

Self-Construction of Media Image and Identity Recognition of Female Doctoral Groups on New Media Platforms

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Abstract. Confronted with the challenges of "stigmatization" and stereotyping, female doctoral groups engage in the self-construction of their media image and identity recognition through new media platforms. From the perspective of media construction these groups authentically portray their real-life experiences. They showcase non-traditional images emphasizing self-worth and social responsibility through visual representations, topics, and discourse frameworks, thereby cultivating a strong self-identity while embracing diverse societal recognition.

Keywords: New media platforms, Female doctoral groups, Media image, Identity recognition.

1 Introduction

In recent years, with the development of higher education and the promotion of gender equality, the number of female doctoral candidates in China has been steadily increasing. In 2021, the number of female doctoral candidates exceeded 210,000^[1]. On the international front, according to a survey by Survey of Earned Doctorates in 2019, female doctoral degree recipients in the United States accounted for 46%. The European Union's SHE FIGURES 2018 pointed out that the growth rate of female doctoral candidates has been faster than that of males over the past decade.

Despite the increasing number of female doctoral candidates, traditional news reporting tends to sensationalize their uniqueness, focusing on issues such as the fake diploma marriage preferences, and family matters. In a way, this catering to outdated gender cultural stereotypes has perpetuated stereotypical perceptions of them^{[2][3]}. The challenges of "stigmatization" and identity recognition have persisted in this context.

Nowadays, in an era where new media is increasingly ubiquitous and accessible, do female doctoral groups have the ability to dissolve the biased construction of their media image stemming from traditional power structures, social relationships, and lifestyles? Are they able to attain identity recognition? An observable phenomenon is that some female doctoral groups have already engaged in the practice of self-constructing

their media image on new media platforms. Through content creation and dissemination, they are striving to establish their own identity recognition. Based on this phenomenon, this paper aims to explore:

RQ1: What kind of media image have active female doctoral groups on new media platforms self-constructed?

RQ2: How do the media image constructed by active female doctoral groups on new media platforms, the comments on their works, and discussions on related topics reflect their self-identity and societal recognition?

The answers to these questions will contribute to a clearer understanding of the real circumstances faced by female doctoral candidates and even women as a whole by the general public. It will help the whole society enhance group identity and enable media platforms to better fulfill their role as builders of societal culture. This, in turn, can lead to the improvement of the biased perceptions generated by mainstream media culture.

2 Literature Review

2.1 Research on Female Doctoral Groups

With the development of the feminist movement and feminist studies, research in this field has aimed to break down media gender bias and focus on women's discourse rights and self-awareness^[4]. In recent years, there has been limited foreign research on female doctoral groups, mainly concentrating on the ideal image of female scholars^[5], their academic practices on social platforms^[6], and the academic obstacles they were plagued^[7]. Only few studies have focused on the research achievements of them^[8].

Some domestic research on female doctors has explored their survival status, social roles, and issues related to marriage and childbirth from demographic and sociological perspectives^{[9][10][11]}. These studies have found that factors such as weaker research capabilities, societal biases, and focusing on family are important reasons affecting the employment of female doctoral candidates^[12]. Discussions on the media image of this group have primarily focused on the negative, disadvantaged, and singular image constructed by traditional newspapers, news portals, and variety shows^[13]. Li Mu pointed out that "highly educated women" face media stereotyping due to biased agenda setting and "labeling"^[14]. With the development of new media, some studies have started to address the media image issues of female doctoral candidates on platforms like Douyin and Weibo^{[15][16]}. From a cultural perspective, some research interprets the identity recognition dilemma faced by female doctoral groups as stemming from societal expectations of their family responsibilities and the constraints of patriarchal environment^[17].

In general, research on female doctoral candidates faces two main issues: firstly, the focus of media research has been primarily on traditional media, with relatively limited attention to new media platforms. Secondly, the interpretation of female doctoral groups often starts from the perspective of the "other" with less consideration given to their subjectivity and autonomous practices.

2.2 Theoretical Framework

Social interactions play a significant role in shaping people's cognition, behavior, and values. Media, by curating and presenting information, have the power to influence individuals' understanding and evaluation of social reality^[18]. Guy Debord emphasized that media constructs and influences social relationships among people^[19]. On new media platforms, female doctoral candidates are confronted with various societal expectations and media-induced biases. To tackle these challenges, female doctoral candidates must proactively present themselves to garner recognition and a sense of belonging. This study employs social construction theory and media construction theory to examine the autonomous practices of female doctoral groups on new media platforms.

