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The Relationship between Age, Internalized Misogyny and the Imposter Syndrome

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Abstract

The present master's thesis explores the relationship between internalized misogyny and imposter syndrome among younger (20–35 years) and older (50–65 years) women, with a focus on generational differences and the potential moderating roles of self-efficacy and self-compassion. Based on literature concerning internalized gender oppression, it explores whether misogynistic beliefs contribute to imposter syndrome and how psychological resources might buffer this effect. A quantitative survey (n = 175) using validated scales assessed internalized misogyny, imposter syndrome, self-efficacy, and self-compassion. Contrary to expectations, internalized misogyny was negatively associated with imposter syndrome. This relationship became non-significant after controlling for age, suggesting that generational context may be a stronger explanatory factor than internalized misogyny. Older women reported higher levels of internalized misogyny but lower imposter syndrome than younger women, indicating meaningful age-related differences in both constructs. Moderation analyses showed that self-efficacy – but not self-compassion – significantly moderated the relationship between internalized misogyny and imposter syndrome, though not in a uniformly protective way: at low self-efficacy, higher internalized misogyny was associated with lower imposter syndrome, while at high self-efficacy, internalized misogyny was associated with increased imposter syndrome after controlling for outliers. These findings point to a complex interplay between internalized misogyny, self-efficacy, and age, highlighting the need for interventions that address both psychological and generational factors. To deepen this understanding and inform more inclusive approaches, future research should further explore these dynamics across diverse social, cultural and professional contexts.

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Introduction

To this day, misogyny – the ingrained hatred, mistrust, or devaluation of women (Griffin, 2017) – remains a pervasive issue in societies around the world. A wide variety of examples illustrate its continuous presence: from the persistent gender wage gap and the objectification of women's bodies, to acts of sexual violence and the ongoing political and social battles over reproductive autonomy (European Commission, 2022; Eurostat, 2024; UNPF, 2021). All of these examples reflect deeply embedded systems of gender-based discrimination that continue to shape the lived experiences of women regardless of age (Miller, 2017).

While these overt forms of oppression offer strong evidence of systemic inequality, misogyny often operates in far more subtle ways. Beyond the surface of institutional policies and public acts of discrimination, it manifests in cultural norms, interpersonal interactions, and, most critically, individual belief systems – implicitly shaping how women perceive themselves, their abilities, and their worth (David, 2014). Internalized misogyny, in particular, refers to the process by which women come to adopt sexist attitudes toward themselves and other women (David, 2014). This phenomenon can appear in various forms, including the passive acceptance of traditional gender roles, the denial of sexism and the devaluation or distrust of women – often accompanied by an internalized belief in male superiority (Piggot, 2004; Szymanski & Moffitt, 2012). Although these attitudes may form subconsciously, they can have a profound negative impact on women's psychological wellbeing (Szymanski & Moffitt, 2012).

While previous studies have explored links between internalized misogyny and mental health outcomes, such as depression, self-esteem, or psychological distress (Szymanski & Moffitt, 2012; Szymanski & Henrichs-Beck, 2014), they have largely overlooked its potential connection with imposter syndrome – a phenomenon that likely stems from similarly internalized negative beliefs. Imposter syndrome refers to the persistent feeling of intellectual fraudulence despite evident competence and success (Clance & Imes, 1978). Although imposter syndrome is not unique to women (Bravata et al., 2019), it is disproportionately experienced by them, particularly in male-dominated or high-performance environments (Price et al., 2024). This present master's thesis seeks to address this gap in the existing literature, assuming that women who have higher internalized misogyny are more inclined to question their competence, credit their achievements to external causes and fear being exposed as unworthy of their success. Incorporating a generational perspective, it is further

hypothesized that younger and older women differ in both the degree of internalized misogyny and the intensity of imposter syndrome. Given that previous research has yielded mixed findings regarding the role of age (Hammond et al., 2018; Gomes et al., 2022; Bravata et al., 2019), this master's thesis aims to clarify the nature of these relationships as well.

Building on the examination of these core associations, the thesis further seeks to identify the influence of potential protective factors that may help mitigate the psychological impact of internalized misogyny and imposter syndrome. Concretely, self-efficacy, the belief in one's ability to achieve goals and manage situations (Maddux, 2016; Bandura, 1977) and self-compassion, the practice of treating oneself with kindness in the face of failure or perceived inadequacy (Neff, 2003). Both constructs have been associated with improved mental health outcomes (Neff & Germer, 2013; Cherry & Wilcox, 2020; Bandura, 2006; Maddux, 2016) and may reduce the likelihood of internalized misogyny translating into self-doubt or imposter syndrome.

Investigating these dynamics is especially important in the context of ongoing efforts to advance gender equality – not only through structural and institutional reforms, but also by promoting individual psychological well-being. Research has consistently shown that higher levels of internalized misogyny are associated with serious negative outcomes, including increased vulnerability to partner violence (Erenoğlu & Sözbir, 2024), lower self-esteem, and heightened psychological distress (Szymanski & Moffitt, 2012; Szymanski & Henrichs-Beck, 2014). These findings underscore the need to better understand internalized misogyny as a contributing factor to women's mental health challenges and social vulnerability. Moreover, examining its possible connection with imposter syndrome may help clarify how internalized negative beliefs about one's gender undermine confidence and well-being, particularly in professional and academic contexts. Such insights could identify new avenues for psychological and organizational support. By further exploring whether self-efficacy and self-compassion can buffer these effects, this thesis aims to generate findings with practical relevance for prevention and intervention across clinical and workplace settings. Additionally, by comparing different age groups, it seeks to illuminate how these experiences evolve across the lifespan, contributing to a more nuanced, generationally informed understanding of women's mental health.

Internalized Misogyny

Internalized misogyny constitutes a form of oppression, rooted in the adoption of societal norms, cultural expectations, and historical power dynamics that reinforce gender inequality (David, 2014). As defined by David and Derthick (2018), oppression exists and operates on three different dimensions: interpersonal, institutional and internalized. Internalized oppression occurs when marginalized individuals absorb systemic discrimination, leading them to adopt negative beliefs about themselves and their group (David, 2014). Socialization – through institutions, peers, and media – plays a central role in transmitting these societal norms, both consciously and unconsciously (Harter, 1999; Pinker, 2002).

Within patriarchal systems – where men disproportionately control power and resources (David & Derthick, 2018; Rich, 1986; Walby, 1989; Walby, 1990) – women are socialized from an early age to internalize beliefs that devalue their own gender (David, 2014; Piggot, 2004). This process fosters internalized misogyny, wherein women adopt and enact sexist ideologies that sustain existing gender hierarchies (Bearman & Amrhein, 2014). Implicit in this process is the promise of conditional access to power and privilege through alignment with patriarchal norms. As a result, women may come to perceive themselves and other women as inferior, exhibiting behaviors such as self-directed negativity, distrust of other women, and a preference for male authority and leadership (David & Derthick, 2018; Hill & Lynch, 1983; Piggot, 2004).

In contrast, general misogyny reflects a broader societal pattern of disdain and devaluation directed at the female gender (Szymanski & Kashubeck-West, 2008). It can be defined as hostility, contempt, or hatred aimed at women (Gilmore, 2001; Griffin, 2017). While internalized misogyny represents an inward-turning process, impacting women's self-concept, interpersonal relationships, and broader social behavior, general misogyny typically manifests externally through discrimination or violence (Erenoğlu & Sözbir, 2024; Bearman et al., 2009; Piggot, 2004; Griffin, 2017).

Drawing on past research, internalized misogyny has been consistently linked to a range of negative psychological outcomes. This includes increased self-doubt, self-deprecation, lower self-esteem, and negative body image (David & Derthick, 2017; Szymanski et al., 2009; Szymanski & Henrichs-Beck, 2014). Furthermore, internalized misogyny has been associated with higher rates of depression, diminished social support, and a greater tolerance for gender-based violence (Szymanski & Moffitt, 2012; Octamelia & Sa'id, 2023; Erenoğlu & Sözbir, 2024). Beyond individual impacts, internalized misogyny

also shapes social dynamics. It fosters rivalry and distrust among women, promotes sexual objectification, and reinforces the broader devaluation of women (Bearman et al., 2009; Piggot, 2004; Szymanski & Moffitt, 2012). Through these mechanisms, internalized misogyny not only perpetuates patriarchal systems but also exerts a profound negative influence on women's psychological well-being and interpersonal relationships. Despite this well-documented range of mental health outcomes, the potential connection between internalized misogyny and imposter syndrome remains largely unexplored – particularly the role that internalized gendered beliefs might play in predicting imposter feelings.

Over time, internalized misogyny has been conceptualized in various ways. One early approach focused on passive acceptance of traditional gender roles, defined as the uncritical endorsement of gender norms and the denial or minimization of sexism across social contexts (Bargad & Hyde, 1991; Downing & Roush, 1985; Fischer et al., 2000). Related constructs such as self-objectification – the tendency to view oneself from an external perspective and prioritize appearance over competence (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996; Noll & Fredrickson, 1998) – and benevolent sexism, which idealizes women while reinforcing traditional roles (Bareket & Fiske, 2023), have also been linked to internalized misogyny. However, empirical evidence supported their conceptual distinctiveness (Szymanski et al., 2009). In its current form, internalized misogyny is understood as a three-dimensional construct comprising the devaluation of women, distrust of women and bias in favor of men (Piggot, 2004). This model forms the theoretical basis for the present thesis.

Dimensions of Internalized Misogyny

The first dimension of internalized misogyny according to Piggot (2004) focuses on the devaluation of women, which is observable across various social and professional domains. One prominent example of institutionalized devaluation is the enduring gender wage gap in Europe. Women earned 12.7% less than men in 2021 for performing comparable work, reflecting a broader pattern of undervaluing women's contributions (European Commission, 2022). This devaluation is further exemplified by the occupational clustering of women in lower-status, feminised roles such as nursing and human resources, and their underrepresentation in high-status, male-dominated fields like surgery and technology (EIGE, 2021; Equinet, 2021). They are also more frequently concentrated in junior positions, face limited access to leadership pathways, and often lack relatable mentors or role models. This contributes to persistent disparities in terms of recognition and remuneration between men and women (Lyness & Thompson, 2000; Eurostat, 2024). Another manifestation of the

devaluation of women is the pervasive sexual objectification they experience across media, interpersonal interactions, and cultural practices. Sexual objectification reduces women to their physical appearance and sexual utility, implicitly valuing their bodies over their intellect, capabilities, and individuality (Ward et al., 2023). This phenomenon, prevalent in both traditional and social media, reinforces the idea that a woman's worth is primarily defined by her attractiveness to others, thereby perpetuating gender hierarchies and limiting women's social and professional recognition (Ward et al., 2023). Importantly, research has shown that sexual objectification also emerges in interactions between women themselves. For example, Bearman et al. (2009) found that conversations between female pairs frequently included objectifying language and attitudes, indicating the internalization and peer-level reinforcement of these norms.

The second dimension of Piggot's (2004) conceptualization – distrust of women – has deep historical roots and continues to shape both societal and interpersonal dynamics. Women's concerns have often been dismissed as exaggerations or fabrications, framed as signs of emotional instability or deceit (Solnit, 2014). Early therapeutic models frequently responded to female disclosures of abuse with disbelief, especially when the perpetrator was a partner or family member (Brown, 2018; Herman, 2015). Today, rape and abuse remain underreported, partly due to the persistent skepticism survivors face, reinforcing long-standing patterns of silencing women (Solnit, 2014). This distrust also manifests in female rivalry. Bearman et al. (2009) found that conversations between women often revealed competition – particularly for male attention and in relation to appearance – marked by suspicion and skepticism. Such dynamics reflect internalized misogyny and are shaped by patriarchal norms that encourage women to view one another as threats. This rivalry reinforces the belief that women are untrustworthy, especially regarding loyalty, honesty, and solidarity (Bearman et al., 2009).

The valuing men over women dimension reflects the belief that men are inherently more competent, rational, and worthy of respect than women (Piggot, 2004). Women who internalize this belief may prioritize male perspectives, seek male validation, and view men as more suited to leadership, intellectual authority, and decision-making roles (Bearman et al., 2009). These attitudes are shaped by early gendered socialization, where boys are associated with autonomy and competence, while girls are linked with emotionality and caregiving (Koenig et al., 2011). Such stereotypes reinforce a hierarchical valuation of masculinity (David, 2014). Media and cultural representations further entrench this bias, frequently casting men as leaders and experts, while women are relegated to supportive or decorative

roles (Collins, 2011; Eagly & Karau, 2002). Educational and occupational structures reflect similar patterns, with male-dominated fields often regarded as more prestigious or serious (Charles & Bradley, 2009). As these three dimensions, devaluation of women, distrust of women, and valuing men over women, are not innate but develop through processes of socialization and internalization, the next chapter will explore these mechanisms in greater depth.

