

Managerial psychological gender and its impact on selected corporate behaviours

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ABSTRACT

Objective: The article aims to determine the psychological gender of leaders of the fastest-growing enterprises and its impact on corporate entrepreneurial behaviour and social responsibility.

Research Design & Methods: We conducted empirical, quantitative research on the leaders of companies from the top of the Forbes Diamonds List to obtain knowledge about their personality traits and behaviours that contribute to business success. Methods: survey research (n=150) applying Bem's BSRI gender role questionnaire, the concept of entrepreneurship orientation and the basic forms of corporate social responsibility (CSR). We also applied tests measuring the statistical significance of relationships between variables (Shapiro-Wilk, Ch2, V Kramer).

Findings: We identified three types of psychological gender culture among the leaders of the surveyed enterprises, the most numerous of which was mixed psychological culture. Androgynes (50 leaders) and unspecified cultures (46 leaders) constituted a total of 64% of the sample. With a few exceptions, there were no statistically significant differences in the entrepreneurial orientation, selected entrepreneurial behaviours, or involvement in responsible social activities of the identified gender cultures.

Implications & Recommendations: Women can and should perform managerial functions in business and achieve success, provided they acquire instrumental traits in the socialization process. The combination of instrumental and expressive traits in a person, especially in a manager, increases their adaptive intelligence and the probability of success regardless of biological sex. The postulate of gender diversity in top management is justified but in terms of psychological gender, not biological sex.

Contribution & Value Added: The research results show that the leaders of the fastest-growing companies have developed both instrumental and expressive features, which may indicate their high adaptive intelligence. Masculine culture differs from the others in a greater, statistically significant, feature: readiness for fierce competition and a lower declarative orientation towards climate protection, safe products, and concern for the local community in terms of social activity. The leaders' cultural, entrepreneurial, and social profiles have additional cognitive value. The results contribute to the development of the following areas: managerial competences, role congruity theory, the theory of higher echelons, and social/psychological gender in business.

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INTRODUCTION

In 2023, Professor Claudia Goldin from Harvard University received the Nobel Prize in Economic Sciences for her research on the situation of women in the labour market. She comprehensively examined the issue of women's earnings and their situation in the labour market over the centuries. Economic inequalities related to gender, shortage of women in managerial positions, gender segregation, and pay gap – these are common phenomena in the labour market, which are based on persistent social and cultural

stereotypes related to gender. The award for Claudia Goldin testifies to the problems' relevance and the need to solve them for economic, social, and moral reasons. The problem is difficult because it results from cultural conditions, which seem to be resistant to quick changes. The essence of the problem concerns historically and culturally shaped patterns of personality traits and behaviours of women and men, as well as persistent stereotypes regarding the expectations around managers' social roles. In addition to formal qualifications, knowledge and industry experience, a manager is expected to have agency, leadership, courage, vision, and readiness to take risks, which are features of an instrumental nature, biologically and then culturally identified with the male gender. It was believed that women, due to their biological conditions and then natural divisions of social roles and their perpetuation over time, are carriers of expressive features such as gentleness, sensitivity, empathy, caring, and community, which claim them to perform culturally specific functions other than men (Deaux & Lewis, 1984). Although a lot is changing and the number of women taking up managerial positions is increasing, the slogans 'think manager-think male' and 'think crisis-think female' are still present in organisational life and maintain stereotypes regarding the social role of a manager (Schein, 1973). Management literature of recent decades provides arguments that the modern business environment evolving towards unpredictability and discontinuity of changes requires a broader repertoire of adaptive behaviours from the manager, which involves the need to use the expressive features of others or develop and consolidate them in oneself. The former postulate can be implemented by ensuring gender diversity in top management teams (Hambrick, 2007). The presence of women on management boards is intended to provide a desirable combination of instrumental and expressive features of such teams, but, at the same time, it may cause undesirable gender conflicts (Ali *et al.*, 2023). The management literature poorly explores the concept of psychological/social gender culture (Bem, 1974; Mandal, 2000). It assumes that as a result of a cultural and moral revolution, a person may acquire, in the process of broadly understood socialization, personality traits characteristic of their biological sex and personality traits of the opposite sex, and become an androgyne with a combination of instrumental and expressive features, which allows them to have greater behavioural potential and free themselves from limitations related to biological gender as well as flexibly adapt to the situation. According to psychologists, this potential may significantly determine a person's professional successes and successful personal life. Although psychologists speak out much about androgyny and its advantages for human personality, we found only few studies on this topic in the field of management. We present them in the literature review. They mainly report the relationship between the psychological culture of a manager's gender and business effectiveness (Jurma & Powell, 1994; Srivastava & Nair, 2011; Powell *et al.*, 2021). According to these studies, managers' androgynous personalities positively impact the results achieved by their enterprises and interpersonal relations in these organisations. However, in these few cases, the studies involved managers in companies with varying degrees of financial success, as well as lower-level managers. May and Spangenberg (1998) studied male MBA students and showed that those of them who had an androgynous personality presented a more flexible style of solving problems with the environment than the rest. Other studies (Lipinska-Grobelny & Wasiak, 2010) established a link between the gender culture of biological female managers and non-managers and their job satisfaction. In the latter case, only the percentage distribution of possible psychological cultures of women in managerial positions seems to be interesting from the point of view of the article's subject. These studies did not consider biological male managers and business financial results.

We aimed to determine the psychological gender of leaders of the fastest-growing enterprises in Poland as well as its impact on corporate entrepreneurial behaviour and social responsibility. Using the psychological concept, we wanted to solve the research problem of personality traits of leaders of the fastest-growing enterprises and their impact on selected corporate behaviours. This is the first study to identify the personality traits of highly successful managers in line with the need to search for new forms of managerial competences (Helfat & Martin, 2015). To solve this research problem, we formulated the following research questions:

- RQ1:** What psychological/social gender cultures are presented by the leaders of selected companies from the Forbes Diamonds List? Which culture dominates?
- RQ2:** How strong is the entrepreneurial orientation of the leaders of the selected enterprises?

- RQ3:** How strongly are the leaders of the selected enterprises involved in international expansion?
- RQ4:** What is the attitude of the leaders of the selected enterprises towards artificial intelligence?
- RQ5:** What is the social responsibility profile of the leaders of the selected enterprises like?
- RQ6:** Is there a relationship between the psychological gender culture of the leaders and their entrepreneurial orientation, commitment to international expansion, and attitude towards artificial intelligence?
- RQ7:** Is there a relationship between the leaders' psychological gender culture and their social responsibility?
- RQ8:** Is there a relationship between the leaders' entrepreneurial orientation and their social responsibility?

By solving the research problem and learning about the personality traits of biological women who are leaders, it will be possible to refer to the conditions that enable them to fulfil the demanding role of a manager.

