

A Review of the Mechanisms Underlying the Impact of Occupational Gender Stereotypes on Male Nursing Students' Professional Identity

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Abstract

Purpose: This study systematically examines the psychological mechanisms through which occupational gender stereotypes influence male nursing students' professional identity, providing a theoretical framework for future intervention studies and nursing education practice. **Method:** Using a literature review approach and drawing on a psychological perspective, this study synthesizes and analyzes domestic research literature on occupational gender stereotypes, professional identity, self-efficacy, attribution styles, coping strategies, social support, and psychological resilience. **Result:** Gender stereotypes in the nursing profession do not directly determine male nursing students' professional identity; rather, they exert a negative influence through multiple psychological pathways: they reduce self-efficacy by undermining the processes of success and failure experiences, vicarious experiences, verbal persuasion, and emotional arousal; they induce negative attribution styles that attribute failure to one's own gender traits; they prompt individuals to adopt negative coping strategies such as self-blame, fantasy, and avoidance; and they lower individuals' perceived levels of social support. At the same time, positive coping strategies and high psychological resilience can mitigate the negative effects of gender stereotypes to some extent. **Conclusion:** Occupational gender stereotypes are a complex psychological process. Nursing educators should focus on their underlying psychological mechanisms and enhance male nursing students' professional identity by boosting their self-efficacy, training them in positive attributions and coping strategies, and strengthening their social support and psychological resilience.

Keywords

occupational gender stereotypes, professional identity, nursing, male students, self-efficacy, coping strategies

1. Introduction

In recent years, with the development of the healthcare sector, the ranks of male nurses have gradually expanded, and they have played an increasingly important role in advancing the nursing profession. However, despite high demand, male nursing students (hereinafter referred to as "male nursing students") exhibit low professional identity, and the majority are unwilling to pursue a career in nursing after graduation or leave the profession after working for a short period [1]. Ren Qiuyan and Ren Qi [2] suggest that the fundamental reason for the lack of breakthrough growth in the number of male nurses is that their masculinity has not yet

been successfully integrated with the feminine label associated with nursing. Traditional notions bind nursing to a feminine label, “caregiving” is viewed as a feminine trait, and male nurses’ abilities are stereotypically perceived as “clumsy,” limiting them to physical labor. Consequently, societal trust in male nurses is significantly lower than in female nurses, particularly in departments such as obstetrics and gynecology and pediatrics, where male nurses often face skepticism and exclusion. These factors indicate that occupational gender stereotypes hinder male nursing students’ identification with the nursing profession.

Furthermore, the negative correlation between occupational gender stereotypes and male nursing students’ professional identity has been empirically supported [3,4,5].

While numerous studies have explored the factors influencing professional identity, they have primarily listed various factors from a nursing perspective—such as being an only child, college application choices, and social factors—without focusing specifically on “occupational gender stereotypes” to deeply analyze their mechanisms of action. How exactly do occupational gender stereotypes influence professional identity? This question has not yet been systematically addressed. Psychology emphasizes the interaction between the environment and individual cognition, providing an appropriate theoretical framework for analyzing this process. This paper adopts a psychological perspective to systematically examine the psychological mechanisms through which occupational gender stereotypes influence male nursing students’ professional identity, with the aim of providing a theoretical reference for future research.

2. Concept

2.1 Occupational Gender Stereotypes

Occupational gender stereotypes refer to the practice of distinguishing and categorizing occupations based on single, fixed, rigid, or overly simplified gender factors, thereby creating the fixed impression that a particular gender is suited only for certain occupations. Specifically, this manifests as the division of occupations into “male professions” (such as engineers and doctors) and “female professions” (such as nurses and secretaries). In the field of nursing, the core of occupational gender stereotypes is the belief that “nursing is a female profession.” Once formed, this perception becomes deeply entrenched, thereby rigidifying individuals’ career perspectives and hindering their future choices and development [3].

2.2 Professional Identity

Professional identity refers to the psychological and behavioral tendency of learners to emotionally embrace and acknowledge a profession based on their understanding of it, develop a sense of belonging, and exhibit positive professional behaviors. Professional identity among male nursing students, specifically, refers to their affirmation of their identity as nursing students and future nurses, as well as their positive perceptions and evaluations of the nursing profession [1].

3. The Psychological Mechanisms Through Which Occupational Gender Stereotypes Influence Male Nursing Students’ Professional Identity

3.1 Self-efficacy

Self-efficacy refers to an individual’s assessment and judgment of their ability to perform a specific task. Bandura defines self-efficacy as “the degree of confidence people have in their ability to use their skills to perform a specific task.”