Lifetime Development of Internalized Misogyny

Internalized misogyny emerges through a lifelong process of social learning and reinforcement in a gendered society. From an early age, individuals are taught to adopt and perform gender roles through both imitation (Butler, 1990; West & Zimmerman, 1987) and behavioral conditioning (Hill & Lynch, 1983). This conditioning is maintained by consistent patterns of reward for conforming to gender expectations and punishment for deviation, often through subtle social cues such as approval, exclusion, or ridicule (David, 2018). To this day, these gendered expectations are persistent in specific gender-stereotypes, that refer to commonly held beliefs about the typical characteristics of men and women (Heilman, 2012). Gendered conceptions are not only distinct but often framed as opposites, with each gender perceived as lacking the traits most strongly associated with the other (Heilman, 2012). This internalization of gendered expectations is generally reinforced not only by men but also by other women, who participate in maintaining and policing these norms, often unconsciously (David, 2018). As a result, internalized misogyny becomes a pervasive psychological and social mechanism that sustains broader systems of gender-based oppression.

However, over the past decades, societal norms and gender attitudes have undergone significant change, driven in part by successive waves of feminism. Each feminist movement, from the second wave to the current fourth wave, has contributed to reshaping public and private perceptions of women's roles (Rampton, 2015; Brewster & Padavic, 2000). These shifts have been accompanied by advances such as stronger legal protections, broader educational opportunities, and greater female participation in the workforce (Brewster & Padavic, 2000; Bolzendahl & Myers, 2004). At the same time, the increased visibility of feminist discourse in media, education, and politics suggests that girls and young women today may be socialized in comparatively less sexist environments than those experienced by earlier generations. These societal shifts raise important questions about whether internalized misogyny manifests differently across generations. Nevertheless, research directly examining changes in internalized misogyny between generations remains scarce. To date, no studies

have systematically explored developmental or cohort differences in internalized misogyny.

Findings from studies that investigated related constructs such as ambivalent sexism provide initial insights (Glick & Fiske, 1997). Hammond et al. (2018) found that both hostile and benevolent sexism in women followed a U-shaped trajectory across adulthood, with higher endorsement in early and late adulthood and lower levels during middle adulthood. Additionally, younger cohorts showed steeper declines in sexist attitudes over time compared to older cohorts, suggesting generational shifts away from sexism (Hammond et al., 2018). Similarly, Gomes et al. (2022) reported a significant decline in women's ambivalent sexism between 2009 and 2019. Women exhibited reduced endorsement of protective paternalism and traditional gender differentiation, further indicating a cultural shift toward more egalitarian gender attitudes (Gomes et al., 2022). Based on these findings and due to the lack of specific research, the present thesis aims to investigate potential differences in internalized misogyny between younger and older women. It is hypothesized that differences in internalized misogyny may exist, however no direction is proposed.

In summary, internalized misogyny is shaped through socialization processes that foster negative attitudes toward women, which are subsequently directed inward. These internalized beliefs not only harm women's mental health but may also – as proposed in the present study – contribute to imposter syndrome. The two constructs overlap in underlying feelings of inadequacy, self-doubt, and the devaluation of one's own competence. Notably, imposter syndrome is experienced more frequently and intensely by women (Price et al., 2024). Therefore, it is assumed that internalized misogyny may serve as a psychological mechanism linking gendered socialization to women's experiences of imposterism.

Imposter Syndrome

Imposter syndrome (Clance & Imes, 1978; Clance, 1985) describes a person's persistent tendency to view themselves as frauds, internalizing their failures but attributing their successes to external factors (e.g., luck, timing) beyond their control. This pattern was originally identified in high-achieving women, who, even after earning advanced degrees, excelling in academia, or gaining recognition in their fields, continued to doubt their intellectual legitimacy and feared being found out as undeserving (Clance & Imes, 1978).

The syndrome comprises six distinct emotional and cognitive tendencies: One central component is the *Imposter Cycle*, where individuals oscillate between procrastination and over-preparation, later attributing any success to luck or effort rather than ability (Clance,

1985). *The Need to Be Special* drives them to set unrealistically high standards and failure to meet these expectations reinforces their self-doubt. Moreover, the *Superwoman/Superman Aspect* reflects the belief that competent people achieve success effortlessly – an ideal they feel they consistently fall short of (Clance, 1985). Their *Fear of Failure* results in perfectionistic behaviors and avoidance of risk, while *Denial of Competence and Discounting Praise* keeps them from internalizing positive feedback. Finally, the *Fear of Success* stems from anxiety over sustaining performance and meeting heightened expectations (Clance, 1985). Since the introduction of the imposter syndrome, multiple studies have consistently validated the construct (Brauer & Proyer, 2022; Cozzarelli & Major, 1990; Mak et al., 2019; Rohrmann et al., 2016), providing empirical evidence for its reliability, factor structure, and validity (CIPS; Klinkhammer & Saul-Soprun, 2009).

Origins of Imposter Syndrome

Previous research has explored various contributing factors in the development of imposter syndrome. Broadly, its emergence has been linked to individual psychological characteristics such as perfectionism, self-doubt and attachment styles, as well as to external influences including social inequalities, high-pressure family dynamics, and competitive professional settings (Pannhausen et al., 2022; Want & Kleitman, 2006; Chrousos & Mentis, 2020; Sonnak & Towell, 2001; Gibson-Beverly & Schwartz, 2008); these origins seem to be gender-neutral.

According to Langford & Clance (1993) imposter syndrome originates from a combination of early familial experiences and broader societal influences that shape a distorted self-concept, particularly in women. In family systems characterized by conflict and selective validation, children often learn that their worth depends on meeting high, often unrealistic standards. As a result, they develop perfectionistic tendencies and struggle to internalize success, attributing achievements to effort or external factors rather than ability (Langford & Clance, 1993; Clance & Lawry, 1995). Societal gender norms further compound these dynamics as suggested by Langford and Clance (1993). From an early age, children internalize expectations that differ by gender: males are encouraged to be assertive and independent, while females are socialized to be warm, expressive, and communal (Fagot & Leinbach, 1989; Slaby & Frey, 1975; Eagly et al., 2020).

These gender-specific stereotypes and expectations seem to take shape in early childhood. A study conducted by Bian et al. (2017) revealed that gender-based stereotypes

regarding intelligence begin to form in children as early as six years old. At this age, girls were significantly less likely than boys to associate high-level intelligence with their own gender (Bian et al., 2017). Importantly, girls' lower self-association with brilliance was not related to their perceptions of academic performance, which remained high; rather, it influenced their interests. Girls were less likely than boys to engage with activities described as being for smart children, a difference that was directly linked to their gendered beliefs about intelligence (Bian et al., 2017).

Further research has shown that self-perceptions of gendered traits continue to play a crucial role in adulthood. Fassl et al. (2020) found that particularly the self-attribution of gender-typed characteristics, is a significant predictor of imposter syndrome, beyond the influence of binary gender alone. The authors demonstrated that individuals who associated themselves with traits traditionally considered positive masculine – such as being pragmatic and level-headed – tend to report lower levels of imposterism. In contrast, those who endorsed attributes linked to negative femininity – such as being anxious or confused – were more likely to experience heightened imposter syndrome (Fassl et al., 2020). No significant connection was observed between positive femininity and imposter syndrome, suggesting that it is not femininity per se, but rather the internalization of specific negative feminine traits, that contributes to imposter experiences (Fassl et al., 2020). This supports the idea that especially negative internalized beliefs – such as internalized misogyny – may serve as an underlying factor in the development of imposter syndrome.

One area where the dynamics concerning gendered stereotypes and imposter syndrome are particularly evident is leadership. Leadership is often associated with traditionally masculine attributes like assertiveness and independence (Powell et al., 2002; Heilman, 2001), whereas women are typically viewed as warm and communal – traits that are perceived as less compatible with leadership roles (Eagly et al., 2020). As a result, women may feel out of place or undeserving in leadership positions, having internalized societal signals that suggest they do not belong (Heilman, 2012; Haynes & Heilman, 2013). Awareness of these stereotypes alone can be enough to trigger imposter syndrome (McClain et al., 2016), which helps explain why gender differences in imposter syndrome appear inconsistently across studies – emerging most clearly in contexts where women's legitimacy is implicitly questioned (Bravata et al., 2019). Thus, representation might play an important role when considering the manifestation of imposter syndrome. Women and ethnic minority individuals are often concentrated in specific roles – frequently underrepresented in high-status, male-dominated fields and overrepresented in roles such as nursing or human resources (EIGE,

2021; Equinet, 2021). They are also less likely to occupy leadership roles, while receiving lower compensation for their contributions (Lyness & Thompson, 2000; Eurostat, 2024). These structural inequalities can foster a sense of not belonging, leading individuals to question their legitimacy in certain professional spaces. As Chakraverty et al. (2020) note, limited representation and unequal treatment can heighten feelings of self-doubt, making individuals more vulnerable to experiencing imposter syndrome within traditionally exclusive environments.

While these findings point to a possible difference between genders concerning the frequency and intensity of imposter syndrome, existing research has yielded mixed findings. Despite the early work by Clance and Imes (1978) suggesting that women are particularly vulnerable to imposter syndrome due to internalized gender stereotypes, empirical findings have been inconsistent. A meta-analysis by Bravata et al. (2019) found that roughly half of the studies reported higher imposter feelings in women, while the other half found no significant gender differences. However, a more recent meta-analysis by Price et al. (2024) confirmed a small to moderate gender effect ($d = 0.27$), with women experiencing imposter syndrome more frequently and intensely than men. Importantly, the size and presence of gender differences appear to vary depending on factors such as geographic region, professional domain, and the measurement instrument used (Bravata et al., 2019; Price et al., 2024). In sum, the current evidence points to a modest but meaningful gender difference in imposter syndrome, with women experiencing it more frequently and intensely than men (Price et al., 2024). This disparity may be shaped by internalized misogyny as proposed in the present master's thesis.

Effects and Correlates of Imposter Syndrome

Empirical research has consistently demonstrated that imposter syndrome is associated with a range of negative psychological outcomes. It has been linked to lower self-esteem (Chrisman et al., 1995), reduced research self-efficacy (Jöstl et al., 2012), diminished academic self-concept (Leary et al., 2000), and lower performance expectations (Cozzarelli & Major, 1990). Moreover, individuals experiencing imposter syndrome often report elevated levels of depression and anxiety, along with an intensified fear of both success and failure (Bernard et al., 2002; Fried-Buchalter, 1997). This constellation of effects may contribute to a self-perpetuating cycle: fear of failure fosters procrastination and reduced productivity, which in turn reinforces self-doubt and feelings of inadequacy (Neureiter & Traut-Mattausch, 2016a,

2016b). Vergauwe et al. (2014) found that imposterism was closely linked to high levels of neuroticism, and maladaptive perfectionism. In occupational contexts, individuals with high imposter tendencies reported lower job satisfaction and were less likely to engage in organizational citizenship behaviors. Additionally, their continued employment often appeared driven by fear of change or perceived risks rather than genuine emotional commitment (Vergauwe et al., 2014). Similarly to internalized misogyny, imposter syndrome seems to contribute to negative mental health outcomes by fostering self-doubt, perfectionism, and diminished self-worth, suggesting that these phenomena may intersect to intensify psychological distress, particularly among women.

Imposter syndrome has also been examined in relation to demographic factors such as age, although findings in this area remain mixed. Some research suggests that imposter syndrome tends to decline with age, particularly among working professionals, as shown by Brauer and Proyer's (2017) study. They reported a significant negative correlation between age and imposter syndrome in a professional sample, but not among students. Other studies, however, have found no association between age and imposterism (Bravata et al., 2019). Medline et al. (2022) indicate that older age was significantly associated with lower levels of imposter syndrome, suggesting it may decrease with professional and personal experience. Specifically, participants aged 30 – 34 years reported significantly higher imposter syndrome scores compared to those aged 45 – 49 years (Medline et al., 2022). While these findings point to a potential age-related decline, the overall evidence remains inconclusive. Therefore, the present master's thesis aims to explore potential differences in imposter syndrome between younger and older women, hypothesizing that such differences exist, without specifying a directional effect.

Connecting Internalized Misogyny and Imposter Syndrome

To emphasize the proposed relationship between imposter syndrome and internalized misogyny, the following section situates these constructs within a broader theoretical framework. Nadal et al. (2021) argue that internalized oppression may interact with imposter syndrome and related concepts such as stereotype threat, microaggressions, and overt discrimination via persistent exposure to negative social messages from various sources (e.g., family, media, education). These negative social messages might be internalized over time and can manifest as imposter syndrome and stereotype threat, particularly in academic and professional settings, where individuals may doubt their abilities or fear confirming negative

stereotypes (Nadal et al., 2021).