Erving Goffman suggests that people rely on specific frameworks to infer and interpret their experiences, using them to position various pieces of concrete information. Media frames refer to the ways in which media select, organize, and present information, influencing people's understanding of social reality. News reporting and platforms frame the media image of female doctoral candidates, shaping the group's image. Female doctoral candidates themselves also employ framing techniques for self-expression, adapting to different contexts and demands. This study will utilize framing theory to analyze the media image of female doctoral groups on both traditional media and new media platforms.

Identity recognition refers to the psychological process through which individuals confirm their self-identity, comprehend their affiliation with specific groups, and integrate associated emotional experiences and behavioral patterns^[20]. Female doctoral candidates assume multiple roles, including scholars, women, and mothers. They engage in role adaptation^[21] and conduct holistic self-evaluations, thereby attaining self-identity recognition. As a relatively minority, female doctoral candidates encounter diverse societal pressures. They address these challenges by establishing social categorizations, making group comparisons, and distinguishing themselves. This study will employ identity recognition theory to comprehend the self and social identity of active female doctoral groups on new media platforms.

3 Research Design

3.1 Research Approach and Methods

This study employs content analysis and textual analysis as its research methods. By analyzing the multimodal content produced by active female doctoral bloggers on new media platforms, along with the analysis of comments on their work and related discussions, it aims to explore the media image and identity recognition of the group.

3.2 Sample Selection

3.2.1. Selection of Female Doctoral User Samples

For this study, the research platforms chosen are The Little Red Book and Bilibili, where female doctoral bloggers actively publish their works. These platforms are characterized by a diverse range of female doctoral bloggers, authenticity of their content, and high user engagement, making them suitable for exploring the group's media image.

By searching for keywords like "female doctor" on these platforms, the selection process involved criteria such as the authenticity of bloggers' identities, internal diversity (different ages, marital and parental status, economic status, graduation year, etc.), the influence of their work (having over ten thousand followers and substantial views), and the consistent and active publication of their content. As a result, 30 female doctoral bloggers, including but not limited to "KemaKema," "Jiajia_LotusDream," "Aoao_Tiger" and "Yeye Snowball", who are either currently pursuing their doctoral degrees or graduated within the last ten years, were selected as research subjects.

3.2.2 Selection of Relevant Comments and Topics

For the selected bloggers from 2019 to 2023, a total of 300 multimodal, multithemed, and representative samples of their work were gathered, and their basic content and related data were collected for content text analysis.

Zhihu and Douban are advantageous due to their in-depth discussions, diverse user communities, and significant volume of discussions related to female doctoral candidates. Through searching, a total of 754 discussions were retrieved from Zhihu, along with 7329 discussions and blog posts from Douban groups. These discussions will be used to explore the self-perception and identity recognition of the female doctoral candidate community.

4 Self-Construction of Media Image by Active Female Doctoral Candidates on New Media Platforms

4.1 Category Construction

Based on the content published by the selected bloggers, this section will analyze the self-construction of media image by female doctoral candidates on new media platforms from the dimensions of topic frameworks, discourse frameworks, and image frameworks. The self-identity, emotional identity, and practical identity of the female doctoral candidate community will be analyzed from the dimensions of self-perception, emotional perception, and practical perception. Using comments on works and discussions related to topics, the social identity of the female doctoral candidate community will be analyzed from the dimensions of social categorization, social comparison, and positive differentiation, as shown in the following table 1.