The research used a quantitative method on a sample of $n=150$ leaders of companies occupying top positions on the Forbes Diamonds List in 2022.

LITERATURE REVIEW

To review the literature, we used Sage Publishing and Google Scholars databases, formulating the search phrases as: social role of gender, social/psychological gender culture in management/business, androgyny in business. We explored the 'relevance' and 'the latest' filters. Based on the analysis of abstracts, from over 5 000 items, we selected 100 of them. The vast majority of the rejected publications concerned the issue of biological sex in managerial positions, the role of biological women in organisations, patriarchal structures, and succession strategies in family businesses. The appearance of such entries in the search engine is related to the fact that in the management literature, the terms 'gender' and 'sex' are commonly used interchangeably, which from the point of view of psychology have different meanings. We divided the selected literature into three thematic threads: the role congruence theory, gender diversity in management from the perspective of higher echelons, and the concept of psychological gender and conducted the review.

The Social Role/Role-congruence Theory

Gender stereotypes have their origins in the division of labour based on gender cultural patterns, according to which the means of production are controlled by men within a patriarchal social structure. The socialization of people within this structure perpetuates stereotypes (Ruble *et al.*, 2006). It is not the individual but the culture that is responsible for creating gender stereotypes (Fiske & Taylor, 2013; Hinton, 2016). The social role theory/role congruence theory (Eagly, 1987, 1995, 1997; Skelly & Johnson, 2011; Koenig & Eagly, 2014; Koch *et al.*, 2015; Ellemers, 2018; Triana *et al.*, 2024) explains the gender stereotypes present when employing women in managerial positions as the result of historically shaped social roles of women and men. Candidates for managerial positions are expected to have technical knowledge, cognitive intelligence and culturally as well as biologically desirable features associated with the male gender, such as leadership predispositions, readiness for aggressive competition, strength, agency, assertiveness, and success orientation. Women are biologically and culturally assigned with caring characteristics, caring for family and home, gentleness, community, and orientation towards social relationships. In business, they are perceived as risk-averse (Maxfield *et al.*, 2010). Employers may assess these features as not fitting the expectations related to the manager's role and therefore disqualifying women applying for professional promotion. In turn, women who are active leaders and manifest masculine characteristics acquired through socialization are accused of violating gender cultural standards by conservatives (Eagly & Karau, 2002). Maintaining gender stereotypes may result from a male threat to self-esteem (Owuamalam & Zagefka, 2014; Inesi & Cable, 2015; Williams

& Tiedens, 2016). The theory of psycho-dynamic systems (Padavic *et al.*, 2020) explains women's difficult access to professional advancement in organisations with work-family conflict. Women are unable to increase their commitment to work and work longer hours due to their household responsibilities resulting from the cultural gender role pattern.

The Perspective of Higher Echelons and Gender Diversity in Management

According to the theory, managerial competences shape the dominant logic in an enterprise, which determines the routine, procedures and skills influencing the implementation of adopted strategies and the search for new growth and development options (Kor & Mesko, 2013). Enterprises are a reflection of their leaders, and their knowledge, experience, values and behaviours translate into decisions and assessments of the organisational situation (Cannella & Monroe, 1997). Despite progress in research on the impact of managerial competences on the results of enterprises and their competitive positions, there is a need for further research and deepening the knowledge about this relationship (Helfat & Martin, 2015). It is suggested that researchers use the theory of higher echelons (Carpenter *et al.*, 2004; Hambrick, 2007) as a construct for designing research determining how various characteristics of the top management team, such as the size and demographic characteristics of its members, affect the team's effectiveness and the company's results. A company's strategic behaviour reflects the team's collective leadership, team knowledge, skills, and interactions. The literature on optimizing the composition of the top management team includes publications indicating that diversifying its composition in terms of gender has a positive impact on its effectiveness and the company's results. Women enrich the team's managerial skills, and decision-making processes, and positively influence the innovative activity of the company (Bagshaw, 2004; Torchia *et al.*, 2011; Diaz-Garcia *et al.*, 2013). Women as managers, unlike men, are more people – and employee-oriented, more democratic, ready for cooperation and support, with greater inclinations to build interpersonal relationships (Brown *et al.*, 2002). Managerial competencies combine technical, conceptual, and social skills (Katz, 1974) and are necessary for the effective creation, integration and reconfiguration of enterprise resources (Adner & Helfat, 2003). The sources of technical, conceptual and social skills of managers are knowledge, education, experience, values and personality traits that have instrumental and expressive dimensions. Deaux and Lewis (1984) used the above-mentioned dimensions of personality traits. Instrumental features are characteristic of the socially, culturally shaped, traditional male gender schema, while expressive features are characteristic of the culturally shaped female gender schema. Instrumental features in the masculine schema include, among others: leadership tendencies, agency, self-confidence, aggression, ambition (need for success), egoism, assertiveness (Bem, 1974) and those that mostly constitute the entrepreneurial orientation: innovativeness, proactivity, lack of risk aversion, autonomy, readiness for fierce competition (Lumpkin & Dess, 1996). There is no consensus in the literature on treating innovation in the entrepreneurial orientation as a purely instrumental feature. It is believed that women have an advantage over men in generating ideas and social competences, which makes them more innovative and conducive to knowledge creation (Hisrich & Brush, 1984; Sandberg, 2013). The feminine schema (expressive features) includes, among others: gentleness, empathy, understanding, compliance, and community. Deductively, the source of the benefits of a gender-diversified top management team is the combination of not only knowledge and experience but also instrumental and expressive features that allow for flexibility and adaptability of managerial behaviours.

Previous empirical research confirms that gender diversity in management teams provides diverse types of skills, knowledge and ideas that translate into benefits for the organisation (Krishnan & Park, 2005; Ruigrok *et al.*, 2007; Torchia *et al.*, 2011). It is associated with better problem-solving, greater innovation, learning, flexibility of activities, and diversity of competences (Ostergaard *et al.*, 2011). Miller and Triana (2009) and Kaymakam (2023) suggest that gender diversity in management teams provides diverse human and social capital that helps the teams create new ideas, appropriately allocate resources, and discover opportunities in R&D activities. It allows for the creation of an open work environment (Nielsen & Huse, 2010). Most empirical research on the positive impact of gender diversity in top management teams focuses on the financial performance of large companies (Smith *et al.*, 2006; Jurkus *et al.*, 2011; Dezso & Ross, 2011; Joecks *et al.*, 2013). There are known results of research

on this relationship in other contexts. In their research conducted among Spanish small and medium-sized technology enterprises (culturally masculine sectors), Ruiz-Jimenez and del Mar Fuentes-Fuentes (2016) showed that the gender diversity of top management teams increases (moderates) the positive impact of managerial competences on product and process innovations of enterprises.

