and among people. World War II and its aftermath necessitated the field itself. The early decades of social psychological research were focused on creating foundational concepts such as conformity, social learning, discrimination, and so on (Cartwright, 1979). Hence, we chose to explore the Chernobyl incident in light of the social psychological processes that were involved. We were interested in the deep-rooted processes and features of the society that gave rise to and dealt with the fallout of a catastrophe of this scale. Societies and political structures are complex systems that are made up of people, and hence, can be subjected to the psychological lens to understand the causes and effects of the behaviours they give rise to.

Power Plant near Pripyat, Ukraine, in the early hours of 26 April 1986, led to one of the worst nuclear disasters in human history. The objective had been to test the emergency mechanisms of the reactor in the event of a power outage. To emulate such a condition, power levels were lowered, an action that eventually got out of hand and resulted in a fire and explosion of the reactor. Severely radioactive materials like iodine, caesium, strontium, and graphite were scattered around the site. Clean up efforts included deploying ‘liquidators’, including firefighters, workers in the power plant, and miners from different Soviets. Ukraine, Belarus, and Russia were the worst affected areas within the USSR, however, the impact was felt even in Scandinavia, other parts of Europe, China, Japan, Canada, and the United States in subsequent days. Around 115,000 people were evacuated from contiguous areas (UNSCEAR, 1988).

Chernobyl is of interest in psychology as it shows a pattern of behaviours exhibited on the systemic and institutional level, also by the personnel involved. Concepts of hierarchy and obedience were of salience in the Soviet state. Ukraine had a history of striving for independence from the Soviet Union. The Soviet Union employed propaganda to discredit this

A safety test in Reactor No. 4 at the Vladimir Lenin

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movement, despite the human rights violations that Ukrainians had been subjected to (Marples, 1991). Though the Chernobyl incident was situated in a period of Glasnost, literally meaning openness, where the Soviet state began recognising freedom of press, the dissemination of information regarding the explosion was inadequate. The policy of Glasnost was implemented for the media, where dissent was also slowly incorporated into publications and films, as well as in political matters, as evidenced by the relaxation in the treatment of dissidents. However, the policy operated within the caveat that the ruling party could not be brought under criticism (Lowe, 2013). In the context of the Cold War, when the United States warned against the dangers of nuclear weapons and advocated for peaceful uses of nuclear energy, the Soviet Union responded by getting involved in the creation of the International Atomic Energy Agency (IAEA) in 1957, which would allow it a stake in the global activities related to nuclear energy and prevent the USA from dominating them (Holloway, 2016). Even though the Soviets had proposed a law that would ensure nuclear safety, they did not implement it (Yaroshinskaya, 2006). Hence, despite the ideal behind Glasnost, the Soviet state covered up Chernobyl and the casualties it caused.

The current study seeks to explore the psychological patterns displayed through the behaviour of authority and institutions, forming a structure that impacts the individuals who are both parts of the system, and those who are subject to it. Apart from systemic factors that had a causal role, dealing with the aftermath also displayed the use of psychology in trying to control the information that is freely available to the people, perspective setting, and giving the perception of normalcy. The dependence on established hierarchies and roles is evident in the functioning of the state and the handling of the incident.

Chernobyl in the Social Sciences

Chernobyl has been the focus of studies within the social sciences, specifically how policymaking is influenced by disasters and crises, (Nohrstedt, 2008) interplay of the state, political bodies, and non-governmental actors, (Stsiapanau, 2010) how risk is dealt with as a society, (Beck, 1987) and other socio-

cultural changes induced by the incident (Nesvetajlov, 1992). There have also been studies from the perspective of mental health and developmental effects (Bromet et al., 2011). The foremost health consequence of Chernobyl has been the impact on mental health, specifically of the clean-up personnel and people residing in the area. These include symptoms relating to cognitive processes like memory and concentration, as well as more generalised health effects like fatigue and sleep changes (Pastel, 2002). In nearby locales, it was found that there was more prevalence of psychological disorders, compared to areas that were further away, more so in mothers who had children below 18 years of age (Havenaar, et al., 1997). Individuals exposed to Chernobyl-related radiation in Norway were also observed to have prenatal effects extending into adolescence (Heiervang et al., 2010). Further, psychological research has investigated Chernobyl in light of the perception of nuclear energy and related phenomena, decision and policy-making, risk perception, and communication (Eiser et al., 1990; Van der Pligt & Midden, 1990; Renn, 1990).

While the above research explores the psychological aspects of mental health, attitudes towards related phenomena, and perceptions involved in Chernobyl, there has not been much focus on the group processes that were prevalent in the state and political structures. The previous research explores politics of policy making in the wake of a disaster and the resultant perception of nuclear energy, however, it has not adequately looked into the fundamental group processes and dynamics that underlie the incident. The Chernobyl incident, specifically, was chosen as the focus of the present study, as there is a lack of a social psychological view of the causes and aftermath of the event. Further, the backdrop of the Cold War and the Soviet Union form an interesting base from which to study the social psychology of historical events.

The Present Study

Given the interlinkage of social psychology and historical events, the present study seeks to explore the psychology underlying the causation and aftermath of the Chernobyl incident, in light of the social, cultural, and systemic factors that played a role. The larger goal is to use the case of Chernobyl as a glimpse into the psychology of how societies and authority institutions

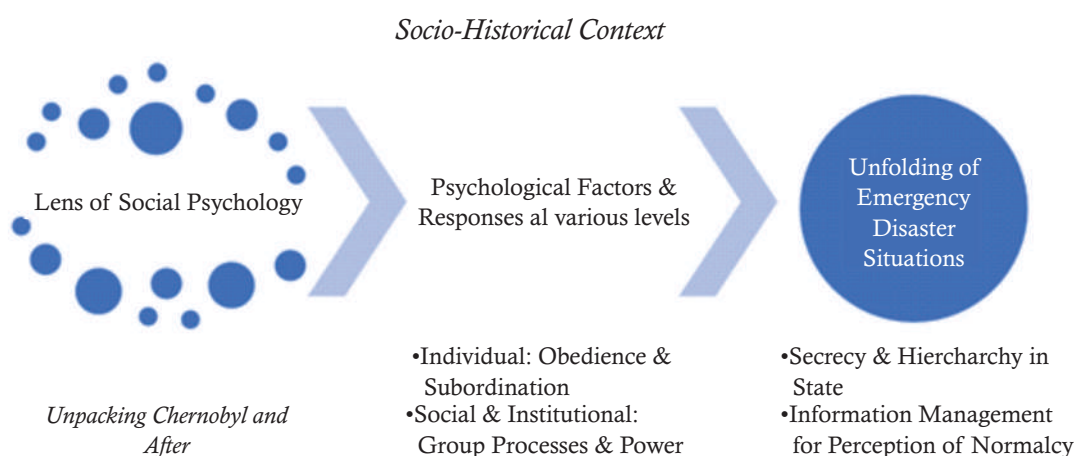
deal with emergency and disaster situations. Hence, the group processes at play are of key interest.

Therefore, the current study seeks to explore the psychology of the individuals and the system that caused and dealt with the aftermath of Chernobyl. This is done by asking the question: What is the psychology behind the subordination of facts and safety, to the mechanisms of the state? Behind a web of bureaucratic and state mechanisms that seem to be intertwined with the incident, there is the underlying

influence of the psychology of power, and all the reinforcements that are necessary to maintain it. There is a constant struggle between this power and the duty that is owed to the people in the face of a disaster. The impact of the struggle is also seen in the individuals involved, in their capacity as constituents of a larger system. This conceptual framework is demonstrated in Figure 1.

Figure 1

Concept map of the theoretical framework of the study



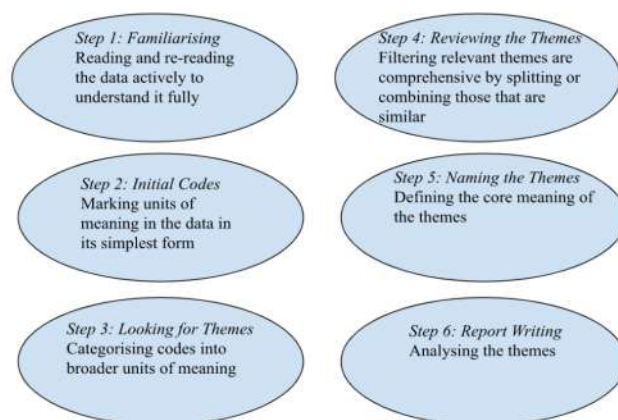
The present study used material that gave insight into the factors that led to the accident, and the mechanisms of the system that were responsible. Also relevant was material on the aftermath, and how it was dealt with as a public crisis. The social psychological constructs implicated in the material are highlighted.

Method

Analysis was done using the six-step process of thematic analysis as given by Braun and Clarke (2006), as illustrated in Figure 2.

Figure 2

Six-step process of thematic analysis given by Braun and Clarke (2006)



The first source is an interview given by Valery Legasov, the head of the committee that was created to deal with the effects of Chernobyl, done in 1987, a year after the explosion. The interview discusses the condition of the population, clean-up efforts, and further steps taken to ensure safety. The next source used is a report by Walter Patterson (1986) on the Vienna conference of the International Atomic Energy

Agency (IAEA), where a Soviet delegation gave details about the incident on an international platform. The third source is an article by Alla Yaroshinskaia (2006) who is a journalist, on state's attempts to conceal information in the aftermath of Chernobyl. The fourth and final source used is the translated transcripts of audio tapes left by Legasov before his death in 1988. The table below contains the sources used.