This underscores the assumption that internalized misogyny might significantly contribute to the development of imposter syndrome. Societal gendered microaggressions, such as being dismissed or undermined in male-dominated spaces, might reinforce feelings of inadequacy and self-doubt, even among high-achieving women (Clance & Imes, 1978). This assumption is backed by recent research, indicating that systemic underrepresentation in fields like STEM and persistent microaggressions emphasize imposter feelings, undermining confidence and success (Espinosa, 2011; Nadal, 2018). The model further highlights a cyclical pattern, where even successful individuals may continue to experience microaggressions, reinforcing internalized oppression and exacerbating imposter syndrome and stereotype threat. Concerning intersectionality, the model emphasizes that individuals with multiple marginalized identities may face compounded experiences of discrimination and internalized oppression (Nadal et al., 2021). For instance, Black women may experience both racial and gendered microaggressions, amplifying feelings of imposterism (Bernard et al., 2017).

Ultimately, according to Nadal et al. (2021) imposter syndrome might operate as a psychological consequence of structural inequalities, where systemic barriers and discrimination contribute to persistent self-doubt and hinder the professional and personal advancement. Based on Nadal et al.'s (2021) model as well as the extensive review of literature, it is therefore assumed that internalized misogyny and imposter syndrome are positively related.

Protective Factors against the Imposter Syndrome

Psychological resources may serve as important protective factors against the harmful impact of internalized beliefs such as internalized misogyny and imposter syndrome. Growing evidence has highlighted self-efficacy and self-compassion as relevant buffering mechanisms (Bandura, 2006; Neff, 2003; Maddux, 2016). These constructs represent internal mechanisms that not only foster resilience and self-confidence but also help individuals cope with chronic self-doubt and feelings of inadequacy (Bandura, 2006; Neff, 2003; Maddux, 2016). By strengthening beliefs in one's own competence and cultivating a kinder, less critical attitude toward oneself, self-efficacy and self-compassion may mitigate the emotional distress associated with persistent negative self-evaluations, thereby promoting psychological well-being.

Self-Efficacy and Self-Compassion

Generally, self-efficacy refers to individuals' beliefs in their own capacity to influence events and achieve desired outcomes through their actions (Maddux, 2016; Bandura, 1977). These beliefs shape goal-setting, motivation, persistence, and resilience when facing challenges, making self-efficacy a key factor in psychological functioning and well-being (Bandura, 1997; Maddux, 2016). Unlike traits or intentions, self-efficacy is a context-specific belief in one's potential to act effectively in a given situation (Maddux, 2016). Concerning the imposter syndrome – which is marked by pervasive self-doubt and fear of being exposed as a fraud (Clance & Imes, 1978) – self-efficacy plays a particularly relevant role. Research has shown that individuals with low self-efficacy are more likely to experience imposter feelings, as they question their competence despite evident achievements (Jöstl et al., 2012; Tao & Gloria, 2019). In line with this result, Pákozdy et al. (2024) also found that self-efficacy and imposter syndrome are negatively associated among university students. Conversely, strong self-efficacy beliefs seem to serve as a buffer against imposter syndrome by promoting a more accurate and confident self-appraisal (Bandura, 2006; Maddux, 2016). These overall findings underscore the assumption that individuals with higher self-efficacy are less likely to experience imposter feelings, even in the presence of internalized misogyny, as self-efficacy may buffer the negative effects of internalized gendered beliefs.

The second moderation variable, self-compassion, has been found to be positively associated with self-efficacy (Liao et al., 2021), and several studies have identified self-compassion as an opposing factor to imposter syndrome (Barnard & Curry, 2012; MacBeth & Gumley, 2012). Self-compassion, as described by Neff (2003), involves extending kindness and understanding to oneself during times of failure, inadequacy, or distress, rather than responding with harsh self-criticism. It consists of three interconnected elements: mindfulness, which encourages individuals to acknowledge painful emotions without becoming overwhelmed by them; a sense of common humanity, which helps people understand that imperfection and struggle are part of the universal human experience; and self-kindness, which promotes a gentle and supportive inner dialogue (Neff, 2003).

Individuals who experience the imposter phenomenon often exhibit deficiencies in all three core components of self-compassion – tending to be overly self-critical (low self-kindness), feeling uniquely inadequate (low common humanity), and becoming consumed by negative emotions (low mindfulness) (Patzak, 2017). Fostering self-compassion may therefore play a crucial role in helping individuals reinterpret failure, reduce self-doubt, and

build a healthier, more resilient self-concept (Neff, 2003). Past research has so far supported these assumptions. Self-compassion has been found to be strongly linked to psychological well-being, with higher levels associated with lower symptoms of depression, anxiety, and stress, as well as greater emotional resilience and intrinsic motivation (Barnard & Curry, 2012; MacBeth & Gumley, 2012). In academic environments, it supports adaptive coping by fostering mastery-oriented goals and reducing fear of failure (Neff et al., 2005). Self-compassion has also been shown to reduce the impact of maladaptive perfectionism and negative self-talk (Gilbert, 2006). Cherry and Wilcox (2020) indicated that self-compassion played a mediating role in the relationship between sexist microaggressions and sexism-based trauma symptoms (SBTS). Specifically, women who reported experiencing more sexist microaggressions exhibited lower levels of self-compassion, which in turn, was associated with higher SBTS. This supports the idea that self-compassion can act as a protective factor, buffering the psychological harm caused by discrimination and microaggressions (Neff, 2003).

A different study conducted by Patzak et al. (2017) has found a mediating effect of self-compassion between gender-role orientation and imposter syndrome, suggesting that fostering self-compassion may serve as a valuable strategy for reducing imposter experiences. The authors also reported that female, feminine, and undifferentiated students exhibited higher levels of imposter syndrome and lower levels of self-compassion compared to their male, masculine, or androgynous peers. Additionally, a negative association between imposter syndrome and self-compassion was observed across all student groups (Patzak et al., 2017). Stevenson and Allen (2017) found that women who demonstrate higher levels of self-compassion also tend to feel more personally empowered. This suggests that self-compassion may also play a critical role in fostering a sense of agency and resilience in the face of internal and external challenges.

Building on this body of evidence, the present thesis seeks to examine whether self-efficacy and self-compassion function as buffering variables in the experience of imposter syndrome, potentially mitigating its negative psychological effects.

Research Questions and Hypotheses

The present thesis investigates the following research questions:

RQ1: *Are internalized misogyny and imposter syndrome related differently in younger versus older women?*

RQ2: *To what extent do Self-Compassion and Self-Efficacy moderate the relationship between internalized misogyny and imposter syndrome?*

To investigate the proposed relationships, and drawing on prior empirical findings within these domains, the following hypotheses are formulated:

H1a: The level of internalized misogyny predicts the severity of imposter syndrome, with higher internalized misogyny associated with higher imposter syndrome.

H1b: There is a difference between younger and older women in the degree of their internalized misogyny.

H1c: There is a difference between younger and older women with regard to the severity of imposter syndrome.

H2a: Self-efficacy moderates the association between internalized misogyny and imposter syndrome, such that the relationship between internalized misogyny and imposter syndrome is weaker among individuals with high self-efficacy. While the association may not be significant due to power issues, I expect at least a medium sized effect.

H2b: Self-compassion moderates the association between internalized misogyny and imposter syndrome, such that the relationship between internalized misogyny and imposter syndrome is weaker among individuals with high self-compassion. While the association may not be significant due to power issues, I expect at least a medium sized effect.

Methodology

The present study employed a cross-sectional, between-participants design. Data were collected using an online questionnaire, which enabled anonymous participation and broad accessibility. The study was preregistered on the Open Science Framework (OSF); the preregistration, study materials, and data are available via the following link: https://doi.org/10.17605/OSF.IO/P5UC7. Ethical approval was obtained from the Departmental Review Board at the University of Vienna (DRB number: 2024/W/013). Prior to participation individuals received detailed information about the study and provided informed consent.

Sample Description

In sum, a total of 200 participants were recruited via personal contacts, social media platforms, university-affiliated groups, and the website *wechselweise.net* – a website targeted at middle aged women. As the sample was drawn based on accessibility and availability, it is considered a convenience sample. Participants were not compensated for their participation. Upon completion, participants received a debriefing that clarified the study's aims.

To be included in the study, individuals had to provide informed consent, belong to one of the specified age groups (20–35 years or 50–65 years), and have been socialized as female, including all cisgender women and non-binary female read persons. Additionally, participants who completed the survey in less than 180 seconds were excluded, as such rapid completion raised concerns about data quality. This decision was informed by the study's preregistered plan to identify and exclude "speeders" – participants who completed the survey unusually quickly – analyzing the distribution of completion times and excluding those below the 10th percentile. However, in the final sample, the 10th percentile corresponded to a completion time of only 44.1 seconds, which was deemed unrealistically fast for thoughtful participation. Therefore, a more conservative and practical cutoff of 180 seconds was applied instead. A total of three participants were excluded due to missing consent, nine were excluded for not meeting the gender identity requirement, and fifteen did not fall within the designated age categories. Notably, two of these mentioned participants failed to meet both the gender identity and age criteria. This resulted in a total of 25 exclusions from the initial sample.

Most participants had a high school degree equivalent to a university entrance qualification exam or were pursuing higher education. Participants were overall politically

left-leaning and not religious. Regarding ethnicity, the majority reported no migration background with only five participants meeting the criteria for having a migration background (both parents born abroad). Participants, on average, identified moderately with feminist attitudes (M = 5.13, SD = 1.78). A summary of the sample descriptives is shown in Table 1.

Significant age differences between the two groups were found for political attitudes, religiosity, self-assigned feminism, and ethnicity. Compared to younger participants, older participants reported more conservative political attitudes, higher religiosity, lower self-assigned feminism, and lower ethnic diversity. No significant differences were found for education level (see Appendix B, Table 7).

Table 1

Sociodemographic Statistics for the Entire Sample (n=175)

Variables	*n*	*M*	*SD*
Age			
20 – 35	118.00	24.92	.29
50 – 65	57.00	55.82	.58
Education			
No university entrance qualification	21.00		
With university entrance qualification	64.00		
Bachelor's Degree	43.00		
Master's/Diploma	42.00		
Doctorate	5.00		
Religiosity		2.57	1.70
Political Attitude		2.86	1.29
Ethnicity		.03	.17
No Migration Background	168.00		
Migration Background [a]	5.00		
Self-Assigned Feminism		5.13	1.78

Notes. Data collected through self-report (1 = strongly disagree, 7 = strongly agree); education level (1 = lowest, 5 = highest)
[a] Both parents born outside the country.

Measures

Internalized Misogyny Scale (IMS; Piggot, 2004)

Internalized misogyny, the independent variable, was measured using the German version of the Internalized Misogyny Scale (IMS; Piggot, 2004), translated by Reiter et al. (2025). The scale comprises 17 items covering three dimensions: devaluation of women (e.g., "I think that most women would lie just to get ahead"), distrust of women (e.g., "Women are

too easily offended"), and preference for men over women (e.g., "I prefer to work for a male boss"). Responses were recorded on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Construct validity of the Internalized Misogyny Scale (IMS; Piggot, 2004) has been supported through factor analysis and convergent validity, demonstrated by significant correlations with related constructs such as modern sexism and body image concerns (Piggot, 2004). Measurement invariance further confirmed its applicability across different groups, including heterosexual and non-heterosexual women (Han et al., 2023).

Clance Impostor Phenomenon Scale (CIPS; Klinkhammer and Saul-Soprun, 2009)

The dependent variable, imposter syndrome, was assessed using a German short version of the Clance Impostor Phenomenon Scale (CIPS; Klinkhammer & Saul-Soprun, 2009). This version comprises six items assessing feelings of self-doubt, fear of being exposed as a fraud, and attributing success to external factors. Responses were recorded on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree). Example items include: "I fear failing at new tasks, even though I am usually good at what I do" and "I'm afraid people important to me may find out I'm not as capable as they think I am". The German version was used based on Brauer and Wolf's (2016) translation. Construct validity of the CIPS was shown through confirmatory factor analyses, which supported a unidimensional structure (Wang et al., 2024). Additional evidence was provided by meaningful relationships with relevant psychological variables: higher scores were linked to greater emotionality, job stress, and turnover intention, while lower levels were associated with traits like conscientiousness, extraversion, and overall job satisfaction – supporting both convergent and discriminant validity.

