

Research on the cognitive mechanism of the widening gender ideological gap

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Abstract. In recent years, more survey data at the global level have indicated that the attitude gap between men and women in gender role cognition, responsibility allocation in the family and perception of social equity keeps widening to constitute a larger and larger ideological gap. This study focuses on the gender schema theory, relative deprivation theory, vested interest theory and social identity theory, systematically studying the psychological cognitive mechanism for the generation of this gap. However, research has shown that the cognitive schema of women is gradually moving towards an egalitarian one, owing to the change in the reference groups, whereas the zero-sum cognitive schema of the male population is strengthening in the face of similar social change, in which the asymmetric distribution of responsibilities in the family domain is reinterpreted as a structural injustice, thus leading to strong demands for fairness. Further studies discover that the algorithmic recommendation mechanism of social media further solidifies the above-mentioned cognitive biases through selective exposure, which will generate the level of psychological discomfort in individuals and turn into ideological opposition between social groups, and finally enhance the gap between values on gender. This study has cognitive psychology connotations for the gender ideological gap, and has theoretical and practical value for studying the micro generation mechanism of gender conflicts in society.

Keywords: Gender ideological gap; Gender schema theory; Cognitive differentiation.

1. Introduction

Longitudinal survey data from several European, American and Asian countries has revealed that public attitudes towards gender equality are converging at an ever-accelerated rate along gender lines in recent years. The gender divide in relation to feminist identity, reasonable participation in household chores and equitable allocation of social resources has increased to unprecedented levels [1, 2]. This phenomenon is more noticeable in youth, impacting not only significantly on communication processes in everyday life and intimate relationships between genders, but also the deep polarisation of the core values in the current society. Such accurate disclosure of the inner logic of the expanding gender ideological gap is an issue of social psychology, which needs to respond to the needs of real life, but also to provide theoretical preparation for easing gender opposition emotions and promoting social integration. But from reading the literature, it can be observed that the academic field has been analyzing this phenomenon mainly at the macro level (external factors), through perspectives such as equal access to education, greater participation of women in the working world or changes in economic policies [3, 4] without giving quite as much attention to the psychological way people process and interpret macro changes.

Obviously, structural research offers a necessary social background, within which changes of the gender ideology can be discussed. This type of research not only offers strong evidence of the systematic changes in the value preferences of women as their education and employment improve but also identifies how some men's conservative attitudes can be altered when the economy becomes more uncertain and traditional male jobs are lost [5, 6]. But there is a basic problem with structural explanations: that they obscure, at the group level, psychological differences between individuals - even where they face the same institutional environment and macroeconomic conditions, there is still a wide range of subjective feelings and attitude changes to social change. Hence, the macro variables have to be processed by the individual's cognitive system to finally be converted into specific attitude and behavioural tendencies. A few studies in recent years have begun to investigate psychological

mediating factors like threat perception and group identity, but a theoretical framework based on cognitive processing has yet to be developed to systematically explain the process of the generation and exacerbation of gender ideological differentiation.

This study aims to offer an explanatory model, based on cognitive schemas, as a response to the academic gaps mentioned above. The research suggests that the increasing gender gap in ideology in recent years does not only result from the direct effects of structural forces but stems from the systematic differences in gender cognitive patterns by the long-term socialization process of both gender groups. The same cultural change information in different genders' cognitive filtering systems lead to women experiencing it as a fairness oriented schema, remembering the horizontal comparison of the reference group, and men as a status maintenance oriented schema, in which a future of equality is remembered as a zero sum loss of their interests in the family and workplace. This study further extends the effect of cognitive bias on the social media environment, as a mechanism of amplification, to see how selective contact and algorithmic recommendation can transform individual dissatisfaction that is dispersed across the social media landscape into ideologically very homogeneous groups. In theory, this study tries to fill the gaps of lacking micro psychological mechanisms in the existing structure explanation and supplementarily explain the problem of gender ideological differentiation from the cognitive paradigm; In practice, the analysis results of this study can be used to provide theoretical support with operational implications to understand the psychological basis of the opposition between the two genders in the modern society, to promote effective communication between different gender groups, and to design the social intervention measures..