Table 1. Construction Table of Sample Content Analysis Categories

Analysis	Parent Dimen-	Sub-Dimension	Definition or Example
Media Image	sion Image Frame- work	Personal Information	Information about the blogger's profession, university, and location of doctoral study
		Media Interface Setting Index	Visual and textual elements found on the blogger's per- sonal profile page on the platform, including profile pic- ture, background image, and personal signature
		Image Presentation Index	External indicators observed in the blogger's visual and video works, such as hair color, clothing, demeanor, personality, etc.
	Topic Frame- work	Overall Playback Quantity and Classification Data of User Works	General data about the blogger's works, such as view count, categorization, and total number of works
		Specific Work Playback and Classification Data	Detailed data about each individual work, including pub- lication date, view count, likes, etc.
		Work Theme Classifica- tion and Keyword Excerpts	Themes, types, and brief descriptions of the specific works published
	Discourse Framework	Presentation Style of Works	The way in which the works are presented, including the environment, background music, and visual packaging
		Titles and Content Rheto-	The titles and rhetorical devices used in specific works
		Narrative Perspective and Ideological Tendency	The narrative angle and preferred approach to expressing thoughts in specific works (e.g., rational, neutral, emotional)
		Emotional Tone of Works	The emotional tone of specific works (e.g., positive, neutral, negative)
		Reasons for Publishing Works	The initial intentions and reasons for publishing specific works
Identity Recognition	Self-Identity Recognition	Self-Identity	How the blogger perceives their own identity, basic information and functions (e.g., tool-oriented role, educational role, emotional role, autonomous role)
		Emotional Identity	The blogger's emotional awareness as a female doctoral candidate
		Behavioral Identity	The behaviors exhibited by the blogger as a female doctoral candidate in their works
	Social Recogni- tion	Social Categorization, Social Comparison, Positive Distinction	How the social audience defines and perceives female doctoral candidates, their emotions, differences from other groups, and self-classification

4.2 Construction of the Media Image of Female Doctoral Groups

4.2.1. Image Framework

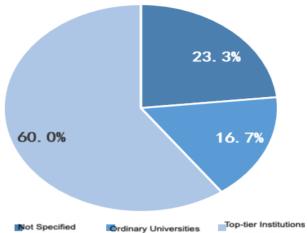


Fig. 1. Distribution of Female Doctoral Blogger's Universities

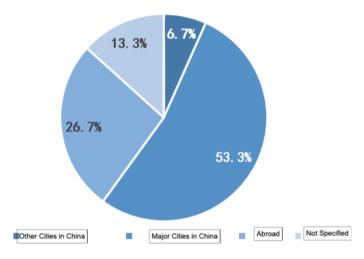


Fig. 2. Distribution of Female Doctoral Blogger's Cities

In terms of the settings on the bloggers' media profiles, female doctoral bloggers with a large number of followers, high view counts, and a substantial number of published works mainly come from top universities both domestically and internationally, as well as major cities worldwide. Their fields of study cover various disciplines, including arts, sciences, and engineering, and the distribution is quite even. The excellent academic backgrounds of these bloggers imply strong research capabilities within the group, as shown in the figure 1 and figure 2.

More than 70% of the bloggers disclose their academic information, such as their university and major, and use authentic photos to portray their real lives. Approximately 60% of them provide genuine contact information, which is used for commercial activities and professional consultation. It demonstrates the bloggers' strong social and business skills, as well as their sense of responsibility for managing their followers, disseminating professional knowledge, and promoting financial literacy, as shown in the figure 3.

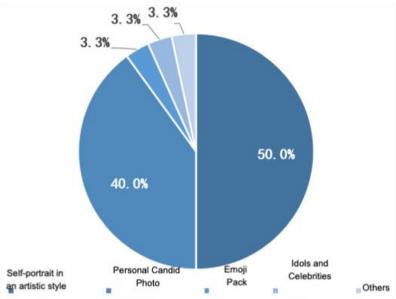


Fig. 3. Types of Images on Female Doctoral Blogger's Homepages

The group's image primarily embodies elegance and intellect, with a variety of appearances. Female doctoral bloggers present diverse identity information, such as yoga instructors, music enthusiasts, and skilled cooks. Their works also exhibit qualities like determination, rigor and critical thinking, breaking away from the traditional stereotypes associated with female doctoral candidates.

In terms of follower count, the audiences tends to show more interest in bloggers with attractive appearances and diverse content, which has helped the female doctoral community challenge stereotypes like being overly focused on academics, lacking life experience, or being socially isolated. Nevertheless, due to commercial influences and the pursuit of platform popularity, some bloggers tend to project overly perfect personal images, which can lead to a new stereotype of being excessively concerned with appearances and image-conscious.