Generalized Self-Efficacy Scale (GSES; Schwarzer & Jerusalem, 1995)

Self-Efficacy, the first moderating variable, was measured using the German version of the Generalized Self-Efficacy Scale (GSES; Schwarzer & Jerusalem, 1995), translated by Schwarzer (1999). The scale includes ten items measuring individuals' confidence in their ability to cope with challenges and achieve goals (e.g. "Even when unexpected events occur, I believe I can handle them."). Responses were provided on a 4-point Likert scale (1 = not at all true to 4 = exactly true). Criterion-related validity has been assessed through multiple correlational studies showing positive associations with favorable emotions, dispositional optimism, and job satisfaction. Conversely, negative correlations have been observed with

depression, anxiety, stress, burnout, and physical health complaints (Rimm & Jerusalem, 1999).

Self-Compassion Scale (Neff, 2003)

Self-Compassion, the second moderating variable, was assessed using the German version of the Self-Compassion Scale – Short Form (SCS-D; Neff, 2003), translated and validated by Hupfeld and Ruffieux (2011). The scale consists of twelve items assessing self-kindness, mindfulness, and a balanced perspective on personal suffering (e.g. "When I'm going through a tough time, I give myself the care and understanding I need"). Responses were recorded on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The SCS-D has also demonstrated good construct and criterion validity (Hupfeld & Ruffieux, 2011). It shows expected correlations with related constructs such as mindfulness, self-esteem, emotional intelligence, and personality traits. It is negatively associated with anxiety, depression, and negative affect, and positively related to life satisfaction and positive affect (Hupfeld & Ruffieux, 2011).

Control Variables

Several demographic and ideological variables were included to control for possible confounding effects. Age was measured with a single open-ended item ("How old are you?") while Ethnicity was assessed using three categorical items about participants' and their parents' countries of birth (Social Survey Austria; Hadler et al., 2024). Education was measured with a single ordinal item ("What is your highest level of education?") offering six categories (e.g., "secondary school with university entrance qualification," "Bachelor's degree"), also based on Hadler et al. (2024). The variable Religiosity was captured using a single-item, 7-point Likert scale ("Many people officially belong to a religion, but practice it very differently. How is it for you: Do you consider yourself a religious person?", 1 = not at all, 7 = completely, Reiter et al., 2024). Political attitude was indicated on a single-item continuous scale ("In politics, people sometimes talk about left and right. Where would you place yourself on this scale, where 0 means left and 7 means right?", Hadler et al., 2024). Lastly, feminist self-identification was evaluated with a single item („I see myself as a feminist and actively support gender equality") on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree), adapted from the Feminist Identity Development Scale (Bargad & Hyde, 1991).

Procedure

The data collection was conducted entirely online using the survey platform Unipark and the questionnaire was accessible to participants from December 13th to December 19th, 2024. Participation was voluntary and anonymous.

At the beginning of the survey, participants were asked to provide their age and gender identity. Subsequently, they completed a range of psychological and demographic measures, including scales assessing internalized misogyny, imposter syndrome, self-compassion, self-efficacy, and several control variables such as religiosity, political orientation, feminist self-identification, ethnicity, and education level. Additionally, participants were presented with a set of short vignettes, which they were asked to evaluate as part of a separate study on internalized misogyny. These vignettes were included in the same survey.

To minimize order effects, all individual scales, the set including all control variables, and the set of vignettes was randomized across participants. Although the vignette data were collected in the same session, they were designed for and analyzed as part of a separate study conducted by a colleague and were not included in the analyses of the present thesis. At the end of the survey, participants received a debriefing explaining the broader aims of the study as well as the theoretical background of the constructs assessed. On average, participants completed the survey in approximately 15 minutes.

Statistical Analysis

All analyses were conducted using IBM SPSS Statistics (IBM Corp., 2023) and the PROCESS macro for SPSS (Version 4.2; Hayes, 2022). Prior to the main analyses, missing data were assessed. As preregistered, participants were required to have responded to at least 80% of questionnaire items to be included in the analysis. While the preregistration stated that missing data would be handled using the Maximum Likelihood Estimation (MLE) method, mode imputation was used for the present analyses. This method was employed due to the minimal extend of missing data, as only two values were missing on the categorical variable *ethnicity* (1.1% of the sample). Mode imputation is considered appropriate in cases of low missingness for categorical variables, as it maintains the distribution of the data without introducing notable bias (Allison, 2002).

The relationship between internalized misogyny and imposter syndrome (Hypothesis 1a) was examined using multiple linear regression. Control variables – age, ethnicity, religiosity, political attitude, self-assigned feminism, and education level – were included in

this model and retained in all subsequent analyses. To address Hypotheses 1b and 1c, independent samples t-tests were used to compare levels of internalized misogyny and imposter syndrome across age groups. Moderation analyses based on PROCESS Model 1 were used to assess whether self-efficacy and self-compassion moderated the association between internalized misogyny and imposter syndrome (Hypotheses 2a and 2b). An exploratory moderation analysis was also conducted to examine the potential moderating role of age group in this relationship. To evaluate the robustness of the findings and identify influential cases, sensitivity analyses were performed using Mahalanobis and Cook's distance. Additionally, bootstrapping (1,000 bias-corrected resamples) was used in all moderation models to generate robust confidence intervals and reduce reliance on parametric assumptions.

Results

Preliminary Analyses

Prior to the analyses, the assumptions of multiple linear regression were tested. Specifically, linearity, independence of residuals, homoscedasticity, absence of multicollinearity, and normality of residuals. The assumption of linearity was evaluated through a scatterplot of standardized residuals against standardized predicted values, which revealed no systematic pattern, indicating that the relationship between the predictor and outcome variable was approximately linear (see Appendix B, Figure 6). The independence of residuals was confirmed by the Durbin-Watson statistic, which yielded a value of 2.05. As values close to 2 suggest the absence of autocorrelation, this assumption was consi*d*ered met. Homoscedasticity was checked via visual inspection of the residual scatterplots, which showed no evidence of funneling or heteroscedastic patterns, suggesting that the variance of residuals was evenly distributed across predicted values. Normality of residuals was examined using both statistical tests and visual diagnostics. The Shapiro-Wilk test was non-significant, $W = 0.99$, $p = .852$, and the Kolmogorov–Smirnov test also indicated no violation of normality, $D = 0.04$, $p = .200$. Furthermore, the histogram showed an approximately normal distribution of standardized residuals (see Appendix B, Figure 7). Lastly, multicollinearity was not a concern, as all variance inflation factor (VIF) values were well below the conventional threshold of 10, with all values falling below 2. Based on these diagnostics, the data were deemed suitable for multiple linear regression analysis.

Possible ranges, means, standard deviations as well as Cronbach's α among all main

study variables are presented in Table 2. A summary of skewness and kurtosis values for all variables can be found in the Appendix B (Table 8), as well as the correlation matrix (Appendix B, Table 9).

Table 2

Possible Ranges, Means, Standard Deviations, and Reliability among all Main Study Variables.

Variables	Possible Range	*M*	*SD*	Cronbach's α
Internalized Misogyny	1 – 7	2.21	.85	.89
Imposter Syndrome	1 – 7	4.00	1.54	.91
Self-Efficacy	1 – 4	2.99	.43	.86
Self-Compassion	1 – 7	4.23	1.00	.86

Notes. $n = 175$

Hypothesis 1a

In the initial simple linear regression model without control variables, internalized misogyny significantly predicted imposter syndrome, $B = –0.58$, $t(173) = –4.20$, 95% CI [–0.80, –0.29], $p < .001$. The model explained 9.3% of the variance in imposter syndrome scores, $R^2 = .09$, $F(1, 173) = 17.66$, $p < .001$. However, after control variables were included in the multiple linear regression model (i.e., age, political attitude, education, religiosity, ethnicity, and self-assigned feminism), the effect of internalized misogyny was no longer statistically significant, $B = –0.10$, $t(167) = –0.64$, 95% CI [–0.39, 0.20], $p = .522$. The overall model remained statistically significant and demonstrated an improved fit, $F(7, 167) = 10.50$, $p < .001$, explaining approximately 30.6% of the variance in imposter syndrome. All values are summarized in Table 3.

An exploratory stepwise regression analysis was conducted to identify the strongest predictors of imposter syndrome. In the first step, age emerged as a significant negative predictor, $B = –0.05$, $t(173) = –7.87$, 95% CI [–0.07, –0.04], $p < .001$, accounting for 26.3% of the variance, $R^2 = .26$. In the second step, political attitude was added to the model and significantly improved the model fit, $B = –0.20$, $t(172) = –2.54$, 95% CI [–0.36, –0.05], $p = .012$. The final model explained 29.0% of the variance in imposter syndrome, $R^2 = .29$, $F(2, 172) = 35.14$, $p < .001$. Other variables – including internalized misogyny, education, religiosity, ethnicity, and self-assigned feminism – did not contribute significantly to the prediction of imposter syndrome and were excluded from the model.

Table 3

Multiple Linear Regression: Effect of Internalized Misogyny on Imposter Syndrome

Predictors	*B*	*SE*	*β*	*t*	95% CI		*p*
					LL	*UL*	
Intercept	6.33	.72		8.86	4.92	7.75	<.001*
Internalized Misogyny	-.10	.15	-.05	-.64	-.39	.20	.522
Age	-.05	.01	-.46	- 6.08	-.06	-.03	<.001*
Education	-.05	.10	-.04	-.54	-.24	.14	.590
Religiosity	.11	.07	.19	1.60	-.03	.24	.112
Political Attitude	-.23	.10	-.19	-.20	-.41	-.04	.018*
Ethnicity [a]	-.61	.62	-.07	-.07	-1.82	.60	.319
Self-Assigned Feminism	.01	.07	.01	.01	-.134	.16	.882

Notes. $n = 175$, *B* = unstandardized coefficient; *SE* = standard error; *β* = standardized coefficient; CI = confidence interval; *LL* = lower limit; *UL* = upper limit.
Significance level*p < .05
[a] 0 = No Migration Background, 1 = Migration Background.
DV = Imposter Syndrome

To further examine the robustness of the regression results, a bootstrapping procedure with 1,000 resamples was conducted using bias-corrected and accelerated (BCa) 95% confidence intervals. The results supported the findings of the standard regression analysis. Age (*B* = –0.05, BCa 95% CI [–0.1, –0.03]) and political attitude (*B* = –0.22, BCa 95% CI [–0.39, –0.06]) remained significant negative predictors of imposter syndrome. In contrast, the effect of internalized misogyny (*B* = –0.11, BCa 95% CI [–0.41, 0.17]) was not statistically significant, as the confidence interval included zero, indicating a lack of robustness. Similarly, education (*B* = –0.06, BCa 95% CI [–0.25, 0.11]) and self-assigned femininity (*B* = 0.03, BCa 95% CI [–0.12, 0.18]) were nonsignificant. Notably, religiosity emerged as a significant positive predictor of imposter syndrome in the bootstrapped model, (*B* = 0.15, BCa 95% CI [0.02, 0.28]), suggesting a stable and robust association. Overall, the bootstrapped estimates confirm the robustness of age, political attitude, and now religiosity as predictors of imposter syndrome, while further supporting the non-significance of internalized misogyny and the remaining covariates in this model. Results also remained stable in a robustness check excluding potential outliers, see Appendix B (Table 10).

Collectively, these findings indicate that Hypothesis 1a was not supported. While

internalized misogyny initially demonstrated a significant association with imposter syndrome in a simple regression model, this effect was no longer significant when relevant control variables were included and did not demonstrate robustness across sensitivity or bootstrapping analyses.

Hypotheses 1b and 1c

To test Hypothesis 1b, which assumed a difference in internalized misogyny between younger and older women, an independent samples t-test was conducted. Participants were grouped by age (younger women, $n = 118$; older women, $n = 57$). As Levene's test indicated unequal variances, $F(1,173) = 11.19$, $p = .001$, equal variances were not assumed. The results generally revealed a statistically significant difference in internalized misogyny scores, $t(173) = –5.88$, $p < .001$. Older women reported significantly higher levels of internalized misogyny ($M = 2.75$, $SD = 0.91$) compared to younger women ($M = 1.94$, $SD = 0.69$). The mean difference was –0.80, 95% CI [–.08, –.53], with a large effect size (Cohen's $d = 0.77$), in line with Hypothesis 1b.

For Hypothesis 1c, which stated a difference in imposter syndrome between younger and older women, a second independent samples t-test was performed. The results showed a statistically significant difference, $t(173) = 7.60$, $p < .001$, with younger women reporting significantly higher levels of imposter syndrome ($M = 4.53$, $SD = 1.40$) than older women ($M = 2.89$, $SD = 1.18$). The mean difference was 1.63, 95% CI [1.21, 2.06], with a very large effect size (Cohen's $d = 1.33$). This provides strong support for Hypothesis 1c. Results of both independent samples t-tests are presented in Table 4.