Few studies in the literature indicate a negative relationship between gender diversification in management teams and corporate performance (Dwyer *et al.*, 2003; Ali *et al.*, 2015) or an insignificant relationship between them (Moscu, 2013; Richard *et al.*, 2013). Subsequent studies have found that this relationship may be non-linear, *i.e.*, it is positive or negative depending on the level of gender diversification and the type of sector, *e.g.*, men's or women's (Nakagawa & Schreiber, 2014; Schwab *et al.*, 2016; Adusei *et al.*, 2017; Bae & Skaggs, 2019; Ali *et al.*, 2023). In these cases, the form of the relationship between the level of gender diversification and labour productivity has the shape of a U-chart (Bae & Skaggs, 2019; Ali *et al.*, 2023) and between gender diversification and financial performance and market value has the shape of an inverted U-chart (Nakagawa & Schreiber, 2014; Adusei *et al.*, 2017). Richard *et al.* (2013) suggest that the type of graph (U-shaped and inverted U-shaped) of the relationship between gender diversification and labour productivity depends on the risk taken in the enterprise/sector. The benefits of gender diversification for labour productivity resulting from the combination of knowledge, skills, and instrumental and expressive features may turn out to be smaller than the potential problems caused by gender conflicts in management teams in the case of a low level of gender diversity in male sectors (Chart U) or too high level in women's sectors (inverted U-plot) (Ali *et al.*, 2023).

Gender diversity in management teams has a positive impact on corporate social responsibility (Liao *et al.*, 2015; Seto-Pamies, 2015; Rao & Tilt, 2016; Terjesen *et al.*, 2016; Francoeur *et al.*, 2019; Katmon *et al.*, 2019; Peng *et al.*, 2021, 2022). In such teams, compared to men, women have greater social sensitivity, a stronger orientation towards building long-term social relationships and more ethical behaviour (Czyzewska, 2006; Terjesen *et al.*, 2016), which means that thanks to gender diversity, enterprises will defend the weakest stakeholders. Only two literature sources claim that the relationship between the gender diversity of the board and the company's CSR activity is statistically insignificant (Bear *et al.*, 2010; Boulouta, 2013). Peng *et al.* (2022) explain these two cases with factors that may negatively moderate the relationship in question. In their empirical research, they showed that national culture, and specifically its dimension of masculinism, plays such a role (Hofstede *et al.*, 2010). We think that the size of the company may also be such a moderator. One of the development barriers of small and medium-sized enterprises is resource scarcity, and therefore their intentions towards sustainable development may remain in the declarative sphere due to the priority of growth and development of the enterprise and the mobilization of financial resources for these purposes.

The Concept of Psychological/Cultural Gender in Management

Although every person has two elements within themselves: male and female ones (Bem, 1974; 1997), their gender is biologically categorized at the moment of birth. In the past, there was a belief in a strong connection between a person's biological sex and their psychological characteristics and behaviours (Constantinople, 1973). The so-called *biological position* assumes that the psychological differences between biological sexes are the result of differences in the production of sex hormones (Zuckerman, 1991). Testosterone – the male hormone – is responsible for aggression and its derivatives, *i.e.*, self-confidence, the tendency to dominate and compete. Prolactin – a female hormone – determines caring behaviour, sensitivity, and tenderness. In turn, the structural and functional differences of the female and male brain are the source of expressive features and the socio-emotional nature of female activities as well as instrumental features and the cognitive nature of male activities (Moir & Jessel, 1992). Moreover, sociobiologists add that differences in the personality of women and men have been consolidated in the course of evolutionary processes as a result of the specialization of social roles and the division of labour between them (Buss, 2019). The cultural approach presents a different position. During the socialization process, differences between cultural gender patterns, *i.e.*, between femininity and masculinity, formed and consolidated (Eagly, 1987; Lott & Maluso, 1993). Because the socio-cultural environment changes over time, the socialisation conditions also change, which means that,

in addition to innate sex characteristics, other features that determine behaviour regardless of biological sex may be acquired. Women may acquire various masculine (instrumental) traits to varying degrees, in turn, men may acquire various feminine (expressive) traits. On this basis, scholars introduced a new notion of psychological /cultural gender as a person's ability to categorize and perceive themselves in cultural patterns of femininity and masculinity (Mandal, 2000), which translates into behaviour and attitudes independent of biological sex. Bem (1974, 1997) distinguished the cultural female gender, the cultural male gender and the mixed gender culture – characteristics of individuals who have developed the traits of the opposite biological sex. In the course of further research she defined four types of cultural/psychological gender: culturally defined people whose psychological features are characteristic of their biological sex, culturally undefined people whose neither female nor male features are not shaped distinctly, independently of biological sex, androgynous people who are characterized by clear, strong both feminine and masculine features regardless of biological sex and finally, there are cross-cultural persons, largely defined by the psychological features of the opposite biological sex. In addition to the individuals culturally defined according to their biological sexes (masculine men, feminine women), the rest have mixed gender. People of mixed gender have a potentially greater repertoire of behaviours and adaptability in specific life and professional situations. Among them, androgynous people have the widest potential for possible behaviours and the greatest opportunities for constructive action. Empirical research (Klimicka *et al.*, 1987; Faulkender, 1991) shows the potentially positive relationship between androgyny and satisfying the needs of human self-actualization. Having only clearly developed cultural characteristics consistent with biological sex is not always beneficial (Bem, 1997). A high femininity index in women is often associated with a high level of anxiety, low self-esteem and low social acceptance, and in turn, a high masculinity index in men causes a high level of anxiety, high neuroticism, and low self-acceptance. According to Bem (1997), young people with a clear gender identity may have lower cognitive abilities, lower spatial imagination and lower creative abilities. Androgynous personalities can add particular value in the following professional activities: medicine (Rupavataram, 2017), art (Jonsson & Carlsson, 2000), science (Norlander *et al.*, 2000), and leadership (Kark *et al.*, 2012; Way & Marques, 2013; Powell & Butterfield, 2015).