Research has found that the higher the general self-efficacy of male nurses, the greater their sense of personal value, behavioral value, and social value in their nursing work [6]. Research by Jiao Zishan et al. [7] further indicates that male nursing undergraduates with high self-efficacy exhibit stronger professional identity and are more willing to actively engage in clinical practice and professional studies. These studies suggest a link between self-efficacy and professional identity.

Bandura proposed that the formation of self-efficacy is influenced by four factors: personal experiences of success and failure, vicarious experiences, verbal persuasion, and emotional arousal. The existence of

occupational gender stereotypes systematically erodes male nursing students' self-efficacy through these four pathways: Regarding experiences of success and failure, negative external stereotypes about men in the nursing profession cause male nursing students' mistakes to be magnified and their progress overlooked during clinical practice, resulting in fewer successful experiences and directly undermining their confidence in their nursing abilities; Regarding vicarious experiences, the prevalence of occupational gender stereotypes results in a low proportion of male practitioners in the nursing field, creating a scarcity of professional role models. Consequently, male nursing students struggle to find reference points and motivation from the successful experiences of male predecessors; Regarding verbal persuasion, comments from family members and patients—such as “men aren't suited for nursing”—continuously convey negative implications, gradually eroding their self-affirmation of professional competence; In terms of emotional arousal, prolonged exposure to gender stereotypes makes male nursing students prone to negative emotions such as anxiety and inferiority. These emotions further diminish their motivation and confidence in learning and work, ultimately affecting the establishment and consolidation of professional identity. A study by Chen Guijie [8] indicates a positive correlation between traditional notions and social biases and the self-efficacy of male nursing students in specialized programs. In summary, occupational gender stereotypes affect nursing students' professional identity by diminishing their self-efficacy.

3.2 Attribution Method

Attribution refers to the process by which people infer the causes of their own or others' behavior, and includes internal and external attributions. The central tenet of attribution theory is that people's explanations of past successes and failures influence their future expectations, emotional responses, and subsequent behavior.

Existing research has confirmed a close and significant association between attribution styles and professional identity among nursing students. Studies indicate that the level of professional identity among nursing students is significantly positively correlated with internal attribution—attributing success or failure to internal factors such as personal effort—and significantly negatively correlated with external attribution—attributing outcomes to objective factors such as the external environment [9]. A questionnaire survey conducted by Zuo Hongxia et al. [10] involving 211 male nursing students further validated this relationship. The results showed that male nursing students' internal attribution style was positively correlated with their professional identity, while external attribution style was negatively correlated with professional identity. Specifically, individuals with an internal locus of control tend to attribute success or failure to their own abilities and level of effort, and possess a strong sense of self-mastery; in contrast, those with an external locus of control are more likely to attribute success or failure to external forces such as environmental circumstances, opportunities, or luck, and perceive a weaker sense of control over their own behavior. This clearly demonstrates that different attribution styles profoundly influence nursing students' attitudes toward and level of identification with the nursing profession.

Male nursing students often face unique pressures stemming from gender stereotypes in their professional development. When exposed to an environment characterized by occupational gender stereotypes over an extended period, male nursing students may develop a tendency toward negative attribution when facing setbacks in their studies or clinical rotations. This involves attributing failures to intrinsic and stable gender-related traits, such as forming fixed negative beliefs like, “Because I am a man, my manual dexterity is lacking.” This negative attribution—blaming professional difficulties on innate, uncontrollable gender factors—not only undermines individuals' confidence and motivation in facing professional challenges but also further erodes their emotional attachment to and sense of value in the nursing profession, ultimately leading to a sustained decline in their professional identity.

3.3 Response Measures

Coping refers to the cognitive and behavioral efforts individuals intentionally undertake when facing stressful situations or events to manage, tolerate, or reduce the internal and external demands they generate. Positive coping is negatively correlated with anxiety and depression and serves as a protective factor in alleviating negative emotions and reducing psychological stress; Negative coping strategies, on the other hand, are positively correlated with stressors and anxiety; the higher the degree of negative coping, the more severe the individual's negative emotions and the greater their perceived stress [11]. The more nursing

students employ positive coping strategies such as “problem-solving,” the higher their level of professional identity; conversely, the more they use negative coping strategies such as “self-blame and fantasy” or “avoidance,” the lower their level of professional identity [12]. Tang Yun et al. [13] conducted a questionnaire survey of nursing students during the COVID-19 pandemic. The results indicated that the more positive coping strategies nursing students adopted, the higher their professional identity; conversely, the more negative coping strategies they adopted, the lower their professional identity. These findings suggest that when faced with stressors, the different coping strategies adopted by nursing students have varying effects on their professional identity.