Table 4

Results of Independent Samples t-Tests Assessing Age-related Differences in Internalized Misogyny and Imposter Syndrome

	20-35 years		50-65 years		*t*(173)	*p*	Cohen's *d*
	M	*SD*	*M*	*SD*			
Internalized Misogyny	1.94	.69	2.75	.91	-5.88	<.001*	.77
Imposter Syndrome	4.53	1.40	2.89	1.18	7.60	<.001*	1.33

Notes. n =175; *M*=Mean; *SD*=Standard Deviation
Significance level *p < .05

As preregistered, robustness of the t-test results was assessed by conducting sensitivity analyses. One extreme outlier was identified through boxplot inspection. As a result, the outlier (case 28 in the younger age group for internalized misogyny) was excluded, and the analysis was re-run without the case. Additionally, a nonparametric bootstrapping procedure with 1,000 resamples and bias-corrected and accelerated (BCa) confidence intervals was applied. Across all sensitivity checks, the pattern of results remained consistent, and the group differences in both imposter syndrome and internalized misogyny remained statistically significant (see Appendix B, Table 11). These findings indicate that the observed effects are robust and not driven by outliers or violations of parametric assumptions.

Hypothesis 2a

A moderation analysis was conducted to test Hypothesis 2a. Prior to all moderation analyses, relevant continuous variables – including internalized misogyny, self-efficacy, self-compassion and imposter syndrome – were mean-centered to improve interpretability and reduce potential multicollinearity in the interaction model. Two models were estimated: one without control variables, and a second including age, education, ethnicity, political attitude, religiosity, and self-assigned feminism. In an initial step, the main effects were tested. A summary of the results is presented in Table 5.

In the model without covariates, the overall regression was statistically significant, $F(3, 171) = 32.01$, $p < .001$, explaining 35.96% of the variance in imposter syndrome ($R^2 = .36$). Internalized misogyny was a significant negative predictor ($B = -0.46$, $t(171) = -3.67$, 95% CI [–0.71, –0.21], $p < .001$) as was self-efficacy ($B = -1.90$, $t(171) = -8.45$, 95% CI [–2.34, –1.46], $p < .001$). Most importantly, the interaction between internalized misogyny and self-efficacy was statistically significant ($B = 0.93$, $t(171) = 3.28$, 95% CI [0.37, 1.48], $p = .001$) accounting for an additional 4.04% of variance in imposter syndrome ($\Delta R^2 = .04$, $\Delta F(1, 171) = 10.78$, $p = .001$).

Conditional effects analysis revealed that internalized misogyny was significantly related to higher imposter syndrome only at low to moderate levels of self-efficacy ($B = -0.82$, 95% CI [−1.12, −0.52], $p < .001$) at −0.38 *SD*, and the relationship became non-significant at high self-efficacy ($B = -0.07$, 95% CI [−0.35, 0.22], $p = .621$) at +0.42 SD. The Johnson-Neyman region of significance was located below 0.23 (centered), indicating that the effect of internalized misogyny on imposter syndrome was only significant for the first to 74th percentile of participants on self-efficacy.

Table 5

Main Effects and Interaction Effect Internalized Misogyny X Self-Efficacy

Step	Variables	*B*	*β*	R^2	*F Change*	*df*
1	Main Effects			.32	40.33**	2,172
	Internalized Misogyny	-.46	-.19**			
	Self-Efficacy	-1.90	-.50**			
2	Interaction Effect			.36	10.96*	1,171
	Internalized Misogyny X Self-Efficacy	.93	.21*			

Notes. $n = 175$; *p < .05 **p < .001
[a] Dependent Variable: Imposter Syndrome

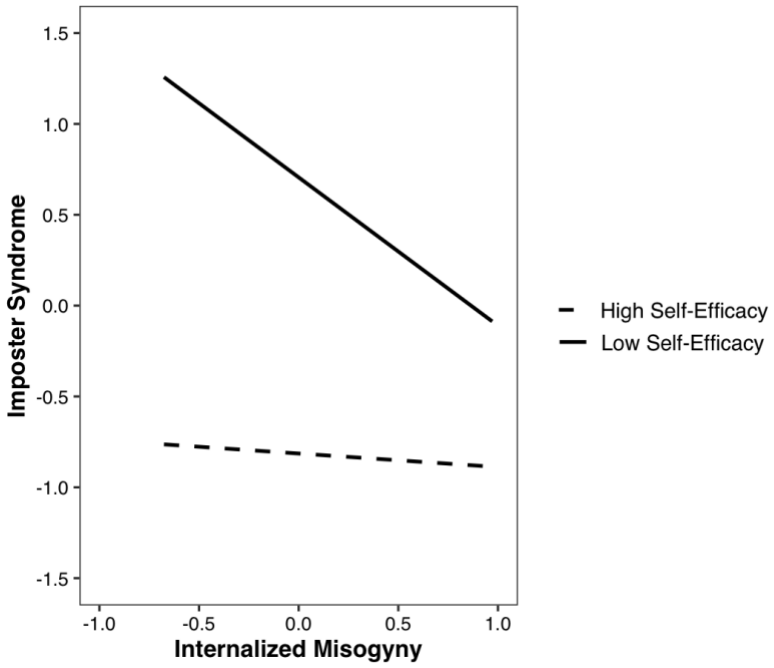
In the model including control variables, the overall regression remained significant, $F(9, 165) = 18.42$, $p < .001$, explaining 50.12% of the variance ($R^2 = .50$). Self-efficacy remained a strong negative predictor ($B = –1.65$, 95% CI [–2.07, –1.23], $p < .001$), whereas internalized misogyny was no longer significant on its own ($B = –0.07$, 95% CI [–0.34, 0.20], $p = .616$). The interaction term remained significant despite covariates ($B = 0.91$, 95% CI [0.41, 1.42], $p = .001$) contributing an additional 3.81% of explained variance ($\Delta R^2 = .04$). Conditional effects again showed that internalized misogyny was significantly associated with higher imposter syndrome only at low levels of self-efficacy ($B = –0.42$, 95% CI [–0.78, –0.06], $p = .024$), while the effect was non-significant at mean levels ($B = –0.05$, 95% CI [–0.33, 0.22], $p = .696$) and reversed to become positively associated with imposter syndrome at high self-efficacy ($B = 0.31$, 95% CI [–0.00, 0.63], $p = .052$). The Johnson-Neyman technique identified two regions of significance: a negative relationship below SE = –0.29 (17.7% of the sample) and a positive relationship above SE = 0.42 (13.1% of the sample).

The interaction plot in the baseline model (without covariates), revealed a clear moderating effect of self-efficacy on the relationship between internalized misogyny and imposter syndrome. Internalized misogyny was strongly negatively associated with imposter syndrome at low levels of self-efficacy (–0.38 *SD*; $y = 0.71 – 0.82x$) and remained negative at average levels of self-efficacy (0.02 *SD*; $y = –0.05 – 0.45x$). However, the strength of the effect was reduced. At high levels of self-efficacy (+0.42 *SD*; $y = –0.81 – 0.07x$), the relationship was nearly flat, indicating no meaningful association between internalized

misogyny and imposter syndrome. The interaction plot in the baseline model is presented in Figure 1.

Figure 1

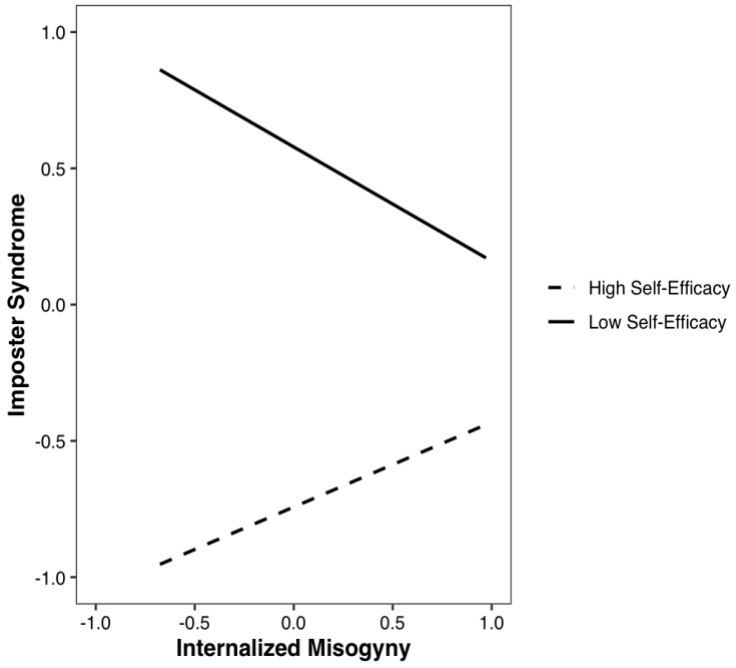
Interaction of Self-efficacy and Internalized Misogyny on Imposter Syndrome (without Control Variables).



In the covariate-adjusted model the pattern of moderation remained conceptually similar, although the interaction effect was attenuated. At low levels of self-efficacy, lower internalized misogyny continued to predict higher levels of imposter syndrome (–0.38 *SD*; $y = 0.58 – 0.42x$), whereas at average levels of self-efficacy, the association was nearly nonexistent ($y = –0.08 – 0.05x$). Notably, at high self-efficacy, the relationship reversed direction and became positive (+0.42 *SD*; $y = –0.74 + 0.31x$), suggesting that among highly self-efficacious individuals, higher internalized misogyny may be linked to greater imposter feelings. This interaction plot is presented in Figure 2.

Figure 2

Interaction of Self-efficacy and Internalized Misogyny on Imposter Syndrome (with Control Variables).



Based on the results of both moderation models, Hypothesis 2a was not supported. While a positive association between internalized misogyny and imposter syndrome was initially expected, the findings revealed a more nuanced, conditional relationship. Specifically, lower internalized misogyny was associated with higher levels of imposter syndrome only among individuals with low to moderate self-efficacy, while the relationship became non-significant or even reversed among those with high self-efficacy. However, the interaction remained significant even after controlling for relevant covariates such as age, education, political attitude, religiosity, self-assigned feminism, and ethnicity, suggesting the effect is robust. Although the moderation effect was statistically significant, the change in explained variance ($\Delta R^2 = .04$) falls between a small and medium effect size, according to conventional benchmarks. This indicates that while self-efficacy does moderate the impact of internalized misogyny on imposter syndrome, the magnitude of the effect is more modest than initially hypothesized. Nevertheless, these results suggest that self-efficacy does not consistently buffer against the effects of internalized misogyny; rather, its influence appears conditional, with high self-efficacy potentially intensifying imposter-related experiences in

the presence of strong internalized misogyny.

After excluding three outliers based on Mahalanobis distance ($\chi^2[9] > 26.12$, $p < .001$) and influential cases identified by Cook's distance (> 0.024), the moderation effect remained statistically significant, $B = 0.91$, $t(161) = 4.13$, 95% CI [0.48, 1.35], $p < .001$ ($\Delta R^2 = .05$). The conditional effect of internalized misogyny was statistically significant at high levels of self-efficacy, $B = 0.33$, $t(161) = 2.32$, 95% CI [0.05, 0.61], $p = .022$. These findings indicate that the moderation effect is robust and not driven by a small number of influential cases or outliers. Additionally, all estimates were derived using bootstrapping procedures with 5,000 resamples and bias-corrected confidence intervals, ensuring robustness against potential violations of normality.

Hypothesis 2b

A second moderation analysis was conducted to examine whether self-compassion moderates the relationship between internalized misogyny and imposter syndrome. In the initial model without control variables, the overall regression was statistically significant, $F(3, 171) = 79.84$, $p < .001$, accounting for 58.34% of the variance in imposter syndrome ($R^2 = .58$). Internalized misogyny was significantly negatively related to imposter syndrome $B = –0.45$, $t(171) = –4.70$, 95% CI [–0.65, –0.26], $p < .001$, as was self-compassion, $B = –1.09$, $t(171) = –14.34$, 95% CI [–1.24, –0.94], $p < .001$. The interaction term was not statistically significant, $B = 0.17$, $t(171) = 1.74$, 95% CI [–0.02, 0.37], $p = .084$. After including relevant covariates (age, education, ethnicity, political attitude, religiosity and self-assigned feminism) the model remained statistically significant, $F(9, 165) = 37.21$, $p < .001$, explaining 66.99% of the variance ($R^2 = .652$). Self-compassion continued to be a strong negative predictor of imposter syndrome $B = –0.97$, $t(165) = –11.80$, 95% CI [–1.14, –0.80], $p < .001$, while internalized misogyny was no longer a significant predictor, $B = –0.19$, $t(165) = –1.67$, 95% CI [–0.42, 0.04], $p = .097$. The interaction term again did not reach statistical significance, $B = 0.18$, $t(165) = 1.92$, 95% CI [–0.00, 0.36], $p = .056$, but contributed a small increase in explained variance ($\Delta R^2 = .01$). A summary of the results is presented in Table 6.

