

Preferred Leadership Styles Across Generations: An Empirical Study of Generation X, Millennials, and Generation Z Among Students and Academic Staff in Egyptian Universities

Dr: Marwa Muhammad Muhammad Elsaed Hassouna
Assistant Professor of Management
Egyptian E-Learning University

Abstract

Effective leadership requires leaders to adapt their behavior to changing workplace demands and to understand the characteristics, needs, and values of their followers. The study aims to identify the leadership behaviors preferred by Generations X, Y (Millennials), and Z to reduce the attitudinal gap between them by recognizing their generational traits, work preferences, and motivations. A non-probability stratified sample was used to collect data from academics and students in Egyptian universities. After verification, the sample included 393 respondents, gathered via print-based questionnaires and Microsoft Forms. Both parametric (ANOVA, t-test) and non-parametric (Kruskal-Wallis, Mann-Whitney) tests were performed in JASP 19.3.0, which is built on the R programming language, to test the hypotheses. Cronbach's Alpha assessed reliability, and Confirmatory Factor Analysis (CFA) evaluated construct validity. The findings revealed not significant variation in preferred leadership styles—Transformational (TF),

Transactional (TS), and Laissez-faire (LF)—across the three generations. No significant difference was found across gender, while a significant difference was observed between students and academic staff. Overall, transformational leadership emerged as the most preferred style among all generations. Based on the key findings and conclusions, managerial implications were derived.

Keywords: transformational (TF), transactional (TS), and laissez-faire leadership (LF), Generation X, Millennials, Generation Z, students, academic staff, gender

ما هي القيادة المفضلة عبر الأجيال المختلفة: دراسة تطبيقية في جامعات المصرية على جيل إكس، وجيل الألفية، وجيل زد بين الطلاب وأعضاء هيئة التدريس .

د. مروة محمد السيد حسونة

مدرس الإدارة

بالجامعة المصرية للتعليم الإلكتروني الاهلية

ملخص البحث

تتطلب القيادة الفعالة من القادة تكييف سلوكهم مع متطلبات مكان العمل المتغيرة، وفهم خصائص واحتياجات وقيم أتباعهم.

تهدف الدراسة إلى تحديد السلوكيات القيادية المفضلة لدى جيل وذلك لتقليل الفجوة بينهم في التعاملات بين جيل إكس، وجيل الألفية، وجيل زد. يهدف البحث لمعرفة قيادته المفضلة بين الطلاب وأعضاء هيئة التدريس من خلال التعرف على سماتهم الجبلية، وتفضيلاتهم المهنية، ودوافعهم. استُخدمت عينة طبقية غير احتمالية لجمع البيانات من الأكاديميين والطلاب في الجامعات المصرية. و تتكون العينة من 393 مستجيباً جُمعت بياناتهم عبر استبيانات مطبوعة ونموذج مايكروسوفت. أُجريت

اختبارات معيارية بواسطه (Mann-Whitney ،Kruskal-Wallis) بواسطه وغير معيارية (ANOVA ،t-TEST).المبني علي برنامج JASP 19.3 باستخدام تقنية R لاختبار الافتراضات البحث. وتم مقياس المصداقيه بواسطه Cronbach's alpha و مقياس الصحة والبناء بواسطه تحليل العوامل التاكديده (CFA) . اظهرت النتائج ان أكثر أنماط القيادة تفضيلاً لاجيال المختلفه القياده التحويله بختلاف نوعهم و طباقتهم المختلفه سواء كانوا طلاب او اعضاء هيئه تدريس. من الرغم أن يوجد تباين كبير في نسب الاراء بينهم بخصوص القياده التحويله (TF) والقياده التبادليه (TS)والقياده المتساهله(LF). استناداً إلى النتائج والاستنتاجات الرئيسيه، تم استخلاص الدلالات الإدارية للتطبيق في مجال الجامعي لتقريب بين الاجيال المختلفه لتحسين التواصل والرضا و المشاركه الفعاله بينهم.

الكلمات المفتاحية

القيادة التحويله- القياده التبادليه- القياده المتساهله- الجيل إكس، جيل الألفية، الجيل زد-أعضاء هيئة التدريس -الطلاب - نوع الجنس..

Introduction

The development of a country depends on its ability to create, acquire, and apply new knowledge. Universities are regarded as key institutions where ideas, innovations, and information are generated. (Al-youbi,Abdulrahman,;Zayed,Adnan;Nahas,Mahoud;Hegazy., 2021)They fulfill four main roles: developing human capital through education, expanding knowledge trough research, sharing and applying it within society, and preserving insights for future generations. These roles position universities as vital

contributors for social and economic development (Al-youbi,Abdulrahman,;Zayed,Adnan;Nahas,Mahoud;Hegazy., 2021).

To remain globally competitive, countries must establish strong research systems, facilitate knowledge exchange for societal benefit, and enhance their ability to generate high-skilled job opportunities (Gashe, 2023). Accordingly, it is essential for university leaders to understand the core value systems of different generations and the diverse beliefs held by academic staff and students to foster a work environment that promotes leadership, motivation, communication, and collaboration across generations (K.W. Smola, C.D. Sutton, 2002).

According to leader–member exchange (LMX) theory, leaders and followers tend to develop high-quality relationships over time by meeting shared expectations through similarity, interpersonal affinity, and mutual trust (Stephen P.Robins & Timothy A.judge , 2024). However, a lack of understanding persists among different generations regarding preferred leadership approaches in universities. Consequently, each generation is more likely to collaborate effectively when mutual understanding is enhanced (King, 2017).

Significant differences exist among generations in terms of characteristics, work values, and motivations. Generations X, Y (Millennials), and Z represent the majority within Egyptian universities. As Baby Boomers gradually retire, they are being

succeeded by members of these generations, who currently occupy a variety of university roles, including professors, assistant professors, lecturers, assistant lecturers, teaching assistants, administrators, and students.

This research aims to: (1) examine the differences among Generations X, Y and Z, regarding their defining traits and preferred leadership styles, as perceived by gender and academic status, to maintain high-quality relationships between academic staff and students; (2) develop a roadmap to help universities select and assign academic staff based on generational preferences; and (3) propose active and effective leadership approaches appropriate for each generation in order to enhance communication, integration, and engagement.

Literature review

Leadership Styles

Leadership is the capacity to influence a group of individuals to pursue a vision or set of objectives. Organizations require effective leaders to challenge the existing quo, formulate future-focused strategies, and motivate organizational members to achieve these visions (Stephen P. Robins & Timothy A. Judge, 2024)

The explicit and implicit behaviors of leaders affect the social climate of the workplace (Caruana, 2020). Some leadership styles are defined by traits such as the Big Five and emotional intelligence, others are based on behaviors that

involve trainings managers to initiate structure and demonstrate consideration, while some models incorporate a combination of both traits and behaviors. Furthermore, a different theoretical perspective argues that the most effective leaders adapt their traits, behaviors, and approaches to align with different situational and contextual demands.

Modern followership theories, such as shared leadership theory and followership theory, suggest that followers themselves represent the most critical contingency in the leadership process. Contemporary theories also emphasize the specific actions undertaken by leaders to positively influence their team members, promote cohesion, and establish a unified vision (Stephen P.Robins & Timothy A.judge , 2024).

This research adopts the full range leadership model, which incorporates three leadership styles, namely transformational, transactional, and laissez-faire. The model outlines the characteristics of eight leadership components: laissez-faire (also a leadership style), contingent reward, management by exception (active), management by exception (passive), idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The first five components are considered passive and less effective, while the last three are active and effective (Stephen P.Robins & Timothy A.judge , 2024)

Transactional and transformational leadership are two primary styles identified by Bass (1990). Transactional leadership consists of three components: contingent reward, management by exception (active), and management by exception (passive). Contingent reward involves a constructive interaction between leaders and their followers, where both parties agree on specific tasks, and followers are rewarded for successful completion. Rewards may be either material, such as a salary increase, or psychological, such as a positive feedback and praise. Management by exception is considered a corrective form of leadership approach, in which leaders intervene if tasks deviate from agreed standards. In active management by exception, leaders closely monitor performance to ensure compliance with the established standards, including rules and procedures, and intervene before the occurrence of problems (Bass & Bass, 2008). Corrective actions may include discipline, negative feedback, or disapproval. On the contrary, in passive management by exception, leaders take action only after problems occur (Yukl, G. A., & Gardner, W. L. , 2020). These approaches can be particularly effective in environments where safety and compliance are prioritized (Stephen P. Robins & Timothy A. Judge, 2024).

