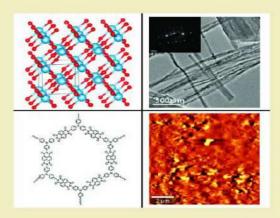




KURIAKOSE ELIAS COLLEGE MANNANAM P.O. KOTTAYAM- 686 561 KERALA, INDIA NEW NUMBERS AND LETTERS
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Editorial Note

Humans are curious by birth and analytic by age. Every decision making in their life is the outcome of a rational evaluation and assessment in their own way. In so far as life is smooth, no one bothers about the decision baking capability. When faced with adversities, humans tend to be reflective, cautious and selective.

The research, both in academic and non-academic fields, experimental or/and experiential is fundamentally goal-oriented. In this issue of Number and Letters, we bring out seven research articles that come from a mix of experimental and theoretical explorations. They come from various fields of human endeavour. Being a multidisciplinary journal, we have articles from humanities, social sciences and sciences.

Joseph and Ravindranadan write about the perceived parenting and its impact in adolescence. Rahul et al. studied the importance of considering both cognitive flexibility and comprehensive intellectual humility in understanding the behavior and attitudes of Ph.D. scholars. In her reflective article, Hema Narayanan analyses the family structure and the role of history, culture and literature in defining the roles in the family.

Mercy Mathews presents the study on magnetization reversal in magnetic thin films using the Curling Model and Kondorsky model. In the review article, Udayappan et al., explore the synthesis, properties, and applications of Covalent organic frameworks, emphasizing their stability, low bulk density, high thermal stability, and continuous porosity.

Deepthy and Suryamol explored society's perception on the co-operative banks and their relevance in the social development in the Meenachil Taluk of Kottayam district, through informal and formal interaction of people leading to financial and developmental outcomes.

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Magnetization Reversal Mechanism of La_{0.67}Sr_{0.33}MnO₃ Thinfilms on NdGaO₃ Substrates

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Abstract

Magnetization reversal mechanism of La_{0.67}Sr_{0.33}MnO₃(LSMO) film on NdGaO₃ (NGO) substrate, was analyzed by some simple modeling using curling model and the model of domain wall movement (Kondorsky model) modified with the demagnetizing effect (modified Kondorsky model). The angular dependence of coercivity curves of different LSMO/NGO (100) films were fitted with both these models and it is seen that the magnetization reversal mechanism in these LSMO films is well explained by the modified Kondorsky model.

Keywords: Magnetization reversal, Kondorsky model, curling model

1. Introduction

Magnetization reversal in magnetic thin films has been the focus of intensive research for several decades for its theoretical and practical importance [1-4]. A part of the magnetization process can be attributed to the rotation of the magnetization for many magnetic materials. This is particularly true for the magnetically "hard" directions of an anisotropic magnet. There are three terms, with different physical meanings, commonly used to describe the magnetization reversal process: the nucleation field HN, which describes the field at which a change in magnetization just starts in a saturated single-domain state; the switching field HS, which is the field at which an abrupt change in magnetization occurs; and the coercivity

HC, which is the field at which the magnetization changes sign[5-8]. The nucleation field is a theoretical concept and is usually difficult to determine experimentally. When magnetic hysteresis loop is measured by changing the applied field angle in-plane or out of plane of the film, its coercivity is in general found to vary with the applied field angle. This is called angular dependence of coercivity (ADC)[9-11]. Experimentally, the magnetization reversal mechanism is usually determined from the dependence of the coercive field as a function of angle θ between magnetic field H direction and easy axis of magnetization[12-14]. For this reason, there have been numerous investigations of ADC behaviors of various magnetic films[15, 16].

Gau and Brucker have studied the angular variation of coercivity of evaporated cobalt-based films[17]. They observed that the angular variation of the coercivity curve exhibited different shapes depending upon the orientation of the easy axis, namely, a bell-shape curve for an isotropic film, an M-shape curve for a perpendicular film and a shifted M-shape curve for an oblique evaporated film having a tilted easy axis. The angular variation of coercivity results of Huang and Judy indicated that magnetization reversal in their rf sputtered Co-Cr perpendicular media followed a curling or buckling mode[18].

2. Theory

In studies of magnetization reversal mechanism, we seek to understand the character of the switching of a magnetic structure from one orientation of the magnetization to another. There are various routes to reversal, depending on structure size, ranging from fast, deterministic, quasi-coherent rotation in submicron-size magnetic elements to slower, stochastic domain wall nucleation and propagation in larger thin films. In hard magnetic materials, the dominating magnetization reversal process is realized by pinning domain walls or nucleation of reversed domains. For the single domain magnets with magnetization reversal process governed by the rotation of magnetic moments, the angular dependence of coercive field HC should correspond to the theory of coherent rotation of magnetization vector and then give rise to a $(\cos 2/3 + \sin 2/3)3/2$ behavior of HC(θ), according to the Stoner-Wohlfarth model[4, 8, 19]. However, for magnets controlled by domain wall pinning mechanism, coercivity HC changes should correspond to Kondorsky's relation HC/HC[0] = $1/\cos(\theta)$; for $0^{\circ}<\theta<90^{\circ}$: this relation is modified by Suponev et al[20,21] by considering magnetization rotation process in multidomain grains which can be written in the formula,

$$H_{c}(\theta_{0}) = H_{c}(0) \frac{(D_{a} + D_{N})\cos\theta_{0}}{D_{c}\sin^{2}\theta_{0} + (D_{a} + D_{N})\cos^{2}\theta_{0}}.....(1)$$
$$= H_{c}(0) \frac{y\cos\theta_{0}}{\sin^{2}\theta_{0} + y\cos^{2}\theta_{0}}.....(2)$$

Where
$$y = (Da + DN)/Dc$$
.

Here Dc and Da (= Db) are the demagnetizing factors of an ellipsoid of revolution (easy axis = c axis) and DN is the demagnetizing factor due to the effect of magnetic anisotropy and DN = HA/MS, where HA is the anisotropy field and MS is the saturation magnetization. When Dc= 0, the above equation reduces to the real Kondorsky relation. The above equation is derived for a prefect crystal having single unique value of Hc(0) and HA.

Analytical solutions for the curling model with the external field applied at an angle θ to the magnetic easy axis are summarized below. For particle sizes larger than the critical size but still in the single-domain regime, magnetization reversal occurs by curling. In the curling model, magnetization switching is an abrupt process, and the switching field is very close to the nucleation field; hence, HC = HS for all angles. Furthermore, HC and HS are dependent on both the aspect ratio and the size of the ellipsoid. The angular dependence of the normalized nucleation field for a prolate spheroid based on the curling model is given by

$$H_{c}(\theta) = H_{c}(0) \frac{\left(2N_{c} - \frac{k}{S^{2}}\right)\left(2N_{a} - \frac{k}{S^{2}}\right)}{\sqrt{\left(2N_{c} - \frac{k}{S^{2}}\right)^{2}\sin^{2}\theta + \left(2N_{a} - \frac{k}{S^{2}}\right)^{2}\cos^{2}\theta}} \dots (3)$$

Where Nc and Na are the demagnetizing factors of the spheroid along the major and minor axes; S is the reduced radius r/r0, where r0 = A½/Ms; A is the exchange stiffness constant and Ms is the saturation magnetization[4], k =q2/ π , where q is the geometrical factor which is equal to 1.8412 for a cylinder of high aspect ratio. θ is the angle between the applied magnetic field and easy axis. It is worth noting that r0 is not depending on the size or shape of the spheroid and it can be related to the critical size for the transition from curling to coherent rotation by the equation rc/r0 = $q/\sqrt{\pi}$.

LSMO films of different thickness were grown on treated substrates of NGO (100), NGO(110) and NGO(001) by Pulsed Laser Deposition Method. We have used laser fluence of 3J/cm², deposition pressure of

0.35mbar and substrate temperature of 750°C. After deposition the sample was cooled to room temperature at a ramp rate of 10°C/min in 1 bar of O₂ gas pressure. The surface morphology of these films is characterized by Atomic Force Microscopy (AFM) and it has shown atomic level smoothness All the films shown here has thickness of ~25nm. To determine the magnetization reversal mechanism in our LSMO film on NGO substrate, we have carried out some simple modeling using curling model, and the model of domain wall movement (Kondorsky model) modified with the demagnetizing effect (modified Kondorsky model). We have considered our LSMO thin film as a square prism of size 5cm×5cm×9nm for using the modified Kondorsky model. From the anisotropy field and magnetization values, demagnetization factor due to the anisotropy is determined to be DN=0.69. The demagnetization factor along the easy axis, Dc is determined using the formula of reference[22]. By putting the dimensions of the thin film in the formula we could get the value of Dc and is equal to 2×10-5. As we considered that Da and Db are equal and Da+Db+Dc=1, Da=0.5. Using these constant values (in Equation (1)), the curve fitting of the angular dependent coercivity plot of LSMO film grown on NGO (100) substrate was carried out by modified Kondorsky model. The angular dependence of coercivity is plotted in figure 5.20, along with the two fitting curves using modified Kondorsky model and curling model. In the curling model, we have assumed LSMO thin film as a cluster of infinitesimally long cylindrical domains with the constant values S = 2, q=1.8412, Na= 2π and Nc = 0 in equation (3)[23].

The curling model, though it fits very well with the experimental values of coercivity except the sharp minimum at the hard direction (field

angle 0° and 180° in figure 1). Assuming that the film behaves purely uniaxial, one has to expect a $\cos(\theta)$ dependence of the remanence signal due to the projection of the easy axis magnetization onto the axis of observation. Here we have plotted remanence also in order to show the hard and easy directions and it follows nicely the $1/\cos(\theta)$ fit as shown in figure 1. The plot proves unambiguously the uniaxial behavior of the films, as the measured remanence (squares) fits the $1/\cos(\theta)$ behavior (black line) nearly perfectly. The model of domain wall motion which was modified by Suponev et al nicely fits in our experimental data of angular dependence of coercivity. In figure 1, angular dependence of coercivity according to modified kondorsky model is also plotted and it is seen that there is a nice fit at all field angles. Though there is a slight deviation of the experimental data near to the hard direction, it explains the sharp minimum at the hard direction.

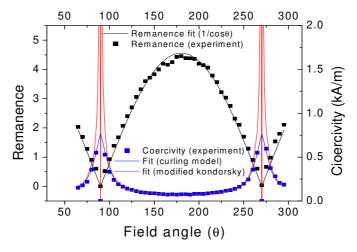


Fig 1: (a) Remanence and Coercivity vs in-plane field angle of 9nm thick LSMO/NGO (100), at room temperature. The solid black line is the $1/\cos(\theta)$ remanence fit. The experimental data of angular dependence of coercivity was fitted with two models namely modified Kondorsky model and curling model.

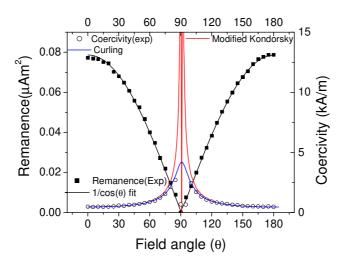


Fig 2: (a) Remanence and Coercivity vs in-plane field angle of 15 nm thick LSMO/NGO (100), at room temperature. Here the LSMO film is the same as shown in figure 5.17(a) and 5.16(a). The solid back line is the $1/\cos(\theta)$ remanence fit. The experimental data of angular dependence of coercivity was fitted with two models namely modified kondorsky model and curling model.

Curling model found to have good agreement with the experimental data of coercivity at all field angles except the hard direction at 90° field angle which represents the sharp minimum. But the modified Kondorsky model explains very well all the points including the sharp minimas at hard directions, though there is a slight deviation near to hard direction. This slight deviation can be an experimental error. We can also explain the magnetization reversal of our LSMO film by the curling model, at all angles except in the hard direction, and at this hard direction it can be explained by the rotation of magnetization. That is, near to hard direction, the reversal mode switches from curling to uniform rotation of magnetization so that the coercivity reaches minimum or zero.