Table 1

Data sets used for thematic analysis, author/source and year, and reference codes used

Data Set	Author/Source and Year	Reference Codes
"A Soviet expert discusses Chernobyl"	Valery Legasov (1987)	D1
"Chernobyl- the official story"	Walter Patterson (1986)	D2
"The big lie- The secret Chernobyl documents"	Alla Yaroshinskaia (2006)	D3
"The Legasov Tapes"	Valery Legasov (1988), translated by Yury Timofeyev on https://legasovtapetranslation.blogspot.com/	D4

Results

Table 2

Table showing themes and codes from the data sets

Themes	Codes
Role of obedience and power dynamics in structures: factors in causes and effects of the incident	Emphasis on the goals of the state Maintaining international image Rectifying criticisms from Western countries Public relations success on an international forum Emphasis on the goals of the State Emphasis on the fixed roles and responsibilities Reliance on established procedure Lack of questioning among personnel Separation of the state and the work of scientific institutions Autonomy of scientific work Subordination of science to the state No heed paid to scientific concerns Emphasis on fixed roles Honour prioritised over safety

Secrecy, concealment, and manipulation of relevant information

Contrast between media for Soviet vs. international audiences
Optimistic picture
Concealing facts about the consequences on different levels
Restricting access to information
Dishonesty about radiation effect on people
Manipulation of diagnoses and medical records
Restricting access to information
Transparency in the face of scrutiny from international actors
Losing of standards on radiation-related sickness
Manipulation of diagnoses and treatment
Tampering with medical records
Political intervention in medical decisions and records
Concealment of facts to hide economic implications
Manipulation of medical records

Avoidance of panic through projection of normalcy

Putting severity in perspective, relative to other accidents
Mention of normalcy
Dealing with the health of first responders
Providing perspective on long term health effects
Full picture not given to avoid panic

Differential dissemination and disclosure of information

Admission of seriousness
Information given in-depth
Details of incident given
Transparency about the incident
Admission of severity
Transparency about structural flaws
Honesty about the incident to undo previous lapses in giving information
Uncertainty about the situation
Lack of instructions to the masses
Legasov's desire for transparency
No action taken to provide information
Lack of credible scientific information
Incomplete and unclear information about the causes
Poor planning of the test
Incomplete instructions given to personnel
Flaws in documentation
Lack of transparency regarding evacuation

Discussion

The aim of the study being to explore the psychological constructs implicated in Chernobyl, the themes that emerged in the analysis of the four data sources had to do with obedience and power dynamics, secrecy and concealment, avoidance of panic, and differential patterns of information dissemination based on different factors. These concepts seemed to broadly describe the behaviour that was observed in the data.

Obedience and Power Dynamics in Structures: Factors in Causes and Effects of the Incident

The following verbatim exhibits the importance attributed to obedience and power dynamics “...*the institution in which we all worked was built on principles of the highest qualifications of people who were executing any operation with the highest responsibility*” (D4) showing the emphasis on the rigid roles of individuals as a part of larger institutions. Further, “...*a generation of engineers came up who were very competent, but not critical of the devices themselves, not critical of all the systems that were ensuring their safety;*” (D4) succinctly expresses how the culture, even in scientific spaces, was one of non-questioning and compliance to the established rules and structures. A recurring code within this theme was that of emphasis on the larger goals of the state, as seen in “...*he said that they had somewhat messed something up, and an accident of sort had occurred there, but this would not stop the overall development of the atomic energy program.*” (D4) further shows the prioritisation of the collective goal over the immediate needs of those affected. There was also reliance on established procedures, (“...*highly qualified people who were used to being relied on, and were convinced that safety issues are solved solely by skills and by precisely instructing the personnel that led the process.*” from D4) that displays a desire to avoid uncertain terrains, and a sense of safety and continuity derived from tried and tested methods and activities. Another dominant observation was that of maintaining an international image and power dynamic, in the light of the power play that was prominent during the Cold War. “...*the Western delegations had drastically muted their criticisms of Soviet nuclear technology*” (D2).

Dordevic (2015) attributes the decision-making at Chernobyl to the Logic of Appropriateness model given by March (1994). It is characterised by decisions

that are made keeping in mind the role and position one occupies in a system, as opposed to the Logic of Consequence, which involves decision-making, keeping in mind the possible outcomes of the decisions. The former creates constraints based on identities and roles, the situation, and the rules in place. Stanley Milgram's (1963) experiment on obedience also showed that people follow instructions given by authority figures, even if the consequences can cause harm, whether the source of the authority be legal or moral (McLeod, 2007). The innateness of obedience is also caused by institutional influence (Zimbardo, 1974). The prison experiment at Stanford (Zimbardo et al., 1971) showed how fixed roles can affect behaviour even when it can cause harm to others. Thus, the behaviour discussed above can be attributed to these findings. The steadfastness of roles has the power to dictate behaviour, when operating within a rigid power structure. Hofstede's dimensions (Hofstede, 2011) of power distance, collectivism, and long-term orientation are also of interest. Power distance is described as the expectation regarding equal power distributions among members of a given society that have different positions, in relation to power. The degree to which inequality of power is accepted is also implicated in this dimension. Collectivism refers to how integrated individuals are into larger society and is characterised by group consciousness and decision-making that is reflective of the collective will. Uncertainty avoidance is indicative of the general approach to uncertain situations and navigation of situations where structure is lacking, characterised by set rules of conduct, and negative reactions to anything that falls beyond these defined boundaries. Russia scored 93 in the power distance dimension, 39 in the individualism dimension (indicating a leaning towards collectivism), and 95 in the uncertainty avoidance dimension, showing the large distance between those with and without power, importance attributed to group functioning, and a feeling of threat towards uncertain situations, as reflected through their fixed bureaucracy system (Hofstede Insights).

Secrecy, Concealment, and Manipulation of Relevant Information

One such action pertaining to this theme was that of maintaining a disparity in media shown to international and Soviet audiences: “*The film offered a*

grim contrast to the Soviet television documentary being shown in the delegates' lounge. The doggedly cheerful documentary devoted most of its time to the efforts of the workers" (D2). There was concealment of facts, including the effect of radiation, and medical records and diagnoses ("These regulations demanded that medical staff must not enter a diagnosis of "acute radiation syndrome" in the files of liquidators from the armed forces but must substitute some other term." from D3). Overall, the authorities covered up the impact of the explosion, political, economic, and health-related ("It had become a matter of economics: the USSR could not afford to resettle so many people. The truth about the health of the population had to be concealed from the population itself." from D3).

The act of secrecy involves not revealing information, as well as providing an alternate, untruthful account of the information at hand (Slepian, Chun & Mason, 2017). A characteristic of a restrained society, as per Hofstede's Dimensions (Hofstede, 2011) is the relative lack of importance attributed to freedom of speech. Shlyakhter and Wilson (1992) attribute the Chernobyl incident to failures and secrecy of Soviet bureaucracy that served as protection for their lack of understanding of the issues at hand. Hence, there is a culture of concealment observed, reinforced through mechanisms of manipulation. They also prioritised the long-term objective, which also aligns with Hofstede's dimension. It is characterised by goal achievement through faith in hierarchy. Further, it has been observed that higher levels of out-group bias is seen in individuals with authoritarian personalities (Downing & Monaco, 1986). This may also have influenced the way information was handled domestically, and abroad.

Avoidance of Panic Through Projection of Normalcy

Panic was avoided by portraying the situation as being normal or under control, achieved by comparing the effects to that of other events and accidents, to keep things in perspective ("...the history of our time knows accidents when human losses were greater by many orders of magnitude. If we regard the Chernobyl breakdown in this respect, it is not the most terrible" from D1). Further, "They lead quite a normal life external radiation" demonstrates that there was an attempt to project a picture of

normality about the livelihood of the people. The state also withheld information about evacuation to avoid panic: "Because I reasoned, for example, that if we say this to the people now, the evacuation will be delayed...People will start to pack for too long. That is why I advised...that we cannot tell about the precise duration of the evacuation yet." (D4). Hence, there is an overall impression of presenting the situation as being in control to avoid negative reactions.

Gantt and Gantt (2012) explain how, contrary to the notion of mass panic in the face of disaster situations, people tend to engage in helpful behaviour, and that the broad situations that cause panic are ones in which there is a perceived threat, perceived lack of escape, and helplessness. The social attachment model (Mawson, 2005) states the tendency to search for groups and situations that are familiar and known to be safe. This, too, suggests the likelihood of acting in groups in emergencies, and that of prosocial behaviour. However, a response of mass panic can occur in dangerous situations in the relative absence of close relationships, thereby offsetting the feeling of attachment. Hence, the incidence of mass panic in emergency or disaster situations is not only unlikely, but a rare occurrence. It is seen here that due to the steep consequences of the accident, there is denial of the severity.

Omer (1991) presented the continuity principle which delineates the need for continuity on all levels, in the course of managing a disaster. One such level is the functional level, the continuity of which entails adequate coping, and carrying on with necessary activities and functions, even when there is an emergency situation. There are thought to be two biases that preclude this continuity: the abnormalcy and normalcy biases (Omer & Alon, 1994). The abnormalcy bias is the tendency to underestimate people's capacity of coping and shaping up to requirements in a disaster. Conversely, the normalcy bias is the tendency to underestimate the damage that is caused by the disaster. Both these biases affect the achievement of continuity by disregarding both the disaster itself, and the people who have to deal with it. The coincidence of these phenomena, according to Omer and Alon, can occur when information is withheld, lest there be adverse reactions among the

people, while making the erroneous assumption that there is not a significant danger. This aligns exactly with what is observed in the data.

Shylakhter and Wilson (1992) attribute the accident at Chernobyl to, among other factors, ignorance. Concealment of information was done under the rationale of it being beyond the understanding of people. However, this could also be a reflection of the lack of understanding among bureaucratic personnel. This ignorance and lack of understanding can also severely implicate emergency responses, both in terms of causation and handling of the aftermath (Smithson, 1990).

Differential Dissemination and Disclosure of Information

The differences in how much information was disclosed was based on several factors, one of which was the need to go into detail and admit the seriousness on an international platform, as indicated through the verbatim: *"Although the consequences of the Chernobyl disaster are very serious-31 people have perished, over 200 persons have acquired radiation sickness..."* (D1). This disclosure also served the purpose of mitigating the lack of transparency until that point (*"Their forthrightness and candour all but blotted out the memory of the initial Soviet failure to warn their neighbours about Chernobyl."* from D2). Even in the immediate aftermath, there was a lack of clarity on the course to be taken, due to faulty communication, as expressed in *"There was no understanding of the steps that needed to be taken, neither from station personnel nor from the Ministry of Energy"*. Even the people weren't equipped with necessary information, and recommendations to provide it weren't acted upon: *"I have already mentioned that I had proposed from the beginning to create a press group under the Government Commission that would correctly inform the population about the events that were happening, that would give the right advice. For some reason, this was not accepted"* (D4).