Table 6

Main effects and Interaction Effect Internalized Misogyny X Self-Compassion

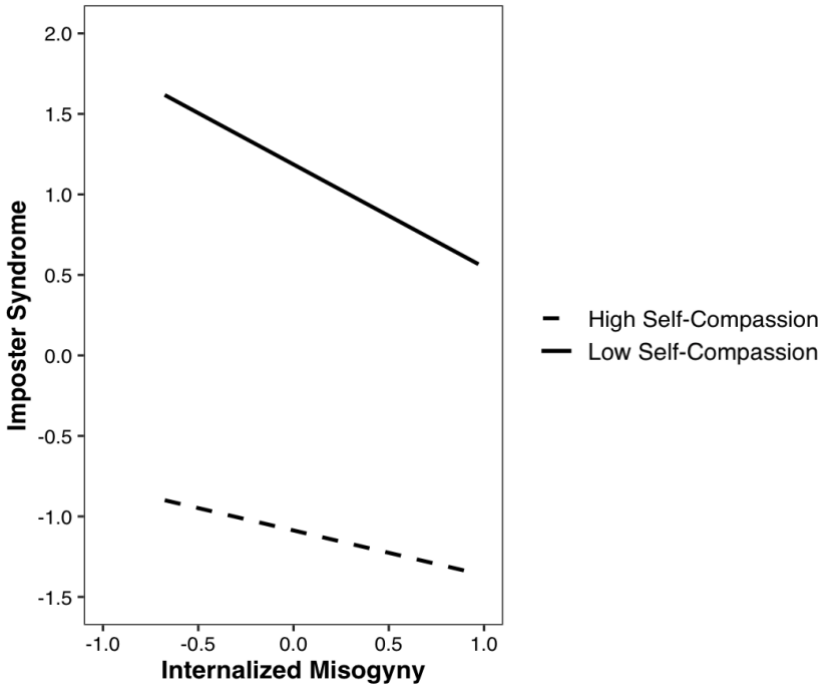
Step	Variables	*B*	*β*	R^2	*F Change*	*df*
1	Main Effects			.58	116.87**	2,172
	Internalized Misogyny	-.45	-.23**			
	Self-Compassion	-1.09	-.07**			
2	Interaction Effects			.58	2.87	1,171
	Internalized Misogyny X Self-Compassion	.17	.09			

Notes. $n = 175$; *p < .05 **p < .001
[a] Dependent Variable: Imposter Syndrome

As the interaction between internalized misogyny and self-compassion did not reach statistical significance in either the baseline or covariate-adjusted model, no additional sensitivity analyses were conducted for this moderation model. The interaction term was clearly non-significant across both models, and the bootstrapped confidence intervals included zero. This suggests that the absence of a significant moderation effect is unlikely to be attributable to a small number of influential data points. As such, any reporting and interpretation of the moderation effect should be considered exploratory and approached with caution. In the baseline model without covariates, the negative association between internalized misogyny and imposter syndrome appeared strongest at low levels of self-compassion (–1.06 *SD*; $y = 1.19 – 0.64x$), somewhat weaker at average self-compassion ($y = 0.09 – 0.47x$), and weakest at high self-compassion (+1.02 *SD*; $y = –1.09 – 0.28x$). The visual plot is presented in Figure 3.

Figure 3

Interaction of Self-Compassion and Internalized Misogyny on Imposter Syndrome (without Control Variables)

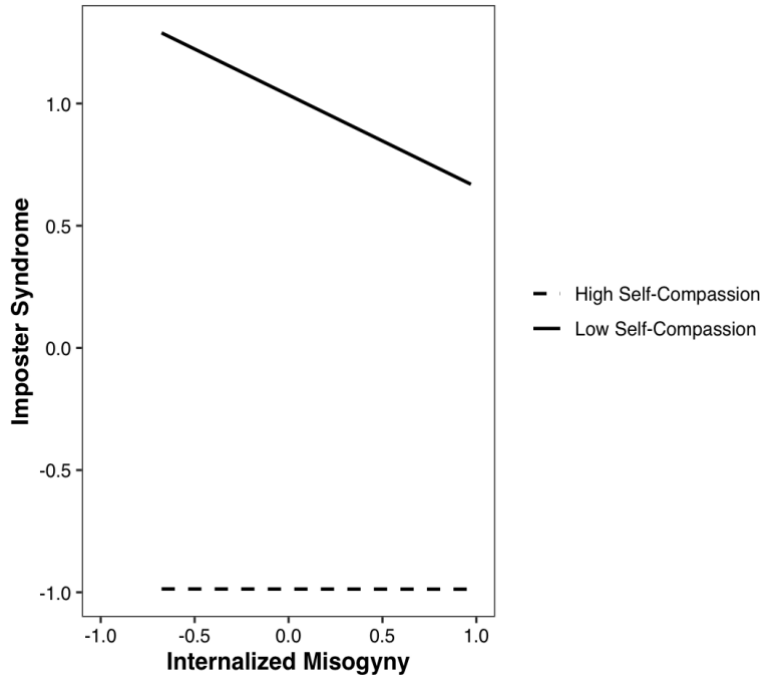


After the inclusion of relevant covariates (age, education, political attitude, religiosity, ethnicity, and self-assigned feminism), the overall moderation pattern became even less pronounced. Although the general trend persisted – showing a decreasing association between internalized misogyny and imposter syndrome as self-compassion increased – the regression slopes became notably flatter. A visual plot is presented in Figure 4.

At low self-compassion, internalized misogyny continued to be negatively associated with imposter syndrome (–1.06 SD; $y = 1.03 – 0.38x$), while at high self-compassion, the relationship was nearly null (+1.02 S*;* $y = –0.99 – x$). Although the conditional effects analysis showed that internalized misogyny was significantly related to imposter syndrome only at low levels of self-compassion, the interaction term itself narrowly missed significance. Therefore, the hypothesis that self-compassion moderates the relationship between internalized misogyny and imposter syndrome was rejected.

Figure 4

Interaction of Self-Compassion and Internalized Misogyny on Imposter Syndrome (with Control Variables



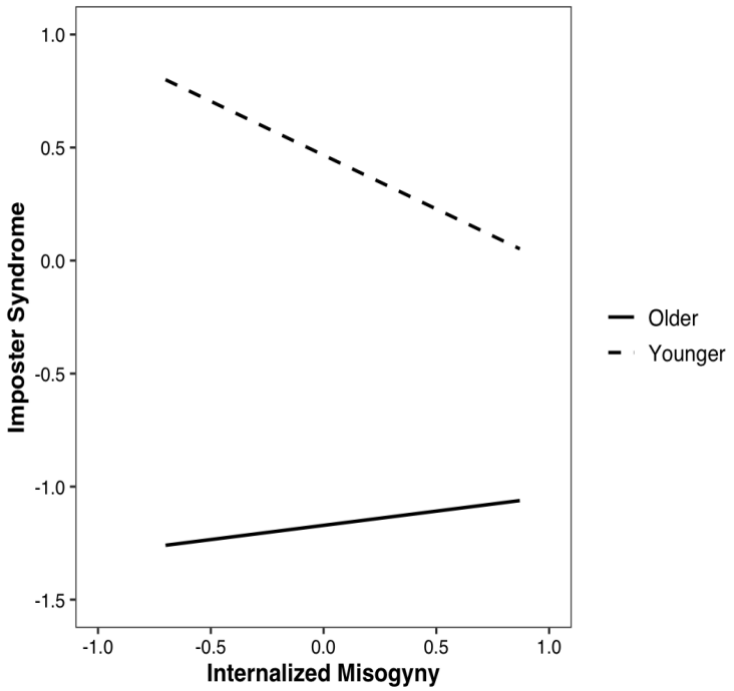
Additional exploratory analyses: Age

An exploratory moderation analysis was conducted to examine whether age group moderates the relationship between internalized misogyny and imposter syndrome. Participants were categorized into two groups: younger (ages 20–35) and older (ages 50–65). As this analysis was not preregistered in the main analysis section, it should be interpreted as exploratory in nature. The overall model was statistically significant, $F(3, 171) = 21.82$, $p < .001$, explaining 27.7% of the variance in imposter syndrome ($R^2 = .28$). Internalized misogyny was a significant negative predictor, $B = –0.48$, $t(171) = –2.43$, 95% CI [–0.86, –0.09], $p = .016$, such that higher levels of internalized misogyny were associated with lower imposter syndrome scores. Age group also significantly predicted imposter syndrome, $B = –1.64$, $t(171) = –6.81$, 95% CI [–2.11, –1.16], $p < .001$, indicating that older participants reported lower levels of imposter syndrome overall. The interaction between internalized misogyny and age group was statistically significant, $B = 0.60$, $t(171) = 2.16$, 95% CI [0.05,

1.15], p = .032, suggesting that the association between internalized misogyny and imposter syndrome differs by age group. A simple slopes analysis showed that the effect of internalized misogyny was significant and negative among younger participants, B = –0.48, $t(171)$ = –2.43, 95% CI [–0.86, –0.09], p = .016), whereas the effect was nonsignificant and positive among older participants, B = 0.13, $t(171)$ = 0.63, 95% CI [–0.27, 0.52], p = .528). A visual interpretation of the interaction pattern as presented in Figure 5 suggested that internalized misogyny was associated with lower imposter syndrome among younger individuals, while the relationship was weaker and reversed in direction – though nonsignificant – among older individuals. This interaction effect was further supported by bootstrapped estimates using 5,000 samples, with the bias-corrected and accelerated 95% confidence interval excluding zero (BCa 95% CI [0.07, 1.18]).

Figure 5

Interaction of Age Category and Internalized Misogyny on Imposter Syndrome (with Control Variables)



Discussion

The present study examined the relationship between internalized misogyny and imposter syndrome among younger and older women, with particular attention to the possible moderating roles of self-efficacy and self-compassion. Five hypotheses were tested to explore the associations among these constructs.

Contrary to expectations, internalized misogyny was overall negatively related to imposter syndrome, suggesting that women with higher levels of internalized misogyny experienced fewer imposter feelings. The relationship disappeared upon including age in the model, indicating that age, not internalized misogyny, was the driving predictor between differences in imposter syndrome. Older women generally reported higher levels of internalized misogyny and lower levels of imposter syndrome compared to younger women. Furthermore, self-efficacy moderated the relationship between internalized misogyny and imposter syndrome. However, the association was not consistently weaker at higher levels of self-efficacy. Instead, the direction and strength of the relationship varied, with higher self-efficacy even amplifying imposter feelings in the presence of strong internalized misogyny, after controlling for outliers. It therefore contradicted the initial hypothesis. The second moderating variable, self-compassion did not influence the relationship significantly.

Hypothesis 1a

The unexpected negative relationship between internalized misogyny and imposter syndrome suggests that it may be primarily influenced by factors such as age and generational context. While the initial analysis indicated that women with higher levels of internalized misogyny felt less like imposters, this effect was not maintained after controlling for demographic variables, particularly age. Age as well as political attitude significantly predicted imposter syndrome, with older women reporting lower levels of imposter feelings and more moderate to conservative political attitudes than younger women. These findings imply that generational or life-stage factors might play a central role in the experience of imposter syndrome. As older women tend to hold more conservative gender role attitudes (Gangal et al., 2024; Lynott & McCandless, 2000), they may be more inclined to remain in roles that align with these internalized norms. Internalized misogyny may not be perceived as problematic, but rather as a natural or accepted aspect of their social reality. This alignment might reduce psychological dissonance and consequently limit exposure to environments where imposter feelings are more commonly experienced, such as high-pressure or male-

dominated professions (Price et al., 2024). System Justification Theory (Jost & Banaji, 1994) explains why individuals, including those from disadvantaged groups, may view existing social hierarchies as fair, legitimate, or natural – even when these structures work against their interests. Women who internalize misogynistic beliefs may see gender inequalities not as unjust but as justified or inevitable. This perspective can reduce the cognitive dissonance that arises when personal competence clashes with the devaluation of one's group. As a result, they may experience fewer imposter feelings – not due to greater self-confidence, but because they do not see their position as misaligned or undeserved.

In contrast, younger women, who often embrace more egalitarian views (Gangal et al., 2024), may experience greater role incongruity when pursuing non-traditional careers, which can contribute to elevated levels of imposter syndrome. This dissonance between internalized ideals of competence and fairness, and the external reality of gendered expectations, can intensify feelings of inadequacy – a core component of imposter syndrome. Social comparison processes may intensify these feelings in younger women, as they are often in formative career stages where competence is closely scrutinized and validated externally, leading them to be more sensitive to feedback and perceived failures (Clance & Imes, 1978).

Alternative explanations for the findings may lie in the sample composition. The sample in this study primarily consisted of students – a group in which imposter syndrome is particularly prevalent (Bravata et al., 2019) – which may further explain the heightened imposter feelings observed within the younger participants. Moreover, the group of older women (n = 57) was considerably smaller than the younger group (n = 118), which could have limited the statistical robustness of the results.