2. The transformation of reference points in female cognitive schemas

In recent years, there has been a significant increase in the gender ideological gap, characterized by a complete shift in women's ideological perspectives towards egalitarian ideologies that focus on gender equality, structural justice, and independence. Women no longer follow traditional social norms (i.e., the division of labor is assumed to be women's responsibility) but instead seek to share responsibilities within the family domain. This transformation is caused by changes in the reference group; Due to the improvement of socio-economic status, the reference point has also changed accordingly.

According to data from the Organization for Economic Cooperation and Development [6], although significant progress has been made in narrowing the gender gap in educational achievement and labor market participation, gender disparities still exist in labor market integration and outcomes. Modern women have experienced a narrowing of the employment gap; However, they have entered a highly competitive labor market where complete equality in salary, career development, and work life balance has not yet been achieved. Therefore, career requirements such as longer working hours and performance evaluation systems continue to put additional pressure on women's time constraints.

However, when they return to paid work, women still face high levels of dual role pressure and role overload. Despite the improvement in education levels, Brennan's Gallup evidence shows that in approximately 60% to 70% of households, women still bear the majority of household chores [7].

This asymmetric situation affects women's job satisfaction and leads to cognitive dissonance. Therefore, contemporary women no longer evaluate themselves based on their ancestors, nor accept unpaid household chores as a natural and mandatory responsibility but begin to use male partners as a new reference point. From a psychological perspective, Runciman's theory of relative deprivation explains this: when a person compares themselves to others who have structurally more resources, they experience feelings of dissatisfaction [8]. In this situation, when women realize that equal economic investment does not lead to an equal reduction in household responsibilities, they will experience a strong sense of relative deprivation. Current research suggests that women view traditional work and emotional support as unpaid work that undermines their autonomy [9]. This empirical evidence indicates that the cognitive schema of contemporary women has been greatly altered; The family is no longer a place of marital harmony, but has become a place of structural

tension, and unpaid emotional labor is seen as a violation of fairness. By shifting the perception of family imbalance from gratitude to a violation of fairness, contemporary women's ideology deviates from traditional concepts at the structural level and sees the family as another place where equality needs to be tested.

The key is that this generation of modern women not only adjusted their expectations for division of labor; Moreover, there has been a significant transformation in women's personal identity and value system, which has promoted the concept of individual autonomy.

Traditionally, women's identity has been closely linked to motherhood and household chores, limiting their social value to the roles of wives and mothers. However, modern women are more concerned with achieving independent social and professional values, rather than viewing marriage as a key indicator of women's worth. From a psychological perspective, this has led to the widening gender gap in courtship and romantic relationships.

Traditionally, women are expected to engage in emotional labor, be submissive, compassionate, and empathetic, while men are expected to provide economic stability. However, even if economic contributions are equal, women are still expected to continue providing intangible emotional labor. Women's mental health is therefore affected, and a large amount of psychological fatigue is generated due to unpaid emotional work. Due to women's active resistance to this systemic emotional exploitation, while men remain in traditional roles, gender cognitive differences in romantic relationships have become increasingly apparent, leading to the widening of gender ideological gaps.

3. Male Cognitive Patterns and Status Maintenance

At the same time, the opposite ideological shift among men has also contributed to the widening ideological gap, leading to traditionalist and conservative stances.

This regression is caused by asymmetric psychological defense mechanisms, which stem from slow adaptation to masculine norms and lead to viewing the same social changes as status threats. Contrary to the adaptive female cognitive framework, traditional male schemas are quite rigid and view gender relationships as zero sum games [5]. To understand this cognitive difference, one should first examine the male gender cognitive schema.

As mentioned earlier, the cognitive structure of men is closely linked to traditional breadwinner masculinity and role expectations. This means that many men tend to explain social and cultural changes from the perspective of maintaining status and preserving roles, rather than from the perspective of justice. This cognitive mechanism hinders the progressive interpretation of social change.