The patterns of dissemination of information described above can be viewed through the perspective of decision-making. Janis (1971) describes the phenomenon of groupthink which is the tendency of groups to conform to established norms while making decisions. There is a sense of commitment to the

decisions of the group, regardless of the outcome. There are certain "symptoms" that are seen to be characteristic of this phenomenon. One such characteristic is a belief in the bulletproof nature of the decisions taken, which are often erroneous. Further, there is an engagement in rationalisation as a way to offset criticism, as well as a stereotypical and negative view of "the other". This reinforces the commitment to the goal, as well as the morality of pursuing it. There is also a pressure to conform to the group. Finally, there is also a perception of unanimity that is reinforced by guards within the group. These signs can be observed through the lens of the larger goal of maintaining an international image, in the backdrop of the Cold War. Despite the adverse effects of faulty information dissemination (as seen through the lack of transparency and clear instructions), there was perseverance in this goal. There was, therefore, disregard for the deviant view expressed, which was the suggestion to provide more clarity. The perception of "the other" was dominant; there was a need to negate the view that information about the incident was withheld. Hence, the Soviets gave more information on the international platform than domestically. Thus, the group nature of the decisions made is evident.

Conclusion

These findings point toward behaviours and psychological factors; it is observed how the individuals are bound by rigid norms, rules, and expectations to behave in a way that will achieve the collective goal. It also indicated how the characteristics of a society exert their influence on individuals, as well as organisations and systems of the state. Further, there are also descriptions of how decisions are made, and facts are used to achieve different objectives, and how this concealment is justified with biased thinking and behaviour. According to Shylakhter and Wilson (1992) there were many factors responsible for the accident, but that "human beings are responsible for each of the contributing causes on the list" (p. 253). Hence, applying a social psychological lens to this incident shows the nature of social interaction that created the system, which in turn created Chernobyl. From the decisions made and the social attitudes in place, to the manipulations and projections of the aftermath, Chernobyl is a case of group processes that were deeply

embedded in the institution. It is a study of how a society caused, experienced, and later dealt with one of the greatest tragedies in human history.

Implications, Limitations, and Direction for Future Research

The findings of the present study give an understanding of the psychological factors involved in the functioning of institutions, specifically regarding dealing with disasters and emergencies. Using the case of a historical event, the current study gives a glimpse into how societies and institutions such as governments are reflections of each other, and are subject to group processes. It illustrates how key social psychological concepts like decision making and culture underlie the functions of society and the state, and can be further applied to understand present-day social and governmental activities. The study adds to the understanding of the Chernobyl incident through the perspective of psychological processes that govern social and political behaviour. While previous research explored the causation of the incident in terms of the technical and political aspects, the current study highlights the group processes involved, thereby providing an understanding of political units as social entities, and how individual and group psychology can have far reaching effects through policy and crisis management.

The study, however, does not provide insight into the way the system has changed in almost forty years since the explosion. Further exploration into the measures taken in light of the failures of Chernobyl can be used to evaluate the social change that followed it. It can also have been limited by the number of data sources used.

Further research can be done on the psychology of institutional structures in relation to group dynamics, decision-making, power structures, collectivistic societies, group secrecy, and information flow. The psychology of governments and its link to the societies they serve can also be explored.

References

- Beck, U. (1987). The anthropological shock: Chernobyl and the contours of the risk society. *Berkeley Journal of Sociology*, 32, 153-165. <https://www.jstor.org/stable/41035363>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Bromet, E. J., Havenaar, J. M., & Guey, L. T. (2011). A 25 year retrospective review of the psychological consequences of the Chernobyl accident. *Clinical Oncology*, 23(4), 297-305. <https://doi.org/10.1016/j.clon.2011.01.501>
- Cartwright, D. (1979). Contemporary social psychology in historical perspective. *Social Psychology Quarterly*, 42(1), 82-93. <https://doi.org/10.2307/3033880>
- Dorđević, Đ. (2015). Chernobyl Disaster—a View from the Decision-Making perspective. <https://dlwqtxtslxzle7.cloudfront.net/>
- Downing, L. L., & Monaco, N. R. (1986). In-group/out-group bias as a function of differential contact and authoritarian personality. *The Journal of Social Psychology*, 126(4), 445-452. <https://doi.org/10.1080/00224545.1986.9713611>
- Eiser, J. R., Hannover, B., Mann, L., Morin, M., Van Der Pligt, J., & Webley, P. A. (1990). Nuclear attitudes after Chernobyl: a cross-national study. *Journal of Environmental Psychology*, 10(2), 101-110. [https://doi.org/10.1016/s0272-4944\(05\)80121-5](https://doi.org/10.1016/s0272-4944(05)80121-5)
- Frequently Asked Chernobyl Questions*. (n.d.). IAEA. <https://www.iaea.org/newscenter/focus/chernobyl/faqs>.
- Gantt, P., & Gantt, R. (2012). Disaster psychology: Dispelling the myths of panic. *Professional Safety*, 57(08), 42-49. <https://onepetro.org/PS/article/57/08/42/33345/Disaster-Psychology-Dispelling-the-Myths-of-Panic>
- Gergen, K. J. (1973). Social psychology as history. *Journal of personality and social psychology*, 26(2), 309-320. <https://doi.org/10.1037/h0034436>

- Havenaar, J. M., Rumyantzeva, G. M., van den Brink, W., Poelijoe, N. W., Van den Bout, J., van Engeland, H., & Koeter, M. W. (1997). Long-term mental health effects of the Chernobyl disaster: an epidemiologic survey in two former Soviet regions. *American Journal of Psychiatry*, 154(11), 1605-1607. <https://doi.org/10.1176/ajp.154.11.1605>
- Heiervang, K. S., Mednick, S., Sundet, K., & Rund, B. R. R. (2010). The Chernobyl accident and cognitive functioning: a study of Norwegian adolescents exposed in utero. *Developmental Neuropsychology*, 35(6), 643-655. <https://doi.org/10.1080/87565641.2010.508550>
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, 2(1). <https://doi.org/10.9707/2307-0919.1014>
- Hofstede Insights. (2021, June 22). *Compare countries - Hofstede Insights*. <https://www.hofstede-insights.com/product/compare-countries/>
- Holloway, D. (2016). The Soviet Union and the creation of the international atomic energy agency. *Cold War History*, 16(2), 177-193. <https://doi.org/10.1080/14682745.2015.1124265>
- Janis, I. L. (1971). Groupthink. *Psychology today*, 5(6), 43-46.
- Legasov, V. (1987). A Soviet expert discusses Chernobyl. *Bulletin of the Atomic Scientists*, 43(6), 32-34. <https://doi.org/10.1080/00963402.1987.11459553>
- Lowe, N. (2013). *Modern world history*. Hampshire, UK: Palgrave Master Series.
- March, J. G. (1994). *Primer on decision making: How decisions happen*. Simon and Schuster.
- Marples, D. R. (1991). *Ukraine under Perestroika: Ecology, Economics and the Workers' Revolt*. NY: Springer.
- Mawson, A. R. (2005). Understanding mass panic and other collective responses to threat and disaster. *Psychiatry*, 68(2), 95-113. <https://doi.org/10.1521/psyc.2005.68.2.95>
- McLeod, S. A. (2007). The Milgram experiment. *Simply Psychology*. <https://www.simplypsychology.org/milgram.html>
- Milgram, S. (1963). Behavioral Study of obedience. *The Journal of Abnormal and Social Psychology*, 67(4), 371-378. <https://doi.org/10.1037/h0040525>
- Nesvetajlov, G. A. (1992). Chernobyl from the point of view of disaster sociology. *Vestnik Rossijskoj Akademii Nauk*, 54-64. https://inis.iaea.org/search/search.aspx?orig_q=RN:25059257
- Nohrstedt, D. (2008). The politics of crisis policymaking: Chernobyl and Swedish nuclear energy policy. *Policy Studies Journal*, 36(2), 257-278. <https://doi.org/10.1111/j.1541-0072.2008.00265.x>
- Omer, H. (1991). Tasks of a psychological emergency team in disaster. *Sihot*, 5, 1-23
- Omer, H., & Alon, N. (1994). The continuity principle: A unified approach to disaster and trauma. *American Journal of Community Psychology*, 22, 273-287. <https://doi.org/10.1007/BF02506866>
- Pastel, R. H. (2002). Radiophobia: Long-term psychological consequences of Chernobyl. *Military Medicine*, 167(suppl_1), 134-136. https://doi.org/10.1093/milmed/167.suppl_1.134
- Patterson, W. C. (1986). Chernobyl—The official story. *Bulletin of the Atomic Scientists*, 42(9), 34-36. <https://doi.org/10.1080/00963402.1986.11459439>
- Renn, O. (1990). Public responses to the Chernobyl accident. *Journal of Environmental Psychology*, 10(2), 151-167. [https://doi.org/10.1016/S0272-4944\(05\)80125-2](https://doi.org/10.1016/S0272-4944(05)80125-2)
- Shlyakhter, A., & Wilson, R. (1992). Chernobyl: The inevitable results of secrecy. *Public Understanding*