Hypotheses 1b and 1c

In contrast to Hypothesis 1a, both Hypotheses 1b and 1c were supported, indicating significant age-related differences in internalized misogyny and imposter syndrome. As stated in Hypothesis 1b, levels of internalized misogyny differed between age groups, with older women reporting significantly higher levels than younger women. This generational variation may be understood through differences in gender role socialization shaped by the cultural and political climates during key developmental periods. Women in the older age group likely came of age during a time when conventional gender norms were still widely accepted, despite the advances brought about by second-wave feminism (Brewster & Padavic, 2000; Rampton, 2015). While that movement achieved important legal and institutional changes, it

did not consistently challenge deeper cultural ideals around femininity, which may have contributed to the persistence of internalized gender norms (Rampton, 2015). Younger women, by contrast, have grown up during the third and fourth waves of feminism, which have emphasized intersectionality, body autonomy, and critiques of traditional gender expectations (Malinowska, 2020; Rampton, 2015). The accessibility of feminist discourse via digital media has likely played a role in shaping more critical awareness of internalized sexism among younger cohorts (Malinowska, 2020).

These findings are also consistent with cohort replacement theory, which proposes that societal attitudes shift as older generations with more traditional views are gradually replaced by younger, more progressive ones (Ryder, 1965; Davis & Greenstein, 2009). Research has shown that women's gender attitudes have shifted more substantially than men's in response to social change, such as increased participation in the labor market and wider diffusion of egalitarian values. Therefore, generational context might play a crucial role in shaping internalized gender beliefs (Brewster & Padavic, 2000; Bolzendahl & Myers, 2004; Mason & Lu, 1988; Ciabattari, 2001).

Hypothesis 1c, which also predicted differences between age groups – in this case regarding imposter syndrome – was likewise supported. Younger women reported significantly higher levels of imposter syndrome compared to older women. This result aligns with previous research by Neureiter and Traut-Mattausch (2016), who found stronger imposter syndrome in student samples than in working professionals. Brauer and Proyer (2017) also observed lower imposter tendencies in older adults. With time and experience, people may gain confidence, clearer role definitions, and greater resilience to self-doubt, which may help explain the decline in imposter tendencies with age. Thus, imposter syndrome might be more common during early career stages, when individuals are still developing professional identities and navigating unfamiliar environments.

Additionally, greater access to social media, especially among younger individuals, may intensify imposter-related feelings through constant exposure to others' curated successes. Platforms like LinkedIn promote professional comparison, often leading users to question the legitimacy of their own achievements. Marder et al. (2023), for example, found that browsing LinkedIn heightened professional self-focused attention, which in turn increased imposter thoughts. For younger users still establishing their careers, this exposure can amplify feelings of inadequacy and widen the gap between self-perception and perceived external expectations.

Exploratory analyses: Age

Exploratory analyses further supported the importance of age as a contextual factor in the relationship between internalized misogyny and imposter syndrome. Specifically, age group significantly moderated this relationship: among younger women, internalized misogyny was negatively associated with imposter feelings, while among older women, this association was nonsignificant and slightly positive. This suggests that internalized misogyny may serve different psychological functions depending on life stage or generational context.

For younger women, higher internalized misogyny might reduce perceived incongruity between societal gender norms and their own success, thereby dampening imposter syndrome. In other words, by accepting negative stereotypes about women, they may reconcile their own achievements as exceptions rather than violations of gender norms, which temporarily buffers them against imposter feelings. This could reflect a coping strategy that allows them to maintain self-confidence in environments where they perceive that women are not fully accepted or valued, albeit at the cost of reinforcing self-limiting beliefs.

In contrast, this dynamic appeared absent in older participants. One possible explanation is that older women have had a longer period of exposure to traditional gender norms, which may have become more deeply integrated into their self-concept. As self-concept becomes more stable and resistant to change with age (Campbell et al., 1996), internalized misogyny may no longer act as a flexible coping mechanism. Instead, it may exist as a fixed component of identity, potentially amplifying – rather than resolving – conflict between one's internalized beliefs and professional success. Thus, while younger women might use internalized misogyny defensively to rationalize success and reduce imposter feelings, older women may no longer experience this buffering effect, which could explain the absence – or even reversal – of the relationship in this group.

However, as this moderation analysis was conducted post hoc and is considered exploratory, these results must be interpreted with caution and considered preliminary. It is further important to note that such generational explanations are inherently complex and difficult to isolate with certainty; the interpretations offered here should therefore be considered with care and understood as theoretically informed, but not definitive.

Hypothesis 2a and 2b

Hypotheses 2a and 2b included possible moderating variables – self-efficacy and self-compassion – that were expected to buffer the relationship between internalized misogyny and imposter syndrome. Both hypotheses were rejected.

Concerning self-efficacy, in both unadjusted and covariate-adjusted models, a significant interaction emerged: the negative association between internalized misogyny and imposter syndrome was significant only at low to moderate levels of self-efficacy, while the relationship became non-significant – or even reversed in direction – at high levels of self-efficacy. This pattern revealed that self-efficacy may not function as a universal psychological buffer. Instead, its moderating role appears more complex. At high levels of self-efficacy, internalized misogyny may create a dissonance between individuals' confidence in their abilities and the negative beliefs they hold about their gender, potentially heightening imposter syndrome. This aligns with theories indicating that greater self-efficacy is linked to resilience and accurate self-assessment (Bandura, 1997; Maddux, 2016), but also highlights that such benefits may be undermined by internalized oppressive beliefs (Pákozdy et al., 2024). Again, System Justification Theory (Jost & Banaji, 1994) suggests that members of marginalized groups may adopt dominant ideologies to preserve a sense of order, even at personal cost. Highly self-efficacious women who endorse internalized misogynistic beliefs may experience a disconnect between their competence and their internalized gender norms, potentially leading to identity conflict or inauthenticity that could paradoxically enhance imposter syndrome. Such dynamics may also relate to mechanisms described in social identity theory, where distancing from one's social group (e.g. women from traditional gender norms) can fail to fully resolve underlying self-perception tensions (Tajfel & Turner, 1979; Pinel, 2002). As Pinel (2002) highlights, even when individuals reject group-based stereotypes, internalized stigma can remain, creating a disconnect between self-confidence and group identity that may heighten imposter feelings.

In contrast, at lower levels of self-efficacy, internalized misogyny may function as a defensive coping strategy, providing a framework that reduces the discomfort of systemic inequalities by rationalizing one's perceived shortcomings as natural or expected. This may lower imposter feelings, as these women may feel less pressure to challenge existing gender norms or question their place in gendered hierarchies (Jost & Banaji, 1994).

The second variable, self-compassion, did not serve as a moderator in the same relationship (Hypothesis 2b). Although self-compassion emerged as a strong negative

predictor of imposter syndrome – consistent with its role in promoting emotional regulation, reducing self-criticism, and fostering psychological well-being (Neff, 2003; Barnard & Curry, 2012; MacBeth & Gumley, 2012) – the interaction with internalized misogyny was not statistically significant. Conditional effects analysis indicated that internalized misogyny was negatively associated with imposter syndrome only at low levels of self-compassion, but the overall moderation effect remained weak and did not reach significance. These results imply that self-compassion may act more as a general protective factor against imposter-related distress, rather than as a specific buffer against the effects of internalized sexist beliefs. This is consistent with prior findings that self-compassion supports adaptive coping and buffers perfectionism (Gilbert, 2006; Neff et al., 2005), but may be less involved in modifying how individuals interpret entrenched ideological beliefs such as misogyny. It is also possible that the current sample lacked sufficient power to detect small interaction effects, or that the relatively homogeneous sample limited the variability needed to observe stronger moderation effects.

Limitations

Several limitations should be taken into account when interpreting the results of this present study. First, due to the correlational nature of the design, no causal conclusions can be drawn. Although Hypothesis 1a assumed a predictive relationship, the data did not support inferences about directionality or causation. In hindsight, the hypothesis should have been more cautiously phrased to reflect an association rather than a directional effect. Additionally, the study relied on extreme group comparisons (younger: 20–35; older: 50–65), with no data collected from individuals in the middle age range. This limits the ability to observe more continuous developmental trajectories and may have artificially amplified generational contrasts. The unequal group sizes further constrained the analyses: the younger group included 118 participants, while the older group comprised only 57, falling short of the preregistered sample size of 64 participants per group and reducing statistical power. Although the study aimed for a sample size of 200 participants to account for potential dropouts and data quality issues, power analyses indicated that achieving 80% power to detect interaction effects would require approximately 1526 participants. This was not feasible within the study's timeline and resources. As a result, while the study can robustly analyze main effects, the reduced sample size may limit the power to detect significant interaction effects. Effect sizes and confidence intervals were reported to provide additional context, but

the reduced power is an important limitation to consider when interpreting the results.

Another limitation concerns the sampling method. The use of a convenience sample, including recruitment through a magazine aimed at empowering middle-aged women, may have introduced self-selection bias, particularly in the older cohort. Participants with a specific interest in gender-related issues may have been more likely to participate, potentially skewing the data. The sample also lacked diversity in terms of ethnicity, socio-economic background and political attitude – factors known to shape experiences of imposter syndrome and internalized misogyny. Beyond this, the sample also showed a clear skew toward more progressive political orientations and lower levels of religiosity. Since political ideology and religious affiliation influence how individuals internalize gender norms – with more conservative or religious individuals often endorsing traditional gender roles (Christopher & Mull, 2006; Dehlin & Galliher, 2019) – future research should investigate whether these patterns hold in more ideologically and culturally diverse populations. Furthermore, the study did not systematically assess participants' educational or occupational status although imposter syndrome is especially prevalent in student populations and high-achieving professional contexts. This omission limits the ability to contextualize imposter experiences within relevant achievement-related environments.

Finally, although the study included relevant control variables such as political orientation, religiosity, and self-identified feminism, each was measured using a single-item measure, which limits the reliability and depth of interpretation. Multi-item validated scales would have provided a more robust assessment of these potentially influential factors.

Implications and Further Research

The findings of this study carry several theoretical and practical implications. First, the unexpected direction of the relationship between internalized misogyny and imposter syndrome challenge common assumptions in the literature. While previous studies have framed internalized misogyny primarily as a psychological risk factor, the current results suggest that its effects may be more complex and context-dependent. For some individuals – particularly those with lower self-efficacy – internalized misogyny may paradoxically serve a short-term protective function by aligning one's self-perceptions with societal expectations, thereby reducing internal conflict. However, such coping mechanisms may come at the cost of long-term psychological well-being, authenticity, and personal growth.

Second, the robust differences observed between younger and older women in both

internalized misogyny and imposter syndrome point to the importance of considering generational context in psychological research. Younger women appear to experience greater imposter-related distress, potentially due to higher achievement pressures, increased exposure to comparison via social media, or evolving societal standards that encourage self-critique. In contrast, older women may have internalized more traditional gender norms during formative years, which persist across the lifespan. These generational differences underscore the need for age-sensitive interventions and educational efforts that take into account the evolving landscape of gender identity and self-perception.

Third, the complex role of self-efficacy in the relationship between internalized misogyny and imposter syndrome highlights the need for more nuanced research into targeted interventions. While self-efficacy was associated with lower imposter feelings overall, it did not consistently buffer the negative impact of internalized misogyny. In fact, at high levels of self-efficacy, the relationship reversed direction, suggesting possible identity tensions. This indicates that interventions aimed at enhancing self-efficacy may need to be carefully tailored, particularly when addressing internalized oppressive beliefs. Similarly, although self-compassion did not moderate the relationship, its strong negative association with imposter syndrome across models suggests that promoting self-compassion remains a promising direction for reducing imposter-related distress more broadly.

Taken together, these findings enhance our understanding of the psychological factors underlying imposter syndrome in women, while also emphasizing the critical role of age-related differences. They suggest that, beyond the general influence of internalized gender norms and psychological resources, generational context and life stage significantly shape how imposter feelings are primarily experienced. Future research should therefore continue to explore these dynamics across diverse populations and life stages, paying particular attention to the sociocultural and identity-based factors that form women's self-perception in achievement settings. These factors include, but are not limited to, socio-economic background, ethnicity, sexual orientation and political attitude, all of which intersect with gender and influence how women experience and internalize societal expectations and gender norms (Crenshaw, 1989). For example, women from different racial or cultural backgrounds may face unique challenges and barriers in male-dominated fields that could amplify or mitigate imposter syndrome, depending on their identity and cultural context. Similarly, women in different stages of life – whether early career, mid-career, or later in life – may have distinct experiences of gender roles and expectations, which could affect how they internalize societal beliefs about competence and success.