Based on empirical research, men construct their identity based on their abilities and economic contributions. In this way, men are primarily defined by their role as breadwinners, which gives them male prestige. According to the study by West and Zimmerman [10], men consistently evaluate their family responsibilities from the perspectives of role maintenance and task inequality. They believe that economic contribution is already considered sufficient family contribution to avoid household chores. However, this mismatch arises because when women try to understand whether tasks are equally distributed, men believe they have fulfilled their role as breadwinners, which they see as the primary task. This defensive psychological interpretation process of social reality demonstrates how people protect their own interests. The theory of vested interests [11] explains the need to maintain status, as familiar structures continue to provide psychological value to the role of breadwinner. If egalitarian arrangements reduce social capital associated with the role of breadwinner, it will be perceived as zero sum loss rather than justice.

Furthermore, the situation has worsened as traditional male standards suggest that a person should maintain emotional distance, but new social relationships require emotional labor and reciprocity. According to Anderson's [12] recent feminist research, due to the rigidity of male schemas, men view emerging demands for emotional reciprocity as unnecessary pressure and family burden. Therefore, they tend to withdraw from emotional management.

Even if men consciously attempt to engage in egalitarian practices, any potential threat to male identity can lead to changes in their intentions and behaviors.

This leads to a male paradox: they may consider themselves egalitarians, but their behavior still tends to maintain traditional male identities. For women, this is an empty promise without action, while for men, it seems that women's expectations are constantly changing and can never be met. Overall, this has led to significant ideological differences.

4. Social media as an ideological amplifier

Although psychological schemas explain the potential ideological gap between genders, contemporary social media platforms have become tools for amplifying and polarizing gender ideologies due to selective engagement. Although cognitive schemas explain the ideological background, social media platforms explain why this rift has appeared so distinct, extreme, and polarized in recent years. Importantly, social networks did not create these ideological positions from scratch; They are just amplifiers of existing cognitive biases.

The algorithms of today's social networks aim to maximize arousal and promote emotionally charged content [13]. These algorithms work together with cognitive mechanisms to provide men and women with information that conforms to their gender specific explanatory schemas, thus forming highly homogeneous echo chambers [14]. Contemporary research suggests that the use of recommendation engines leads to the internalization of pre written scripts.

For example, according to Ging [15], young women are pushed for content about feminism, relationship asymmetry, and motherhood punishment, while men are pushed for content about "masculinity crisis" and opposition to feminism in the manosphere.

This type of algorithm promotes the process of social identity [16], transforming individual dissatisfaction into institutionalized collective identity ("us" and "them"). Research on online engagement also suggests that dissatisfaction within social circles can spread through group polarization, as like-minded viewpoints converge and reinforce initially moderate opinions [17]. Therefore, complex social experiences are transformed into binary moral oppositions. Therefore, social media is an amplifier that transforms individual complaints into a division of collective identity and ideology.

5. Refutation and argumentation

A competitive explanation claims that the widening gender ideological gap is primarily a result of structural economic and social changes, rather than psychological ones [3]. The increase in women's access to higher education and career opportunities directly faces institutionalized egalitarian discourse, which shapes their preferences for autonomy. On the other hand, the growing economic uncertainty has weakened the traditional role of breadwinners, leading to a more conservative attitude. Thus, macro structural changes have created a natural ideological divide, as men tend to view institutionalized calls for equality as another systemic burden that threatens their status.

Although these structural changes form the basis of the problem, they cannot explain why the same economic and social pressures can lead to such different perceptions among individuals. According to the gender schema theory [18], individuals do not passively absorb social information but organize their experiences through cognitive schemas developed during the process of gender socialization.

Therefore, the same social changes are filtered through different cognitive schemas.

For modern women, career integration has changed their relational reference points, activating a fairness-based schema that compares family reality with male reference groups and transforms structural tension into a sense of relative deprivation. On the other hand, male cognitive schemas tend to operate in a position-maintenance manner. When the role of breadwinner is challenged by egalitarian arrangements, men respond to reality through vested interests and view it as a zero-sum

loss of status and a threat to masculinity. Therefore, psychological interpretation is the main reason for this phenomenon, rather than social change itself.