Despite recognizing the value and importance of a wide range of instrumental and expressive features in a human personality for the quality of their life, representatives of psychology in the twenty-first century have a critical approach to traditional androgyny because they consider it unnatural for a person to have a biological sex and a psychological sex, *i.e.*, they question the possible dualism in this respect, which may cause internal disharmony, personality, and cultural conflicts (Woodhill & Samuels, 2023). In their opinion, a person has one biological sex, with which they are born and which determines their behaviours only within a physiological and socially limited scope. An individual's basic social behaviours result from personality traits acquired in the socialization process and predispose them to fulfil the same social roles regardless of biological sex. Therefore, they propose a new model of social androgyny called neoandrogyny, devoid of references to biological sex and its limitations. In the socialization process, neoandrogynes acquire a combination of instrumental, expressive and neutral features, which determine positive social androgyny with the following parameters: a sense of fulfilment, social respect, high self-esteem, acceptance of others, internal locus of control. In turn, the factors supporting the intensity of positive androgyny are social effectiveness (emotional intelligence), creativity, abilities (talents, passions), outstandingness (exceptionality, excellence, charisma) and determination (enthusiasm, commitment, optimism). Therefore, modern androgyny refers to the theory of adaptive intelligence (Sternberg, 2020), reminiscent of multiple intelligence (Gardner, 2011). It is a specific combination of social intelligence with cognitive, analytical, and creative skills, allowing an individual to set and achieve significant goals in life in the context of a specific culture (Sternberg, 2020).

In light of the above, mixed gender culture, especially androgyny, should be the subject of interest in management sciences in the context of the desired personality traits of managers and their behavioural potential as well as the ability to adapt to various circumstances. However, there is little discussion on this topic in the management literature. Androgyny causes flexibility in human behaviour depending on the situation (Bem, 1975) and increases leadership effectiveness (Hall *et al.*, 1998). Sargent (1979) believes that the androgynous personality in a managerial position, combining instrumental

and expressive features and using them in a wide repertoire of behaviours, is highly desirable. In her opinion, women should become more assertive, self-confident and ready to exercise power, while men, in turn, should be more cooperation-oriented, less competitive, more open and supportive of others. May and Spangenberg (1998) studied male MBA students preparing to perform managerial roles and showed that those of them who had an androgynous personality presented a more flexible style of solving problems with the environment than others. The results of research by Jurma and Powell (1994) and Lay (1994) showed that subordinates in organisations are more satisfied when their superiors have culturally assigned characteristics, both feminine and masculine. Respondents rated the androgynous managers the highest, and managers with a dominance of feminine characteristics as more effective than those with a dominance of masculine characteristics. Based on the gender role questionnaire (BSRI) by Bem (1974), Srivastava and Nair (2011) showed that in a sample of 300 middle and lower-level managers of female and male biological sex, employed in various sectors, there were three gender cultures: feminine, masculine, and androgynous. The androgynous culture included people with strong both feminine and masculine features as well as those presenting both feminine and masculine features but with less intensity, referred to in the literature as people without a gender-cultural identity. From the point of view of management sciences, it seemed right to treat both subgroups together as individuals with a mixed gender culture, demonstrating a wide repertoire of behaviours and adaptive skills thanks to having both instrumental and expressive features. The research detected a positive and statistically significant relationship between androgyny (broadly understood as mixed-gender culture) and managerial effectiveness measured by the MEQ test by Gupta (1996). During research on the relationship between job satisfaction and gender culture of women in managerial and non-managerial positions in Poland, Lipinska-Grobelny and Wasiak (2010) found that regardless of the position held, the largest percentage was androgynous personalities – approximately 49%, and the smallest for the female gender – 15% in the case of managers and 1.6% for the male gender among women holding other positions. The second place among women managers was taken by the male gender – 20%, and among non-managers, the female gender – 35.5%. The results indicate that women managers from a male culture experience the highest remuneration satisfaction, while those from a typically feminine culture experience the least satisfaction from remuneration. Recent research on a large sample has found that the most effective managers show a decreasing emphasis on masculinity and an increasing emphasis on femininity over time (Powell *et al.*, 2021). The authors of the study claim that an effective, efficient manager is one with an androgynous personality.

Due to the limited quantity and scope of empirical research on this topic conducted so far worldwide, the authors studying the topic do not formulate research hypotheses. They focus on finding answers to the research questions posed above. To date, the existing research reports prove only that there is a positive correlation between the personality of managers presenting a mixed psychological gender culture and the results achieved by the companies or divisions they manage (Jurma & Powell, 1994; Srivastava & Nair, 2011; Powell *et al.*, 2021). There is no research that would determine the psychological gender cultures of top managers of strategically and economically unique companies and characterise their cultural, entrepreneurial, and social profiles.

RESEARCH METHODOLOGY

Justification for the Selection of Research Subjects

According to the art of strategic management, the continuous development and growth of an enterprise are crucial for its competitive position and long-term functioning. Those enterprises that grow faster, increase their market shares, better adapt to changes in the environment, and increase their competitive advantage over their rivals. Strategic management is the domain of the leader, and the top management team, and the strategic goals achieved are a function of their competences, including their personality traits, values, and behaviours. The literature review indicates that the combination of instrumental and expressive personality traits of people who make decisions and shape the logic and strategic culture of the enterprise they manage is of great importance for managerial success. To achieve the optimal combination of these features, organisations should introduce gender diversity

into the management team. Men typically display instrumental traits, in line with traditional gender cultural patterns. Women, on the other hand, tend to embody expressive traits. Alternatively, organizations can select candidates for managerial positions who possess a mixed gender culture. These individuals demonstrate both instrumental and expressive traits, which enables them to behave flexibly and adapt their actions according to changing conditions and needs. The latter solution, little explored in scientific research and in the literature, may seem particularly interesting for micro, small, and medium-sized enterprises that cannot afford extensive management teams and gender diversity due to resource barriers. In turn, large companies should strive for gender diversity on management boards, but in a cultural and not a purely biological context. Therefore, we decided to conduct empirical, quantitative research on the leaders of companies with the strongest growth orientation from the Forbes Diamonds List 2022 in Poland. Our goal was to gain insights into the personality traits that contribute to their undeniable business success. These traits may serve as a source of reflection for other business practitioners and for decision-makers responsible for shaping broadly understood education.

Research Design

Using the quantitative method, *i.e.*, survey research, we collected empirical material to solve the research problem and achieve the goal. We conducted the survey research using the CATI technique in the period November-December 2023.

In total, $n=150$ companies from the 2022 Forbes Diamonds List participated in the survey. We intended to research the leaders of companies occupying the top positions on the list. Initially, we assumed a limit of the first 2 000 companies (11 818 total quotes) with relatively comparable significant strategic achievements. The selection of the sample consisted of telephone contacts, starting with the leader of the list and ending finally at the company ranked in 2016, asking their leaders / key decision-makers to participate in the survey. In total, 150 of them agreed and we received 150 complete questionnaires. This approach provided an opportunity to select the best companies with relatively comparable achievements. Namely, to be included on the list, companies must have a positive credibility rating and sales revenues in the last year of not less than PLN 5 million. For this purpose, we assessed the following candidate indicators: EBIT, ROA, financial liquidity, timely payment of receivables, financial results, and revenues. Then, we valued companies using the Swiss method, which combines asset and income valuations, because entities focused on growth and investments may not show high profits. The integration of both approaches offers a more comprehensive picture of the company's value, which ultimately determines its place in the ranking. This value is averaged over the last five years and updated annually. The research sample constituted 7.5% of the subgroup of the 2016 fastest-growing companies from the List.