Another LSMO film of different thickness (15nm) was also measured for the angular dependence of remanence and coercivity and

plotted in figure 2. Here also we fitted the curves using the above magnetization reversal models and found to agree well with the experimental data. We observed the same magnetization reversal behavior for all our LSMO films of different thicknesses, grown on different NGO substrates of all different orientations, NGO (100), NGO (110) and NGO (001). But the reversal mechanism in LSMO film grown on STO substrates were quite different when we compare the angular dependence of coercivity of LSMO/STO with LSMO/NGO.

3. Conclusion

To analyze the magnetization reversal mechanism of LSMO film on NGO substrate, we have carried out some simple modeling using curling model and the model of domain wall movement (Kondorsky model) modified with the demagnetizing effect (modified Kondorsky model). The angular dependence of coercivity curves of different LSMO/NGO(100) films were fitted with both these models and it is seen that the magnetization reversal mechanism in these LSMO films is well explained by the modified Kondorsky model

References

- 1. Aharoni Amikam, *Angular dependence of nucleation by curling in a prolate spheroid*. Journal of Applied Physics, 1997. **82**(3): p. 1281-1287.
- 2. A. Moschel, R. A. Hyman, A. Zangwill and M. D. Stiles, Magnetization Reversal in Ultrathin Films with Monolayer-Scale Surface Roughness. Physical Review Letters, 1996. **77**(17): p. 3653.
- 3. J. M. Florczak and E. Dan Dahlberg, *Magnetization reversal in* (100) Fe thin films. Physical Review B, 1991. **44**(17): p. 9338.

- 4. Amikam Aharoni, *Introduction to the theory of ferromagnetism*. 2nd ed. 2000, Newyork: Oxford University Press
- 5. F. Cebollada, M. F. Rossignol, D. Givord, V. Villas-Boas and J. M. González, *Angular dependence of coercivity in Nd-Fe-B sintered magnets: Proof that coherent rotation is not involved.* Physical Review B, 1995. **52**(18): p. 13511.
- 6. D. Y. Oh and J. K. Park. *Crystallographic texture and angular dependence of coercivity of ordered CoPt thin film.* 2005: AIP.
- 7. J. M. Sivertsen C. Byun, and J. H. Judy, *A study on magnetization reversal mechanisms of CoCR films*. IEEE Transactions on Magnetics, 1986. **22**(5): p. 1155-1157.
- 8. Soshin Chikazumi and Charles Danne Graham, *Physics of ferromagnetism*. 2nd ed: Oxford: Clarendon Press, Oxford University Press.
- 9. D. Zhao, Liu Feng, D. L. Huber and M. G. Lagally, *Step-induced magnetic-hysteresis anisotropy in ferromagnetic thin films*. Journal of Applied Physics, 2002. **91**(5): p. 3150-3153.
- Y.-N Hsu S. Jeong, D. E. Laughlin, and M. E. McHenry, Magnetic Properties of Nanostructured CoPt and FePt Thin Films. IEEE Transactions on magnetics, 2000. 36(5): p. 2336-2338.
- 11. Dittrich Rok, Hu Guohan, Schrefl Thomas, Thomson Thomas, Suess Dieter, D. Terris Bruce and Fidler Josef, *Angular dependence of the switching field in patterned magnetic elements*. Journal of Applied Physics, 2005. **97**: p. 10J705.
- 12. J.J. Wyslocki P. Pawlika, W. Kaszuwara, M. Leonowicz, *Angular dependence of coercivity in Sm-Fe-N permanent magnets*. Journal of Magnetism and Magnetic Materials, 2002. **242-245**: p. 1344-1346.
- 13. P.-L. Lu and S. H. Charap, *Angular Variation of Coercivity in Thin-Film Media by Micromagnetic Model*. IEEE Transactions on Magnetics, 1992. **28**(2): p. 986-989.

- M. Huang and J. H. Judy, Effects of Demagnetization Fields on the Angular Dependence of Coercivity of Longitudinal Thin Film Media. IEEE Transactions on Magnetics, 1991. 27(6): p. 5049-5051.
- 15. J.S. Gau and N. Amin R. Ranjan, *Comparison of angular variation of coercivity in various magnetic media*. Journal of Magnetism and Magnetic Materials, 1990. **89**: p. 38-46.
- 16. R. M. Grechishkin N.P. Suponev, M. B. Lyakhova, Y. E. Pushkar, *Angular dependence of coercive field in (Sm,Zr) (Co,Cu,Fe)_z alloys.* Journal of Magnetism and Magnetic Materials, 1996. **157/158**: p. 376-377.
- 17. J. S. Gau and C. F. Brucker, *Angular variation of the coercivity in magnetic recording thin films*. Journal of Applied Physics, 1985. **57**(8): p. 3988-3990.
- 18. M. Huang and J. H. Judy, *Effects of Demagnetization Fields on the Angular Dependence of Coercivity of Longitudinal Thin Film Media*. IEEE Transactions on Magnetics, 1991. **27**(6): p. 5049-5051.
- 19. David Jiles, *Introduction to magnetism and magnetic materials*. 2nd ed. 1998: London [etc.] : Chapman & Hall.
- 20. E. Kondorsky, Journal of Physics., 1940. USSR 2 p. 161.
- 21. N.P. Suponev, R.M. Grechishkin, M.B. Lyakhova and Yu.E. Pushkar, *Angular dependence of coercive field in (Sm, Zr) (Co,Cu,Fe)*_z *alloys.* Journal of Magnetism and Magnetic Materials, 1996. **157/158**: p. 376-377.
- 22. Aharoni Amikam, *Demagnetizing factors for rectangular ferromagnetic prisms*. Journal of Applied Physics, 1998. **83**(6): p. 3432-3434.
- 23. L. Sun, Y. Hao, C.-L. Chien and P. C. Searson, *Tuning the properties of magnetic nanowires*. IBM Journal of Reserach and Development, 2005. **49**(1): p. 79-102.

Studies on PTCDA-Based Covalent Organic Frameworks

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Abstract

Covalent organic frameworks (COFs) emerging as a versatile class of crystalline porous polymers that offer precise integration of organic units into pre-designed frameworks and nanopores. This review explores the synthesis, properties, and applications of COFs, emphasizing their stability, low bulk density, high thermal stability, and continuous porosity. Recent advances in COF synthesis, such as microfluidic systems and 3D printing, have expanded their potential in gas separation, energy storage, and electronics. The review highlights the transformative potential of PTCDA-based COFs for integration into catalysis, electronic devices, and energy storage. Their large surface area, excellent transmission properties, and versatile structural adjustability make them an important technological advance for the future. As research continues to prove its capabilities, PTCDA COFs are poised to play an important role in shaping the future of materials science and technology.

Keywords: Covalent organic frameworks, PTCDA, applications

1. Introduction

Covalent organic frameworks (COFs) are a new class of crystalline porous polymers that allow for precise integration of organic units to create predesigned frameworks and nano pores. They have emerged as a promising platform for the design of organic materials for various applications such as gas storage, catalysis, and optoelectronics. The design and synthesis of COFs (Fig.1) rely on

factors like reversible dynamic covalent reactions, diversity of building blocks, and conservation of geometry. Interest in nano porous materials has grown due to their excellent performance and wide range of applications. COFs consist of light elements linked by strong covalent bonds, resulting in low mass density, high thermal stability, and permanent porosity. They can be classified as two-dimensional (2D) or three-dimensional (3D) based on the size of the building blocks, enabling the synthesis of rigid porous architectures with tunable chemical and physical properties [1,2]. 2D COFs have a unique columnar stack structure that facilitates the transport of charge carriers, making them potential candidates for developing new p-electronic and photo functional materials. On the other hand, 3D COFs typically have a large specific surface area and low density, making them ideal for gas storage applications. The ability to create solid crystals with precise control over geometry and functionality is of interest in the development of COFs [3,4]. A growing library of linkers and topologies suitable for COF synthesis is available, allowing for the design of COFs with specific composition, pore size, and aperture.

Porous materials with metal ions play a crucial role in developing chemical and physical properties. Metal-organic frameworks (MOFs) allow for homogeneous distribution of metals but are limited in stability, hindering practical applications. Metal-covalent organic frameworks (MCOFs) have emerged as a solution to this issue by integrating active metal species into stable COF frameworks. Over the past two decades, advanced porous materials such as MOFs, covalent organic frameworks (COFs), and others have been extensively studied. While MOFs offer a wide range of structures and functions, their coordination bonds limit

applicability in harsh conditions. COFs, on the other hand, offer stability in extreme environments, attracting significant research interest as a suitable alternative to MOFs. COFs comprise light elements, restricting their properties but enhancing their stability. This makes them valuable additions to the field of porous materials alongside MOFs and zeolites [5].

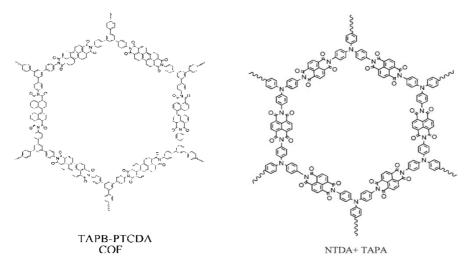


Fig.1 Images of some covalent organic frameworks

Recent advances in COF synthesis methods, such as microfluidic systems and gelation-mediated 3D printing, have made processable COFs possible and expanded their potential applications in gas separation, energy storage, catalysis, and electronics. The combination of tunable pore dimensions with synthetic pre- and post-modifications has increased the versatility of COFs. COFs have also been used to create woven materials that combine flexibility and elasticity, allowing the design of frames with different forms of participation. This method of molecular weaving has opened new possibilities for creating extended structures and interconnected networks. The ability to control covalent bonds outside of molecules and create extended covalent

organic solids represents a major advance in chemistry and materials science, influencing the development of new technologies and materials in the future [6,7].

2. PTCDA based covalent organic frameworks

Zulys et al. [8] synthesized characterized metal organic framework based on nickel and perylene dyes as water splitting photo catalyst. Ni-MOFs-ptc (Ni-MOFs-ptc) was synthesized using perylene-3,4,9,10-tetracarboxylic dyes as an organic binder by a solvothermal method. The chromophore linker in the ptc structure enabled the MOFs to exhibit light-harvesting properties. Ni-MOFs-ptc showed high crystallinity and efficient photocatalytic activity for hydrogen production under UV-visible radiation.

D.S Suresh et al. [9] put forward a novel approach towards optically active and hexagonal plate morphology of Zinc doped Perylene tetracarboxilic dianhydride composite (Zn-PTCDA) for high photovoltaic and flexible supercapacitor performance. The study shows that the Zn-PTCDA compound has potential for use in dye-sensitized solar cells, although the power conversion efficiency is slightly degraded due to carrier recombination. In addition, the addition of graphene oxide further improves the electrochemical performance of the composite, significantly improving the capacitance retention and specific capacity during multiple charge-discharge cycles. The results show that metal-organic frameworks such as Zn-PTCDA can improve the performance of supercapacitors and solar cells, offering a promising solution for future energy storage needs.

Lithium-ion batteries (LIBs) are crucial for future energy storage due to their convenience and sustainability. Research on cathode materials for LIBs is extensive, but finding an efficient anode material is also essential. Xiao et al.[10] derived two-dimensional leaf like Zn composites as anode materials for high-capacity Li-ion batteries. Zn-and Mn-selenium compounds have become promising candidates for LIB anode materials due to their theoretical capacity and unique properties. A new MOF material, Zn-Mn-ptcda, was synthesized and used as a precursor for creating 2D elliptical sheet-shaped Zn_{0.697}Mn_{0.303}Se/C composites through a direct selenization process. These composites possess a large specific surface area, a mesoporous structure, and excellent lithium storage capacity, particularly at high rates. They have a reversible capacity of 1005.14 mAhg⁻¹ after 110 cycles at a current density of 100 mA g⁻¹ and maintain a good capacity of 653.79 mAh g⁻¹ after 1000 cycles at a high current density of 1A g⁻¹

Zhou et al. [11] derived porous NiCo₂S₄ nanorods and N-doped carbon for high-performance battery-super capacitor hybrid device. NiCo₂S₄ was synthesised from NiCo-PTCDA-MOF through a hydrothermal and annealing process, showing excellent electrochemical performance. Combining PTCDA and DAAQ(2,6- diaaino-anthraquinone) in Zn-PQI MOFs resulted in high surface area and specific capacity in the derived carbon materials. The combination of these materials results in impressive performance with a BSC (Battery Super capacitor Hybrid Cell) current density of 234 C g⁻¹ at 1 A g⁻¹.The BSC also achieves a high energy density of 51.98 W h kg⁻¹ with a power density of 0.8 kW kg⁻¹, surpassing the performance of symmetric cells made with the same electrodes. The porous. NiCo₂S₄/N doped carbon BSC

showed a higher energy density of 51.98 WhKg⁻¹ and a power density of 0.8 kWkg⁻¹ compared to symmetrical cells.