Transformational leadership comprises four components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Yukl, G. &

Gardner, 2020). Idealized influence characterizes leaders admired by their followers for qualities such as morality, trustworthiness, and integrity. They demonstrate moral clarity when addressing challenges, emphasize purpose, and consider the ethical implications of their decisions. Inspirational motivation refers to leaders with an inspiring vision that is both attractive and challenging to their followers. These leaders have the ability to motivate their subordinates, encouraging problem-solving and promoting innovation. Intellectual stimulation involves leaders prompting their followers to develop new ideas and solutions, thereby enhancing creativity. Rather than penalizing inappropriate decisions, such leaders are regarded as risk takers, as they support experimentation. Finally, individualized consideration describes leaders who recognize and respond to their followers' needs and interests, and provide guidance through mentoring or coaching (Stephen P. Robins & Timothy A. Judge, 2024).

Laissez-faire leadership is one of the three main leadership styles identified by Lewin et al. (1939). In this approach, subordinates are granted full autonomy by their leaders in determining how they perform their tasks and set their own goals (Sousaa, M. & Rochaa, A., 2018). Despite its passive nature, laissez-faire leadership can result in adverse outcomes. Team members led by laissez-faire leaders often struggle to address the leadership gap created by this passivity. According to social

learning theory, team members tend to imitate the actions of their passive leaders, which can negatively impact team performance. Consequently, followers may experience emotional strain, as a passive laissez-fair leader creates the perception of low-quality leader-member exchange (LMX) relationship. Furthermore, such undemanding leadership can cause followers to feel disengaged and less committed to the organization (Stephen P. Robins & Timothy A. Judge, 2024).

This study presents a practical examination of the full range leadership model as applied to Generations X, Y (Millennials), and Z, exploring the appropriate use of each leadership style. It also highlights contemporary leadership theories, such as the leader-member exchange (LMX) theory, emphasizing how leaders positively influence their followers and establish high-quality, individualized relationships.

Leader-Member Exchange (LMX) Theory

Leader-member exchange (LMX) theory explains how leaders typically develop individualized relationships with their followers, varying in quality. Leaders form high-quality exchanges with a select group of trusted followers, who receive greater attention and privileges. These individuals constitute the ingroup, while the rest constitute the outgroup.

Sustaining these relationships requires mutual investment from both the leader and the follower. Competent, conscientious, proactive, and positive employees often establish stronger

relationships with their leaders and are more likely to be included in the ingroup. Leaders cultivate high-quality LMX through behaviors such as emotional labor, transformational leadership, responsiveness to follower ingratiation, and the selective recognition and rewarding of employees, while offering limited support to outgroup members.

Research indicates that interactions between leaders and followers promote the development of social capital, as followers adjust their contributions based on their perceived level of obligation, reducing effort after meeting expectations and increasing it in response to a compelling sense of commitment. When leaders hold high expectations for their followers, leader-member relationships tend to strengthen over time. Furthermore, leaders and followers of the same gender often form stronger bonds compared to those of different genders. The perceived significance of LMX also varies, as some individuals place greater value on these relationships (Stephen P. Robins & Timothy A. Judge, 2024).

Generation Theory

The foundation of generation theory lies in understanding - the traits and culture of generational cohorts—groups of individuals who are born within a specific time frame and share common experiences. Each cohort is influenced by its social and historical context (Mannheim, 1952; Strauss, 1991b). According to Mannheim (1952), a generational cohort typically

spans 15 to 30 years. During this period, individuals form and internalize their cultural norms. Due to the varying factors that differentiate each generation, recent research has adjusted the generational span to approximately 17 years.

Several factors contribute to the development of each generational cohort's culture, including social, political, and intellectual influences experienced throughout both the early and later stages of the cohort's life (King, 2017). Therefore, different generations tend to exhibit distinct characteristics, needs, work values, and motivational drivers.

Generation X Personnel Characteristics

Individuals born between 1965 and 1980 are referred to as members of Generation X. Research suggests that they are characterized as autonomous, results-driven, self-sufficient, skeptical, adaptable, impatient, tech-literate, informal, and, to some extent, disillusioned. As digital immigrant, they recall a world before the internet and the web (Aguas, 2024). Members of Generation X were raised during a time when their parents demonstrated organizational loyalty but also experienced significant corporate layoffs. These contrasting experiences shaped their work values, leading them to prefer an entrepreneurial management style and prioritize work-life balance compared to older generational cohorts. They also emphasize the importance of their personal time and how it is

intentionally spent beyond the workplace (Singh, A., & Gupta, B., 2015).

Regarding their preferred work styles, individuals from Generation X seek regular feedback on the quality of their output and performance, which is viewed as a reflection of their commitment to independence and self-direction (King, 2017). Their desire to devote more time to family and maintain a healthy work-life balance stems from childhood experiences, including growing up as latchkey children or in divorced households. As a result, this generation is recognized for its independence and skepticism toward authority figures (King, 2017). Generation X employees value both independent and collaborative work styles and have contributed to the evolution of the digital era. They tend to be more loyal to individuals than to organizations (King, 2017). In addition, many members of this generation encounter significant financial hardship. According to Smola and Sutton (2002), this cohort bears the highest average debt burden among all generations. Their preferred work environments are described as functional, positive, and enjoyable, with a pace that is fast, flexible, and informal (Schintzier, 2019).

Individuals from Generation X value open and honest communication and prefer leaders who are direct when providing feedback, considering it a means for growth and improvement. Rather than seeking praise, this generation

prioritizes feedback that supports overall improvement (Day, 2023). Moreover, their motivation is influenced by both social and intrinsic values (Sharma, 2020).

Millennials Personnel Characteristics

Millennials also known as Generation Y, Nexters, or Echo Boomers (Imperator, 2017), are individuals born between 1981 and 1997 (Schroth, 2019). They have been portrayed in contrasting ways. Some portrayals emphasize their individualism, assertiveness, and self-focus (Weirich, 2017), whereas others highlight their ambition, dynamism, entrepreneurial mindset, and adaptability in the digital world. They are commonly referred to as 'digital natives,' as they grew up during the development of the internet with the widespread adoption of information and communication technologies.

This generation exhibits distinctive communication patterns and workplace preferences influenced by their generational experiences. They tend to share new ideas and value teamwork (Slepian, R. C., Vincent, A. C., Patterson, H., & Furman, H., 2024). They also prefer secure employment, growth opportunities, open communication, and a healthy work-life balance (Sowmya N , Sudha Shukla and Shubhra Chakravorty, 2021). They are capable of multitasking and often demonstrate a low power distance attitude (Imperator B. , 2017). In addition,

they seek flexible work arrangements that allow them to balance personal interests with professional responsibilities.

This generational cohort is considered the most educated generation in the workforce and is described as confident in asserting their needs or adapting to change (Gabriellova & Buchko, 2021) (Karina Gabriellova & Aaron A. Buchko, 2021). Their work values include purpose, optimism, risk-taking, and a preference for frequent feedback. They favor entrepreneurial environments that are less rigid in structure, and they appreciate roles that offer responsibility, creativity, and a sense of accomplishment (King, 2017).

Millennials are entrepreneurial thinkers who embrace responsibility, pursue continuous achievement, require timely feedback, and prioritize support and engagement from their organizations. The authors further explain that this generation leverages early job and life experiences to shape their managerial approaches, which are also influenced by broader forces such as globalization, political upheaval, and economic volatility (Dimock., 2019)

They prefer challenging, meaningful work and often show greater interest in artistic or expressive roles than in traditional leadership positions (Karina Gabriellova & Aaron A. Buchko, 2021). Millennial managers are viewed as generalists with strong

communication skills, a preference for inclusive, diverse teams, and proficiency in using a variety of communication channels within a data-driven environment.

Millennials are more responsive to both intrinsic and extrinsic motivators than members of other generations. Herzberg's two-factor theory asserts that the key drivers for this generation include personal growth, working conditions, salary, relationships with supervisors, and work-life balance. Furthermore, Millennials typically thrive under strong leadership and clear direction (King, 2017). Many reviews suggest that Millennials 'want it all' and 'want it now,' seeking good compensation, rapid advancement, stimulating work, and contribution to society (Weirich, 2017).