The questionnaire applied consisted of five parts. We used the first part to obtain the values of control variables: biological sex of the leader, place of birth, marital status, education, age of the enterprise, its size, regional location, organisational and legal form, family/non-family nature. The second part of the questionnaire, based on the classic, traditional (used in other studies around the world) BSRI Gender Role Questionnaire (Bem, 1974), allowed for the measurement of the leader's gender culture. Traditional gender culture patterns: female and male reflect a precise division into expressive and instrumental features, which is important in the managerial context. Our questionnaire included additional features related to the perception of femininity (family-oriented, timidity, obedience, need to feel safe, forgiveness) and masculinity (bravado, excitability, pride, sensitivity to honour, weakness for alcohol) in Polish culture (Zukowska, 2006). In total, on a scale of 1-5, the leaders determined the intensity of 26 feminine (expressive) and 26 masculine (instrumental) traits. The third part of the questionnaire measured the leader's entrepreneurial orientation on a scale of 1-5, using five features considered to be the definition of entrepreneurial orientation (Lumpkin & Dess, 1996): innovation, proactivity, risk tolerance, sense of autonomy, and readiness to compete. We gave respondents a detailed interpretation of proactivity. The next part of the questionnaire measured two selected entrepreneurial behaviours of the selected companies: commitment to international expansion and attitude towards artificial intelligence. The last part of the questionnaire intended to help determine the level (scale 1-5) of social responsibility of the surveyed leaders and the activity of the enterprises they manage in this area.

Although the questionnaire consists of parts that are scientific constructs deeply rooted in scientific theory and research (BSRI by Bem, entrepreneurial orientation by Lumpkin & Dess, CSR), we conducted a pilot study on a sample of 25 leaders of enterprises from the Forbes Diamond List in September 2023 to check the internal consistency of the survey construct used in this study and estimate its reliability. We did it using Cronbach's Alpha reliability coefficient. We also examined how removing individual questions would affect the change in the value of this indicator. We performed such analyses separately for each of the question sections: masculine aspects (26 questions), feminine aspects (26 questions), and entrepreneurial aspects (5 questions). For each of these sections, the Cronbach's alpha coefficient value was more than 0.7, which means that the respondents provided consistent answers. The section of the questions about feminine aspects was characterized by the greatest consistency (0.922 with a 95% confidence interval of 0.84 to 0.956). None of the survey questions significantly improved the questionnaire's reliability, so we may consider its composition appropriately selected (Cronbach, 1951).

RESULTS AND DISCUSSION

Demographics of the Surveyed Leaders

The vast majority of the respondents were biological men – 95 of them. The number of biological women participating in the study was 55. The largest group of respondents were people who got married. In total, 107 out of 150 respondents chose this answer. Moreover, 29 surveyed leaders were single, while another 14 respondents lived in extramarital relationships. The largest number of the leaders participating in the survey (129) had higher education, 17 respondents had secondary education, and the remaining 4 had vocational education. The respondents most often represented companies run in the form of a limited liability company – there were 119 of them, 13 respondents indicated that they represented a general partnership, 9 a joint-stock company, 4 a limited partnership, 2 respondents ran businesses as natural persons, the rest of the respondents indicated other organisational and legal forms. Half of the respondents (75 people) answered that they represented a family business. Furthermore, 82 leaders managed a small enterprise, 38 a medium-sized enterprise, 21 a micro-enterprise, and 9 a large enterprise (the questionnaire included the criteria of the European typology of companies).

A Method for Identifying the Psychological Gender Culture of Leaders of the Surveyed Enterprises

To determine what type of psychological/social gender culture the surveyed representatives of companies on the Forbes Diamonds List represent, the survey questionnaire included a segment in which we asked the respondents to rate 52 features in terms of the degree to which the features occurred in them. The respondents used a 5-point scale, where 1 meant that a given feature did not occur at all in the respondent, and 5 meant that it occurred very strongly. We treated the first 26 features listed in the survey questionnaire as masculine – instrumental features, and the next 26 features as feminine – expressive features. For each respondent participating in the study, we calculated the sums of points in the male and female parts. In the next step, we calculated the difference between these two sums (sum of points in the male part minus the sum of points in the female part). We graphically analysed the distribution of results using a histogram and a quantile chart (Figure 1). As expected, the distribution of differences was close to normal ($p > 0.05$; Shapiro-Wilk test). The mean of the differences was -14 points and the standard deviation was 14 points. Parametric statistical tests may be used when the variables are normally distributed. Developing a method for identifying the psychological gender culture of leaders required consultations with professional statisticians.

With this in mind, we adopted the following division:

1. If the difference was within one standard deviation from the mean, i.e., -28 to 0 points, we then qualified the respondent as representing a mixed social gender culture,
2. for results below one standard deviation from the mean value, i.e., less than -28 points, we classified a given respondent as a representative of a female social culture,
3. If the result was higher than 0 points, then we classified the respondent as a representative of a male social culture.

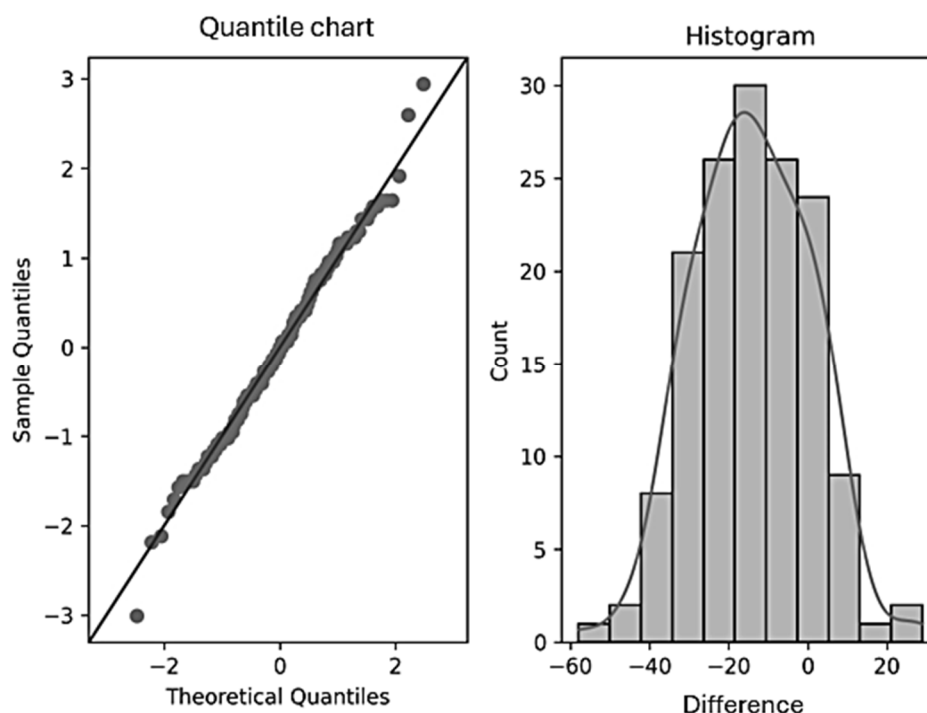


Figure 1. Distribution of the obtained test results (n=150)

Source: own elaboration.