Lie et al. [12] Synthesised Cu₂O nanowire mesocrystals using PTCDA as a modifier and their superior peroxidase-like activity. A new approach using the perylene-3,4,9,10-tetracarboxylic dianhydride molecule as a modifier was developed to produce tunable Cu₂O NWMCs at higher yields. The Cu₂O NWMCs showed enhanced catalytic activity as nanozymes, with a 10 times higher catalytic efficiency than HRP (Horseradish peroxide). Additionally, the Cu₂O NWMCs retained 69.5% of their original activity after 10 cycles of redox reactions. This research offers a simple and scalable method for the controlled synthesis of Cu₂O NWMCs, opening up possibilities for their use in industrial applications as nanozymes.

Zhang et al. [13] prepared two-dimensional organic cathode materials for alkali-metal-ion batteries. Synthetic approaches, structural analyses, and electrochemical characterization of 2D organic materials for use in lithium-ion batteries (LIBs), lithium-sulfur batteries (LSBs), lithium-air batteries (LABs), and sodium ion batteries (SIB) are discussed. 3,4,9,10-Perylenetetracarboxylic dianhydride (PTCDA) is able to accept electrons and form lithium menolate in the reduction process. The perylene ring of PTCDA favours this reaction, resulting in a high theoretical capacity of 273 Ahg⁻¹. PTCDA has been successful as a cathode material in sodium ion and potassium ion batteries. However, PTCDA showed poor cycling stability, with efficiency decreasing as the number of cycles increases. In contrast, 1,4,5,8-naphthalene tetracarboxylic dianhydride (NTCDA) is expected

to have a higher capacity and better stability as a cathode material, despite its similar structure to PTCDA.

3. Conclusion

In conclusion, the study of PTCDA-based covalent organic frameworks shows their enormous potential in various applications ranging from catalysis to electronic devices. It is used as a precursor for most reactions because PTCDA is a well-known organic semiconductor with a large surface area and excellent charge transfer properties^[11]. The literatures has shown that PTCDA can be used as an active material for supercapacitor electrodes due to its large surface area, excellent electrical conductivity, and redox behaviour. Its layered structure and abundant carboxyl groups provide many sites for electrochemical reactions, enabling efficient charge storage and rapid charge-discharge cycles^[12]. This framework provides a versatile platform for tailored functionality and structure, paving the way for innovative advances in materials science. As research demonstrates their properties and applications, PTCDA-COFs are poised to make significant contributions to many fields and shape the landscape of future technologies

References

- 1. X. Feng, X.Ding, D. jiang. *Chemical Society Reviews* 18 (2012) 6010-6022.
- 2. P.J. Waller, F. Gandara, O.M. Yaghi, *Accounts of chemical research* 12 (2015) 3053-3063.
- 3. M.S. Lohse, T. Bein, *Advanced Functional Materials* 33 (2018) 1705553.

- 4. A.P. Cote, A.I. Benin, N.W. Ockwig, M.O. Keeffe, A.J. Matzeger, *science* 5751 (2005) 1166-1170.
- 5. J. Dong, X. Han, Y. Liu, H. Li, Y. Cui, *Angewandte Chemie International Edition* 33 (2020) 13722-13733.
- 6. K. Geng, T. He, R. Liu, S. Dalapati, K.T. Tan, Z. Li, *Chemical reviews* 16 (2020) 8814-8933.
- 7. C.S. Diercks, O.M. Yaghi, Science 6328 (2017) 1585.
- 8. A. Zulys, D. Asrianti, J. Gunlazuardi, *AIP Conference Proceedings* 2020
- 9. D.S. Suresh, S.P. Vijaykumar, S. Sharanappa, *Journal of Power Sources* (2024) 233967.
- 10. J. Xiao, H. Liu, Y. Lu, L. Zhang, J. Huang, *Ceramics International* 6 (2021) 7438-7447.
- 11. M. Zhou, H. Zhao, F. Ko, P. Servati, A. Bahi, *Journal of Power Sources* 440 (2019) 227146.
- 12. G.L. Li, P. Ma, Y.F. Zhang, X.L. Liu, H. Zhang, *Journal of materials science* 51 (2016) 3979-3988.
- 13. C. Zhang, C. Lu, F. Zhang, F. Qiu, X. Zhuang, *Journal of energy chemistry* 1 (2018) 86-98.

Comprehensive Intellectual Humility and Cognitive Flexibility

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Abstract

In a world characterized by constant change and complexity, the cultivation of comprehensive intellectual humility and cognitive flexibility has emerged as a crucial endeavor. This research explores the intricate relationship between these psychological constructs among Ph.D. scholars, aiming to shed light on their impact on individual well-being and societal discourse. By delving into the nexus of intellectual humility and cognitive flexibility, this study seeks to provide insights that can inform interventions tailored to the unique needs of scholars, fostering their resilience and success in navigating the challenges of modern academia. The current study has adopted a correlation research design and data were collected through a purposive sampling technique, i.e. by administering questionnaires both online and offline mode. The tools used include comprehensive intellectual humility scale and cognitive flexibility. The results revealed a positive correlation, indicating that as cognitive flexibility increases, so does intellectual humility. In simpler terms, this means that being more open-minded and flexible in your thinking is associated with being more humble about your intellectual abilities. Overall, the study highlights the importance of considering both cognitive flexibility and intellectual humility in understanding the behavior and attitudes of Ph.D. scholars.

Keywords: Intellectual humility, Cognitive flexibility

Introduction

In an era marked by rapid technological advancements, societal complexities, and unprecedented access to information, significance of certain individual traits has come to the forefront. Among these, comprehensive intellectual humility and cognitive flexibility have emerged as pivotal factors in navigating the multifaceted challenges of our modern world. Comprehensive intellectual humility encompasses a willingness to acknowledge the limitations of one's own knowledge and an openness to diverse perspectives and constructive dialogue. Meanwhile, cognitive flexibility refers to the ability to adapt thought processes and behaviors in response to changing circumstances, fostering innovative problemsolving and resilience in the face of uncertainty. As we delve into this thesis, we embark on a journey to explore the profound implications of these traits in addressing contemporary issues and shaping a more adaptable, empathetic, and harmonious society. Through rigorous examination and analysis, this study aims to shed light on the interconnectedness of comprehensive intellectual humility and cognitive flexibility and their role in fostering individual and societal well-being in today's dynamic landscape.

Comprehensive Intellectual Humility

Comprehensive intellectual humility (CIH) refers to a multifaceted disposition characterized by an awareness of one's intellectual limitations and an openness to critically examining and revising one's views considering new information or opposing perspectives (Scott.1962). It's distinct from general humility, as it specifically focuses on one's intellectual abilities and knowledge. The term, intellectual humility (IH), has been defined in several ways, but most definitions converge on the notion that IH involves recognizing that one's beliefs and opinions might be incorrect.

Intellectual humility (IH) conceptualized as "a non-threatening awareness of one's intellectual fallibility" (Krumrei-Mancuso & Rouse,2016, p. 210), may have a positive impact in this challenging social environment. Researchers have demonstrated links between IH and several positive interpersonal benefits that might extend to the socio-political domain. For example, high levels of IH tend to correlate with greater open-mindedness, empathy, prosocial values, and tolerance toward diverse ideas and people.

Some people tend to respond in a more intellectually humble fashion than other people do, and this cross-situational consistency qualifies IH as a trait. Importantly, nothing in the concept of trait or disposition implies that people act the same way all the time, that their reactions are genetically determined, or that their behaviors can't change. It simply conveys that people show some degree of consistency in how they respond across different situations.

People differ not only in their general, dispositional level of IH but also in the degree to which they manifest IH with respect to particular beliefs and attitudes (Hoyle, Davisson, Diebels, & Leary, 2016). People may be intellectually humble with regard to some of their beliefs while being arrogant about others. This domain specificity is seen in most personality characteristics as people often differ from

one another on average while also displaying substantial within-person variability across situations (Fleeson, 2004). People's reactions in any particular situation reflect both their general tendency to be intellectually humble as well as the degree to which they are intellectually humble with respect to a specific belief.

Psychologists often prefer to measure constructs with self-report measures because self-reports are efficient and economical to administer and may be completed by many respondents simultaneously via computer. Self-report measures are highly valid for many constructs, but they are useful only when people can accurately assess the characteristic in question and are not motivated to misrepresent their answers.

Some researchers have questioned whether these conditions are met in the case of IH. If respondents are asked to rate themselves on items such as "I am an intellectually humble person," such concerns are probably justified. People may have difficulty assessing how intellectually humble they are and may also wish to appear humble by either rating their humility highly or, ironically, by modestly rating themselves low in IH, thereby demonstrating humility about how humble they are. However, when self-report items refer to beliefs, attitudes, or reactions that reflect differences in IH, people may be able to rate themselves reasonably accurately, and such items may be less susceptible to a social desirability bias. (In fact, some people view features of low IH as desirable because they connote certainty, decisiveness, and strength.) The usefulness of any psychological measure lies in its demonstrated validity, so the question is whether

scores on self-report measures of IH reflect true differences between people's levels of IH. Research evidence shows that at least some self-report measures of IH are acceptably reliable and valid and are not unduly contaminated by social desirability biases (Haggard et al., 2018; Krumrei-Mascuso & Rouse, 2016; Leary et al., 2017; Porter & Schumann, 2017). Even so, these measures differ in important ways, and researchers should consider the precise content of the items on these measures to determine whether they assess the desired conceptualization of IH.

Cognitive Flexibility

Cognitive flexibility is the human ability to adapt cognitive processing strategies to face new and unexpected conditions in the environment (Cañas et al. 2003). This definition involves three important characteristics:

- 1. Cognitive Flexibility as a Learnable Ability: Cognitive flexibility is an ability that implies a process of learning, meaning it can be acquired with experience.
- 2. Adaptation of Cognitive Processing Strategies: Cognitive flexibility involves adapting cognitive processing strategies. A strategy, in this context, is a sequence of operations that search through a problem space (Payne et al. 1993). Therefore, cognitive flexibility refers to changes in complex behaviors, not in discrete responses.
- 3. **Response to Environmental Changes**: Adaptation occurs in response to new and unexpected environmental changes after a person has been performing a task for some time.

Cognitive flexibility has been described as the ability to switch thoughts between two different concepts, to think about multiple concepts simultaneously (Scott, 1962), or to select among multiple representations of an object, multiple strategies, or multiple tasks given specific or changing situations (Jacques & Zelazo, 2005). It is an important aspect of executive functioning at all stages of the life span (Bakos et al., 2008; Pureza, Jacobsen, Oliveira & Fonseca, 2011) and appears to rely heavily upon dopamine levels in the prefrontal cortex (Dreisbach & Goschke, 2004).

There exists a substantial body of research exploring cognitive flexibility and intellectual humility; however, there remains a notable gap in the literature concerning these constructs within this specific geographic or demographic area and sample group. This gap is particularly concerning given the current high rates of suicide and dropout among scholars in today's educational settings. The urgent need for this study is underscored by the shifting landscape of higher education in the modern era, which is experiencing significant changes and challenges due to globalization and technological advancements. There is a distinct lack of comprehensive studies in this area, highlighting the critical importance of investigating how cognitive flexibility and intellectual humility can impact the success, well-being, and resilience of scholars and students. By addressing this research gap, we can better support scholars in developing the essential skills and attitudes needed to thrive in today's rapidly changing educational and economic landscapes.