Both Generation X and Generation Y emphasize self-direction, creativity, and meaningful contribution in their work. They share an appreciation for entrepreneurial environments and maintaining work-life balance. Therefore, Millennials exhibit several value-based similarities with Generation X predecessors (Karina Gabrielova & Aaron A. Buchko, 2021).

Generation Z Personnel Characteristics

Generation Z, also known as Gen Z, iGen, or Zoomers (Dimock, 2019), comprises individuals who were raised in a digital environment. This cohort is characterized by a fast-paced

lifestyle and a high level of individualism and empowerment. They prioritize both intrapersonal and interpersonal communication and are generally viewed as motivated and accountable. They also exhibit a strong entrepreneurial spirit, particularly regarding social responsibility and environmental sustainability, and tend to embrace risk-taking (Aguas, 2024).

Members of Generation Z experienced diverse family structures, including single-parent and multiracial households, as well as family environments where conventional gender roles were not clearly defined (Dimock, 2019). While social media has positively influenced this generation by offering immediate access to information, it has also been identified as a contributing factor to social isolation and underdeveloped interpersonal skills (Williams, 2015).

Generation Z is highly proficient in technology and often prefers digital communication, such as email, text messaging, or social media platforms, over face-to-face interaction (Day, 2023). This preference is reinforced by their strong digital connectivity, prompting them to maintain personal and academic connections through digital means rather than in-person interaction (Schwieger & Ladwig, 2018).

In academic contexts, Generation Z is inclined toward independent study and self-paced learning (Chicca, J., & Shellenbarger, T., 2018); (Hampton, D., & Keys, Y., 2016);

(Rickes, P., 2016); (Shatto, B., & Erwin, K. M. , 2016); (Williams, 2015). They prefer a flipped-classroom learning approach over traditional lecture-based instruction and printed textbooks (Chicca & Shellenbarger, 2018; Hampton et al., 2019; Rickes, 2016; Shatto & Erwin, 2016; Williams, 2015).

The extrinsic work values of Generation Z include security, pragmatism, risk aversion, and a desire for frequent feedback. Socially, they are competitive and oriented toward messaging-based communication (Karina Gabrielova & Aaron A. Buchko, 2021). Their emphasis on security results from their upbringing during a recession and witnessing the financial struggles faced by their parents. Consequently, they tend to be money-conscious, focused on job stability, and concerned about challenges such as student debt and an uncertain labor market.

Generation Z requires frequent, actionable feedback (Randstad., 2016) and thrives under direct and constructive criticism (Gabrielova & Buchko, 2021). They value daily interactions with supervisors and may interpret a lack of communication as a sign of underperformance (Kinetics, 2018). They also expect organizational engagement, including mentoring relationships with leaders and support through training and development, a trait they share with Millennials. Comfortable with new technologies, they use them in both their personal and professional lives. They expect their

academic staff to remain up to date with technological advancements (Williams, 2019).

Generation Gap Challenges Between Generation X, Millennials, and Generation Z

The primary attitudinal gap between different generations results from distinct work values and the periods in which each generation was raised. Generation X, now senior employees, believe that Millennial should 'pay their dues,' as they themselves did early in their careers. In addition, both Millennials and Generation X professionals may not share the same beliefs and values as Generation Z.

Generation X perceives Millennials as pursuing higher-ranking positions despite having limited experience and education. They are also viewed as less committed to traditional work expectations, prioritizing personal or family life over extended work hours. In addition, Generation X disapproves of younger generations' preference for working remotely, which they perceive as less productive compared to the established work environments to which they were accustomed. Moreover, they believe that Millennials lack communication skills and are less inclined toward conventional business practices (Turner, 2015).

Millennials regard Generation X as capable leaders who are socially conscious and community-oriented, and adhere to ethical standards in the workplace. However, they also view them as resistant to new technologies, inflexible, and attached to the

status quo. Although Millennials respect Generation X's expertise and knowledge, they reject organizational constraints based on rank, age, or years of tenure (Sharma, 2020).

Despite the differences between Generation X and Millennials, they share several similarities, including technological proficiency and perspectives regarding work, as both prioritize the concept of life satisfaction. However, the nontraditional work approach of millennials contrasts with the traditional approach of Generation X. Although they both value independence, Generation X typically avoids challenging the decisions of their superiors, unlike Millennials, who are more inclined to question the actions and decisions of their supervisors and colleagues. This assertiveness reflects Millennials' confidence but also highlights their reduced emphasis on hierarchical authority (Sharma, 2020).

Millennials, while cooperative and socially inclusive, prioritize individual goals over organizational responsibility (Sharma, 2020). They also exhibit greater flexibility with rules and are more willing to adjust them when possible, in contrast to Generation X (Sharma, 2020). Although Generation X professionals may attempt to serve as a role model for Millennials, their efforts are often perceived as a form of overcompensation rather than mentorship. These generational contrasts reveal underlying tensions that can influence workplace dynamics and leadership expectations.

Regarding Generation Z, this cohort shares several attributes with Millennials, yet also maintains its distinct characteristics. Hampton et al. (2019) reported that the attention span of Generation Z is approximately eight seconds, four seconds shorter than that of Millennials and their predecessors (Shatto, B., & Erwin, K. M. , 2016). This generation is marked by significant racial and ethnic diversity and aligns closely with Millennials in terms of social and policy perspectives (Gap., 2024). Both cohorts demonstrate progressive values, championing social equality and emphasizing the necessity of addressing climate change. Compared to Generation X, members of Generation Z are less resistant and more willing to adapt and improve. In addition, Generation Z has demonstrated a more positive attitude toward adaptive education (Garg, 2024).

Gender

The World Health Organization defines 'sex' as the biological traits that distinguish men from women. In contrast, 'gender' refers to the social roles, behaviors, activities, and qualities that a society considers appropriate for men and women. Gender is a complex concept that encompasses various aspects, such as the roles of individuals, their responsibilities, and the imposed societal constraints, all based on their sex or gender identity (organization, 2025).

Gender identity is shaped by a variety of factors, including gender stereotypes, personal beliefs, attitudes, and values related to gender roles. Upbringing, cultural norms, and media exposure significantly impact the development of a stable gender identity. It was proposed that interactions with the opposite sex often reinforce gender stereotypes, especially in social settings, and suggested that people may behave differently toward the opposite sex based on perceived attractiveness. However, these personal factors represent individual differences that can influence behavior or self-perception, regardless biological sex or socially defined gender roles (Kathryn Eklund, Erin S Barry, & Neil Grunberg, 2017).

Gender stereotypes involve widely held assumptions regarding behavioral differences between women and men. Men are generally characterized as confident, assertive, independent, rational, and decisive, whereas women are generally perceived as caring, sensitive, warm, helpful, and nurturing. These depictions of women as loving and nurturing, and men as cold, competitive, or controlling, reflect common gender stereotypes (Kathryn Eklund, Erin S Barry, & Neil Grunberg, 2017).

Academic Status

Academic status refers to a person's position within a university, whether as a member of the academic staff or a student. In Egypt, academic staff titles include Professors, Associate Professor, Assistant Professor, Assistant Lecturer, and

Teaching Assistant. The academic status of a faculty member contributes to the university's academic and administrative structure, as it indicates hierarchical levels and enables differentiated support based on the faculty member's rank or category. This structure helps universities organize and manage their personnel more effectively (Jing, 2024).

Theoretical Framework

Transformational and transactional contingent reward leadership are perceived by university faculty members as effective forms of leadership, whereas the passive-avoidant leadership styles, such as management-by-exception (passive) and laissez-faire leadership, are regarded as unsatisfactory and ineffective in academic settings, especially in nursing education (MALESH, 2007). Research further supports the association between transformational leadership and transactional leadership and successful outcomes, regardless of gender (Baker, 2003).

Transformational leadership, which emphasizes mentoring and developing followers, aligns more strongly with traditionally feminine traits. Research indicates that employees perceive a closer connection between feminine personality characteristics and transformational leadership than with transactional leadership. In various contexts, women are more likely than men to employ the reward-and-punishment elements of transactional leadership, using praise or penalties to motivate others (Kathryn Eklund, Erin S Barry, & Neil Grunberg, 2017). Transformational

leadership is regarded as effective for both genders; however, its association with leadership success is notably stronger for women than for men. Women have also been observed to employ a laissez-faire approach slightly more frequently than men (Wanstreet, 2003).