Gender Cultures of the Surveyed Leaders

Adopting the described methodological assumptions regarding the method of determining the social gender culture of the respondents, we established that out of 150 respondents participating in the study, 96 of them represented the mixed type of social gender culture, 28 people represented female gender culture and 26 people represented male gender culture, *i.e.*, 64%, 19%, and approx. 17% respectively. Most leaders have developed both instrumental and expressive qualities. These are individuals with androgynous traits and ones with an undefined psychological culture. The research results also allowed us to determine what percentage of biological men and women participating in the study we could describe as representatives of mixed, male and female social gender cultures. Table 1 presents the results.

Table 1. The biological sex of respondents and their psychological gender culture (n=150) in percentage

Features	Male psychological culture	Mixed psychological culture	Female psychological culture	Total
Female biological sex	12.8	54.5	32.7	100%
Male biological sex	20.0	69.5	10.5	100%

$\Phi < 0.03$, V Kramera 0.277.

Source: own study.

The results show that we can identify 30 biological women and 66 biological men participating in the study based on their responses to the survey questionnaire as representatives of the mixed psychological gender culture. We classified 7 biological women and 19 biological men into the male gender culture. In turn, we considered 18 biological women and 10 biological men to exhibit characteristics of the female psychological culture.

Entrepreneurial Orientation of the Leaders, Selected Corporate Activities, and their Relationships with Gender Culture

Another research goal was to determine the entrepreneurial orientation of the surveyed company leaders. To be able to make such a determination, the survey questionnaire included a question in

which we asked respondents to indicate which of the following five features: innovativeness, proactivity (ability to identify opportunities and threats), risk tolerance, readiness to compete in the sector, autonomy they find in themselves and to what extent. The respondents answering this question were to rate the intensity of each of these five features in themselves using a 5-point scale, where 1 meant that the respondent did not identify a given feature in themselves, and 5 meant that they identified it to a very large extent. Figure 2 presents the results of the respondents' answers to this question.

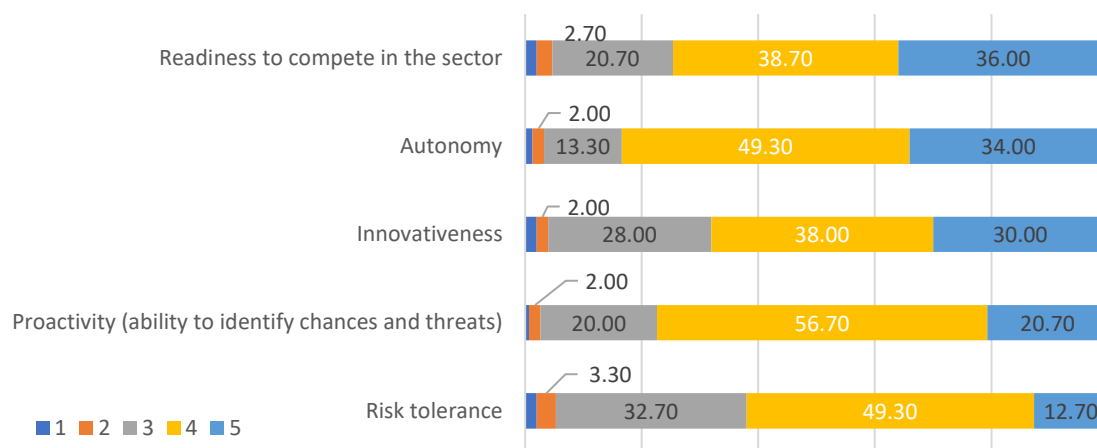


Figure 2. Entrepreneurial orientation of surveyed leaders (n=150) in percentage

Source: own elaboration.

The research results provide the basis for stating that the respondents have a relatively strong entrepreneurial orientation. For each of the assessed features, the cumulative percentage of ratings '4' and '5' was not lower than 60.0%. In the case of the innovativeness feature, it was exactly 68.0%, in the case of proactiveness: 77.4%, risk tolerance – 62.0%, the readiness to compete in the sector – 74.7%, and autonomy – 83.3%. Noteworthy, 60 out of 150 respondents marked '4' and/or '5' in relation to all 5 examined features. The entrepreneurial orientation of the surveyed respondents, in the light of the research results, is characterized primarily by a high degree of internal autonomy, proactivity and readiness to fight in a competitive sector. Respondents most often rated these features as '4' and '5'. The presented results indicate the source of the success of companies from the Forbes Diamonds List. Thanks to the strong entrepreneurial orientation of their leaders, they grow quickly and build sustainable competitive advantage.

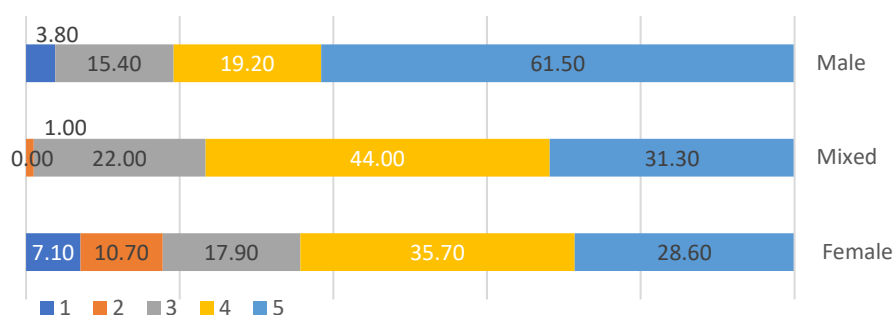


Figure 3. Readiness to compete in the sector and social culture of gender (n=150) in percentage

Source: own elaboration.

The results of the conducted research showed that people assigned to the male psychological culture were statistically significantly more likely to choose higher scores measuring the feature of readiness to compete in the sector than the respondents assigned to the other types of psychological gender culture ($\chi^2 = 24.47914916$, $p\text{-value} = 0.00259948$). In the remaining cases of the dimensions of entrepreneurial orientation, the type of psychological/social gender culture was not a variable that would statistically significantly differentiate the respondents' assessments ($p > 0.05$).