Furthermore, by shining a spotlight on this under-researched area, we can contribute to the broader conversation on mental health and academic success, promoting interventions and strategies that foster resilience, adaptability, and intellectual humility among scholars. Ultimately, closing this research gap can lead to tangible benefits for individuals, educational institutions, and society at large, paving the way for a more inclusive, supportive, and successful educational environment.

Methods

The purpose of this study is to investigate the intricate relationship between comprehensive intellectual humility and cognitive flexibility among Ph.D. scholars. In an era marked by alarming rates of suicides and dropouts among scholars, understanding these psychological constructs becomes paramount. With the landscape of higher education constantly evolving to meet the demands of a globalized economy, scholars face unprecedented challenges requiring adaptability and openness to diverse perspectives.

Correlational research design is used to investigate the relationships between variables without the researcher controlling or manipulating any of them. The aim of this research is to explore the relationship between comprehensive intellectual humility and cognitive flexibility among Ph.D. scholars. The study involved 77 participants pursuing Ph.D. across various demographics, using a purposive sampling method. Measures included the Comprehensive Intellectual Humility Scale (CIHS) and the Cognitive Flexibility Scale (CFS), both established with validated Likert scale items. Data collection was

conducted via Google Form and offline methods, ensuring transparency, confidentiality, and voluntary participation. The analysis employed the Shapiro-Wilk test for normality, Pearson correlation for examining relationships, and descriptive statistics for summarizing data. Ethical considerations encompassed informed consent, confidentiality, participant comfort, and no monetary incentives. This correlational design aimed to contribute insights into intellectual humility and cognitive flexibility among Ph.D. scholars.

Result

The study reveals a positive correlation (r = 0.352) between cognitive flexibility and intellectual humility, suggesting that higher levels of cognitive flexibility tend to accompany greater intellectual humility. Mean scores indicate that participants scored an average of 80.54 (SD = 8.143) on cognitive flexibility and 53.66 (SD = 5.21) on intellectual humility, reflecting the central tendency and variability within each trait. These findings underscore the interconnected nature of cognitive flexibility and intellectual humility, highlighting their significance in comprehending both cognitive processes and social behaviors among individuals.where Intellectual humility, the ability to acknowledge the limits of one's own knowledge and be open to revising one's beliefs, is a crucial cognitive trait with far-reaching implications.

The analysis reveals a significant positive correlation between intellectual humility and cognitive flexibility, confirming the hypothesis With a positive correlation coefficient of 0.352 (P<0.05)., it is evident that as cognitive flexibility increases, so does intellectual humility. This finding aligns with expectations and results are also congruent with prior

researches. Zmigrod et al.'s (2019) study examines the psychological factors underlying this construct, highlighting the roles of intelligence and cognitive flexibility, indicating a critical role for cognitive flexibility in intellectual humility. suggesting that individuals who exhibit higher levels of cognitive flexibility also tend to demonstrate greater intellectual humility. This correlation implies a potentially symbiotic relationship between the two traits, wherein individuals who are more adaptable in their thinking patterns may also be more open-minded and humble in their intellectual pursuits. Overall, these results shed light on the interplay between cognitive processes and social attitudes, highlighting the importance of considering both factors in understanding human behavior and cognition.

Conclusion

The purpose of this study was to explore the relationship between cognitive flexibility and intellectual humility among Ph.D. scholars. The researchers aimed to understand how these two traits are connected. Data's were collected from 77 Ph.D. scholars using scales to measure comprehensive intellectual humility and cognitive flexibility. The study design adopted correlational methods to summarize the data and employed the Shapiro-Wilk test to check for normality. Pearson correlation was used to understand the relationship between the variables. The results revealed a positive correlation, indicating that as cognitive flexibility increases, so does intellectual humility. In simpler terms, this means that being more open-minded and flexible in your thinking is associated with being humbler about your intellectual abilities. Overall, the study highlights the importance of considering

both cognitive flexibility and intellectual humility in understanding the behavior and attitudes of Ph.D. scholars.

Major Findings

- ➤ It can be concluded that exists a positive correlation between comprehensive intellectual humility and cognitive flexibility.
- ➤ It was observed that the mean score and standard deviation of the variable cognitive flexibility was greater as compared to those of the variable comprehensive intellectual humility.
- The observed correlation coefficient underscores the importance of cognitive flexibility in fostering a deeper sense of intellectual humility. Higher levels of cognitive flexibility within individuals were associated with increased comprehensive intellectual humility.

References

- Barrett, J. L. (2016). Intellectual humility. The Journal of Positive Psychology, 12(1), 1–2. https://doi.org/10.1080/17439760.2016. 1167945
- Cognitive flexibility. Cognitive Flexibility-an overview|ScienceDirect Topics. (n.d.). https://www.sciencedirect.com/topics/neuroscience/cognitive-flexibility
- Cognitive flexibility in decision making: A neurological model of learning and change. (n.d.-c). https://www.researchgate.net/publication/ 242302648_cognitive_flexibility_in_decision_making_a_ neurological_model_of_learning_ and_change

- Cognitive flexibility scale (CFS). (n.d.-b). https://www.psytoolkit.org/survey-library/flexibility-cfs.html
- Comprehensive intellectual humility scale items. (n.d.-a). https://seaver. pepperdine.edu/social-science/content/comprehensive-intellectual-humility.pdf
- Finding middle ground between intellectual arrogance and... (n.d.-b). http://faculty.wwu.edu/~howardd/Finding_middle_ground_between_in tellectu.pdf
- Haggard, M. C. (2019). Understanding humility as intellectual virtue and measuring it as psychological trait. *Humility*, 354–374. https://doi.org/ 10.1093/oso/9780190864873.003.0015
- Haggard, M., Rowatt, W. C., Leman, J. C., Meagher, B., Moore, C., Fergus,
 T., Howard Snyder, D. (2018). Finding middle ground between intellectual arrogance and intellectual servility: Development and assessment of the limitations-owning intellectual humility scale.
 Personality and Individual Differences, 124,184–193.Haran, U., R
- Hoyle R. H., & Krumrei-Mancuso E. (2021). Psychological measurement of humility. In Alfano, M. P Lynch, & A Tanesini **M**(Eds.), The Routledge handbook of philosophy of humility (pp. 387–400). Routledge.
- Hodge A. S., Hook J. N., Davis D. E., & McMinn M. R. (2020). Attitudes of religious leaders toward integrating psychology and church ministry. Spirituality in Clinical Practice, 7, 18–33. 10.1037/scp0000200
- Intellectual humility definition: What is intellectual humility. Greater Good. (n.d.). https://greatergood.berkeley.edu/topic/humility/definition

- Leary M. R. (2017). *The psychology of intellectual humility*. John Templeton Foundation.
- Martin, M. M. & Rubin, R.B. (1995). A new measure of cognitive flexibility. Psychological Reports, 76, 623-626
- Payne, J.W., et.al.,1993, The Adaptive Decision Maker (Cambridge: Cambridge University Press)
- Porter, T., Elnakouri, A., Meyers, E. A., Shibayama, T., Jayawickreme, E., & Grossmann, I. (2022). *Predictors and consequences of intellectual humility*. Nature reviews psychology. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9244574/
- SV;, K.-M. E. (n.d.). *The development and validation of the comprehensive intellectual humility scale*. Journal of personality assessment. https://pubmed.ncbi.nlm.nih.gov/26542408/
- Rubia, K. (2018, March 29). Cognitive neuroscience of attention deficit hyperactivity disorder (ADHD) and its clinical translation. Frontiers in human neuroscience. https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC 5884954/
- Scott, W. A. (1962). Cognitive complexity and cognitive flexibility. *Sociometry*, 25(4), 405–414. https://doi.org/10.2307/2785779
- Zmigrod, L., Zmigrod, S., Rentfrow, P. J., & Robbins, T. W. (2019). The psychological roots of intellectual humility: The role of intelligence and cognitive flexibility. *Personality and Individual Differences*, 141, 200–208. https://doi.org/10.1016/j.paid.2019.01.016

Perceived Parenting as Mediation in the relationship between Parental Conflict and Adolescent Impulsiveness

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Abstract

This conceptual analysis through journal research reviews investigates the mediation role of perceived parenting in the relationship between parental marital conflict and impulsiveness among adolescents. The objective is to understand how adolescents' perceptions of parental behavior mediate the influence of marital discord on their impulsiveness. A comprehensive review of existing literature reveals that perceived parenting significantly mediates the relationship between impulsiveness and parental marital conflict. Specifically, adolescents who perceive their parents as supportive and consistent tend to exhibit lower levels of impulsiveness, even in the presence of marital conflict. Conversely, perceptions of parental inconsistency or negativity during conflict exacerbate adolescent impulsiveness. This study highlights the crucial role of perceived parenting as a buffer against the adverse effects of parental marital discord on adolescent behavior. Future research should further explore the specific mechanisms and contexts that contribute to this mediation effect to inform effective interventions aimed at promoting positive family dynamics and adolescent development.

Keywords: Parental Conflict, Perceived Parenting, Impulsiveness.

Introduction

In any family with children, disagreements are common among both parents and between children themselves, as well as between children and their parents. According to Cummings and Davies (2012), these interpersonal conflicts within the family are a significant predictor of children's adjustment issues, a viewpoint supported by Emery (2012), who linked marital discord strongly with behavioral problems in children. A thorough examination of research on the relationship between marital conflict and children's adjustment could inform the development of preventive programs aimed at identifying factors that promote better mental health outcomes for children and adolescents (Formosa, Gonzales, & Aiken, 2000).

Witnessing marital conflict can profoundly impact children's emotional and behavioral development. Research by Edleson, et al., (2007), based on 31 studies, reveals that children exposed to domestic violence often experience challenges in their behavior, emotions, and cognitive growth. Moreover, severe marital conflict has been linked to psychological issues in a minority of children. Despite these potential negative effects, most children typically continue to develop well psychologically and socially, even amidst familial stressors. The emotional security hypothesis proposed by Cummings and Davies (2012) underscores the importance of children's perceptions of their relationship quality with parents. It suggests that children's adjustment depends significantly on whether they feel their emotional needs are consistently met by their parents, despite marital discord. This hypothesis implies that a strong emotional bond with at least one

parent can buffer children against behavioral problems and internal struggles like depressive symptoms, even in the presence of marital discord.

Impact of marital conflict of Parents on Adolescents

Parental marital conflict refers to disagreements, whether verbal or physical, arising from conflicting views on family matters (Fincham, 1994). The incidence of children witnessing such conflicts is widespread and appears to be increasing (Westrupp et al., 2015). The effect of parental marital discord on the development of individuals during childhood has been emphasized, with potential implications extending into adolescence. Moreover, adolescents are particularly sensitive to perceiving conflicts between their parents (Cummings & Davies, 2010).

Marital conflicts significantly impact children's development, as highlighted in Abhinandita Chakraborty's review (2023). The research underscores that children exposed to high levels of parental conflict often exhibit negative cognitive and socio-emotional outcomes, with adolescents particularly vulnerable to developing psycho pathological issues. The review synthesizes findings from various studies, emphasizing marital conflict as a potential catalyst for behavioral problems among children. It acknowledges, however, that factors related to the environment and individual child characteristics can moderate the effects of such conflicts. Overall, the review provides a comprehensive examination of how parental disputes can influence children's well-being, underscoring the importance of effective conflict

resolution in fostering a supportive family environment (Barletta & O'Mara, 2006).

Parental marital conflict can have profound effects on children's emotional and behavioral development. It often creates a stressful environment that can contribute to increased anxiety, depression, and behavioral problems in children. Understanding the dynamics and consequences of parental marital conflict is crucial for developing interventions to support healthy family functioning and mitigate negative impacts on children's well-being.

Impulsiveness of adolescents

Impulsiveness refers to the tendency to act on sudden urges or desires without considering the potential consequences. It involves making decisions or engaging in behaviors hastily, often without adequate reflection or planning. Impulsiveness can manifest in various ways, such as acting without foresight, taking risks, or being unable to delay gratification. It is a trait that can affect personal and social functioning, influencing behaviors across different contexts and situations.