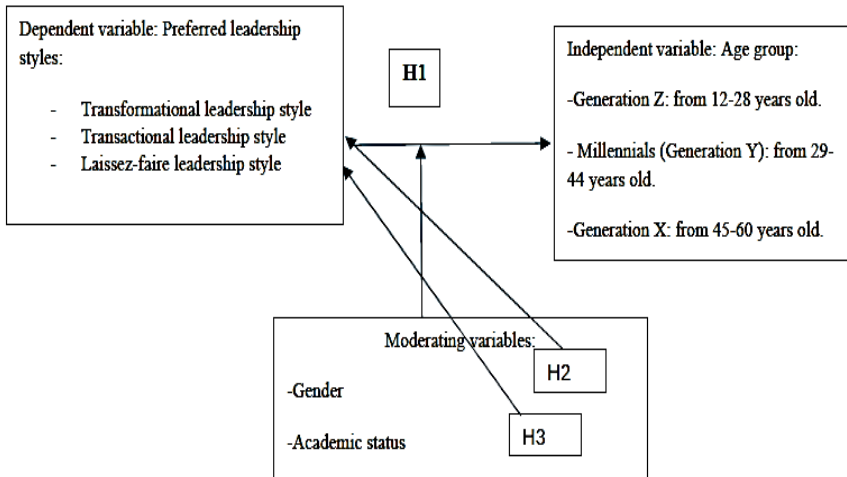
Despite gender-based differences in perceptions of leadership styles, some studies suggest that demographic factors such as gender, age, academic rank, and institutional type do not significantly influence leadership style among higher education leaders (Aphimonbute, 1999). Nevertheless, Pichon (2010) reported that in educational institutions such as schools, both teachers and principals preferred transformational leadership.

Hypotheses Testing

The following null hypotheses were formulated to test the differences in preferred leadership styles based on generational group, gender, and academic status variables:

- **H₁**: There is no statistically significant difference in preferred leadership styles among different generations.
- **H₂**: There is no statistically significant difference in preferred leadership styles between males and females.
- **H₃**: There is no statistically significant difference in preferred leadership styles between students and academic staff.

Research Model



Methodology

Research Design

This study aims to propose specific behavioural practices for academic staff and students to improve the quality of their interpersonal relationships. It adopts an exploratory case study approach. Data were collected from Generation X, Millennials, and Generation Z at Fayoum University and the Egyptian E-learning National University, which operates across 13 governorates. A stratified sampling technique was employed, with age serving as the basis for categorizing participants into three generational groups.

Statistical Tool

Jeffreys's Amazing Statistics Program (JASP) 19.3.0 is a free, open-source statistical software package designed primarily for Bayesian statistics and frequentist analysis. In this study, JASP was used to conduct data analysis through multiple packages (e.g., Iavaan) that are integrated within the R programming environment.

Measurement and Scale

This study employed two questionnaires as part of the data collection process, both employing 5-point Likert scales. They were combined to test the research hypotheses. The first questionnaire was adapted from Avolio et al. (1999) to assess preferences for transformational and transactional leadership styles across generations. The second questionnaire was adapted from Lund's "What's Your Leadership Style?" instrument, which, in turn, is based on the original tool developed by Lewin et al. (1939). It was used to examine laissez-faire leadership styles within group settings. In both questionnaires, responses range from (5) = strongly agree and (1) = strongly disagree. The constructs were measured as follows:

- Transformational Leadership Style (TF): measured using 20 individual items, labelled TF1 through TF20.

- Transactional Leadership Style (TS): measured using 8 individual items, labeled TS1 through TS8.
- Laissez-Faire Leadership Style (LF): measured using 4 individual items, labeled LF1 through LF4.

Likert scale responses are inherently ordinal, representing ordered categories rather than true continuous intervals. However, in psychometric modelling, particularly when using scales with five or more response options, it is a common and empirically supported practice to treat them as quasi-interval data for analyses such as **Confirmatory Factor Analysis (CFA)**. This approach allows for the application of parametric statistical techniques, which are generally robust under these conditions. In addition to the Likert scale items, the dataset includes demographic and grouping variables such as gender, age, generation, academic status, and university affiliation.

Population and Sample Data

The dataset comprised 393 valid responses from a total of 900 distributed questionnaires, with each row representing a unique participant. The analysis focused on three dependent variables, each assessed through multiple 5-point Likert-scale items.

Table 1

Demographic Data Analysis

Variables	Level	Frequencies	%
Gender	Male	166	42.2%
	Female	227	57.8%
Age	13-28 (Generation Z)	261	66.4%
	29-44 (Generation Y)	93	23.7%
	45-60 (Generation X)	39	9.9%
Status	Student	219	55.7%
	Teaching Assistant	51	13.0%
	Assistant Lecturer	17	4.3%
	Lecturer	55	14.0%
	Associate Professor	26	6.6%
	Professor	25	6.4%
University	Fayoum University	195	49.6%
	The Egyptian E-learning University	198	50.4%

Data Analysis*Confirmatory Factor Analysis Model*

Confirmatory Factor Analysis (CFA) was employed to evaluate the adequacy of the proposed measurement model, which includes three latent constructs: Transformational Leadership (TF), Transactional Leadership (TS), Laissez-Faire Leadership (LF). Each construct was measured using multiple observed indicators as previously defined in the instrument. The values for the fit indices and their interpretation are presented in Table 2.

Table 2
CFA Model Fit Indices

Fit Index	Guideline for Good Fit	Value	Interpret
χ^2 (<i>p</i> -value)	p -value > $\alpha = 0.05$ (sensitive to sample size > 200)	284.1 (<.001)	Significant
χ^2/df	1 to 3 (or up to 5)	2.273	Good
Comparative Fit Index (CFI)	≥ 0.90 (excellent if ≥ 0.95)	0.955	Excellent
Tucker Lewis Index (TLI)	≥ 0.90 (excellent if ≥ 0.95)	0.939	Good
Normed Fit Index (NFI)	≥ 0.90 (excellent if ≥ 0.95)	0.924	Good
Relative Fit Index (RFI)	≥ 0.90 (excellent if ≥ 0.95)	0.986	Excellent
Incremental Fit Index (IFI)	≥ 0.90 (excellent if ≥ 0.95)	0.956	Excellent
Relative Non-centrality Index (RNI)	≥ 0.90 (excellent if ≥ 0.95)	0.955	Excellent
Goodness of Fit Index (GFI)	≥ 0.90 (excellent if ≥ 0.95)	0.928	Good
Root Mean Square Error of Approximation (RMSEA)	≤ 0.08 (excellent if ≤ 0.06)	0.057	Excellent
Standardized Root Mean Residual (SRMR)	≤ 0.08 (excellent if ≤ 0.05)	0.037	Excellent

The results demonstrate that the overall model fit is strong. Despite the significant chi-square statistic ($p < 0.001$), which is a common result expected with large samples, the remaining fit indices are well within accepted thresholds (e.g. $\chi^2/\text{df} = 2.273$, CFI = 0.955, TLI = 0.939, NFI = 0.924, RFI = 0.986, RNI = 0.955, GFI = 0.928, RMSEA = 0.057, and SRMR = 0.037 < 0.08). These results indicate a strong alignment between the hypothesized model and the observed data, supporting the structural validity of the measurement model.

Convergent Validity, Discriminant Validity, and Reliability

Convergent validity refers to the degree to which items intended to measure the same construct are highly correlated, thus confirming their convergence on the same underlying factor. It was assessed using standardized factor loadings and Average Variance Extracted (AVE). Standardized factor loadings quantify the strength of association between observed variables and their latent constructs; values of 0.70 or higher are generally considered strong, as they indicate that at least 50% of the item's variance is explained by the latent factor. Hence, all factor loadings are statistically significant (p -value < 0.05).