- of Science, 1(3), 251. <https://doi.org/10.1088/0963-6625/1/3/002>.
- Slepian, M. L., Chun, J. S., & Mason, M. F. (2017). The experience of secrecy. *Journal of Personality and Social Psychology*, 113(1), 1–33. <https://doi.org/10.1037/pspa0000085>.
- Smithson, M. (1990). Ignorance and disasters. *International Journal of Mass Emergencies & Disasters*, 8(3), 207–235. <https://doi.org/10.1177/0280727090000800302>.
- Stsiapanau, A. (2010). The Chernobyl politics in Belarus: Interplay of discourse-coalitions. *Filosofija. Sociologija*, (2), 143-150. <https://www.cceol.com/search/article-detail?id=157922>.
- UNSCEAR 1988 Report. (n.d.-b). United Nations: Scientific committee on the effects of atomic radiation. <https://www.unscear.org/unscear/en/publications/1988.html>
- Timofeyev, Y. (2020). The Legasov Tapes. <https://legasovtapetranslation.blogspot.com/>.
- Van der Pligt, J., & Midden, C. J. (1990). Chernobyl: Four years later: Attitudes, risk management and communication. *Journal of Environmental Psychology*, 10(2), 91–99. [https://doi.org/10.1016/S0272-4944\(05\)80120-3](https://doi.org/10.1016/S0272-4944(05)80120-3)
- Yaroshinskaia, A. (2006). Chernobyl: The big lie. *Index on Censorship*, 35(2), 20–28. <https://journals.sagepub.com/doi/pdf/10.1080/03064220600746623>
- Zimbardo, P. G. (1974). On “Obedience to authority.” *American Psychologist*, 29(7), 566–567. <https://doi.org/10.1037/h0038158>
- Zimbardo, P. G., Haney, C., Banks, W. C., & Jaffe, D. (1971). *The Stanford prison experiment*. Zimbardo, Incorporated. https://web.stanford.edu/dept/spec_coion.pdf

Appendix

Table Showing Themes, Codes, and Verbatim Statements from the Data Set

Themes	Codes	Verbatim
Role of obedience and power dynamics in structures: factors in causes and effects of the incident	Emphasis on the goals of the state	<i>D1: "...the motives requiring the development of the nuclear power industry have not changed... The goal set in the Soviet energy program-to raise the capacity of nuclear power stations by 400 to 600 percent by the end of this century-will not be revised."</i>
	Maintaining international image	<i>D2: "The Chernobyl accident in April apparently has convinced the world nuclear industry that nuclear power is safe-or at any rate safe enough. This somewhat disconcerting conclusion emerged from an August 25-29 conference in Vienna, sponsored by the International Atomic Energy Agency (IAEA). There the Soviet Union presented its official report on the world's worst nuclear accident."</i>
	Rectifying criticisms from Western countries	<i>D2: "By the close of the conference the Western delegations had drastically muted their criticisms of Soviet nuclear technology. The evidence of impressive Soviet competence in other areas-especially the emergency measures implemented in the hours after the accident-had taken the edge off earlier Western suggestions that the Soviets could not be trusted to build and operate nuclear plants."</i>
	Public relations success on an international forum	<i>D2: "...an outpouring of mutual congratulations on the week's efforts. For the Soviets the conference was a public relations triumph. Their forthrightness and candor all but blotted out the memory of the initial Soviet failure to warn their neighbors about Chernobyl."</i>
	Emphasis on the goals of the State	<i>D4: "...he said that they had somewhat messed something up, and an accident of sort had occurred there, but this would not stop the overall development of the atomic energy program."</i>

Emphasis on fixed
roles and respon -
sibilities

Reliance on
established procedure

Reliance on
established procedure

Lack of questioning
among personnel

Separation of the
state and the work of
scientific institutions

A u t o n o m y o f
scientific work

Subordination of
science to the state
No heed paid to
scientific concerns

Emphasis on fixed
roles

D4: "...the institution in which we all worked was built on principles of the highest qualifications of people who were executing any operation with the highest responsibility...highly qualified people who were used to being relied on, and were convinced that safety issues are solved solely by skills and by precisely instructing the personnel that led the process."

D4: "...they began to lose the standard of modern equipment. The staff began to age. Fewer young people joined. New approaches were not welcomed...The habitual rhythm of work persisted and the usual approach to solving problems prevailed."

D4: "...a generation of engineers came up who were very competent, but not critical of the devices themselves, not critical of all the systems that were ensuring their safety; but mainly knew the systems and required an increase in their numbers."

D4: "Our Institute was not part of the Ministry of Medium Machine Building. It stood beside it, as a separate independent organisation, and had the right to dictate its scientific requirements and positions. And the Ministry, after evaluating the scientific proposals, was technically obliged to execute them precisely...Scientific proposals not being limited by the influence of those in power...history came to such a state where science became subordinate to the Ministry...And so, the scientific spirit and the scientific atmosphere in reactor engineering gradually began to submit to the engineering will, as it were, to the ministerial will...it complicated my relationship with the Ministry when I tried to, not very carefully, speak out on this issue. And I could not win in these matters...I was a chemist, and this allowed them to not listen to my opinions carefully and to treat my suggestions as sort of fantasies. This was the general environment in which all this work was happening"

Secrecy, concealment, and manipulation of relevant information	Honour prioritised over safety	<i>D4: "The operators made mistakes because they had to complete the experiment which they considered a matter of honour..."</i>
	Contrast between media for Soviet vs. international audiences	<i>D2: "Legasov also brought with him a 25-minute videotape entitled simply "26 April", which was shown to the conference on the opening morning and then twice again by overwhelming demand. The film offered a grim contrast to the Soviet television documentary being shown in the delegates' lounge. The doggedly cheerful documentary devoted most of its time to the efforts of the workers"</i>
	Optimistic picture	<i>D3: "It is well known that after the Chernobyl accident, the Soviet government immediately did everything possible to conceal the fact of the accident and its consequences for the population and the environment: it issued "top secret" instructions to classify all data on the accident, especially as regards the health of the affected population."</i>
	Concealing facts about consequences on different levels	<i>D3: "...instructions from the ministry of health and the ministry of defence to classify the radiation doses received by the general population, the "liquidators... and military personnel. These regulations demanded that medical staff must not enter a diagnosis of "acute radiation syndrome" in the files of liquidators from the armed forces but must substitute some other term."</i>
	Restricting access to information	<i>D3: "These classified documents were not accessible for many years. Only in 1991, when the Soviet Union was collapsing, was I able to get hold of secret protocols and other documents of the operative group of the Politburo. These minutes revealed the numbers of persons irradiated and hospitalized during the first days after the accident</i>
	Dishonesty about radiation effects on people	<i>D3: "The cynicism of the document is striking: "The proposal of the Ministry of Health Care of the USSR on publishing data on the number and condition of patients in Moscow Hospital No. 6 should be accepted, taking into account that there are US specialists working in this hospital." Had</i>
	Manipulation of diagnoses and medical records	
	Restricting access to information	
	Transparency in the face of scrutiny from international actors	

Loosening of standards on radiation-related sickness

Americans not been there, nothing would have been known about the situation in Hospital No. 6.”

Manipulation of diagnoses and treatment
Tampering with medical records

D3: “Why did the process of discharging people from hospitals become so rapid after the number of patients had exceeded 10 000?... the 10 000-plus people hospitalized because of exposure to radiation were automatically reclassified as “healthy” and discharged. The official number of people suffering from acute radiation syndrome also fell significantly. It goes without saying that Party bosses increased the acceptable dose in this way simply to hide the numbers affected.”

Political intervention in medical decisions and records

Concealment of facts to hide economic implications

D3: “It had become a matter of economics: the USSR could not afford to resettle so many people. The truth about the health of the population had to be concealed from the population itself.”

Tampering with medical records

D3: “Officials in the Narodichi district of the Zhitomir region made every effort to eliminate the primary medical documents representing the actual doses: medical staff were ordered to register understated dose values.”

Manipulation of medical records

D3: “...secret official documents of the Academy of Medical Sciences of the USSR are similar. According to them, no autopsies of those who died after the accident, including children, were carried out in the SCZ in Zhitomir region

Putting the severity in perspective, relative to other accidents

D1: “...the history of our time knows accidents when human losses were greater by many orders of magnitude. If we regard the Chernobyl breakdown in this respect, it is not the most terrible”

Secrecy, concealment, and manipulation of relevant information

D1: “There are some districts outside the 30-kilometer zone... which are contaminated by strontium and cesium. People live in these districts but they eat foodstuffs brought from other regions. They lead quite a normal life; they are not exposed to any noticeable external radiation, but foodstuffs grown in

	<i>this territory are not recommended for use.”</i>
Mention of normalcy	<i>D1: “...all 200-odd people who have developed radiation sickness have left the hospitals...All-round diagnosis of the general condition of the people is periodically carried out, and the composition of their blood is checked. Particular attention is paid to the thyroids and lungs. To the best of my knowledge, no anomalies have been detected among the evacuees.”</i>
Dealing with the health of first responders	<i>D2: “The press conference panelists-comparing this with fatalities in car accidents, plane crashes, and other modern technological mishaps insisted on the need to keep the health effects of the Chernobyl accident in perspective...The precise numbers, however, could not be predicted with any confidence, nor would it be possible to say that Chernobyl caused any particular cancer.”</i>
Mention of normalcy	<i>D2: “By setting the long-term Chernobyl fatalities against a background of all the other deaths occurring during the same period in the same population, the health effects of the accident could be made to appear unimportant.”</i>
Providing perspective on long term health effects	<i>D3: “...the authors claim that among the population in the SCZs, who were exposed to irradiation every day, there will be less fatal cases of induced cancers than among the population of all other territories.”</i>
Putting the severity in perspective, relative to other events	<i>D4: “Because I reasoned, for example, that if we say this to the people now, the evacuation will be delayed...People will start to pack for too long. That is why I advised...that we cannot tell about the precise duration of the evacuation yet.”</i>
Full picture not given to avoid panic	<i>D1: “Although the consequences of the Chernobyl disaster are very serious-31 people have perished, over 200 persons have acquired radiation sickness”</i>
Admission of seriousness	

Differential dissemination and disclosure of information	Information given in-depth	D2: "Western suspicions that the Soviet authorities would resort to obfuscation and cover-up were swept aside by a deluge of information-explicit, vivid, and chilling. The official Soviet report ran to 388 pages. In a five-hour tour de force the head of the Soviet delegation, Academician Valery Legasov, deputy chairman of the Kurchatov Institute of Atomic Energy, introduced the report."
	Details of incident given	D2: "Legasov's videotape, however, recounted all too starkly the events of April 25-26 that had made all the subsequent heroics and cleanup efforts necessary"
	Transparency about the incident	D2: "No Western advance commentary on the Soviet report had come close to conveying the true horror of the accident."
	Admission of severity	D2: "As to the longer term, many people would suffer cancers as a result of exposure to radiation from Chernobyl, some of which would certainly be fatal." D2: "Legasov had admitted that the RBMK design had not merely disadvantages but defects."
	Transparency about structural flaws	D2: "Their forthrightness and candour all but blotted out the memory of the initial Soviet failure to warn their neighbours about Chernobyl." D4: "There are so many different interpretations of how and why this happened, that it is in a way my duty to tell what I know, how I see and understand it and how I witnessed the events that occurred."
	Honesty about the incident to undo previous lapses in giving information	D4: "There was no understanding of the steps that needed to be taken, neither from station personnel nor from the Ministry of Energy. And so I and the Government Commission had to take these decisions, come up with the action plan, get a clear understanding of the situation"