Adolescence, spanning from 10 to 19 years old, is a critical developmental phase characterized by significant physical, neurological, psychological, emotional, and social changes (Dahl et al., 2018). Impulsivity, defined as difficulty in controlling desires and impulses without deliberate planning, is a prominent feature during this period (Rosenbaum & Hartley, 2019). Associated constructs include low self-control, marked by impulsivity and lack of planning and sensation-

seeking, the pursuit of novel and stimulating experiences (Stoyanova & Ivantchev, 2021).

Adolescent impulsivity is prevalent and associated with increased risks of delinquency, aggression, substance use, self-harm, and suicidal behavior, all contributing to higher morbidity and mortality rates. Studies have consistently linked impulsivity to various biopsychosocial factors, exploring its interactions within the unified theory of development. (Rosenbaum & Hartley, 2019,Ragan et al.,2022). Factors such as female gender, older age, higher parental socioeconomic status, parental self-control, positive school environment, positive peer relationships, and positive parenting have been identified as predictors of lower impulsivity or higher self-control in adolescents, highlighting the multifaceted nature of its development and potential mitigating factors across biological, psychological, and social domains (Bozzini et al., 2021).

Perceived parenting as a mediation model in the relationship between parental marital conflict and impulsiveness

Perceived parenting style, as defined by Dixon, Graber, and Brooks-Gunn (2008), refers to how children or adolescents subjectively interpret the parenting they received. It encompasses parents' attitudes, behaviors, values, and standards, influencing how children perceive their parents' responsiveness and involvement. The importance of perceived parenting style lies in its subjective assessment, recognizing that parenting impacts children's subjective experiences and interpretations (Dixon et al., 2008). This perspective highlights the individuality of each child's perception and underscores the need to understand how children interpret their parents' approach. By acknowledging the nuanced nature

of perceived parenting style, researchers and practitioners gain insights into the complex dynamics of parent-child relationships and their potential effects on children's emotional well-being, social skills, and self-perception (Dixon et al., 2008).

Perceived parenting serves as a crucial mediator in the complex relationship between parental marital conflict and impulsiveness among children and adolescents. Research indicates that high levels of marital conflict can lead to increased impulsiveness in youth, potentially due to stress or disrupted family dynamics. However, how children perceive their parents' parenting behaviors plays a pivotal role in shaping their responses to such conflict. For instance, children who perceive their parents as nurturing and supportive despite marital discord may exhibit lower levels of impulsiveness compared to those who perceive their parents as distant or inconsistent (Alizadeh,2011). This mediation model underscores the importance of parental communication and behavior in buffering the impact of marital conflict on children's impulsiveness, highlighting the need for supportive parenting practices even in the face of interparental tension.

Conclusion

The study underscores the critical role of perceived parenting in buffering the impact of parental marital conflict on children's impulsiveness. From the reviews it is found that how children perceive their parents' behaviors and responses during marital discord significantly influences their own levels of impulsiveness. Children who perceive their parents as supportive and consistent in their caregiving amidst conflict tend to exhibit lower levels of impulsiveness

compared to those who perceive their parents as distant or inconsistent. These insights highlight the importance of fostering positive parenting practices, even in the context of interparental tension, to promote healthier emotional and behavioral outcomes for children. Future research could further explore specific mechanisms through which perceived parenting mediates the relationship between parental conflict and child impulsiveness, informing targeted interventions aimed at improving family dynamics and child development.

References

- Alizadeh, S., Abu Talib, M., Abdullah, R., & Mansor, M. (2011). Relationship between parenting style and children's behavior problems. Asian Social Science, 7(12), 195. https://doi.org/10.5539/ass.v7n12p195
- Barletta, J., & O'Mara, B. (2006). A review of the impact of marital conflict on child adjustment. *Australian Journal of Guidance and Counselling*, 16(1), 91-105. https://doi.org/10.1375/ajgc.16.1.91.
- Cummings E. M., Davies P. T. (2010). Marital Conflict and Children: An Emotional Security Perspective. New York, NY: The Guilford Press.
- Cummings, E., & Davies, P. (1994). Children and marital conflict: The impact of family dispute and resolution. New York: The Guilford Press.
- Edleson, J. L., Ellerton, A. L., Seagren, E. A., Kirchberg, S. L., Schmidt, S. O., & Ambrose, A. T. (2007). Assessing child exposure to adult domestic violence. *Children and Youth Services Review*, 29(7), 961–971. https://doi.org/10.1016/j.childyouth. 2006.12.009.

- Emery, R.E. (1982). Marital conflict and the children of discord and divorce. PsychologicalBulletin, 92, 310–330.
- Formosa, D., Gonzales, N., & Aiken, L. (2000). Family conflict and children's internalizing and externalizing behavior: Protective factors. *American Journal of Community Psychology*, 28(2), 175–199.
- Khurana, A., & Romer, D. (2020). Impulsivity in adolescence: Predictors and consequences. In Development of the self in adolescence: *Autonomy and independence*. Retrieved June 16, 2024, from https://doi.org/10.1002/9781119171492.wecad472.
- Rosenbaum, G. M., & Hartley, C. A. (2019). Developmental perspectives on risky and impulsive choice. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 374(1766), Article 20180133. https://doi.org/10.1098/ rstb. 2018.0133.
- Ragan, D. T., Osgood, D. W., & Kreager, D. A. (2022). Impulsivity, peers, and delinquency: A dynamic social network approach. *Journal of Quantitative Criminology*. Advance online publication. https://doi.org/10.1007/s10940-022-09547-8.
- Bozzini, A. B., Bauer, A., Maruyama, J., Simões, R., & Matijasevich, A. (2021). Factors associated with risk behaviors in adolescence: A systematic review. *Brazilian Journal of Psychiatry*, 43(2), 210-221. https://doi.org/ 10.1590/ 1516-4446-2019-0835.
- Dixon, Graber, and Brooks-Gunn (2008). The roles of respect for parental authority and parental practices in parent-child conflict among African American, Latino, and Europeon American families. *Journal of Family Psychology*, 22(1),1-10.
- Dahl, R., Allen, N., Wilbrecht, L., & et al. (2018). Importance of investing in adolescence from a developmental science

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 - perspective. *Nature*, 554, 441–450. https://doi.org/10.1038/nature25770.
- Stoyanova, S., & Ivantchev, N. (2021). Associations among functional and dysfunctional impulsivity: Direct and indirect effects on sensation seeking in youth (19-25 years old). Psychological Thought, 14(1), 115-149. https://doi.org/10.37708/psyct.v14i1.551.
- Fincham, F. D. (1994). Understanding the association between marital conflict and child adjustment: Overview. *Journal of Family Psychology*, 8(2), 123–127. https://doi.org/10.1037/0893-3200. 8.2.123.
- Westrupp, E. M., Rose, N., Nicholson, J. M., & Brown, S. J. (2015). Exposure to inter-parental conflict across 10 years of childhood: Data from the Longitudinal Study of Australian Children. *Maternal and Child Health Journal*, 19(9), 1966–1973. https://doi.org/10.1007/s 10995-015-1704-3.

Societal Perception about Co-operative Societies in Meenachil Taluk

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Abstract

Co-operative societies play an important role in communities, bringing people together to work towards common goals. These organizations, formed by individuals with shared goals, aim to benefit everyone involved. There is drastic change in status of these co-operative societies. This review helps in understanding the societal perception about co-operative societies.

Keywords: Societal perception, Co-operative societies.

Introduction

In our everyday lives, we come across co-operative societiesorganizations where people work together for common goals, like economic growth and community well-being. In the heart of our community, co-operative societies play a crucial role in shaping our local economy and social fabric. But how do we, the members of this community, perceive these co-operative societies? Do we fully understand their impact, or are there misconceptions that colour our views? In our study, we aim to explore how people in Kottayam Taluk view these co-operative societies. Are they seen as helpful and positive forces, or are there concerns and misconceptions? This review dives into the heart of that question, exploring what people think and feel about these collaborative ventures.

This review stems from the belief that the way people perceive co-operative societies can greatly impact their success and effectiveness. Co-operative societies, with their roots in shared values, communal objectives, and economic collaboration, serve as crucial conduits for sustainable development and community empowerment. Yet, their efficacy is profoundly influenced by the perceptions held by the very societies they aim to serve. This project delves into the fascinating realm of societal perception concerning co-operative societies right here in our midst and it aims to unravel the thoughts and opinions of our community members regarding co-operative societies in Meenachil Taluk.

Co-operative societies are not just places where goods are exchanged; they are the threads connecting us, helping us build stronger bonds. The way we see and understand these co-operatives can influence their success and, in turn, impact the well-being of our community.

As we navigate through this study, it becomes necessary to not only recognize the existing perceptions but also to critically analyse the implications of these societal viewpoints. How do these perceptions influence the functioning, success, or challenges faced by co-operative societies in Kottayam Taluk? What role does culture play in shaping these attitudes, and how might changes in perception contribute to the growth and sustainability of these entities?

By listening to the voices of our neighbors, leaders, and stakeholders, this review aims to paint a clear picture of how these cooperative societies are seen and understood. This study is like taking a snapshot of what people think right now and understanding these perceptions helps to uncover ways to improve the relationship between co-operative societies and the communities they serve. From the challenges they face to the opportunities they present, this study seeks to bring forth valuable insights that can contribute to a better understanding and, perhaps, lead to positive changes in the way we perceive and engage with co-operative societies in our midst.

Statement of the Study

The present study on "Societal Perception about Co-operative Societies in Meenachil Taluk" tries to understand how the society look upon the co-operative banks and why the people are approaching these institutions.

Significance of the Study

Co-operative Banks have become an integral part of the success of Indian Financial Inclusion. They have achieved many landmarks since their creation and have helped a normal rural Indian to feel empowered and secure. At present there are several cooperative banks which are performing multi purpose functions such as financial, administrative, supervisory and developmental. In such a situation it is worth while to make a study on the societal perception of cooperative credit societies.

Objectives of the Study

- 1. To evaluate the general awareness of the respondents regarding co-operative societies.
- 2. To understand the general view point of people regarding the recurring co-operative scams.
- To find out the major reasons for approaching a co-operative society.

Research Methodology

The study is a descriptive one. Population of the study constitutes people residing within Meenachil taluk. Primary data used for the study was collected using a questionnaire. The sample size was 100. The samples was selected using convenient method.

Review of Literature

Chakrapani Pegu, Sarkar A, Biswas P, Upadhyay A D, Pal P and Singh YJ (2018)- The study was conducted to examine the functioning of fisherman co-operative societies in the light of perception of members themselves. The research found that fishermen's co-operative societies in Tripura didn't meet members' expectations of providing strong support and empowerment against issues like marginalization and poverty.

Dr. M. Manivannan (2019)-This paper focuses on the current status of urban co-operative banking in India. It examines the growth and structure of co-operative credit societies in the country, aiming to understand the financial aspects and overall performance of Urban Co-operative Banks(UCBs) in India.

C K Gomathy (2022)-This paper explains about the importance of the co-operative societies in economic development. The aim is to discuss about the ways in which co-operatives can act as agents to the sustainable development of the community. This paper suggests that co-operatives need to focus on two important goals: improving their ability to work well and serving their members better. At the same time, they should aim to stay economically strong, creative, and competitive.

N Raveendranath Kaushik (2023)- One of the major problems in running Co-operative Societies is managing money properly. Many frauds in these societies happen because funds are misused, and there isn't a clear system to assign responsibility and accountability. Often, these societies are not computerized and are not run by qualified individuals, leaving a big opportunity for mishandling and stealing money. The Karnataka State Co-operative Act has important rules to not only report such misuse of funds but also to make sure auditors disclose these issues in the financial statements they provide during their audits.

Dr.Ashwani Varshney, Ajay Tripathi (2023)-This research paper aims to explore the relationship between the co-operative sector and inclusive growth in India. It examines the current state of the co-operative sector, identifies the barriers to inclusive growth, and proposes strategies to enhance the sector's role in achieving equitable development.

Data Analysis and Interpretation

Analysis of data is done using percentage analysis and mean scores.