We may explain this only difference by the presence of the male hormone testosterone responsible for developing instrumental traits: aggression, and its derivatives, *i.e.*, self-confidence and the tendency to dominate and compete (Zuckerman, 1991).

Moreover, when analysing the research results, we did not detect any statistically significant relationship between the socio-demographic characteristics of the respondents, the status of their businesses (family/non-family), and their entrepreneurial orientation ($p > 0.05$).

More than half of the surveyed leaders, *i.e.*, 78 people, declared that their companies were expanding on international markets. Another 21 people declared that they planned to do so in the future. Moreover, 51 survey participants indicated that their companies did not conduct international expansion and did not plan it. Only 18% (27 enterprises) generated significant revenues from sales on foreign markets (intensity rated 4 or 5). The average assessment of the intensity of international activity given by the respondents was 2.14, which allowed us to conclude that the overall level of expansion on foreign markets of the surveyed enterprises remains surprisingly low. There was no statistically significant relationship between international expansion, its intensity and their leader's psychological gender ($p > 0.05$).

The questionnaire included a question determining the attitude of the surveyed leaders to the use of artificial intelligence in enterprises they manage. This question was closed-ended. Its cafeteria consisted of three answers: positive, negative, and neutral. Out of 150 respondents, 72 of them (almost half) described their attitude to the use of artificial intelligence in business as positive. Another 65 respondents indicated that their view in this area was neutral. The smallest group (13 leaders) of the respondents described their attitude towards the use of artificial intelligence in business as negative. The socio-demographic characteristics of the respondents, the type of their gender culture or the type of company (family/non-family) did not have statistical significance for their answers to this question ($p > 0.05$).

The Profile of Social Responsibility of the Leaders of the Surveyed Enterprises and its Relationship With Gender Culture

The first question on this topic asked whether the respondent believed that corporate social responsibility was necessary. The question was single-choice. When answering this question, the surveyed leaders used a 5-point scale, where 1 meant that corporate social responsibility is definitely not necessary, and 5 that it is definitely necessary. Figure 4 presents the results of the responses.

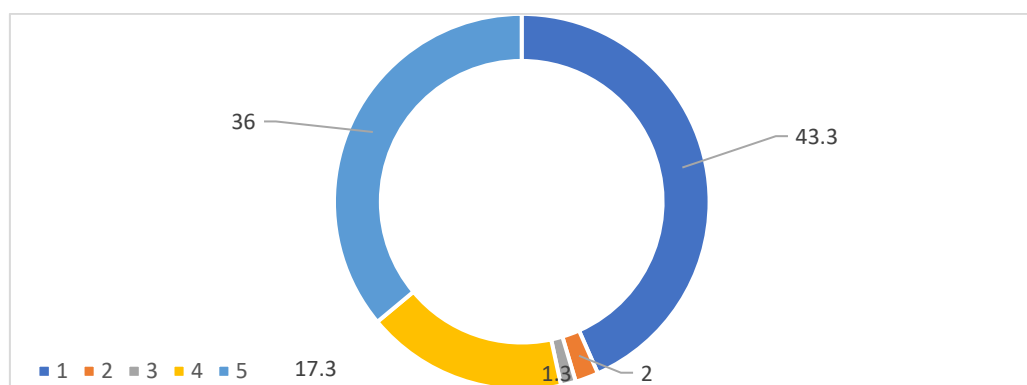


Figure 4. Is corporate social responsibility necessary? (n=150) in percentage

Source: own elaboration.

Of the 150 survey participants, the largest group were those who strongly shared the view that corporate social responsibility is necessary. In total, 65 respondents marked the highest rating, *i.e.*, 5 and 54 respondents pointed to the rating '4'. Therefore, a total of 119 out of 150 survey participants shared the view on the need for corporate social responsibility to a large or very large extent. Moreover, 26 respondents marked the rating 3 – indicating that they share this view to an average extent. Only two respondents gave the rating '2' and three respondents gave the rating '1'. The average of all ratings given by the respondents was 4.17, which may be additional confirmation that the group of surveyed business leaders is dominated by the view of the need to demonstrate corporate social responsibility.

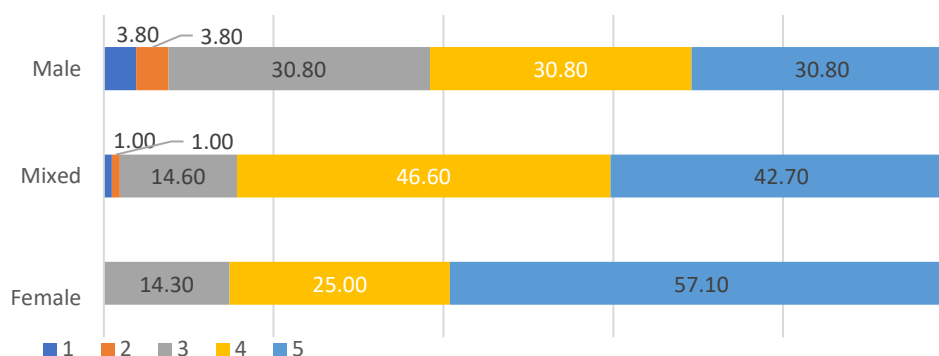


Figure 5. Social gender and the assessment of the need to demonstrate corporate social responsibility (n=150) in percentage

Source: own elaboration.

The research showed that more than half of the respondents assigned to male, female, and mixed genders believe that corporate social responsibility is very or very much necessary. In the case of respondents representing mixed and female gender cultures, over 80% of respondents assigned to these two groups gave the ratings '4' and '5'. However, the chi-square test did not show a statistically significant correlation between social gender culture and the assessment of the need for corporate social responsibility ($\chi^2 = 10.06938574$, $p\text{-value} = 0.24955009$). This finding is surprising because it was believed that leaders with developed expressive traits would be much more oriented towards social activities than representatives of the masculine culture.

In the next question of the survey, we asked the participants to indicate in which areas, in their opinion, corporate social responsibility should be manifested. The question was semi-open. Its cafeteria included five proposed answer options, in addition, the respondents could choose a different answer and indicate their proposals for areas in which business should be socially responsible. The question was multiple choice; respondents could indicate any number of answers.