4.2.2. Topic Framework

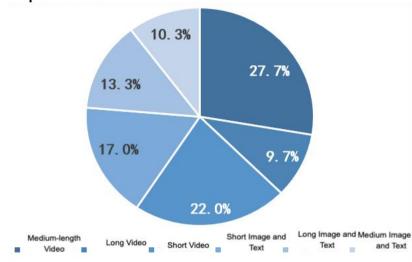


Fig. 4. Types of Content Genres

As shown in the figure 4, the primary format of content is short and medium-length videos (47.7%), showcasing a diverse range of themes. Over half (73.4%) of content blogger autonomously categorize their content based on themes. Female doctoral candidates predominantly delve into personal topics (over 58%), with a primary focus on sharing personal experiences and aspects of daily life. These encompass humorous and meme-based content, such as "What does it feel like to have a funny dad?"; content related to marriage and parenting, offering insights into the journey of balancing childrearing and academic pursuits; and professional science communication, involving the explanation of intricate experiments within their respective fields. Content blogger do not shy away from discussing their marital status, parental responsibilities, or age, thereby portraying the authentic challenges of maintaining a work-life balance during their doctoral studies, thereby enriching the group's image. Furthermore, concerning public topics, female doctoral candidates actively engage in professional science communication and express their viewpoints on contentious subjects, thereby assuming the social responsibility associated with being part of the intellectual elite. For instance, Jiajia disseminates accessible knowledge about biomedicine, while Posy challenges the notion of women being solely responsible for their appearance. Their identity as female doctoral candidates lends credibility and authority to their statements, thereby amplifying the impact of their videos on public discourse.

4.2.3. Discourse Framework

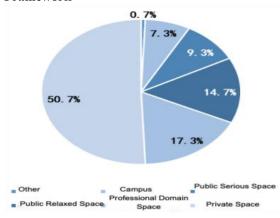


Fig. 5. Spatial Content of Their Works

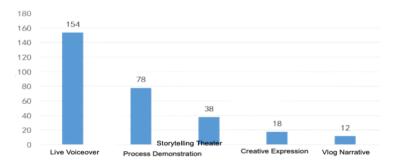


Fig. 6. Blogger' Narrative Styles

In terms of the presentation format, more than half of the content blogger prefer to deliver video content in a vlog-style format within their personal spaces. The videos are well-produced, highlighting the diverse skills of female doctoral candidates, as shown in the figure 5 and figure 6.

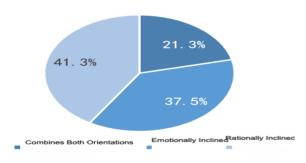


Fig. 7. Map of Bloggers' Ideological Tendencies

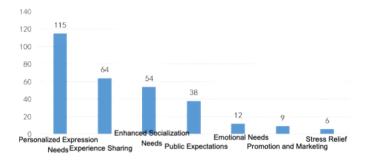


Fig. 8. Implicit Semantic Situation in Content

As shown in the figure 7 and figure 8, regarding narrative style, the content blogger predominantly adopt an internally focused narrative perspective with a positive emotional tone. Their discourse is typically casual and everyday, becoming more rigorous and in-depth only when conveying professional knowledge. The content blogger can balance meeting audience demands, expressing their own emotions, and sharing their life experiences. They provide a comprehensive mix of rational and emotional content to construct a more holistic group image emotionally.

5 Identity Recognition of Active Female Doctoral Candidates on New Media Platforms

5.1 Self-Identity Recognition

Female doctoral candidates demonstrate self-identity through sharing experiences, providing professional insights, and documenting daily life. Nearly all of their content carries identity labels, as shown in the figure 9.

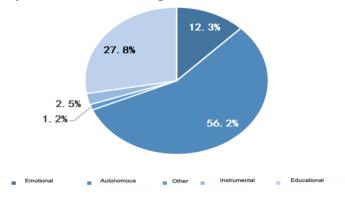


Fig. 9. Map of Bloggers' Self-Identities

The majority of female doctoral candidates (56.2%) perceive their identity as autonomous. They acknowledge the challenges that come with their identity but also recognize that it helps them secure better employment and shoulder more social responsibilities, reflecting the group's rational professional and academic identity.

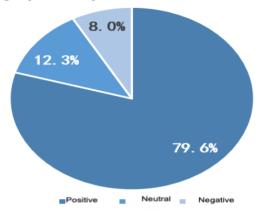


Fig. 10. Map of Bloggers' Emotional Identities

As shown in the figure 10, the depicted group primarily exhibits positive emotions related to their identities (79.6%). This emphasizes the authenticity of their identities and achievements, showcasing the confidence, independence, and intellectual depth associated with being female doctoral candidates. However, the high societal expectations can also lead to a certain level of anxiety within the group, prompting bloggers to express resistance against inquietude and pressure.

Almost all bloggers engage in positive, diverse identity practices. It is worth noting that women play a crucial role in assuming social responsibilities. Bloggers convey positive values and promote knowledge dissemination through knowledge popularization and commentary on current political hot topics.