Table 1
Demographic profile of respondents

Gender	Frequency	Percentage
Male	46	46%
Female	54	54%
Total	100	100%
Qualification	Frequency	Percentage
High School	4	4%
Graduate	59	59%
Post Graduate	37	37%
Doctorate	0	0%
Total	100	100%
Occupation	Frequency	Percentage
Government Job	17	17%
Private Job	35	35%
Entrepreneur	3	3%
Student	32	32%
Others	13	13%
Total	100	100%
Monthly Income	Frequency	Percentage
Lessthan10,000	30	30%
Between10,000-30,000	33	33%
Between30,000-50,000	28	28%
Above50,000	9	9%
Total	100	100%

Source: Primary data

The above table reveals that majority of respondents are females. 80% of the respondents are aged between 20 and 40 Years. 59% of respondents are graduates. Average monthly income of respondents are fall in the range of 10000- 30000.39% of respondents are employed in the private sector.

Table 2
Awareness and perception about co-operative societies

Level of Awareness and perceived	Number of respondents	Percentage	
Extremely aware and perceived	10	10%	
Highly aware and perceived	20	20%	
Moderately aware and perceived	51	51%	
Slightly aware and perceived	14	14%	
Not at all aware and and perceived	5	5%	

Source: Primary Data

Table shows that 51% of the respondents are moderately aware and have a perception about co-operative societies.5% of respondents are not at all aware about co operative societies. Only 10% of respondents are highly aware and perceived about co operative societies.

Table 3
CONCERN ABOUT CO-OPERATIVE SCAMS

Response Options	Number of respondents	Percentage		
Very Concerned	31	31%		
Concerned	55	55%		
Neutral	8	8%		
Not Very Concerned	6	6%		
Not Concerned at all	0	0%		
Total	100	100%		

Source: Primary Data

55% of respondents are concerned about Co-operative Society scams. 6% of respondents are not very concerned about scams.

This analysis reveals the motives driving individuals to engage with co-operative societies. Competitive interest rates offered by these societies have the highest mean score of 3.74, indicating that favorable interest rates are a significant factor attracting individuals. Profit-sharing and dividend distribution among members closely follow, with a mean score of 3.62, suggesting that the potential for financial returns is another important motivator.

Table4

Diverse Motives for Approaching Co-Operative Societies Mean Score
Analysis

Motivating Factors	Frequency Distribution of Values				Weighted		
	1	2	3	4	5	Score	Score
Profit-sharing and dividend Distribution among members.	23	11	16	7	5	226	3.62
Flexible and tailored loan terms and repayment options.	14	22	15	6	5	220	3.55
Competitive interest rates Offered by the co-op society.	23	12	19	4	4	232	3.74
Accessibility and convenience Of co-op society branches.	17	16	11	5	3	215	3.47
Strengthening local economies and resilience.	19	13	11	11	8	210	3.39

Flexible and tailored loan terms and repayment options also play a significant role, with a mean score of 3.55. This indicates that individuals value the flexibility and customization offered by co-operative societies in their loan offerings. Accessibility and convenience of co-operative society branches, while slightly lower with a mean score of 3.47, remain important factors for engagement, highlighting the significance of ease of access to services.

Finally, strengthening local economies and resilience ranks slightly lower with a mean score of 3.39. While still a relevant

factor, it appears to be of slightly less importance compared to other motives.

Overall, the analysis underscores the multifaceted nature of individuals' motivations for engaging with co- operative societies, with financial incentives, flexibility, and accessibility emerging as primary drivers.

Findings

- The study concluded that majority of the respondents were moderately aware about co-operative societies.
- About 55% of the sample population is concerned about cooperative scams. Majority of respondents concern regarding prevalence of co-operative scams within the society.
- The study shows that 54% of respondents are female. Most participants (80%) are aged 20-40. Among 100 individuals, 59% hold graduate degrees. The largest income group (33%) earns between 10,000 to 30,000 monthly. The private sector employs the most respondents (35%). Among 100 respondents.
- The primary reason for joining co-operative societies is competitive interest rates (mean score 3.74). Profit-sharing (3.65) and the societies' reputation (3.85) are also key motivators.
- Among co-operative society members, 51% had awareness about co-operatives. Enhancing internal controls, KYC compliance, government audits, employee monitoring, transparency, customer education, and using online media for awareness.

Conclusion

Based on the gathered data, it's evident that co-operative societies play a significant role in society, with a majority of respondents being members or having awareness of these organizations. The analysis reveals a multifaceted understanding of co-operative societies among respondents. It underscores the importance of various demographic factors in shaping perceptions, including gender, education, income, occupation. Trust and alignment with personal values are significant factors influencing membership and engagement with co-operative societies .Additionally, there is notable concern about the prevalence of co-operative scams and a belief in the responsible role of co-operative societies in preventing scams and ensuring transparency. To address these concerns and enhance public awareness and protection against scams, initiatives should focus on implementing robust internal controls, conducting thorough due diligence, increasing educational awareness, and ensuring transparency and compliance. Community outreach efforts and collaboration between regulatory bodies, co-operative societies, and government entities are crucial in fostering trust and improving societal perceptions of co-operative societies.

In conclusion, the findings from the respondents' responses shed light on various aspects of societal perception regarding co-operative societies. There are some of major reasons behind the decision to approach these co-operative societies including profit sharing, flexible loan terms and repayment options, interest rates, accessibility and convenience, strengthening local economies.

Reference

- Gomathy, C. K. (2022). AStudy on Co-operative Societies in Economic Development. *International Journal of Scientific Research in Engineering and Management (IJSREM)*, 6(3), (1-7).
- Varshney, A., & Tripathi, A. (2023). Co-operative Sector and Inclusive Growth in India: Exploring Strategies to Ensure Equitable Development. *The Management Accountant*, 58(8), (31-35).
- Bhattaraia, R., & Pandit, M. (2023). Co-operatives as Pillar of Economy to Improve Agriculture Production and Marketing. *Nepal Agriculture Co-operative Central Federation Limited (NACCFL)*, 3(1), (221-238).
- Sathisha, & Katti, M. S.(2023). Agricultural Co-operative: A Pillar for Agriculture Development and Food Security in India. *The Management Accountant*, 58(8), (43-47).
- Talsaniya, G. K., &Sinha, K. (2023). Digitalization, Co-operative Society and Agricultural Credit-A Systematic Literature Review. *The Management Accountant*, 58(8), (39-42)

पारिवारिक निर्माता - हिंदी के समकालीन कथा साहित्य के संदर्भ में। *हेमा नारायणन*

हिंदी विभाग, कुरियाकोर्स एलियास कॉलेज, मन्नानम Home maker- In the context of contemporary Hindi fiction Hema Narayanan

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Literature serves as a reflection of society. Society consists of different genders. An ideal social system should ensure the all round progress of every individual of society. But the present social system is constructed with patriarchy. Family is a basic unit of the society. It also influenced with the patriarchal values. In a patriarchal system, the man holds the power. He creates and defines the identity women according to his desire. The identity of women is recorded and remains obscure. Female literature is considered as a mirror of women lives. It denotes the authentic representation and experiences of women. Literature blends the reality and imagination. But in feminine literature the part of imagination negligible. This article explore the concept of feminine literature, Patriarchal values embedded in the family system, role of women in family, her struggle with this system, the changes to come in the family system, the role of women in the reshaping of family system and etc. Contemporary Hindi fiction details about with the same.

Keywords: Feminine writing, family system, Man means hero, my world, we are one, my womb, my role, my body, Owner

सार

साहित्य को समाज के दर्पण के रूप में माने जाते हैं। समाज भिन्न लिंक के मनुष्यों से संपन्न है। एक आदर्श सामाजिक व्यवस्था में सभी लिंक के सर्वतोमुख विकास संभव होना बहुत अनिवार्य है। लेकिन वर्तमान सामाजिक व्यवस्था पितृसत्तात्मक है। परिवार समाज का लघु रूप है। वर्तमान पारिवारिक व्यवस्था भी पितृसत्तात्मक मान्यताओं से जुड़ा हुआ है। यहां पुरुष सत्ताधारी है। वह अपनी इच्छा के अनुसार स्त्री रूपों की परिभाषा देता है। अव्यक्त ढंग से स्त्री रूपों का निर्माण और चित्रण अभी तक हुआ है। स्त्री जीवन के प्रतिबिंब के रूप में स्त्री लेखन को माने जाते हैं। स्वानुभूति तथा स्वाभिव्यक्ति का अंगन यहां हम देख सकते हैं। साहित्य में यथार्थ और कल्पना का मिलन हम देख सकते हैं। लेकिन स्त्री लेखन में कल्पना का अंश नगण्य है। इस लेखन में स्त्री लेखन का स्वरूप, पितृसत्तात्मक मान्यताओं से निर्मित पारिवारिक व्यवस्था, परिवार में स्त्री की भूमिका, इस व्यवस्था के साथ उसका संघर्ष, पारिवारिक व्यवस्था में आनेवाला परिवर्तन, पारिवारिक व्यवस्था के पुनर्गठन में स्त्री की भूमिका आदि मुद्दों की चर्चा की जाती है। समकालीन साहित्य इस पर विचार करता है।

बीज शब्द - स्त्री लेखन, पारिवारिक व्यवस्था, पुरुष यानी नायक, अपनी दुनिया, हम एक हैं; मेरी कोख, अपनी भूमिका, मेरा तन, मालिक

भूमिका

परिवार समाज का लघु रूप है। रक्तसंबन्धों से जुड़ा हुआ छोटा सा समाज है परिवार। जिसके हर सदस्य रिश्तों से बन्धित है। मनुष्य का पहला पाठशाला तथा सामाजिक जीवन का आधार है परिवार। समाजोपयोगी नागरिक के निर्माण में परिवार अहं भूमिका निभाती है। पारिवरिक व्यवस्था का निर्माण निस्वार्थ प्रेम, आदर, सम्मान से होना चाहिए। हरेक समय के अनुसार परिवार का रूप बदलता रहता है। बदलते हुए सामाजिक, राजनीतिक, आर्थिक, सांस्कृतिक स्थिति इसका कारण है। स्त्री और परिवार के साथ का संबंध अटूट है। परिवार का निर्माता है स्त्री। बदलते हुए पारिवारिक संदर्भ में स्त्री की भूमिका क्या है? वर्तमान परिवार में उसका योगदान क्या है? परंपरागत जंजीरों से वह कैसा संघर्ष करती है? नवीन पारिवारिक व्यवस्था का

निर्माण वह कैसे करती है? आदि कई सवालों का जवाब हिंदी के समकालीन स्त्री लेखन में है।

स्त्री लेखन

महिला लेखन स्त्री की नवीन दृष्टि का उपज है। स्त्री अपनी नवीन दृष्टि से संपूर्ण विश्व को देखती है। वह पितृसत्तात्मक संकल्पनाओं को पहचानकर उसकी सूक्ष्म आलोचना करती है। अपने अधिकारों केलिए स्त्री आवाज़ उठाती है। स्त्री लेखन स्त्री जीवन के दुखों, यातनाओं की अभिव्यक्ति से परे उसकी मुक्ति का राह भी दिखाता है। राकेश कुमार के शब्दों में- "स्त्री लेखन का अर्थ है, वह साहित्य जिसमें स्त्री की दशा-दुर्दशा, दुर्भाग्य अवमूल्यन का ही चित्रण न हो बल्कि उससे बाहर निकलने का भी दिशा निर्देश हो कि वह उस गफलत से कैसे मुक्त होगी ? वह समाज के उन तमाम अभद्र, अनैतिक नियमें के खिलाफ हो जो स्त्री को अवमूल्यित करते हैं। उसे अस्तित्वहीन बनाते हैं, जड़ वस्तु की तरह ।"1 स्त्री लेखन पितृसत्तात्मक व्यवस्था के विरोध करने के साथ-साथ स्त्री के नवीन रूप का निर्माण करती है। यह लेखन नारी के स्वजीवन का प्रतिबिंब है। स्त्री द्वारा लिखित कहानी और उपन्यासों में अपने जीवन के विभिन्न पक्षों को बहुत सुक्ष्म ढंग से आलोचना करने की कोशिश हम देख सकते हैं। स्त्री लेखन में कथा साहित्य की भूमिका महत्वपूर्ण है। इसके अध्ययन के बिना स्त्री लेखन अध्रा हो जाता है। स्त्री कैसे वर्तमान पारिवारिक व्यवस्था का निर्माण करती है? यह जाने के लिए परंपरागत पारिवारिक व्यवस्था का भी थोड़ा सा जानकारी प्राप्त करना बहत अनिवार्य है।