Transparency about the incident	<i>D4: "During the first days of the Chernobyl tragedy, the flaws in our information services were very evident...that prepared literature that could quickly be distributed among the people to explain, for example, what doses are extremely dangerous for humans, how to behave when a person is inside a zone of increased radiation exposure...all this literature was totally absent."</i>
Uncertainty about the situation	
Lack of instructions to the masses	<i>D4: "I have already mentioned that I had proposed from the beginning to create a press group under the Government Commission that would correctly inform the population about the events that were happening, that would give the right advice. For some reason, this was not accepted"</i>
Legasov's desire for transparency	
No action taken to provide information	<i>D4: "...our press reported a lot of information of the second type, about people, about their impressions, about what was happening there, but reported very little...about what has happened so far and what has changed. This, in my opinion, was a defect in the communication system, firstly. And secondly, there were too few statements by expert scientists."</i>
Lack of credible scientific information	<i>D4: "It seems to me that they were overly modest and careful when writing about what happened at the station itself, why the accident occurred, whose fault it was, whether the reactor was defective or the actions of the staff were wrong... I think that the full picture of exactly what happened, and how, is not entirely clear to anyone."</i>
Incomplete and unclear information about the causes	<i>D4: "The plan for the experiment was drawn up very poorly, very imprecisely, and not authorised by the specialists by whom it should have been authorised...One operator calls another and asks, "Valera, here in the program, it's written what needs to be done, but then a lot of it is crossed out. What should I do?" And the second one answers, "You do what is crossed out.""</i>
Poor planning of the test	
Incomplete instructions given to personnel	<i>D4: "There were a lot of inconsistencies between the part of the documentation that</i>

Flaws in documentation

Lack of transparency
regarding evacuation

was at the station and the reality in various places of the station and underground facilities. All this certainly gave an impression of gross neglect, of gross sloppiness towards maintaining documentation, which should be accurate”

D4: “I understood, I must tell you honestly, that I understood that the city was being evacuated permanently. But psychologically, somehow, I did not have the means, the strength, the ability to say this to people

Promoting psychological capital interventions towards alleviating adjustment problems in adolescents perceiving inter-parental conflict

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Abstract: Adolescents' mental health and well-being are a major concern for their future as well as for society. The present study is a crux of the findings of several researches that have been conducted and published in renowned journals, books, and magazines across the world. Based on the analysis of available literature, the present study tries to analyze the maladjustments that occur due to the perceived inter-parental conflict among adolescents. It was found that the most effective way to deal with adolescents is through an authoritative parenting style, characterized by a high level of parental affection and behavioral control. The importance of adolescents' spontaneous disclosure to their parents in reducing maladjustment issues has also been highlighted. Further, the study proposes psychological capital interventions can influence adolescents' perceptions of inter-parental conflict and subsequent maladjustments. The present study has implications in educational settings, where psychological capital can be used as an intervention toward lowering maladjustment among adolescents.

Keywords: Adolescent adjustment, inter-parental conflict, psychological capital, interventions, well-being

The period of adolescence is crucial for development and growth because it involves self-exploration, identity formation, decision-making, and autonomy. At this point, adolescents begin to learn how to adapt to their surroundings. Research supports that adjustment during adolescence plays a vital role in their health and well-being (De La Barrera et al., 2019; Ordóñez et al., 2015; Pettit & Laird, 2002). An adjustment is a change in a person's behavior or thinking. It is a process by which individuals maintain a balance between their needs and the surroundings. Adolescents who are well-adjusted grow up to be fully functioning adults in contrast to adolescents who struggle with maladjustment.

For any society to produce well-adjusted adults, adolescent mental health is crucial. Adolescents need to be taught how to develop adequate emotional adjustment and to increase their willingness to learn to adapt to their surroundings. Notably, adolescents struggle with a variety of maladjustment issues, including emotional and behavioral problems, which can sometimes be easily noticed and other times go unnoticed until they have negative consequences. According to Birch and Ladd (1996), historically, school adjustment has been characterized in terms of

children's academic growth or achievement. However, later research found that additional factors that affect school adjustment include children's attitudes toward school, anxieties, loneliness, social support, and academic motivation (e.g., engagement, avoidance, and absences) (Curtona, 2007; Dwyer & Cummings, 2001). These factors also contribute to maladjustment issues in adolescents' other spheres of functioning, such as social adjustment or emotional and behavioral adjustment.

Further, adolescents may also struggle with adjustment for a number of reasons outside of the classroom, such as problems with their families, neighborhoods, and peers. The dysfunction of each of these subsystems will worsen adolescents' mental health and increase their maladaptive behaviors. This paper, therefore, particularly tries to focus on the adolescents' adjustment issues as a consequence of perceiving inter-parental conflict (IPC). Further, it assesses whether Psychological Capital (PsyCap) can intervene on such adjustment problems among adolescents.

Perceived Inter-parental Conflict and Adjustment Problems

Relations between inter-parental conflict and children's

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psychological adjustment are well established (e.g., Emery, 1982; Grych & Fincham, 1990). The inter-parental conflict was found to be associated with children's internalizing symptoms (Dadds et al., 1999; Harold et al., 1997); externalizing problems (Grych et al., 2000; Harold et al., 1997); and academic achievement (Forehand & Wierson, 1993).

Further, it was found that an increase in adjustment problems was caused by parental rejection or lack of acceptance, which came about as a result of an inter-parental conflict (Sturge-Apple et al., 2006). It was found that parental resources are depleted by emotional distress and distractions caused by inter-parental conflict, which decreases their propensity to care for their adolescent's mental health. O'Donnell et al. (2010) found that an increase in parent rejection, over the course of a year, mediated the relationship between an increase in inter-parental conflict and an increase in depressive symptoms. Moreover, studies speculated that differences in child gender may be related to adjustment issues when evaluating parent-child rejection. In contrast to father-child rejection, which was found to be associated with internalizing adjustment problems like withdrawal behavior and anxious-depressive symptoms, mother-child rejection was found to be associated with externalizing adjustment problems like hostility and aggression (Shelton & Harold, 2008). Grych and colleagues (2004) indicated that a close parent-child relationship has a "main effect" rather than a buffering or moderating effect on adolescent adjustment. Their study revealed that a positive parent-child relationship

could help manage adjustment issues.

Method

To understand the contribution of psychological capital interventions towards alleviating adjustment problems in adolescents perceiving inter-parental conflict, the present study analyzed the findings of several researches that have been conducted and published in renowned journals, books, and magazines as well as an unpublished doctoral thesis. The review also used online databases like JSTOR, Directory of Open Access journals (DOAJ), Scopus, and Google Scholar.

Inclusion criteria

- Researches related to the inter-parental conflict that focused on adolescents' maladjustment, parenting styles, and psychological capital components (HERO): hope, efficacy, Resilience, Optimism, and Psychological Capital interventions.
- Published in a peer-reviewed journal, books, any article, or unpublished research work/dissertation in the English Language.

Exclusion criteria:

- Studies that largely addressed mental health with no focus on adolescents perceiving inter-parental conflict and psychological capital interventions were excluded.

Table 1

Empirical studies indicating the association between inter-parental conflict and adjustment issues

Author/s and year of publication	Methodology	Findings/ Results
Emery (1982)	Data collected from 132 elementary school students, teachers and their mothers.	Only indirect evidence that marital conflict is associated with children's adjustment.
Hetherington, Cox, & Cox (1982)	Six years follow up longitudinal	It was found that only the degree of conflict to which children were exposed was related to adjustment problems in children. It was termed as "Encapsulated conflict" or conflict of which children were not aware.

Rutter et al. (1975)	Data was collected from children with three psychiatric disorders: emotional disorders, conduct disorders and specific reading retardation.	Child problems were found to be more highly associated with unhappy marriages that were quarrelsome, tense, and hostile than unhappy marriages characterized by apathy and indifference.
Cummings et al. (1981)	Eleven boys and 13 girls from intact, white, middle-class families were studied for a 9-month period in a cross-sequential design.	Children exhibit more distress when observing naturally occurring anger between their parents that involves physical aggression.
Harold, Aitken & Shelton (2007)	It was a longitudinal study, analyzed via. Structural Equation Modeling method.	Inter-parental conflict was associated with academic outcomes

Note: Table 1 demonstrates the adverse effects of inter-parental conflict on children adjustment levels. These studies depicted that inter-parental conflict not always have direct effect. Most often, as indicated in the research studies, maladjustment arises due to hidden effects of inter-parental conflict.

Table 2

Researches showing association between trust beliefs and maladjustment

Author/s and year of publication	Methodology	Findings/ Results
Rotenberg et al. (2010)	Longitudinal study (data was collected early childhood, age 5 yrs to young adulthood, 21 yrs). Structural Equation Modeling was carried out for data analysis.	Low disclosure, withdrawal affect, and a lack of social connectedness with others are found to be signs of distrust cognition, which promotes a lack of social integration.
Malti et al. (2016)	Longitudinal study conducted on ethnically- diverse sample of children in Switzerland. Latent Growth Modeling was used for data analysis.	It was found that children who had low trustworthiness and low trust beliefs progressed toward becoming more aggressive.
Rotenberg, Boulton, & Fox (2005)	434 school students of age 5-6 years were administered in United Kingdom across an 8-month period. Regression Analysis was carried out for data analysis.	Children's internalized maladjustment was found to be more pronounced at both of the extremes of peer trust beliefs, i.e., very low and very high.
Rotenberg et al. (2014)	Data was collected from 149, 8-11 years children from UK. Latent growth Curve Modeling was used for data analysis.	It was found that compared to girls with a middle range of trust beliefs, those with very low and very high levels of trust demonstrated higher indirect aggression, lower peer group interaction, and distress.