5.2 Social Identity Recognition among Female Doctoral Candidates

By examining the socio-temporal context, interpersonal interactions within the female doctoral candidate blogger community, as well as the internal stratification and interactions of individuals, the following observations can be made:

Higher Levels of Intrinsic Identity Recognition within Similar Groups

Within the content-sharing spaces predominantly occupied by women, over 80% of female doctoral candidates express satisfaction with their academic and life situations. In the audience domain of female doctoral candidate bloggers, there is a significant resonance among the group, including non-female doctoral candidate audiences. This resonance is characterized by expressions of admiration for the superior material, appearance, or research conditions of female doctoral candidates. Some even form mutual support groups.

Strong Intrinsic Group Social Identity

Within the discussions on various topics, the female doctoral candidate community engages less in the comparison of group categorization or group status. Instead, their intrinsic identity is pronounced, with a primary focus on their own academic and life situations. When emphasizing positive dimensions, the group enhances their self-esteem and social identity by sharing their professional strengths, personal academic competencies, and significant vertical growth in character and network circles.

Differences in Identity and Topic Result in Social Identity Variations

Regarding positive and rational topics and content, comments and discussions demonstrate higher levels of social identity and shared values. However, when it comes to everyday life topics, the perceived distance in identity (psychological, physiological, physical) significantly influences identification. Individuals with less exposure to the female doctoral candidate community tend to harbor stronger biases against the group.

6 Conclusion and Reflection

6.1 Research Findings

- 1. Differing from the flattened and predominantly negative image portrayed in traditional news reports, female doctoral candidate bloggers have self-constructed a three-dimensional and positive image:
 - (1) Highly Knowledgeable Individuals with a Sense of Social Responsibility.

Female doctoral candidate bloggers contribute content related to serious public issues, accounting for over 30% of their posts, while educational and knowledge-sharing content makes up more than 50%. This reflects the group's inclination toward showcasing their "academic orientation" and their concern for public issues in their image construction. This reversal stands in contrast to traditional reporting, where the group was often portrayed as focusing solely on their personal lives, and their academic proficiency was undermined in image frameworks.

- (2) Engaging in Various Fields and Balancing Career and Family as Professionals The bloggers are not confined to traditional social roles, and their portrayal contrasts with the conventional image of women as docile and primarily responsible for household duties. They demonstrate the ability to balance personal life, academic pursuits, and family responsibilities. They excel in various domains, including STEM research, the fashion industry, and the arts, challenging traditional stereotypes.
- (3) Cultivating a Fashionable Persona with a Balance of Internal and External Qualities, and Multifaceted Roles.

The bloggers challenge the traditional media's tendency to "otherize" and depict them as individuals with serious personality and life skills deficiencies. Instead, they are individuals who have achieved success in academia while also focusing on enhancing their appearance, taste, and life skills. They showcase their fashion and life charm, countering the media's biases and portraying themselves as individuals with a balanced blend of internal and external qualities and a multifaceted array of roles.

Female Doctoral Candidate Bloggers Exhibit High Identity Recognition, but There Are Still Differences in Group Social Identity.

Bloggers enhance their self-identity by increasing their media visibility. They exhibit substantial social identity recognition, particularly in rational discussions. However, when engaging in emotional topics, groups further removed from female doctoral candidates still have significant doubts about them, indicating that social distance remains a challenge for full social recognition of female doctoral candidates.

6.2 Research Prospects

In traditional news reporting, female doctoral candidates have often been portrayed with negative and one-dimensional stereotypes. While platforms like China Women's News have presented a more objective and positive image, their reach has been limited. However, the growth of the female doctoral candidate community, the empowerment of new media platforms, and the continuous opening of the social and cultural environment are facilitating a more proactive media image construction by the group. This shift aims to counteract the discourse powerlessness and image distortion resulting from "otherization."

However, the logic of traffic on new media platforms and societal aesthetics continue to frame female doctoral candidates in a new cycle. Female doctoral candidates should be vigilant against being ensnared by commercial logic and must persist in presenting their authentic selves. Platforms should also improve the environment and provide more encouragement for minority groups to create content. The public should enhance their media literacy and focus on higher-quality content. More importantly, governments and universities should provide more reasonable policy support, such as optimizing evaluation mechanisms.

In the future, it is hoped that research on the female doctoral candidate community can enhance the diversity within the sample. Additionally, increasing social surveys to gain a more realistic understanding of the female doctoral candidate community will allow the group to truly gain societal understanding.

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