Table 3
CFA Standardized Factor Loadings

Variables	Constructs	Standardized factor loadings	Std. Error	Z	p-value
TF	TF3	0.718	0.046	15.486	< .001
	TF4	0.700	0.061	11.408	< .001
	TF6	0.728	0.042	17.136	< .001
	TF7	0.700	0.045	15.468	< .001
	TF8	0.769	0.034	22.600	< .001
	TF9	0.734	0.039	18.990	< .001
	TF10	0.740	0.038	19.694	< .001
	TF11	0.770	0.034	22.625	< .001
	TF12	0.751	0.040	18.703	< .001
	TF14	0.730	0.044	16.669	< .001
	TF15	0.713	0.043	16.638	< .001
	TF16	0.722	0.040	17.865	< .001
	TF20	0.718	0.051	14.040	< .001

Variables	Constructs	Standardized factor loadings	Std. Error	Z	p-value
TS	TS5	0.700	0.063	11.174	< .001
	TS6	0.858	0.067	12.877	< .001
	TS8	0.804	0.110	7.311	< .001
LF	LF2	0.764	0.110	6.921	< .001
	LF3	0.671	0.059	11.429	< .001
	LF4	0.834	0.074	11.345	< .001

Note: TF: Transformational Leadership style, TS: Transactional Leadership style, LF: Laissez-Faire Leadership style.

Table 3 presents the CFA standardized factor loadings. The results indicate that most items meet or exceed the 0.70 benchmark, signifying robust item-construct associations. Items with loadings slightly below 0.70, such as LF3, still surpass 0.60, which is an acceptable threshold in behavioral and social sciences. Importantly, all factor loadings are statistically significant ($p\text{-value} < 0.001$), reinforcing the measurement model's validity.

AVE values for the three constructs: TF, TS, and LF, are 0.535, 0.630, and 0.585, respectively. These values exceed the 0.50 threshold, thereby confirming that each latent construct explains more than half of the variance in its corresponding observed items, fulfilling the criteria for convergent validity.

Discriminant validity assesses whether theoretically distinct constructs are also empirically distinct. It was evaluated using the Heterotrait-Monotrait Ratio of Correlations (HTMT), a

contemporary and statistically rigorous approach. HTMT values below 0.85 suggest that the constructs are adequately differentiated. In the current study, all HTMT values fall well below this cut-off, indicating that TF, TS, and LF are conceptually and statistically distinct.

Reliability, particularly internal consistency, was evaluated using Cronbach's alpha. This coefficient estimates the extent to which items within a scale are interrelated and consistently measure a single construct. While there is no universal consensus on ideal cut-off values, empirical research typically considers values above 0.90 to indicate excellent reliability, above 0.80 as good, and above 0.70 as acceptable (Cronbach, 1951) (Taber, 2018).

Table (4)
Reliability, Convergent and Discriminant Validity

Variables	Cronbach's Alpha	AVE	Heterotrait-Monotrait (HTMT)		
			TAN	RES	PS
TF	0.932	0.535	0.731		
TS	0.736	0.630	0.145	0.794	
LF	0.834	0.585	0.059	0.493	0.745

Table 4 demonstrates that all three leadership style scales exhibit internal consistency ranging from acceptable to excellent, as indicated by Cronbach's alpha values. TF scale achieved an

alpha of 0.932, reflecting excellent reliability and suggesting that its 13 items are highly cohesive in capturing the intended construct. The TS scale recorded an alpha of 0.736, denoting acceptable reliability across its three items. Similarly, LF scale yielded an alpha of 0.784, also reflecting an acceptable level of internal consistency.

These findings indicate that the items within each scale are sufficiently interrelated and reliably measure their respective constructs. In addition, the AVE values for TF (0.535), TS (0.630), and LF (0.585) all exceed the minimum threshold of 0.50, thereby supporting good convergent validity.

Furthermore, all HTMT values fall below the 0.85 benchmark, indicating a satisfactory degree of discriminant validity among the three constructs. Notably, the square root of each AVE (shown as bold diagonal values in Table 4) exceeds the inter-construct HTMT correlations, further supporting the empirical distinctiveness of the TF, TS, and LF constructs, in alignment with theoretical expectations.

Thus, these results confirm that the instrument demonstrates strong psychometric properties, accurately captures the intended constructs, and is suitable for subsequent statistical analysis.

Descriptive Statistics

Prior to conducting inferential statistical analyses, a comprehensive overview of the data was obtained through descriptive statistics. This step provided a foundational understanding of the central tendencies and dispersion measures associated with each leadership style. The overall means, standard deviations (SD), coefficients of variation (CV) and sample sizes for TF, TS, and LF were computed for the entire dataset, as shown in Table 5.

These statistics offer initial insights into the response distribution and consistency across the measured styles. For instance, high standard deviations and CVs may indicate a broader range of responses or reduced agreement among participants.

Table 5*Descriptive Statistics*

Variables	N	Mean	SD	CV (%)
TF	393	4.5	0.502	11.1%
TS	393	3.6	0.982	27.3%
LF	393	3.2	1.041	32.5%

Table 5 demonstrates that the overall trend for all three leadership styles tends toward agreement, as all mean values exceed 3, with a range from 3.2 to 4.5. The coefficients of variation range from 11.1% to 32.5%, indicating varying degrees of dispersion, with TF being the most consistently rated and LF showing the greatest variability in responses.

Assumption Checks for Parametric Tests

A critical step in conducting rigorous statistical analysis is to verify the assumptions that underpin parametric tests. For comparative analyses involving group means, such as Analysis of Variance (ANOVA) or independent samples t-test, two key assumptions were evaluated: normality of residuals and homogeneity of variances.

Normality. The Shapiro-Wilk test was employed to assess whether the distributions of TF, TS, and LF scores approximate normality within each level of generation, gender, and academic

status variables. A p -value below the threshold of 0.05 suggests a statistically significant deviation from normality.

Homogeneity of Variances. Levene's test was used to examine the equality of variances across different groups for each leadership style. A non-significant p -value (i.e., p -value > 0.05) indicates that the assumption of homogeneity is met, whereas a significant p -value implies unequal variances (Hair et al., 2010)

The results of these assumption tests were pivotal in selecting the appropriate inferential statistical method. Although the assumption of homogeneity of variances was generally satisfied, the Shapiro-Wilk test indicated a significant violation of normality across all leadership styles and demographic groups.

As a result, standard ANOVA was not appropriate. Instead, non-parametric alternatives, such as the Kruskal-Wallis H-test and Mann-Whitney U-test, were applied, as they do not rely on distributional assumptions. This structured approach ensured methodological rigor and aligned with best practices in statistical analysis. Table 6 presents the results of these assumption checks.

Table 6
Assumption Tests

Factors	Variables	Shapiro-Wilk		Levene's Test	
		W	<i>p</i> -value	F	<i>p</i> -value
Generation	TF	0.825	< .001	2.541	0.080
	TS	0.955	< .001	1.001	0.368
	LF	0.966	< .001	6.312	0.002
Gender	TF	0.833	< .001	0.192	0.661
	TS	0.957	< .001	0.085	0.771
	LF	0.974	< .001	0.235	0.628
Status	TF	0.831	< .001	2.106	0.148
	TS	0.968	< .001	0.204	0.652
	LF	0.973	< .001	9.867	0.002

Table 6 shows that the Shapiro-Wilk test results (p -value < 0.001 for all combinations) indicate a significant departure from normality for all three leadership styles across all demographic factors. This suggests that the data distributions deviate from the normal distribution, which is a common occurrence in real-world datasets. In contrast, Levene's test results (with most p -values > 0.05) demonstrate that the assumption of homogeneity of variances is largely satisfied across all demographic groups.

Accordingly, both parametric tests (ANOVA and independent-samples t-test) and non-parametric tests (Kruskal-Wallis H-test and Mann-Whitney U-test) were employed, with a focus on the non-parametric results due to the violation of the normality assumption.

Results and Findings

Hypothesis 1

The Kruskal-Wallis H-test was performed to determine whether there are statistically significant differences in Leadership styles (TF, TS and LF) across different generations (X, Y, and Z). In addition, a one-way ANOVA was also conducted for comparative insight, despite the violation of the normality assumption, as presented in Table 7.