Conclusion

This study adds to the growing body of literature emphasizing the importance of understanding psychological phenomena through the lens of gender. By exploring the interplay between age, internalized misogyny, and imposter syndrome, the findings underscore the value of gender-focused research in deepening our comprehension of complex psychological constructs. The results primarily point to the relevance of generational influences and age, suggesting that societal progression, shifting norms and general life-experience may affect internalized beliefs and self-perception – whether in the form of internalized misogyny or manifestations of imposter syndrome.

Moreover, this research highlights the layered and dynamic nature of gendered psychological processes and challenges the assumption that such mechanisms operate in a uniform way across different social groups. Instead, the findings advocate for a more differentiated and context-sensitive approach to psychological inquiry, one that recognizes the variability of lived experience across lines of identity, privilege, and marginalization.

To that end, future research should place greater emphasis on intersectionality – specifically, on how multiple dimensions of oppression and identity (e.g., gender, race, class, age, sexuality) intersect and interact to shape psychological outcomes. Exploring these intersections will be crucial for capturing the full complexity of gendered experiences and for developing more inclusive, representative, and socially responsive psychological theory and practice.

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Appendix

A. Abstract

The present master's thesis explores the relationship between internalized misogyny and imposter syndrome among younger (20–35 years) and older (50–65 years) women, with a focus on generational differences and the potential moderating roles of self-efficacy and self-compassion. Based on literature concerning internalized gender oppression, it examines whether misogynistic beliefs contribute to imposter syndrome and how psychological resources might buffer this effect. A quantitative survey (n = 175) using validated scales assessed internalized misogyny, imposter syndrome, self-efficacy, and self-compassion. Contrary to expectations, internalized misogyny was negatively associated with imposter syndrome. This relationship became non-significant after controlling for age, suggesting that generational context may be a stronger explanatory factor than internalized misogyny. Older women reported higher levels of internalized misogyny but lower imposter syndrome than younger women, indicating meaningful age-related differences in both constructs. Moderation analyses showed that self-efficacy – but not self-compassion – significantly moderated the relationship between internalized misogyny and imposter syndrome, though not in a uniformly protective way: at low self-efficacy, higher internalized misogyny was associated with lower imposter syndrome, while at high self-efficacy, internalized misogyny was associated with increased imposter syndrome after controlling for outliers. These findings point to a complex interplay between internalized misogyny, self-efficacy, and age, highlighting the need for interventions that address both psychological and generational factors. Future research should further explore these dynamics across diverse social, cultural and professional contexts, considering intersecting identity factors.

Die vorliegende Arbeit untersucht den Zusammenhang zwischen internalisierter Misogynie und dem Imposter-Syndrom bei jüngeren (20–35 Jahre) und älteren (50–65 Jahre) Frauen. Der Fokus liegt dabei auf möglichen Generationsunterschieden sowie der moderierenden Rolle psychologischer Ressourcen wie Selbstwirksamkeit und Selbstfürsorge. Basierend auf der Annahme, dass internalisierte geschlechtsspezifische Unterdrückung zur Entstehung von Imposter-Gefühlen beitragen kann, wurde überprüft, ob misogyne Überzeugungen positiv mit dem Erleben des Imposter-Syndroms zusammenhängen. Zusätzlich wurde untersucht, inwiefern individuelle Ressourcen diesen Zusammenhang beeinflussen können. Im Rahmen einer quantitativen Online-Befragung (n = 175) wurden alle Variablen mithilfe validierter Skalen erfasst. Entgegen der ursprünglichen Hypothese zeigte sich ein negativer Zusammenhang zwischen internalisierter Misogynie und Imposter-Syndrom. Nach Kontrolle des Alters verlor dieser Zusammenhang an Signifikanz, was auf die Relevanz des Generationskontexts als Erklärungsfaktor hinweist. Ältere Frauen verfügten über höhere Werte internalisierter Misogynie, gleichzeitig jedoch über geringeres Imposter-Syndrom im Vergleich zur jüngeren Altersgruppe. Die Moderationsanalysen ergaben, dass Selbstwirksamkeit – nicht jedoch Selbstfürsorge – die Beziehung zwischen internalisierter Misogynie und Imposter-Syndrom signifikant moderierte. Dabei zeigte sich ein differenziertes Muster: Bei niedriger Selbstwirksamkeit war höhere internalisierte Misogynie mit geringerem Imposter-Syndrom verbunden, während sich bei hoher Selbstwirksamkeit ein tendenziell positiver Zusammenhang zeigte, der erst nach Ausschluss von Ausreißern statistisch signifikant wurde. Die Ergebnisse verdeutlichen die komplexe Wechselwirkung zwischen internalisierter Misogynie, Selbstwirksamkeit und Alterskontext. Des Weiteren unterstreichen sie die Notwendigkeit generationensensibler Interventionen, die psychologische Ressourcen stärken und intersektionale Faktoren miteinbeziehen. Zukünftige Studien sollten diese Dynamiken in verschiedenen sozialen, kulturellen und beruflichen Kontexten weiter erforschen und dabei verschiedene Identitätsdimensionen berücksichtigen.

B. Additional Analyses

Table 7

Results of Independent Samples t-Tests Assessing Age-Related Differences in all Control Variables.

	20-35 years		50-65 years		*t*(173)	*p*	Cohen's *d*
	M	*SD*	*M*	*SD*			
Political Attitude	2.55	1.15	3.50	1.35	-4.78	<.001**	1.22
Religiosity	2.23	1.64	3.26	1.62	-3.94	<.001**	1.63
Ethnicity	.04	.20	.00	.00	2.27	.025*	.17
Education	2.75	.91	2.58	1.31	.87	.388	1.05
Self-Assigned Feminism	5.66	1.43	4.02	1.91	5.75	<.001**	1.60

Notes. n=175; *M*=Mean; *SD*=Standard Deviation
Significance level p < .05 p** < .01

Table 8

Skewness and Kurtosis for all Variables

Variables	Skewness*	Kurtosis**
Internalized Misogyny	.85	.25
Imposter Syndrome	.01	-.98
Age	.75	-1.2
Education	.17	-.87
Ethnicity	.20	20.66
Political Attitude	.70	.44
Religiosity	.82	-.50
Self-assigned Feminism	-.78	-.37
Self-Efficacy	-.00	.39
Self-Compassion	.01	-.16

Notes. n=175, *0 = symmetrical, ±1 or more = strong asymmetry, **0 = normal distribution ±1 or more = notable kurtosis

Table 9

Correlational Matrix of all Continuous Variables

Variables	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1. Age	-							
2. Political Attitude	.33**	-						
3. Religiosity	.25**	.41**	-					
4. Self-Assigned Feminism	-.42**	-.47**	-.29**	-				
5. Internalized Misogyny	.43**	.45**	.26**	-.56**	-			
6. Imposter Syndrome	-.51**	-.32**	-.10	-.28**	-.30**	-		
7. Self-Efficacy	.24**	.22**	.04	-1.00	.19*	-.53**	-	
8. Self-Compassion	.24**	.23**	.04	-1.00	.09	-.72**	.57**	-

Notes. n=175; *$p < .05$ **$p < .001$

Table 10

Effect of Internalized Misogyny on Imposter Syndrome

Predictors	*B*	*SE*	*β*	*t*	*p*
Intercept	6.24	.73		8.54	<.001**
Internalized Misogyny	-.02	.15	-.01	-.10	.917
Age	-.05	.00	-.50	-6.88	<.001**
Education	-.10	.09	-.07	-1.05	.293
Religiosity	.12	.06	.13	1.94	.054
Political Attitude	-.27	.09	-.23	-3.00	.003**
Self-Assigned Feminism	.05	.07	.06	.69	.492

Notes. n=167, B = unstandardized coefficient; SE = standard error; β = standardized coefficient
Ethnicity was excluded due to insufficient variance. Eight outliers were excluded based on Malahanobis Distance for six predictors (> 22.458).
significance level*p < .05
DV = Imposter Syndrome

Table 11

Results of Independent Samples t-Tests Assessing Age-related Differences in Internalized Misogyny and Imposter Syndrome

	20-35 years		50-65 years		*t*(172)	*p*	Cohen's *d*
	M	*SD*	*M*	*SD*			
Internalized Misogyny	2.04	.57	2.75	.88	-6.39	<.001*	.69
Imposter Syndrome	4.53	1.40	2.89	1.18	7.60	<.001*	1.33

Notes. n=174; M=Mean; SD=Standard Deviation
Significance level *p < .05
One outlier excluded based on visual examination (Boxplot).

Figure 6

Scatterplot of Standardized Residuals against Standardized Predicted Values

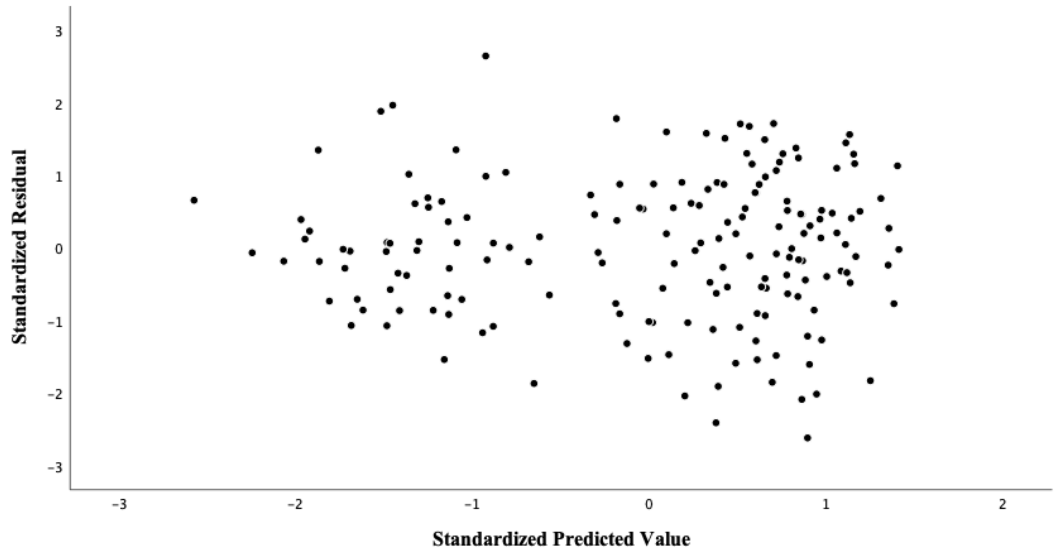
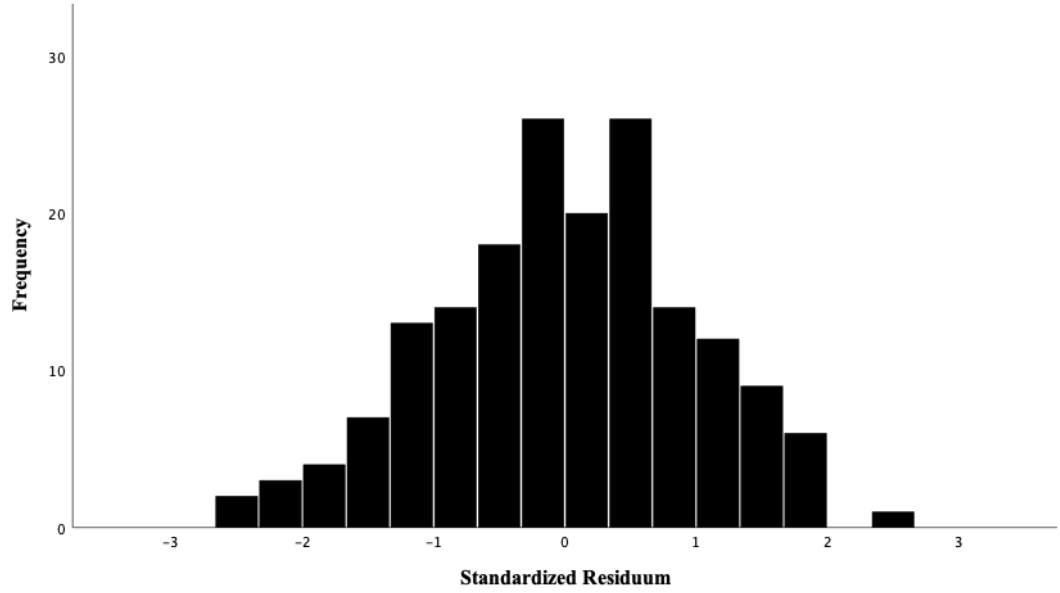


Figure 7

Histogram showing the Distribution of Standardized Residuals



C. Statement of Tools and Assistance Used

In the preparation of this master's thesis, the AI language model ChatGPT (OpenAI) was used on occasion to enhance the linguistic quality of certain formulations. Its use was strictly limited to improving the clarity and expression of the text. All scientific content, including research, argumentation, and conclusions, is solely the result of my own work and intellectual effort.