As an external source of stress, stereotypes can directly trigger anxiety and depression in nursing students. If they adopt negative coping strategies, these negative emotions—such as anxiety and depression—may intensify, ultimately undermining their professional identity. In contrast, positive coping strategies may serve as a buffer between stereotypes and professional identity, helping nursing students better manage stress and maintain their professional identity. Therefore, different coping strategies can either mitigate or exacerbate the impact of stereotypes on male nursing students’ professional identity.

3.4 Social Support

Social support refers to the various forms of assistance and backing that individuals receive from their social networks—such as family, friends, colleagues, and the community—which enable them to feel cared for, respected, and understood, and to believe that they belong to a network characterized by mutual responsibilities and obligations. Social support is categorized into four main types: emotional support, informational support, instrumental support, and evaluative support. Research indicates that the more social support nursing undergraduates receive, the higher their level of professional identity [14,15]. This indicates a link between social support and professional identity among nursing students. Male nursing students with high levels of social support receive more emotional support and practical assistance from their families, friends, and schools; these resources can mitigate the negative effects of occupational gender stereotypes. Therefore, social support moderates the impact of occupational gender stereotypes on professional identity.

3.5 Mental Resilience

Psychological resilience refers to an individual’s ability to adapt effectively and cope successfully when faced with adversity, trauma, stress, or threats. Zhang Xinjian et al. [16] found that psychological resilience is a key factor influencing nursing students’ professional identity, with a positive correlation between the two. Zhang Shuqi and Shi Ruijie [17] demonstrated that higher levels of psychological resilience are associated with stronger professional identity among undergraduate nursing students at military academies. Gao Gai et al. [18] conducted a survey and analysis that revealed a positive correlation between psychological resilience and professional identity among current graduate nursing students.

Psychological resilience reflects an individual’s core ability to cope with setbacks and adapt quickly; it plays a significant moderating role in alleviating anxiety and depression among nursing students. When faced with adversity, individuals with high psychological resilience can transform stress and negative factors into motivation for self-improvement and growth. In clinical settings with high emotional demands, nursing students with strong psychological resilience are better able to relieve stress and gain positive experiences through strategies such as shifting their focus, thereby achieving physical and mental adjustment as well as professional development [16]. Male nursing students with high psychological resilience are better able to proactively identify and resolve the biases and pressures stemming from occupational gender stereotypes. They transform external doubts into an internal conviction to remain committed to their nursing roles, thereby strengthening and enhancing their professional identity. Thus, psychological resilience serves as a buffer between occupational gender stereotypes and professional identity.

4. Conclusion

4.1 Research Findings and Contributions

From a psychological perspective, this study systematically examines and reveals the complex psychological mechanisms through which occupational gender stereotypes influence male nursing students’

professional identity. The findings indicate that occupational gender stereotypes do not directly determine professional identity; rather, they reduce male nursing students' professional identity by undermining self-efficacy, inducing negative attributions, and prompting negative coping strategies. At the same time, factors such as positive coping strategies, high social support, and high psychological resilience can mitigate the negative effects of these stereotypes to a certain extent. The innovation of this study lies in moving beyond the narrow perspective of previous research, which merely identified external influencing factors, by introducing mediating and moderating variables and analyzing their psychological mechanisms. This provides a theoretical framework for understanding the formation of professional identity among male nursing students and for developing intervention strategies.

4.2 Limitations of the Study and Future Directions

This review also has some limitations. First, most of the psychological mechanism models discussed in this paper are based on cross-sectional studies; the causal relationships between variables and the actual extent of their effects require further validation through longitudinal or experimental studies. Second, psychological factors such as self-efficacy, attribution styles, and coping strategies interact and influence one another; for example, low self-efficacy tends to foster negative attribution tendencies. This paper does not provide a detailed analysis of such complex relationships.

Given these limitations, future research could be refined in three areas. First, long-term follow-up studies should be conducted to further clarify how occupational gender stereotypes continuously influence male nursing students' professional identity through a series of psychological factors. Second, practical intervention strategies should be designed around relevant psychological mechanisms. For instance, curriculum-based training could help male students enhance their self-efficacy, adjust their attribution patterns, and learn to cope with stress effectively, thereby providing practical guidance for nursing education through applied research. Third, differences among male nursing students across various levels of training and clinical settings should be compared. Based on these findings, support and guidance measures tailored to the specific needs of different groups should be developed.

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Conflicts of Interest

The authors declare no conflict of interest.

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