Note. Table 2 demonstrates the association of trust beliefs with maladjustments. These studies suggest that the relationship between perceived inter-parental conflict and adolescent maladjustment may be moderated by trust beliefs.

Table 3

Researches showing association between adolescents' spontaneous disclosure and adjustment

Author/s and year of publication	Methodology	Findings/ Results
Keijsers et al. (2009)	Four wave study among 309 Dutch adolescents and their parents. Latent Growth Curve Analysis was used.	It was found that as adolescents' disclosure levels rose over time, delinquency among them was more likely to decline.
Cheung & Pomerantz (2011)	825 American and Chinese children (mean age= 12.74 yrs). Structural Equation Modeling was used.	It was found that the degree to which parents are involved in their children's education, particularly when it comes to autonomy support (vs. control), has been found to have little impact on how well their children adjust academically in terms of investment, engagement, and achievement.

Note. Table 3 demonstrated the association between adolescents' spontaneous disclosure and adjustment. Studies have shown the importance of adolescents' spontaneous disclosure to their parents in reducing maladjustment issues.

Table 4

Researches showing association between parenting styles and maladjustments

Author/s and year of publication	Methodology	Findings/ Results
Barber & Buehler (1996)	Data was collected from 471 Tennessee adolescents. Regression was carried out for data Analysis.	Parents' Psychological control has been found to be particularly associated with internalizing adjustment problems.
Maccoby & Martin (1983)	Clinical sample was collected from 113 mothers and adolescent dyads.	Adolescents, whose parents showed high level of parental affection and behavioral control, were found to be well adjusted.
Galambos et al. (2003)	Longitudinal study was carried out for 32 years (N= 109 families) Hierarchical Linear Modeling method was used for data analysis.	It was found that those adolescents whose parents uses high psychological control as well as behavioral control are more prone to substance abuse, antisocial behaviors and misconduct at school.
Pettit & Laird (2002)	An assessment of potential antecedents of parental psychological control was done.	It was found that parental involvement and affection decreased problem behavior in children and adolescents.

Note. Table 4 demonstrated the association between parenting styles and maladjustments.

Studies indicated that the most effective way to deal with adolescents is through an authoritative parenting style that is characterized by a high level of parental affection and behavioral control.

The above review suggests that there has been a decline in the level of adjustment among adolescents. Several studies have documented that inter-parental conflict has an adverse effect on adolescent emotional and behavioral maladjustment problems (Davies & Windle, 2001; Cummings & Davies, 2002). It depends upon how the child perceives the conflict between their parents (Grych et al., 2000; Jouriles et al., 2000). Studies also revealed that behavioral and emotional maladjustment problems arise due to spillover effects of inter-parental conflict e.g. maladjustment issues like depression, a feeling of helplessness, feeling threatened, and self-blaming tendencies grew worse as inter-parental conflict increased (Gerard et al., 2005; Grych et al., 2000; 2004; DuRant et al., 1995; Formoso et al., 2000). In this context, the present study proposes that PsyCap constructs can significantly contribute to alleviating adjustment problems in adolescents perceiving inter-parental conflict.

Psychological Capital Constructs (Hope, Efficacy, Resilience, and Optimism)

The Hope Resource in PsyCap

According to Snyder (1994, p. 2), hope is an "empowering way of thinking." Snyder's hope theory was based on the premise that people are typically goal-oriented, meaning they act in ways that indicate they are attempting to accomplish something. Inculcating high hopes through effective psychological capital interventions would be helpful for children witnessing inter-parental conflict. The research by Buehler, Franck, and Cook (2009) revealed that adolescent internalizing adjustment issues completely mediated the association between triangulation in marital conflict and peer rejection. Internalizing behavioral adjustment problems were found to be linked with peer rejection (Hay et al., 2004), whereas externalizing behavioral adjustment problems were found to be linked with peer rejection and impaired friendships (Bagwell & Coie, 2003). This indicates that adolescents experience difficulties with social adjustment. Therefore, incorporating psychological capital

interventions can contribute to modifying their adjustment patterns. Multiple clinical studies have demonstrated hope as being developable using a goals-based, contingency planning framework (Snyder, 2000).

Further, studies have shown that hope has a beneficial effect on outcomes in education, health, psychological adjustment, and even higher work performance outcomes (e.g., Luthans et al., 2007; Peterson & Luthans, 2003).

The Efficacy Resource of PsyCap

Researches show that self-efficacy significantly affects performance outcomes (Sadri & Robertson, 1993; Stajkovic & Luthans, 1998). Efficacy has been defined as "the individual's conviction or confidence about his or her abilities to mobilize the motivation, cognitive resources or courses of action needed to successfully execute a specific task within a given context" (Stajkovic & Luthans, 1998, p. 66).

Self-efficacy may be impacted by psychological, physiological, or emotional arousal and/or wellness. Additionally, few researchers have started to focus on PsyCap's mediating role in adolescents' individual development and the family environment (i.e., the parent-child relationship). For instance, adolescents who believe that they have good parental relationships are more likely to report high levels of PsyCap, which will help them achieve good social and academic outcomes such as prosocial behavior and academic performance (Carmona-Halty et al., 2020).

The Resilience Resource of PsyCap

Resilience "refers to a class of phenomena characterized by patterns of positive adaptation in the context of significant adversity or risk" (Masten & Reed, 2002, p. 75), which enables people to recover quickly and successfully from negative events. Richardson (2002) argues that those higher in resilience bounce back psychologically (including emotion and cognition) to levels at, or even beyond, previous levels of homeostasis or equilibrium.

The resilience component in psychological capital intervention would be helpful for children perceiving inter-parental conflict as research supports that

adolescents' emotional reactivity to their parents' arguments and triangulation leads to a variety of externalizing and internalizing emotional and behavioral adjustment issues (Buehler & Welsh, 2009). For alleviating such chronic and prolonged maladjustment issues, developing and enhancing resilience is very crucial for the betterment of adolescents' health and well-being. Further, according to a large body of research in clinical and positive psychology (Bonanno, 2005; Garmenzy, 1974), as well as human resource development (Luthans et al., 2006), it was found that resilience can be developed through training interventions.

The Optimism Resource in PsyCap

Optimists 'differ in how they approach problems and challenges and differ in the manner and success with which they cope with adversity', according to Carver and Scheier (2002, p. 231). Pessimists, on the other hand, 'expect bad things to happen to them'. According to Seligman (1998), optimists attribute internal, stable, and global causal explanations for positive events and external, unstable, and specific explanations for negative events.

Researchers have identified a number of characteristics in adolescents perceiving inter-parental conflict that influence both internalizing and externalizing behavioral adjustment problems. For instance, Kovacs and Devlin (1998) focus on disinhibited behaviors and other under-socialization expressions, whereas other researchers place more emphasis on negative emotions that are directed against others and manifest as hostility, aggression, and frustration (Roeser et al., 1998). Moreover, behavioral adjustment issues are externalized when self-regulation abilities are underdeveloped, resulting in under-controlled behavior (Cole et al., 1996). On the other hand, internalizing behavioral adjustment issues was associated with withdrawal, fearfulness, inhibition, and anxiety (Roeser et al., 1998). Studies have also demonstrated that internalizing adjustment behavior issues are caused by excessively rigid self-control (Block & Block, 1980; Cole et al., 1996). According to Roeser et al. (1998), negative emotions cause problems with internalizing adjustment when they are directed at oneself, and externalizing adjustment when they are

projected onto others. In general, studies have shown that both of these behavioral changes cause issues in a variety of spheres of life; including school, peer relationships, and mental health (Kitzrow, 2003). The effect of these maladjustments on adolescents' health and well-being worsens because they lack an optimistic outlook and develop self-blaming tendencies.

The optimistic component of the psychological capital intervention helps overcome such internalizing and externalizing maladjustment problems. Adolescents can be taught to develop an optimistic attitude. Seligman (1998) proposed that optimism can be learned, which he termed "learned optimism".

Studies have suggested that the key to the application of psychological capital interventions is that it has state-like properties and are open to development through relevant training programs (Luthans et al., 2007). PsyCap resources of hope, efficacy, resilience, and optimism are malleable and thus open to change and development.

Suggestions of the Present Study

This study showed that the perception of inter-parental conflict has negative effects on adolescents' well-being. Furthermore, studies have shown that parental distress affects their relationship with their children in one way or another. As a result, it is proposed, that strengthening parent-child relationships can mitigate the detrimental effects of the inter-parental conflict that result in maladjustment issues. In order to enhance the mental health and adjustment of adolescents, the constructs of positive psychology can be significantly used. Psychological capital (PsyCap) can lead to successful outcomes both at individual and organizational levels. It was found through a review of the literature that psychological capital has primarily been used in organizational settings and has had a positive impact on raising job-related affective well-being (for example, Kaplan et al., 2014). Furthermore, Luthans et al. (2007) noted that psychological capital (PsyCap) emphasizes a person's "best self." In the developmental sense, "who you are becoming" is discussed rather than just "who you are" (i.e., human capital) (Luthans et al., 2007, p. 20).

PsyCap interventions need to be implemented in educational settings to improve adolescent well-being and academic performance. Luthans et al. (2010) found that PsyCap interventions for students produced encouraging findings. The present study suggests that developing more PsyCap interventions can enhance mental health as well as adjustment levels of adolescents.

Although the effects of the individual components have been thoroughly researched, the integration of various PsyCap components may hold special value. PsyCap's overall impact may be greater than the sum of its parts (Hobfoll, 2011). Therefore, the present study recommends that interventions should be developed using all of PsyCap's components for adolescents' well-being.

Research studies showed that PsyCap components have a favorable effect on adolescents' adjustment. For instance, a significant relationship has been found between hope and school adjustment (Cedeno et al., 2010), and between optimism and college adjustment (Pritchard et al., 2007). Therefore, it is suggested that PsyCap interventions can contribute to improving parent-child relationships.