पारिवारिक व्यवस्था

परंपरागत पारिवारिक व्यवस्था में सामंतवादी व पूंजीवादी मूल्य का बहुत गहरा प्रभाव है। पारिवारिक व्यवस्थाओं का प्रारंभ मातृसत्तात्मक मूल्य से माना जाता है। मातृसत्तात्मक व्यवस्था में स्त्री ही घर की नायिका है। फ्रेडरिक एंगल्स के अनुसार मातृ सत्तात्मक पारिवारिक व्यवस्था स्त्री को पूर्ण एवं स्वतंत्रता देती है। उनके मत में

पारिवारिक व्यवस्था के प्रारंभ में बहुपतित्व कायम था। उनके शब्दों में- In all forms of group family it is uncertain who is the father of a child; but it is certain who is it's mother is"2मातृ सत्तात्मक पारिवारिक व्यवस्था में सभी रिश्तों का शुरुआत माँ से होती है। सिमोन दि बुआ की दृष्टि में "As for ordinary women, pregnancy giving birth and menstruation diminished her work capacity" ³स्त्री की शारीरिक विशेषताओं की वजह से उससे उसका अधिकार पुरुष ने छीन लिया है। गर्भधारण, प्रसूति, मासिक धर्म आदि के अवसर पर स्त्री को पुरुष की आश्रता के रूप में रहनी पड़ती थी। आर्थिक पराधीन नाथ उनकी गुलामी का एक और कारण थी। धीरे-धीरे पितृसत्तात्मक पारिवारिक व्यवस्था का प्रारंभ हुआ। पितृसत्तात्मक आचारसंहितायें यह व्यवस्था को शक्ति प्रदान करते हैं। इस व्यवस्था में स्वत्वयुक्त स्त्री केलिए कोई स्थान नहीं है। स्त्री के विभिन्न आदर्श रूप जैसे- आदर्श पुत्री, आदर्श पत्नी, आदर्श बहन, आदर्श बहु आदि का निर्माण किस व्यवस्था ने किया है। इसलिए समकालीन स्वत्वयुक्त नारी इस व्यवस्था से संघर्ष करती हैं। इस व्यवस्था का विरोध वह करती है। पारिवारिक व्यवस्था के एक सकारात्मक परिवर्तन के ज़रिए पूरे विश्व के सकारात्मक परिवर्तन की कोशिश करती है समकालीन स्त्री। हिंदी समकालीन स्त्री कथा साहित्य पितृसत्तात्मक पारिवारिक व्यवस्था के पुंसत्तात्मक मान्यताओं का विरोध करता है। अपने लेखन के जरिए स्त्री नए परिवारिक व्यवस्था का निर्माण करती है।

पुरुष यानी नायक

पितृसत्तात्मक पारिवारिक व्यवस्था का नायक पुरुष है। एक के बाद दूसरे पुरुष से यह व्यवस्था आगे बढ़ती है।' छिन्नमस्ता' में प्रभा खेतान कहती है कि- "एक मालिक असमय चले गए। सिंहासन खाली था। युवराज, बड़े भैया को युवराज के रूप में ही सबके सामने रखा था।" उपन्यास की नायिका प्रिया को उसके भाई ने ही शारीरिक शोषण किया। प्रिया की माँ ने अपने बेटे को घर के नायक के रूप में माना है। उसकी

दृष्टि परंपरागत पितृसत्तात्मक है। वह हमेशा किसी पुरुष की आश्रिता बनकर रहना चाहती थी। पुरुष की अनुपस्थिति में वह सुरक्षा महसूस करती थी। 'अन्या से अनन्या' नामक प्रभाव खेतान की आत्मकथा में प्रभा जी की मांँ छिन्नमस्ता की प्रिया की मांँ से बहुत मिलती है। लेकिन प्रभा जी की मांँ अंत में यह चाहती है कि अपनी बेटियाँ स्वावलंबी हो जाए। कभी भी अपने सामान एक आश्रिता बनकर न रह जाए। अर्थात् अपने जीवनअनुभव के द्वारा प्रभा जी के माँ खुद समझती है कि स्त्री का आदर्श रूप उसे पिंजरे में डालता है। पुरुष की हाथों में वह कभी सुरक्षित नहीं हो जाएगी। सुरिष्ठत रहने के लिए स्त्री कोई वस्तु नहीं है। अपना परिवार का निर्माण खुद करना चाहिए वह भी अपनी मर्जी से करना चाहिए। परिवार को संभालने की शक्ति उसकी हाथों में है। वह अबला नहीं है बल्कि शक्ति का पुंज है। 'इदमन्नम' की सगुणा के पिता, 'आवांँ' की स्मिता के पिता, 'शेष कादंबरी' की सविता के पिता और भाई ऐसे कई पात्र हैं जिन्होंने घर के नायकत्व संभाला, साथ ही स्त्री का शोषण भी किये हैं। समकालीन स्त्री इस नायकत्व का विरोध करती हैं। वे खुद मेहनत करके घर को संभालती हैं। 'आवांँ' उपन्यास की निमता, स्मिता आदि कई उदाहरण हिंदी के स्त्री कथा साहित्य में हैं।

अपनी दुनिया

पुरुष की दुनिया एक स्वार्थ संकुचित दुनिया है। जहाँ अपनी कामनायें, ज़रूरतें, व्यस्तताओं केलिए पुरुष महत्व देता है। बािक सभी सदस्य वहाँ उपेक्षित हैं। स्त्री वहां अपेक्षित है। पुरुष की कामनाओं को पूर्ण करनेवाली एक वस्तु है पितृसत्तात्मक पारिवारिक व्यवस्था में स्त्री। मृदुला गर्ग की 'वितृष्णा' कहानी का नायक दफ्तरी दुनिया में सीिमत था। वह हमेशा अपनी व्यस्थताओं के पीछे था। पत्नी से बातचीत करने का वक्त भी उसके पास नहीं था। उनकी दृष्टि में "बात करने का पुरसत उन्हें होती हैं जिनके पास काम नहीं होता।" यानी दिनेश की दृष्टि में पात्न घर में रहती है। उसकेलिए कुछ काम नहीं है, इसलिए वह हमेशा बातचीत करना चहती है। घर में ओर कोई सदस्य नहीं था। वहाँ दिनेश की पत्नी शालिनी उपेक्षित थी। वह अपने

पति के ज़रूरतें निभाती है। सेवानिवृत्त होने के बाद दिनेश अपनी पत्नी को समझने लगा। वह अपने पत्नी से बातचीत करना चाहता था। लेकिन शालिनी पहले की तरह अपने पित की ज़रूरतों निभाकर उससे कूछ कहे बिना अपनी दुनिया में लीन हो जाती है। उसके प्रतिरोध का तरीका इन शब्दों में व्यक्त होता है कि "खाना खाकर वह अपने कमरे में आराम कर सकता है। बिस्तर के पास छोटी- सी डिबिया में सौंफ इलायची रखी रहती है। खा लें और सो जाये। न चाहे तो न सो जा।" शालिनी खाना बनाती है। पित चाहे तो खा सकें नहीं तो नहीं। संबन्ध विहीनता से शालिनी अपने पित की घोर उपेक्षा का प्रतिरोध करती है। पित को उसकी ही दुनिया में छोड़ देती है शालिनी। कठगुलाब के गैरी कपूर पारिवारिक ज़िम्मेदारियाँ उठाने केलिए तैयार नहीं। वह सिर्फ अपने बारे में सोचता है। इसलिए उसकी पत्नी ने उसे छोड़ दिया। शालिनी ने अपनी दुनिया का निर्माण किया है। कानून की दृष्टि में वे पित-पत्नी है। लेकिन दोनों अपनी-अपनी दुनिया में सीमित हैं। शालिनी का प्रतिरोध परंपरागत पारिवारिक व्यवस्था के खिलाफ है। प्रतिरोध किए बिना परिवर्तन नामुमिकन है। इसलिए शालिनी पितृसत्तात्मक पारिवारिक व्यवस्था में परिवर्तन लाने की कोशिश करती है। नए पारिवारिक व्यवस्था की ज़रूरत की ओर यह प्रतिरोध इशारा करता है।

हम एक है

पितृसत्तात्मक पारिवारिक व्यवस्था में लड़का-लड़की का अलगाव विद्यमान है। इसका प्रमुख कारण यह है कि शादी के बाद नारी औरों के घर का सदस्य बन जायेगी। लड़का यानी पुरुष अपनी ही संपत्ति बनकर वंश का पालन करता है। शिक्षा ,खेलखूद आदि विषयों से लेकर हर इकाई में यह अलगाव देखा जा सकता है। 'इदमन्नम' के मकरन्त और मंदा लड़का-लड़की के खेल की चर्चा इस प्रकार करते हैं कि —"मैं क्या खेलूँ तुम्हारे साथ , तुम तो लड़की हो।" तब मंदा जवाब देती है कि — "जो लड़का-लड़की के अलगाव की व्यवस्था को तोड़ना चाहती है। 'माई' उपन्यास में

घरवालों ने सुनैना और सुबोध को अलग प्रकार की शिक्षा प्रदान की है। सुनैना कहती है कि "सुबोध ने अपने स्कूल में गिटार क्लास जाना शुरू कर दिया। मेरे स्कूल में ऐसी कोई सुविधा न थी, पढ़ाई के अलावा एक विषय था होम साइंस- पकाना, सिलना, बुनना.......। " लड़के को काफी शिक्षित होना बाहरी दुनिया के साथ संबन्ध रखने का प्रशिक्षण देता जाता है। लड़की को घर में सीमित होनेवाला परंपरागत काम सिखाया जाता है। इसके प्रतिरोध के रूप में सुनैना ने ज़बरदस्ती से सुबोध के समान शिक्षा हासिल की है। परिवार में लड़का और लड़की का स्थान समान होना चाहिए। उनको सभी मौके समान रूप से मिलना चाहिए। पितृसत्तात्मक पारिवारिक व्यवस्था में मौजूद अलगाव की भावना का विरोध यहां हम देख सकते हैं। 'लड़का' और 'लड़की' के रूम में नहीं बल्कि संधान के रूप में बच्चों का पालन पोषण करना चाहिए। ऐसा एक पारिवारिक व्यवस्था का निर्माण करना चाहती है स्त्री। इसके ज़रिए वह यह भी कहना चाहती है कि बच्चे अलग-अलग नहीं है बल्कि एक है। हिंदी के समकालीन स्त्री लेखन इन बिंदुओं पर जोर देता है।

मेरी कोख

लड़का-लड़की का अलगाव ने नारी को वंशवृद्धि का माध्यम बना दिया है। उसकी कोख के स्वातंत्रता को हटा दिया है। पितृसत्तात्मक पारिवारिक व्यवस्था हमेशा लड़के का जनम चाहता है। लड़के को अपने उत्तराधिकारी के रूप में देखा जाता है। यहाँ लड़की सिर्फ वंशवृद्धि का माध्यम बन जाती है। 'कठगुलाब' की गंगा, 'माई' की दादी आदि ऐसे कई पात्र हैं जिन्होंने कई बच्चों को जनम देकर अनजाने ही एक माध्यम बन गयी है। समकालीन नारी स्वेच्छा से बच्चों को जनम देना चाहती है। 'शेष कादंबरी' की रूबी दी अपनी ही मर्जी से दूसरी लड़की को जनम देती है। 'आवां' अपन्यास का अशोक दुसरे बच्चे को चाहता है। लेकिन उसकी पत्नी गौतमी कहती है कि-"अशोक का मन है एक लड़का पैदा करूँ। नौ महीने पेट फुलाकर न अब मैं निष्क्रिय होना चाहती हूँ न रोती जा रही बकरी सी प्रसव पीडा झेलते छपटाना.......।"8 पित की