Table 7

<i>Kruskal-Wallis and ANOVA</i>							
L. styles	Gen.	Descriptive Statistics		Kruskal-Wallis		ANOVA	
		Mean	SD	χ^2	p-value	F	p-value
TF	Z	4.515	0.547	0.424	0.809	0.201	0.818
	Y	4.553	0.413				
	X	4.527	0.366				
TS	Z	3.799	0.941	35.791	< .001	19.130	< .001
	Y	3.290	0.900				
	X	2.991	1.016				
LF	Z	3.424	1.044	37.529	< .001	21.584	< .001
	Y	2.864	0.812				
	X	2.538	1.022				

The p -value of the Kruskal-Wallis H-test for TF construct exceeds the conventional significance threshold of 0.05 (p -value = 0.809), indicating no statistically significant difference in TF style among generations ($Z_{\text{mean}} = 4.515$, $Y_{\text{mean}} = 4.553$ and $X_{\text{mean}} = 4.527$). The ANOVA results corroborate this finding (p -value = 0.818). Both tests consistently demonstrate that generational differences do not significantly

influence TF style. This finding supports H1 with respect to the TF construct.

The p -value of the Kruskal-Wallis H-test for TS is less than the conventional significance level of 0.05 (p -value < 0.001), indicating a statistically significant difference in TS construct across generations ($Z_{\text{mean}} = 3.799$, $Y_{\text{mean}} = 3.290$ and $X_{\text{mean}} = 2.991$). The ANOVA results confirm this outcome (p -value < 0.001). Accordingly, both tests reveal that generational differences significantly influence TS style.

Similarly, for the LF construct, the Kruskal-Wallis H-test yields a p -value below 0.05 (p -value < 0.001), suggesting a significant difference in LF style among the generational groups ($Z_{\text{mean}} = 3.424$, $Y_{\text{mean}} = 2.864$ and $X_{\text{mean}} = 2.538$). The ANOVA results also indicate a statistically significant difference in LF style.

These findings do not support H1 in relation to the TS and LF styles. Table (8) presents shows the post hoc comparisons between each generational group.

Table 8
Post Hoc Tests

L. styles	Comparison	Dunn test		HSD test	
		Z	p-value	T	p-value
TS	Z Y	4.474	< .001	4.489	< .001
	Z X	4.730	< .001	5.012	< .001
	Y X	1.424	0.154	1.668	0.219
LF	Z Y	4.591	< .001	4.675	< .001
	Z X	4.834	< .001	5.199	< .001
	Y X	1.444	0.149	1.719	0.199

Table 8 shows a statistically significant difference between Generation Z and both Generation Y and Generation X in relation to TS and LF constructs, as p -values of both Dunn and Tukey's HSD post hoc tests are below the conventional threshold of 0.05 (p -value < 0.001). In contrast, no statistically significant differences were found between Generation Y and Generation X, with p -values exceeding 0.05 in both tests.

These consistent results across post hoc methods indicate that Generation Z is the primary source of the observed differences, as it demonstrates the highest mean scores for both leadership styles (TS: $Z_{\text{mean}} = 3.799 > Y_{\text{mean}} = 3.290$ and $X_{\text{mean}} = 2.991$) and (LS: $Z_{\text{mean}} = 3.424 > Y_{\text{mean}} = 2.864$ and $X_{\text{mean}} = 2.538$). Therefore, TS and LF styles appear to be more dominant or prevalent among individuals belonging to Generation Z.

Hypothesis 2

The Mann-Whitney U-test was performed to determine whether there is a statistically significant difference in leadership styles (TF, TS, and LF) across genders (male and female). In addition, the independent-samples t-test was also conducted for comparative insight, despite the violation of the normality assumption, as shown in Table 9.

Table 9
Mann-Whitney and t-test Results

L. styles	Gender	Descriptive Statistics		Mann-Whitney		t-test	
		Mean	SD	U	p-value	T	p-value
TF	Male	4.490	0.489	17180	0.133	-1.179	0.239
	Female	4.551	0.511				
TS	Male	3.608	0.961	18916.5	0.946	0.166	0.868
	Female	3.592	0.998				
LF	Male	3.145	1.066	17584	0.256	-0.961	0.337
	Female	3.247	1.022				

Based on the results presented in Table 9, the p -value of the Mann-Whitney U-test for TF exceeds the conventional significance threshold of 0.05 (p -value = 0.133), indicating no statistically significant difference in TF across genders (Male_{mean} = 4.490 and Female_{mean} = 4.551). The independent-samples t-test results support this conclusion, with a non-significant result (p -value = 0.239).

Similarly, the p -value of the Mann-Whitney U-test for TS is 0.946, which also exceeds the 0.05 threshold, suggesting no significant gender-based difference in TS (Male_{mean} = 3.608 and Female_{mean} = 3.592). The t-test result (p -value = 0.868) confirms this finding.

For LF, the Mann-Whitney U-test yields a p -value of 0.256, which is above the 0.05 threshold, indicating no statistically significant difference between male and female

respondents (Male_{mean} = 3.145 and Female_{mean} = 3.247). This result is supported by the t-test outcome (p -value = 0.337).

Collectively, these results confirm that gender does not significantly affect any of the three leadership styles examined, thereby supporting H2 across all dimensions.

Hypothesis 3 Testing

The Mann-Whitney U-test was performed to determine whether there is a statistically significant difference in leadership styles (TF, TS, and LF) between students and academics. In addition, the independent-samples t-test was also conducted for comparative purposes, despite the violation of the normality assumption, as presented in Table 10.

Table 10
Mann-Whitney and t-test Results

L. styles	Status	Descriptive Statistics		Mann-Whitney		t-test	
		Mean	SD	U	p -value	T	p -value
TF	Student	4.515	0.547	17683	0.666	-0.570	0.569
	Academic	4.545	0.398				
TS	Student	3.799	0.941	23370	< .001	5.43	< .001
	Academic	3.202	0.942				
LF	Student	3.424	1.044	23520.5	< .001	6.178	< .001
	Academic	2.768	0.888				

Table 10 shows that the p -value of the Mann-Whitney U-test for TF exceeds the conventional significance threshold of 0.05 (p -

value = 0.666), suggesting no statistically significant difference in TF based on respondents' status (Student_{mean} = 4.515, Academic_{mean} = 4.545). The independent-samples t-test corroborates this finding, yielding a non-significant difference (p -value = 0.569). The consistency across both tests indicates that status does not exert a statistically significant influence on the adoption of TF style. Accordingly, H₃ is supported in relation to TF.

The p -value obtained from the Mann-Whitney U-test for Transactional Leadership (TS) is below the conventional significance threshold of 0.05 (p -value < 0.001), indicating a statistically significant difference based on status (Student_{mean} = 3.799, Academic_{mean} = 3.202). The independent-samples t-test corroborates this finding, revealing a statistically significant result (p -value < 0.001). These results contradict H₃, which posited no significant difference in TS across status groups..

Moreover, the p -value of the Mann-Whitney U-test for LF is less than the conventional significance threshold of 0.05 (p -value < 0.001), demonstrating a statistically significant difference in LF across status groups (Student_{mean} = 3.424, Academic_{mean} = 2.768). The independent-samples t-test supports this result, also yielding a statistically significant difference (p -value < 0.001). Both tests consistently demonstrate that status differences significantly affect LF. This finding does not support H₃, which proposed no significant difference in LF across status.

Given that students reported higher mean scores than academics for both TS ($3.799 > 3.202$) and LF ($3.424 > 2.768$), these leadership styles appear to be more strongly endorsed among students.

Discussion of the Empirical Findings

Based on the results of the statistical analyses, the researcher identified two principal findings. First, two null hypotheses were rejected, suggesting statistically significant differences in preferred leadership styles both across generational cohorts and between academic staff and students. Second, one null hypothesis was retained, suggesting that preferred leadership styles do not differ significantly by gender.

Regarding H1, the results are consistent with previous research, particularly the findings of Malesh (2007). For H2, the results align with the studies of Aphimonbute (1999) and Baker (2003), but contradict the findings of Eklund et al. (2017) as well as Wanstreet (2003). With respect to H3, the results contradict the findings of Aphimonbute (1999), but align with those of Pichon (2010), who reported that TF was the preferred style across academic roles.

Therefore, TF emerges as the consistently preferred style across generations, genders, academic staff, and students. Despite statistically significant differences in mean scores and p-values

for TS and LF, these differences are observed only across generations and between academic staff and students.