Furthermore, evidence suggests that PsyCap components can enhance cognitive abilities. For instance, Fredrickson's (1998, 2001) broaden-and-build theory of positivity showed that people's combined psychological resources can be strengthened in addition to their combined intellectual, physical, and social resources when they are in positive emotional states. Additionally, PsyCap can cause positive emotions while also having a negative impact on emotional labor (Avey et al., 2011). Therefore, it is suggested that the PsyCap intervention might help influence adolescents' perceptions of their parents' conflict and facilitate better adjustments.

Implications

Programs that encourage particular attitudes, behaviors, and interests can have significant and enduring effects on psychological health. For example, Marques, Lopez, and Pais-Ribeiro (2011) planned a Hope-based intervention on middle-school students to enhance hope, self-worth, life satisfaction, academic

achievements, and mental health. Further the intervention program of Noble and McGrath (2008) on resilience called 'Bounce Back' is considered significant towards improving resiliency among adolescents. Some researchers have also designed interventions in the Indian context such as Vranda (2015), who designed school promotive mental health programs to reduce risks and enhance the psychosocial competencies and resiliency of adolescents in schools. Buragohain and Mandal (2015) also found that positive emotions like resilience, self-efficacy, hope, satisfaction, forgiveness, savor, etc., could be taught and learned at school levels. Our review therefore suggests that self-guided, positive psychology interventions hold the potential for enhancing an individual's well-being.

Research studies also indicate that high-quality relationships with parents might promote higher levels of PsyCap (Carmona-Halty et al., 2020) which in turn might influence their perception of their parents' conflicts. As described above, PsyCap can be learned and developed. Therefore, PsyCap interventions designed to enhance parent-child relationships might be useful in alleviating maladjustment issues.

Thus, based on the literature review, it is suggested that psychological capital intervention can be developed in school, clinical, and organizational settings, particularly for educational settings considering the requirements of adolescents' adjustment.

Conclusion

Perceived inter-parental conflict has been identified as one of the causes of adjustment issues of adolescents, both internally and externally. Studies have shown evidence of adjustment issues due to the perception of inter-parental conflict since the early nineties among adolescents. Studies have also shown that adolescents struggle with adjustment issues on the emotional, psychosocial, and academic fronts. The present study showed that positive psychological interventions can help adolescents to combat the worsening effects of maladjustment issues. Further, it can be suggested that future interventions need to be modeled after the psychological capital intervention for adolescents. In conclusion, it can be said that more interventions need to be designed which should utilize PsyCap.

References

- Avey, J. B., Wernsing, T. S. & Mhatre, K.H. (2011). A longitudinal analysis of positive psychological constructs and emotions on stress, anxiety and well-being. *Journal of Leadership & Organizational Studies*, 18(2), 216–28. DOI: 10.1177/1548051810397368
- Bagwell, C. L., & Coie, J. D. (2003). The best friendships of aggressive boys: Relationship quality, conflict management, and rule-breaking behavior. *Journal of Experimental Child Psychology*, 88(1), 5–24. <https://doi.org/10.1016/j.jecp.2003.11.004>
- Barber, B. K., & Buehler, C. (1996). Family cohesion and enmeshment: Different constructs, different effects. *Journal of Marriage and the Family*, 58, 433–441. <https://doi.org/10.2307/353507>
- Birch, S. H., & Ladd, G. W. (1996). Interpersonal relationships in the school environment and children's early school adjustment: The role of teachers and peers. In J. Juvonen & K. R. Wentzel (Eds.), *Social motivation: Understanding children's school adjustment* (pp. 199–225). Cambridge University Press.
- Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W.A. Collins (Ed.), *Minnesota symposia on child psychology: Development of cognition, affect, and social relations, Vol. 13*. (pp. 39 – 101). Hillsdale, NJ: Erlbaum.
- Bonanno, G. A. (2005). Clarifying and extending the construct of adult resilience. *American Psychologist*, 60(3), 265–267. <https://doi.org/10.1037/0003-066x.60.3.265b>
- Buehler, C., Franck, K., & Cook, E. A. (2009). Adolescents' triangulation in marital conflict and peer relations. *Journal of Research on Adolescence*, 19(4), 669–689. <https://doi.org/10.1111/j.1532-7795.2009.00616.x>
- Buehler, C., & Welsh, D. P. (2009). A process model of adolescents' triangulation into parents' marital conflict: The role of emotional reactivity. *Journal of Family Psychology*, 23(2), 167–180. <https://doi.org/10.1037/a0014976>
- Buragohain, P., & Mandal, R. (2015). Teaching of gratitude among the students of secondary school as a means of well-being. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 2(2), 179–188.
- Carmona-Halty, M., Salanova, M., & Schaufeli, W. B. (2020). The strengthening starts at home: Parent–child relationships, psychological capital, and academic performance – a longitudinal mediation analysis. *Current Psychology*, 41(6), 3788–3796. <https://doi.org/10.1007/s12144-020-00898-8>
- Carver, C. S., & Scheier, M. S. (2002). Optimism. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of Positive Psychology* (pp. 231–243). Oxford, United Kingdom: Oxford University Press.
- Cedeno, L. A., Elias, M. J., Kelly, S., & Chu, B. C. (2010). School violence, adjustment, and the influence of hope on low-income, African American youth. *American Journal of Orthopsychiatry*, 80(2), 213–226. <https://doi.org/10.1111/j.1939-0025.2010.01025.x>
- Cheung, C. S., & Pomerantz, E. M. (2011). Parents' involvement in children's academic lives in the United States and China: Implications for children's academic and emotional adjustment. *Child Development*, 82(3), 932–950. <https://doi.org/10.1111/j.1467-8624.2011.01582.x>
- Cole, P. M., Zahn-Waxler, C., Fox, N. A., Usher, B. A., & Welsh, J. A. (1996). Individual differences in emotion regulation and behaviour problems in preschool children. *Journal of Abnormal Psychology*, 105(4), 518–529. <https://doi.org/10.1037/0021-843x.105.4.518>
- Cummings, E. M., & Davies, P. T. (2002). Effects of marital conflict on children: recent advances and emerging themes in process-oriented research. *Journal of Child Psychology and Psychiatry*, 43(1), 31–63. <https://doi.org/10.1111/1469-7610.00003>

- Cummings, E. M., Zahn-Waxler, C., & Radke-Yarrow, M. (1981). Young children's responses to expressions of anger and affection by others in the family. *Child Development*, 52(4), 1274. <https://doi.org/10.2307/1129516>
- Curtona, C. E. (2007). Transition to college: Loneliness and the process of social adjustment. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A source book of current theory, research, and therapy* (pp. 291-309). New York: John Wiley.
- Dadds, M. R., Atkinson, E., Turner, C., Blums, G. J., & Lendich, B. (1999). Family conflict and child adjustment: Evidence for a cognitive-contextual model of intergenerational transmission. *Journal of Family Psychology*, 13(2), 194-208. <https://doi.org/10.1037/0893-3200.13.2.194>
- Davies, P. T., & Windle, M. (2001). Interparental discord and adolescent adjustment trajectories: The potentiating and protective role of intrapersonal attributes. *Child Development*, 72(4), 1163-1178. <https://doi.org/10.1111/1467-8624.00340>
- De La Barrera, U., Schoeps, K., Gil-Gómez, J., & Montoya-Castilla, I. (2019). Predicting adolescent adjustment and well-being: The interplay between socio-emotional and personal factors. *International Journal of Environmental Research and Public Health*, 16(23), 4650. <https://doi.org/10.3390/ijerph16234650>
- DuRant, R. H., Getts, A. G., Cadenhead, C., Emans, S. J., & Woods, E. R. (1995). Exposure to violence and victimization and depression, hopelessness, and purpose in life among adolescents living in and around public housing. *Journal of Developmental and Behavioral Pediatrics*, 16(4), 233-237. <https://doi.org/10.1097/00004703-199508000-00004>
- Dwyer, A., & Cummings, A. L. (2001). Stress, self-efficacy, social support, and coping strategies in university students. *Canadian Journal of Counselling and Psychotherapy*, 35(3). <http://cjc-rcc.ucalgary.ca/cjc/index.php/rcc/article/download/189/430>
- Eisenberg, N., Cumberland, A., Spinrad, T. L., Fabes, R. A., Shepard, S. A., Reiser, M., Murphy, B. M., Losoya, S. H., & Guthrie, I. K. (2001). The relations of regulation and emotionality to children's externalizing and internalizing problem behavior. *Child Development*, 72(4), 1112-1134. <https://doi.org/10.1111/1467-8624.00337>
- Emery, R. E. (1982). Inter-parental conflict and the children of discord and divorce. *Psychological Bulletin*, 92(2), 310-330. <https://doi.org/10.1037/0033-2909.92.2.310>
- Forehand, R., & Wierson, M. (1993). The role of developmental factors in planning behavioral interventions for children: Disruptive behavior as an example. *Behavior Therapy*, 24(1), 117-141. [https://doi.org/10.1016/s0005-7894\(05\)80259-x](https://doi.org/10.1016/s0005-7894(05)80259-x)
- Formoso, D., Gonzales, N. A., & Aiken, L. S. (2000). Family conflict and children's internalizing and externalizing behavior: Protective factors. *American Journal of Community Psychology*, 28(2), 175-199. <https://doi.org/10.1023/a:10005135217449>
- Fredrickson, B. L. (1998). What Good Are Positive Emotions? *Review of General Psychology*, 2(3), 300-319. <https://doi.org/10.1037/1089-2680.2.3.300>
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218-226. <https://doi.org/10.1037/0003-066x.56.3.218>
- Galambos, N. L., Barker, E. T., & Almeida, D. M. (2003). Parents do matter: Trajectories of change in externalizing and internalizing problems in early adolescence. *Child Development*, 74(2), 578-594. <https://doi.org/10.1111/1467-8624.7402017>
- Garmezy, N. (1974). The study of competence in children at risk for severe psychopathology. In E. J. Anthony & C. Koupernik (Eds.), *The child in his family: Children at psychiatric risk*. John Wiley & Sons.
- Gerard, J. M., Buehler, C., Franck, K., & Anderson, O. (2005). In the eyes of the beholder: Cognitive appraisals as mediators of the association between interparental conflict and youth maladjustment. *Journal of Family Psychology*, 19(3), 376-384. <https://doi.org/10.1037/0893-3200.19.3.376>

- Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive contextual framework. *Psychological Bulletin*, 108(2), 267–290. <https://doi.org/10.1037/0033-2909.108.2.267>
- Grych, J. H., Fincham, F. D., Jouriles, E. N., & McDonald, R. (2000). Interparental conflict and child adjustment: Testing the mediational role of appraisals in the cognitive-contextual framework. *Child Development*, 71(6), 1648–1661. <https://doi.org/10.1111/1467-8624.00255>
- Grych, J. H., Raynor, S., & Fosco, G. M. (2004). Family processes that shape the impact of interparental conflict on adolescents. *Development and Psychopathology*, 16(03). <https://doi.org/10.1017/s0954579404004717>
- Harold, G. T., Aitken, J., & Shelton, K. H. (2007). Inter-parental conflict and children's academic attainment: A longitudinal analysis. *Journal of Child Psychology and Psychiatry*, 48(12), 1223–1232. <https://doi.org/10.1111/j.1469-7610.2007.01793.x>
- Harold, G. T., Osborne, L. N., & Conger, R. D. (1997). Mom and dad are at it again: Adolescent perceptions of marital conflict and adolescent psychological distress. *Developmental Psychology*, 33(2), 333–350. <https://doi.org/10.1037/0012-1649.33.2.333>
- Hay, D. F., Payne, A. J., & Chadwick, A. (2004). Peer relations in childhood. *Journal of Child Psychology and Psychiatry*, 45(1), 84–108. <https://doi.org/10.1046/j.0021-9630.2003.00030.x>
- Hetherington, E. M., Cox, M., & Cox, R. (1982). Effects of divorce on parents and children. In M.E. Lamb (Eds.), *Nontraditional families: Parenting and child development* (pp. 233–288). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hobfoll, S. E. (2011). Conservation of resource caravans and engaged settings. *Journal of Occupational and Organizational Psychology*, 84(1), 116–122. <https://doi.org/10.1111/j.2044-8325.2010.02016.x>
- Jouriles, E. N., Spiller, L. C., Stephens, N. S., McDonald, R., & Swank, P. R. (2000). Variability in adjustment of children of battered women: The role of child appraisals of interparent conflict. *Cognitive Therapy and Research*, 24(2), 233–249. <https://doi.org/10.1023/a:1005402310180>
- Kaplan, S. A., Bradley-Geist, J. C., Ahmad, A. S., Anderson, A. H., Hargrove, A. K., & Lindsey, A. (2014). A test of two positive psychology interventions to increase employee well-being. *Journal of Business and Psychology*, 29(3), 367–380. <https://doi.org/10.1007/s10869-013-9319-4>
- Keijsers, L., Frijns, T., Branje, S., & Meeus, W. (2009). Developmental links of adolescent disclosure, parental solicitation, and control with delinquency: Moderation by parental support. *Developmental Psychology*, 45(5), 1314–1327. <https://doi.org/10.1037/a0016693>
- Kitzrow, M. (2003). The mental health needs of today's college students: Challenges and recommendations. *NASPA Journal*, 41(1), 167–181. <https://doi.org/10.2202/1949-6605.1310>
- Kovacs, M., & Devlin, B. (1998). Internalizing disorders in childhood. *Journal of Child Psychology and Psychiatry*, 39(1), 47–63. <https://doi.org/10.1111/1469-7610.00303>
- Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly*, 21(1), 41–67. <https://doi.org/10.1002/hrdq.20034>
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60(3), 541–572. <https://doi.org/10.1111/j.1744-6570.2007.00083.x>
- Luthans, F., Vogelgesang, G. R., & Lester, P. B. (2006). Developing the psychological capital of resiliency. *Human Resource Development Review*, 5(1), 25–44. <https://doi.org/10.1177/1534484305285335>

- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford, United Kingdom: Oxford University Press.
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent – child interaction. In P. H. Mussen (Series Ed.) & Hetherington, E. M. (Vol. Ed.), *Handbook of child psychology: Socialization, personality, and social development*, 4th ed. (pp. 1-101). New York: Wiley.
- Malti, T., Averdijk, M., Zuffianò, A., Ribeaud, D., Betts, L. R., Rotenberg, K. J., & Eisner, M. (2016). Children's trust and the development of prosocial behavior. *International Journal of Behavioral Development*, 40(3), 262–270. <https://doi.org/10.1177/0165025415584628>
- Marques, S., Lopez, S. J., & Pais-Ribeiro, J. L. (2011). "Building hope for the future": A program to foster strengths in middle-school students. *Journal of Happiness Studies*, 12, 139–152. <https://doi.org/10.1007/s10902-009-9180-3>
- Masten, A. S., & Reed, M.G. J. (2002). Resilience in development. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 74–88). Oxford, United Kingdom: Oxford University Press.
- Noble, T., & McGrath, H. (2008). The positive educational practices framework: A tool for facilitating the work of educational psychologists in promoting pupil well-being. *Educational & Child Psychology*, 25(2), 119–134.
- O'Donnell, E., Moreau, M., Cardemil, E. V., & Pollastri, A. R. (2010). Interparental conflict, parenting, and childhood depression in a diverse urban population: The role of general cognitive style. *Journal of Youth and Adolescence*, 39(1), 12–22. <https://doi.org/10.1007/s10964-008-9357-9>
- Ordóñez, A., Maganto, C., & Gonzalez, R. G. (2015). Quejas somáticas, conciencia emocional e inadaptación en población escolar. *Anales De Pediatría*, 82(5), 308–315. <https://doi.org/10.1016/j.anpedi.2014.03.020>
- Peterson, S. J., & Luthans, F. (2003). The positive impact and development of hopeful leaders. *Leadership and Organization Development Journal*, 24, 26–31. <https://doi.org/10.1108/01437730310457302>
- Pettit, G. S., & Laird, R. D. (2002). Psychological control and monitoring and earlier child adjustment. In B. K. Barber (Ed.), *Intrusive parenting. How psychological control affects children and adolescents* (pp. 97-123). American Psychological Association.
- Pritchard, M., Wilson, G. J., & Yamnitz, B. (2007). What predicts adjustment among college students? A longitudinal panel study. *Journal of American College Health*, 56(1), 15–22. <https://doi.org/10.3200/jach.56.1.15-22>
- Richardson, G. E. (2002). The meta theory of resilience and resiliency. *Journal of Clinical Psychology*, 58(3), 307–321. <https://doi.org/10.1002/jclp.10020>
- Roeser, R. W., Eccles, J. S., & Sameroff, A. J. (1998). Academic and emotional functioning in early adolescence: Longitudinal relations, patterns, and prediction by experience in middle school. *Development and Psychopathology*, 10(2), 321–352. <https://doi.org/10.1017/s0954579498001631>
- Roeser, R. W., Eccles, J. S., & Strobel, K. R. (1998). Linking the study of schooling and mental health: Selected issues and empirical illustrations at the level of the individual. *Educational Psychologist*, 33(4), 153–176. https://doi.org/10.1207/s15326985sep3304_2
- Rotenberg, K.J., Addis, N., Betts, L.R., Fox, C., Hobson, Z., Rennison, S., Trueman, M. & Boulton, M.J. (2010). The relation between trust beliefs and loneliness during early childhood, middle childhood and adulthood. *Personality and Social Psychology Bulletin*, 36(8), 1086–1100. <https://doi.org/10.1177/0146167210374957>
- Rotenberg, K. J., Boulton, M. E., & Fox, C. L. (2005). Cross-sectional and longitudinal relations among children's trust beliefs, psychological maladjustment and social relationships: Are very high as well as very low trusting children at risk?

- Journal of Abnormal Child Psychology*, 33(5), 595–610. <https://doi.org/10.1007/s10802-005-6740-9>
- Rotenberg, K. J., Qualter, P., Holt, N., Harris, R., Henzi, S. P., & Barrett, L. (2014). When trust fails: The relation between children's trust beliefs in peers and their peer interactions in a natural setting. *Journal of Abnormal Child Psychology*, 42(6), 967–980. <https://doi.org/10.1007/s10802-013-9835-8>
- Rutter, M., Yule, B., Quinton, D., Rowlands, O., Yule, W., & Berger, M. F. (1975). Attainment and adjustment in two geographical areas: III. Some factors accounting for areadifferences. *British Journal of Psychiatry*, 126(6), 520–533. <https://doi.org/10.1192/bjp.126.6.520>
- Sadri, G., & Robertson, I. T. (1993). Self-efficacy and work-related behaviour: A review and meta-analysis. *Applied Psychology: An International Review*, 42(2), 139–152. <https://doi.org/10.1111/j.1464-0597.1993.tb00728.x>
- Seligman, M. E. P. (1998). *Learned optimism*. New York: Pocket Books.
- Shelton, K. H., & Harold, G. T. (2008). Interparental conflict, negative parenting, and children's adjustment: Bridging links between parents' depression and children's psychological distress. *Journal of Family Psychology*, 22(5), 712–724. <https://doi.org/10.1037/a0013515>
- Snyder, C. R. (1994). *The psychology of hope: You can get there from here*. New York: Free Press.
- Snyder, C. R. (2000). *Handbook of hope*. San Diego: Academic Press.
- Stajkovic, A. D., & Luthans, F. (1998). Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioral approaches. *Organizational Dynamics*, 26(4), 62–74. [https://doi.org/10.1016/S0090-2616\(98\)90006-7](https://doi.org/10.1016/S0090-2616(98)90006-7)
- Sturge-Apple, M. L., Davies, P. T., & Cummings, E. M. (2006). Impact of hostility and withdrawal in interparental conflict on parental emotional unavailability and children's adjustment difficulties. *Child Development*, 77(6), 1623–1641. <https://doi.org/10.1111/j.1467-8624.2006.00963.x>
- Vranda, M. N. (2015). Promotion of mental health and well-being of adolescents in schools: A NIMHANS model. *Journal of Psychiatry*, 18(5), 2-5.

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