This polarization of cognitive differences occurs on social media. Recommendation systems do not create ideological differences from scratch but rather reinforce existing cognitive biases through selective contact [19]. In this way, women are exposed to stories that emphasize emotional labor and systemic inequality, while men are exposed to discussions about status anxiety and erosion of masculinity.

Therefore, macro structural changes only provide raw materials for social tension; The widening gap in gender ideology stems from different interpretations of gender stereotypes.

6. Conclusion

In summary, the widening gender ideological gap in recent years is a crisis of psychological interpretation. As demonstrated in this article, the most powerful explanation is not a specific cultural event, but rather a mismatch in gender cognitive patterns. Faced with social change, men and women are no longer just debating different solutions to social problems; On the contrary, they use increasingly differentiated cognitive frameworks to interpret, perceive, and experience the modern world. Women are increasingly evaluating social change based on egalitarian fairness, while many men still cling to hierarchical views of competence, hegemonic masculinity, and status maintenance. Subsequently, digital media took advantage of this psychological difference and provided it with faster and more emotional dissemination. The echo chamber on social media amplifies dissatisfaction and anger and creates ideological enclaves that appear obvious to both sides, revealing potential cognitive differences.

References

- [1] Pew Research Center. Gender and Politics in Contemporary Society. Pew Research Center Report, 2023.
- [2] National Comprehensive Social Survey. Annual Report on Social Attitudes and Value Trends. NCSS Press, 2022.
- [3] Inglehart R, Norris P. Rising tide: Gender equality and cultural change around the world. Cambridge University Press, 2003.
- [4] Cotter D A, Hermesen J M, Vanneman R. The end of the gender revolution? Gender role attitudes from 1977 to 2008. *American Journal of Sociology*, 2011, 117(1): 259-289.
- [5] Kimmel M. Angry white men: American masculinity at the end of an era. Nation Books, 2013.
- [6] OECD. Gender wage gap (indicator). OECD Publishing, 2024.
- [7] Brennan M. Women still handle main household tasks in U.S. Gallup News, 2020.
- [8] Runciman W G. Relative deprivation and social justice: A study of attitudes to social inequality in twentieth-century England. University of California Press, 1966.
- [9] Yavorsky J E, Kamp Dush C M, Schoppe-Sullivan S J. The production of inequality: The gender division of labor across the transition to parenthood. *Journal of Marriage and Family*, 2015, 77(3): 662-679.
- [10] West C, Zimmerman D H. Doing gender. *Gender & Society*, 1987, 1(2): 125-151.
- [11] Crano W D, Prislin R. Components of vested interest and attitude-behavior consistency. *Basic and Applied Social Psychology*, 1995, 17(1-2): 1-21.
- [12] Anderson E. Hermeneutic labor: The gendered burden of interpretation in intimate relationships between women and men. *Hypatia*, 2023, 38(1): 177-197.
- [13] Brady W J, Wills J A, Jost J T, et al. Emotion shapes the diffusion of moralized content in social networks. *Proceedings of the National Academy of Sciences*, 2017, 114(28): 7313-7318.
- [14] Sunstein C R. Republic: Divided democracy in the age of social media. Princeton University Press, 2018.
- [15] Ging D. Alphas, betas, and incels: Theorizing the masculinities of the manosphere. *Men and Masculinities*, 2019, 22(4): 638-657.

- [16] Tajfel H, Turner J, Austin W G, et al. An integrative theory of intergroup conflict. *Intergroup relations: Essential readings*, 2001: 94-109.
- [17] Rathje S, Van Bavel J J, Van Der Linden S. Out-group animosity drives engagement on social media. *Proceedings of the National Academy of Sciences*, 2021, 118(26): e2024292118.
- [18] Bem S L. Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 1981, 88(4): 354.
- [19] Kunda Z. The case for motivated reasoning. *Psychological Bulletin*, 1990, 108(3): 480.