Conclusion

Influencing a group, team, unit, or organization to achieve its goals is a fundamental responsibility of leadership. While not everyone must occupy a leadership position, understanding the attributes of both effective leaders and competent followers can significantly enhance interpersonal dynamics within professional settings.

Transactional and transformational leadership are complementary rather than mutually exclusive, offering distinct yet interrelated paths toward organizational goal attainment. Transformational leadership, in particular, enhances followers' motivation, commitment, and performance.

Although both leadership styles are valuable, research indicates that transformational leadership is strongly associated with enhanced group performance, organizational citizenship behavior, and leader satisfaction. However, transactional leadership, especially when applied through contingent rewards, is strongly associated with followers' performance, perceived leader effectiveness, and job satisfaction. Furthermore, transactional leadership behaviors such as active management-by-exception are crucial for maintaining task accomplishment

and adhering to organizational safety procedures (Robins & Judge, 2024).

Conversely, Laissez-faire leadership is widely considered a passive and ineffective approach across generations, genders, and academic roles. Characterized by minimal guidance or oversight, this style may result in ambiguity, reduced accountability, and impaired team functioning. In such contexts, team members may fail to step up in the absence of proactive leadership. The lack of engagement may lead to perceptions of low-quality Leader Member Exchange (LMX), undermining organizational commitment. Thus, the perception of weak leader-follower relationships, as framed by LMX theory, may result in decreased loyalty and diminished motivation among subordinates (Robins & Judge, 2024).

Transformational leadership emerged as the preferred style across all demographic groups. Generation X, comprising Professors, Associate Professors, and Lecturers, tends to demonstrate stronger loyalty to individuals than to institutions in which they work. This generation also bears the highest average debt burden of any generational cohort. Gen Xers prefer work environments that are functional, positive, and enjoyable, as they value a pace that is both fast and flexible, as well as informal (Schintzier, 2019). They appreciate open and honest communication and prefer leaders who are direct in

their feedback. Rather than seeking praise, Generation X values constructive feedback as a means of personal and professional development (Day, 2023).

Millennial academic staff, typically ranging from Lecturers to Associate Professors, are more inclined to provide continuous feedback and demonstrate proficiency in managing virtual teams and digital communication platforms. They favour collaboration over competition and are drawn to institutions aligned with their values. Purpose-driven by nature, Millennial faculty members aim to transform both their universities and the broader society, adopting a leadership approach that is both adaptable and agile. Motivational drivers for this generation include opportunities for advancement, supportive colleagues and supervisors, comprehensive training, work-life balance, robust health insurance, job security, competitive salaries, and intellectually challenging work environments (Sharma, 2020).

Higher education institutions now face the critical task of preparing Generation Z for the workforce. Schmitt and Lancaster (2019) contend that the majority of students entering and completing higher education belong to Generation Z. In the academic workplace, Generation Z is already represented through roles such as teaching assistants, lecturer assistants, administrators, and junior staff. This generation requires leaders who foster engagement and offer

continuous, real-time feedback. They seek mentorship and prefer virtual communication methods, such as video conferencing, over more traditional channels like email or phone calls. Effective leadership for Generation Z involves patience, access to the right tools, and frequent check-ins to align expectations and performance (Day, 2023).

While gender and academic status do not significantly impact leadership style preferences, some patterns are observed. For instance, women tend to adopt a transformational leadership style more frequently than men. Meanwhile, students occasionally demonstrate a preference for laissez-faire leadership, particularly in contexts where autonomy and informal structures are valued.

The research findings align with previous studies indicating that transformational leadership is the most preferred style across generations, genders, and academic roles. Extensive research has identified five primary mechanisms that explain its effectiveness. First, the affective (or attitudinal) mechanism suggests that transformational leadership fosters positive emotional states among employees, thereby enhancing their job satisfaction, organizational commitment, and overall well-being. Second, the motivational mechanism highlights how this leadership style increases employee confidence and engagement, encouraging greater effort and investment in their work. Third,

the identification mechanism emphasizes the leader's role in promoting personal identification with their values and the broader identity of the team or organization. Fourth, the social exchange mechanism refers to the enhancement of leader-follower relationships, as evidenced by higher-quality leader-member exchange (LMX), where followers perceive greater support from their leaders, teams, and organizations. Finally, the justice enhancement mechanism illustrates how transformational leadership improves perceptions of fairness, fostering trust and motivating employees to contribute more actively to organizational goals.

Managerial Implications

Human resource professionals can utilize the findings of this research to develop more effective recruitment and retention strategies. Universities, whether large or small, must navigate the complexities of a multigenerational workforce by accounting for generational differences in characteristics, values, and motivational drivers. Institutions can enhance training and communication practices by acknowledging variations in job search behaviour, compensation expectations, career prospects, incentives, collaboration preferences, learning styles, and openness to change and development.

To address these differences effectively, establishing clear boundaries and maintaining consistent

standards across universities can help cultivate an inclusive environment and minimize confusion or division when different generations work together. This, in turn, supports the preservation of a healthy work environment that embraces diversity.

Nevertheless, the benefits of integrated adaptation may be diminished in universities that promote generational inclusion without aligning it with institutional key performance indicators. Hence, it is essential to develop work values that reflect the needs of a multigenerational workforce and to communicate these values in diverse ways that resonate with both students and academic staff.

Furthermore, recruiting leaders with transformational leadership styles can help build high-quality relationships between leaders and followers, encouraging mutual trust, respect, understanding, and a shared sense of responsibility.

Emphasis should also be placed on the principles of reciprocity and the development of high-quality leader-follower relationships, as advocated by LMX theory and the followership theory. Ultimately, implementing such strategies to manage workplace diversity can enhance motivation and contribute to a more positive organizational climate (King, 2017).

Limitations and Directions of Future Research

This study was empirically conducted within the context of universities. To broaden the applicability and generalizability of the findings, future research should extend to include schools, thereby encompassing a wider spectrum of educational settings.

To better understand the academic and learning needs of both academic staff and students, the use of qualitative methods is recommended. Engaging participants through interviews or open-ended questionnaires may provide deeper insights into their motivations and expectations, which can inform more effective strategies for engagement and support.

References

- Aguas, J. (2024). *A PHENOMENOLOGICAL STUDY OF LEADERSHIP*. Ann Arbor, MI 48106 - 1346 USA: ProQuest LLC.
- Al-youbi, Abdulrahman,; Zayed, Adnan; Nahas, Mahoud; Hegazy. (2021). The Roles of Universities in Development. *The Leading World's Most Innovative Universities Book*, DOI:10.1007/978-3-030-59694-11., 1-8.
- Aphimonbute, T. (1999). *LIFE CYCLE THEORY OF LEADERSHIP STYLE AND LEADERSHIP STYLE ADAPTABILITY: PUBLIC VERSUS PRIVATE HIGHER ACADEMIC PROFESSIONALS IN THAILAND*. USA: Proquest.

- Assefa, A. A. (2016). University-industry linkage practices, determinants and challenges theoretical and empirical article review: Lessons for effective and successful collaboration. *International Journal of Research in Management, Economics and Commerce*,.
- Baker, R. (2003). *Percieved effectiveness of carrier and techinical educations adminstrators as influened by leadership style and gender*. illinois, USA: UMI, Proquest.
- Bem, S. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 88(4).
- Caruana, C. J. (2020). *Leadership and Challenges in Medical Physics: A Strategic and Robust Approach*. London: IOP Publishing Ltd .
- Chicca, J., & Shellenbarger, T. (2018). Connecting with Generation Z: Approaches in nursing education. *Teaching and Learning in Nursing*, 13(3), <https://doi.org/10.1016/j.teln.2018.03.008> , 180–184.
- Christensen, S. S., Wilson, B. L., & Edelman, L. S. . (2018). Can I relate? A review and guide for nurse managers in leading generations. . *Journal of Nursing Management*, 26(6), <https://doi.org/10.1111/jonm.12601>, 689–695.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Daugherty, T., & Hoffman, E. (2014). eWOM and the importance of capturing consumer attention within social media. . *Journal of Marketing Communications*, 20(1-2), . <https://doi.org/10.1080/13527266.2013.797764> , 82–102.