इच्छा को मानकर बार बार बच्चों को जनम देना गौतमी चाहती नहीं है। 'शाल्मली' उपन्यास की नायिका शाल्मली अपनी पारिवारिक परिस्थिति में एक बच्चा का जनम चाहती नहीं है। समकालीन नारी अपनी कोख पर अपना अधिकार जमाना चाहती है। क्योंकि गर्भधारण, प्रसूति आदि सब पूर्णतया उस पर निर्भर हैं। पुरुष की वंशवृद्धि का माध्यम बनकर रहना वह नहीं चाहती है। संतान प्राप्ति को सबसे बड़ा सौभाग्य के रूप में आज स्त्री मानती नहीं है। उसकी दृष्टि में कोख अपना है। परिवार में उसकी भूमिका पुरुष की वंशवृद्धि के माध्यम के रूप में नहीं होना चाहिए। वरन् अपना स्वतंत्र रूप की स्थापना करना वह चाहती है। समकालीन नारी अपनी ज़िन्दगी के हरेक इकाई में अपनी इच्छा को बनायी रखनी चाहती है।

अपनी भूमिका

पुंसत्तात्मक परिवारिक व्यवस्था में नारी की भूमिका सेविका की है। पित के,बच्चों के, मेहमानों के,घर के अन्य सदस्यों की सेवा करके नारी तंग हो जाती है। अपना स्वत्व विकास केलिए उनके पास वक्त नहीं होती है। वह हमेशा दूसरों के हित केलिए कई व्रत उपवास लेती है। फिर भी उस घर में उनके लिए अपना कोई स्थान नहीं है। बचपन से ही उसके रसोई चलाने की प्रशिक्षण देती जीती है। क्योंिक किसी भी दशा में हो रसोई संभालना नारी का फर्ज है। 'माई' उपन्यास में बुआ की दृष्टि में-" ...जिसको बनना है वह चूल्हा, लकड़ी आटे के बीच भी बन जाता है।" यह दृष्टि पितृसत्तात्मकता ने उनको प्रदान किया है। 'शाल्मली' उपन्यास की नायिका शाल्मली मेहमानों की सेवा करती है। पित ने उसकी कोई मदद नहीं की है। पित की दृष्टि में ."...यह औरतों के काम में मुझे कोई दिलचस्पी नहीं है।" ¹⁰ पुंसत्तात्मक पारिवारिक व्यवस्था ने यह सब नारी का काम बना दिया। लता शर्मा की 'मदयंतिका' कहानी की नायिका अपनी सेविका रूप से त्रस्त होकर यों प्रतिरोध करती है कि"...वो स्वयं तैयार हुई। अटैची में उसने कपड़े रखे और अपना ड़ायरी।....वो बाहर निकली। ताला बंद किया और चाबी पायदान के नीचे रख दी। इस घर में चूराने को हैही क्या?" नायिका मदयंतिका

अपनी सेविका रूप से मुक्त होकर नवीन दुनिया की तलाश करती है। पितृसत्तात्मक पारिवारिक व्यवस्था में मूल्यवान चीज़ कुछ भी नहीं है। इसलिए वहाँ चोरी होने की संभावना भी नहीं है। इस कहानी में मदयंतिका अपना सशक्त प्रतिरोध व्यक्त करती है। यह प्रतिरोध परिवार में स्त्री की नई भूमिका की मांँग करती है।

मेरा तन

पुरुषसत्तात्मक पारिवारिक व्यवस्था ने नारी को गुड़िया का रूप प्रदान किया है। नारी का शरीर हमेशा पुरुष केलिए आपर्षित होना चाहिए। 'कठगुलाब' में असीमा अपनी माँ के बारे में कहती है कि "....माँ देह प्रदर्शन के खिलाफ थी। वह उसका सिद्धांत था। मेरा बाप चाहता था कि मेरी माँ ऐसी कपडे पहने, जिससे उसके देह का सौन्दर्य और सौष्ठव वहीं नहीं उसका दोस्त अहमाद भी देखें। और वह गर्व से सिर ऊचा करके मूक कटाक्ष फेंक सके कि देखो क्या बाँकी औरत ब्याह कर लाये हैं हम,तुम लाख लाट गिराते रहो, हाथ नहीं आएगी।"12 असीमा के बाप अपनी पत्नी को एक प्रदर्शन वस्तु बनाना चाहता था। वह दूसरों के सामने अपनी पत्नी का देह सौष्टव दिखाकर खुद गर्व करना चाहता था। वह यह स्थापित करना चाहता है कि यह देह मात्र उसकी वैयक्तिक संपत्ति है। लेकिन असीमा की माँ यह सब चाहती नहीं थी। इसलिए पतित्यक्त होकर भी पित के पीछे जाने बिना वह खुद मेहनत करके आजीविका चलाती है। स्वाभिमन के साथ वह रहती है। यह उसका सशक्त प्रतिरोध है। 'हरी बिंदी' कहानी की नायिका अपने पति की अनुपस्थिति में अपनी इच्छाओं को तलाश करती है। यह भी एक सशक्त प्रतिरोध है। वह अपनी इच्छाओं को कभी भूलती नहीं है। ये सभी पात्र यह स्थापित करना चाहती हैं कि परिवार में सिर्फ पति की इच्छा केलिए नहीं बल्कि पत्नी की इच्छा के लिए भी स्थान है होना चाहिए। उसका तन अपना है। उस पर पुरुष का नहीं बल्कि नारी का अधिकार होना चाहिए।

पुरुष नारी के शरार पर अपनी कामेच्छा की पूर्ती करना चाहती है। पितृसत्तात्मक पारिवारिक व्यवस्था में पित्न का शरीर हमेशा पित केलिए समर्पित है। अनिच्छा से होनेवाला ऐसा शारीरिक संबन्ध नारी की लैंगिक स्वतंत्रता का हनन है। ऐसा संबन्ध नारी केलिए पीड़ादायक है। समकालीन नारी यह भोग्या रूप का विरोध करती है। 'दस द्वारे का पींजरा' में हलवंद आपनी पत्नी ढेलाबाई को ज़बरदस्ती से भोगना चाहता है। लेकिन ढेलाबाई ऐसा प्रतिरोध करती है कि - " ज़बरदस्ती मेरे देह पर तो हो सकती है, रूह या काबू इस जन्म में तुम नहीं पाओगे! बिना रूह की मुर्दी देह चाहिए तो ले लो! पूरा ढेलाबाई नहीं मिलेगी। उप नारी को पाने का मतलब उसके शरीर पाना नहीं है। उसके शरीर पर ज़बरदस्ती दिला सकता है। लेकिन ज़बरदस्ती से नारी का प्यार, सम्मान, आदर कभी नहीं मिलेगा। ढेलाबाई यहाँ सशक्त रूप से प्रतिरोध करती है।

मालिक

पितृसत्तात्मक पारिवारिक व्यवस्था में पित के लिए सबसे महत्वपूर्ण स्थान है। इस व्यवस्था में पित को परमेश्वर के के रूप में माना जाता है। पित की प्रताड़ना सहने केलिए स्त्री यहां विवश हो जाती है। पुरुष नारी के मालिक बनकर उसे बुरी तरह पीटता है। पुरुष नारी को अपना अधीन बनाना चाहता है। ऐसे पुरुष से प्यार करने में नारी असमर्थ हो जाती है। उससे वह घृणा करती है। 'दस द्वारे का पींजरा' में आनंदीबाई जोशी अपने पित की मृत्यु से खूश हो जाती है। लेखिका कहती है कि"नन्हीं आनंदी की चूड़ियाँ तोड गई तो भी यह सोचकर खुश हुई कि बात- बात पर झापड़ मारकर गींज- गाँजकर देनेवाला गया!...अब वह स्वतंत्र है....। 14 आनंदी की दृष्टि में पित की मृत्यु से उसको स्वतंत्रता मिली है। यह दृष्टि उसका एक सशक्त प्रतिरोध है। 'शाल्मली' उपन्यास में नरेश कहता है कि - "नियम और धर्म केवल कागज़ पर लिखने केलिए होते हैं या फिर तुम औरतों केलिए बनाए जाते हैं। इनसे हटकर एक और कानून होता है, जो मर्दों के बीच प्रचलित होता है। उसका अपना संविधान है, अपना धर्म होता है। है। उसका अपना संविधान है, अपना हम होता है। सान विस्तात्मक व्यवस्था के इस नज़िएए के

खिलाफ स्त्री लेखन अपना प्रतिरोध व्यक्त करती है। पारिवारिक व्यवस्था में मौजूद यह त्रासदी का बदलाव स्त्री चाहती है और उसके लिए कोशिश भी करती है।

निष्कर्ष

समकालीन स्त्री पितृ सादात्मक पारिवारिक व्यवस्था के लिंगाधिष्ठित अलगाव के खिलाफ आवाज उठाती है। सेविका, भोग्या, आश्रिता आदि परिवेशों से मुक्ति का राह वह खोजती है। पारिवारिक व्यवस्था में अपनी नई भूमिका का निर्माण करना चाहती है समकालीन स्त्री। निर्धारित मान्यताओं का विरोध वह करती है। यह प्रतिरोध सिर्फ अपने केलिए नहीं बल्कि आगामी पीढ़ी केलिए है। आनेवाली पीढ़ी इन जीर्ण शीर्ण मान्यताओं से मुक्त होना चाहिए। स्त्री को स्वतंत्र मनुष्य के रूप में जीना चाहिए। मानवीय धर्म निभाना चाहिए। इन उम्मीदों के साथ स्त्री अपना आवाज़ उठाती है। यह प्रतिरोध पुरुष के खिलाफ नहीं बल्कि पितृसत्तात्मकता के खिलाफ है। नए पारिवारिक व्यवस्था का निर्माण करता है आज का स्त्री लेखन। यहां स्त्री परिवार का निर्माता है। नई पारिवारिक व्यवस्था में स्त्री आश्रिता नहीं है, वस्तु नहीं है, भोग्या नहीं है बल्कि एक स्वतंत्र मनुष्य है। उसकी अपनी इच्छाएं हैं, कामनायें हैं। अपने स्वत्व को बनाए रखकर सभी रिश्तों को निभाती है। परंपरागत जड़ मान्यताओं का विरोध करते हुए परिवार का निर्माण करती है आज की स्त्री।

References

- 1. Rakesh kumar-Narivadi vimarsh AadharPrakashan Pvt Ltd, Haryana, ,44
- 2. Simone de Beauvoir-The Second Sex first winters books-Newyork -Vol 2011, 97
- 3. Friedrich Engels-The Origin of the Family, Private Property and the State-penguin books ltd.-England-Vol 2010, 71
- 4. Prabha Khaitan–Chhinnamasta-Rajkamal prakashan ltd- Vol.2010, ll Edition, 2014, 38

- 5. Mridula Garg-sangathi visangati-2, National publishing House, New Delhi, First Edition 2004, 400
- 6. Mridula Garg-sangathi visangati-2, National publishing House, New Delhi, First Edition 2004, 398
- 7. Maitreyi Pushpa-Idannamam-Rajkamal prakashan Ltd-Vol 2004 ll Edition 2009,52
- Maitreyi Pushpa-Idannamam Rajkamal prakashan Ltd -Vol 2004
 -Il Edition 2009,52
- 9. Geetanjali shree-Maai-Rajkamal prakashan Ltd-Vol 2004-l Edition 2012,36
- Chitra Mudgal-Aawan-Samayik Prakashan-New Delhi-Vol 2007,
 361
- 11. Geetanjali shree- Maai- Rajkamal prakashan ltd -Vol 2004-l Edition 2012,69
- Nasira Sharma-Shalmali-Kitab Ghar- New Delhi-lll Edition1994,
 33
- 13. Lata Sharma-Akhiri Naam Allah Ka (Story Collection)-Medha Books-1 Edition 2004,13
- 14. Mridula Garg- Kathgulab-Bhartiya jnanpith-New Delhi ll Edition 2004,156
- 15. Anamika-Dus Dware ka pinjara-Rajkamal prakashan ltd-New Delhi-Vol 2008, ll Edition 2014, 192
- 16. Anamika-Dus Dware ka pinjara-Rajkamal prakashan Ltd-New Delhi -Vol 2008, ll Edition 2014, 113
- 17. Nasira Sharma-Shalmali- Kitab Ghar- New Delhi-lll Edition 1994,144,