- Day, J. (2023). *BABY BOOMERS, GEN X, MILLENNIALS, AND GEN Z TEACHERS: A comparison of Generational preferences for leadership practices*. Department of Educational Studies, Indiana University, Proquest.
- Dimock, M. (2019). *Defining Generation: Where Millennials End and Generation Z Begins*. <https://www.pewresearch.org/>.
- Dimock, M. (2019). *The generations defined*. Pew Research Center.
- Gabrielova, K., & Buchko, A. A. (2021). *Here comes Generation Z: Millennials as managers*. published by Elsevier Inc.
- Gap., G. (2024). *Investopedia*. Retrieved from <https://www.investopedia.com/terms/g/generation-gap.asp#:~:text=A%20generation%20gap%20refers%20to,younger%20generations%20versus%20older%20ones>
- Garg, R. (2024). Generational Contrasts: A Comparative Analysis of Resilience, Interpersonal Communication, and Life Values in Gen X and Gen Z. *International Journal of All Research Education and Scientific Methods (IJARESM)*, 12(3.), 943-948.
- Gashe, A. A. (2023). Academic Staff Engagement in Research and its relation to classroom teaching in public universities in Amhara Regional State. *journals.sagepub.com/home/sgo*, 1-8.
- Grossman, P. (2018). *www.zendesk.com*. Retrieved from <https://www.zendesk.com/blog/millennials-as-managers>
- Hair et al. (2010). *Multivariate data analysis (7th ed.)*. Upper Saddle River, NJ, USA: Prentice-Hall, Inc.
-

- Hampton, D., & Keys, Y. (2016). Generation Z students: Will they change our nursing classrooms? . . *Journal of Nursing Education and Practice*, 7(4), 111-115.
- Imperatori, B. (2017). Engagement and Disengagement at Work Drivers and Organizational Practices to Sustain Employee Passion Performance. *Springer Briefs in Business*.
- Imperatori, B. (2017). *Engagement and Disengagement at Work Drivers and Organizational Practices to Sustain Employee Passion Performance*.
- Jing, X. (2024). Investigating the Academic Status Allocation Mechanism of University Faculty: A Case Study of National Talent Projects. . *China Higher Education Research*, 40(07), <https://doi.org/10.16298/j.cnki.1004-3667.2024.07.08>, 51-57.
- K.W. Smola, C.D. Sutton. (2002). Generational differences: Revisiting generational work values for the new millennium. *Journal of Organizational Behavior*, 23 (4) , pp. 363-382.
- Karina Gabrielova & Aaron A. Buchko. (2021). *Here comes Generation Z: Millennials as managers*. published by Elsevier Inc.
- Kathryn Eklund, Erin S Barry, & Neil Grunberg. (2017). Gender Differences in Different Contexts. In *Gender and leadership*. Research Gate publication, INTECH.
- Kinetics, C. f. (2018). <https://genhq.com/generation-z-research-2018/>. Retrieved from <https://genhq.com/generation-z-research>

King, N. M. (2017). *GENERATIONAL DIVERSITY: ORGANIZATIONAL COMMITMENT BETWEEN GENERATION X EMPLOYEES AND GENERATION Y EMPLOYEES IN THE HOSPITALITY INDUSTRY*. USA: ProQuest LLC.

Lulla, A. (2019). Retrieved from <https://www.forbes.com/sites/forbeshumanresourcescouncil/2019/12/03/the-millennial-managers-are-here-four-ways-millennials-are-reshaping-the-workplace-again/?sh=5dce4f46e044>

MALESH, W. L. (2007). *LEADERS OF UNIVERSITY BACCALAUREATE NURSING PROGRAMS LEADERSHIP STYLE: PERCEPTIONS OF FACULTY*. Ottawa, Canada: Published Heritage .

Mannheim, K. (. (1952). Essays on the sociology of knowledge. *Collected works ,5(1) pp. 276-322*) New York, NY: Routledge.

organization, W. H. (2025). <https://www.who.int>. Retrieved from https://www.who.int/health-topics/gender#tab=tab_1.

Patel, D. (2017). www.forbes.com/. Retrieved from <https://www.forbes.com/sites/deep Patel/2017/08/27/the-top-5-traits-gen-z-looks-for-in-leaders/?sh=5572e7c8609d>

Pichon, C. (2010). *The effects of elementary school prinicpals leadership styles and prefered mangerial styles of reachers on students achievement* . Texas USA: UMT disseration Publishing.

Randstad. (2016). <https://workplacetrends.com>. Retrieved from https://workplacetrends.com/files/wp-content/uploads/2016/09/genz_millennials_collide_report_sept2016_bothlogos.pdf

- Randstad. (2016). https://workplacetrends.com/files/wp-content/uploads/2016/09/genz_millennials_collide_report_sept2016_bothlogos.pdf. Retrieved from <https://workplacetrends.com>.
- Rickes, P. (2016). Generations in flux: How Gen Z will continue to transform higher education space. . *lanning for Higher Education Journal*, 44(4), <https://secureservercdn.net/198.71.189.232/m91.7fc.myftpupload.com/wp-content/uploads/2019/09/Generat>, 21–45.
- Robins & Judge. (2024). *Organization behaviour*. Pearson education Ltd.
- Schintzier, K. &. (2019). www.theladders.com. Retrieved from These are the 5 main generation X characteristics you see in the workplace. : <https://www.theladders.com/career-advice/these-are-generation-x-characteristics-in-the-office-and-their-new-labelr>
- Schroth, H. (2019). Are you ready for Gen Z in the workplace? *California Management*.
- Schroth, H. (2019). Are you ready for Gen Z in the workplace? *California Management Review*, 61 (3) , <https://doi.org/10.1177/0008125619841006> , 5-18.
- Schwieger, D., & Ladwig, C. . (2018). Reaching and retaining the next generation: Adapting to the expectations of Gen Z in the classroom. . *Information Systems Education Journal*, 16(3), <https://files.eric.ed.gov/fulltext/EJ1179303.pdf> , 45–54.
- Seemiller, C., & Grace, M.. (2017). Generation Z: Educating and engaging the next generation of students. *About Campus*, 22(3), <https://doi.org/10.1002/abc.21293>, 21–26.
-

- Sharma, D. (2020). *How to Recruit, Incentivize and Retain Millennials. I generational Diversity in the Organizational Context*. Sage.
- Shatto, B., & Erwin, K. M. . (2016). oving on from millennials: Preparing for Generation Z. *The Journal of Continuing Education in Nursing*, 47(6),<https://doi.org/10.3928/00220124-20160518-05> , 253–254.
- Singh, A., & Gupta, B. . (2015). Job involvement, organizational commitment, professional commitment, and team commitment. . *Benchmarking*, 22(6), [doi:10.1108/bij-01-2014-0007](https://doi.org/10.1108/bij-01-2014-0007), 192-1,211.
- Slepian, R. C., Vincent, A. C., Patterson, H., & Furman, H. (2024). *Social media, wearables,telemedicine and digital health,—A Gen Y and Z perspective*. Elsevier EBooks <https://doi.org/10.1016/B978-0-12-824010-6.00072-1>.
- Sousaa, M. & Rochaa, A. (2018). Leadership styles and skills developed through game-based learning Maria José. . *Journal of business research*.
- Sowmya N , Sudha Shukla and Shubhra Chakravorty. (2021). Generational Diversity in the Workplace. *International Journal of Research in Engineering and Management (ISSN: 2456-1029)*, 77-81.
- Stephen P.Robins & Timothy A.judge . (2024). *Organization behaviour*. Pearson education Ltd.
- Strauss, W. &. ((1991b).). *Generations: The history of America's future*,9. New York: Quill William Morrow.

- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273-1296.
- Taylor, C. (2020). <https://www.kornferry.com>. Retrieved from <https://www.kornferry.com/insights/briefings-magazine/issue-39/the-millennial-managers-have-arrived>
- Turner, R. (2015). *Strategies for Bridging the Generation Gap between Baby Boomers and Millennials*. The College of St. Scholastica ProQuest Dissertations & Theses.
- Wanstreet, R. B. (2003). *Perceived effectiveness of career and technical education administrators as influenced by leadership and gender*. Proquest.
- Weirich, B. (2017). A Millennial Leader's Views on the Millennial Workforce 15 (2). 137–139 .
- Williams, A. (2015). Move over, millennials, Here comes generation z. . *The New* .
- Yukl, G. A., & Gardner, W. L. . (2020). *Leadership in Organizations*. Pearson Education, Inc.