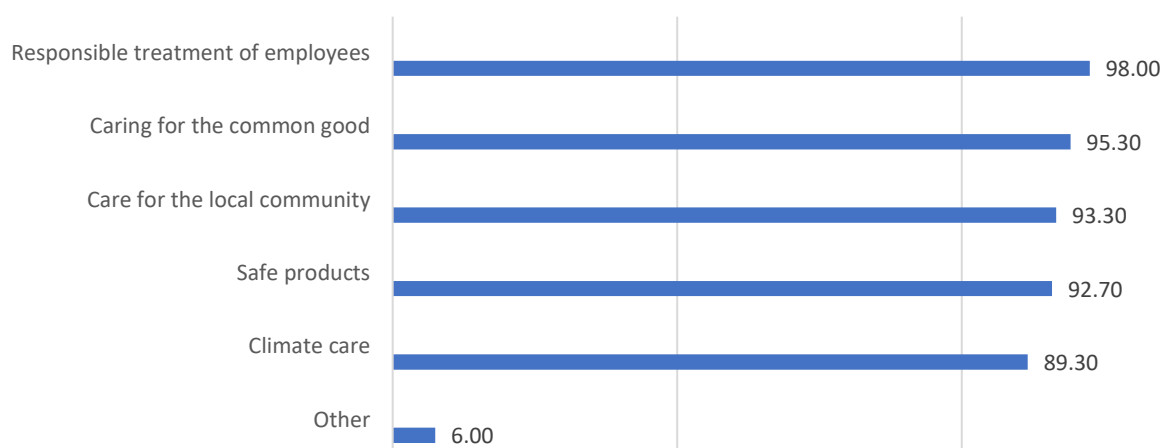


Figure 6. Areas in which corporate social responsibility should be manifested (n=150) in percentage

Source: own elaboration.

The presented results show the hierarchy of importance of various forms of corporate social responsibility, although the observed differences are small. Nine respondents chose the answer 'other'. They indicated the following areas: the area of education (2 people), the area of interpersonal relations (1 person), the area of corporate governance (1 person), the area of quality (1 person), the area related to acting for the good of enterprises (1 person), the area of supporting disabled people and their professional activation (1 person). 1 person indicated that corporate social responsibility should not be manifested in any area.

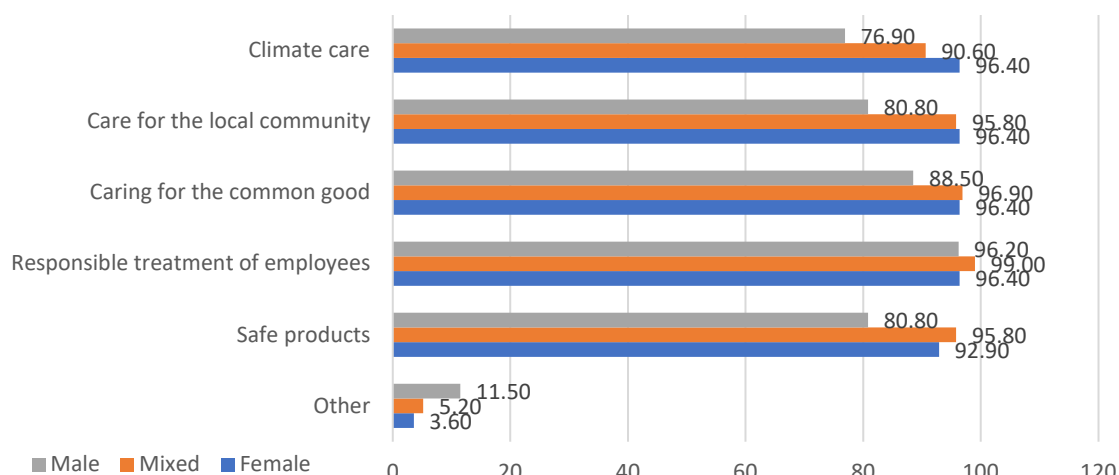


Figure 7. Gender social culture and declared areas of corporate social responsibility (n=150) in percentage

Source: own elaboration.

Social/psychological gender culture was a factor that differentiated the respondents' answers. The use of the chi-square test allowed us to conclude that the representatives of the male gender culture were statistically significantly less likely to indicate the following answers: 'safe products' ($\chi^2=6.833813668$, $p\text{-value} = 0.028394321$), 'care for the climate' ($\chi^2=5.84971669$, $p\text{-value} = 0.047590482$), 'care for the local community' ($\chi^2 = 7.991562009$, $p\text{-value} = 0.023195361$) than those assigned to the other distinguished types of social gender culture. The correlation between the answers and the represented type of social gender culture was weak. However, we did not observe any correlations observed between the type of enterprise (family/non-family) and the way the respondents answered this question.

The next question included in the survey questionnaire concerned the areas in which the companies represented by the respondents were socially responsible. The question was multiple choice.

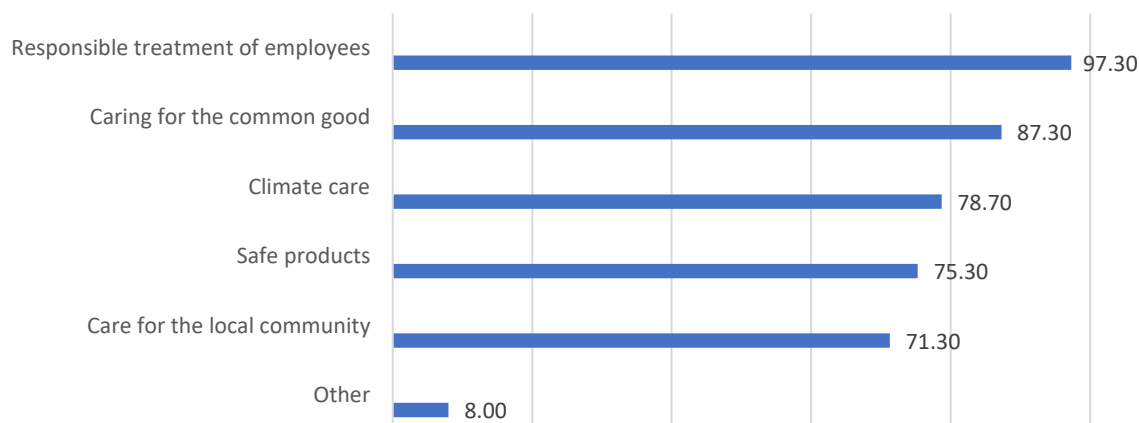


Figure 8. Real areas of social responsibility of enterprises run by respondents (n=150) in percentage

Source: own elaboration.

The presented results regarding the actual involvement of the companies in social activities in Figure 8 differ from the personal opinions of leaders on the need for businesses to engage in social activities in Figure 6. This may mean that capital needs for business development have priority over non-economic goals.

Eight respondents chose the answer 'other', indicating areas of social responsibility not mentioned in the cafeteria. The answers given by the respondents included carrying out activities for children (organising Saint Nicholas Day, helping children in an orphanage), carrying out activities to help

Ukraine, supporting sports initiatives, activities for ecology, and activities for local communities despite that in most cases they coincide with the proposals in the questionnaire.

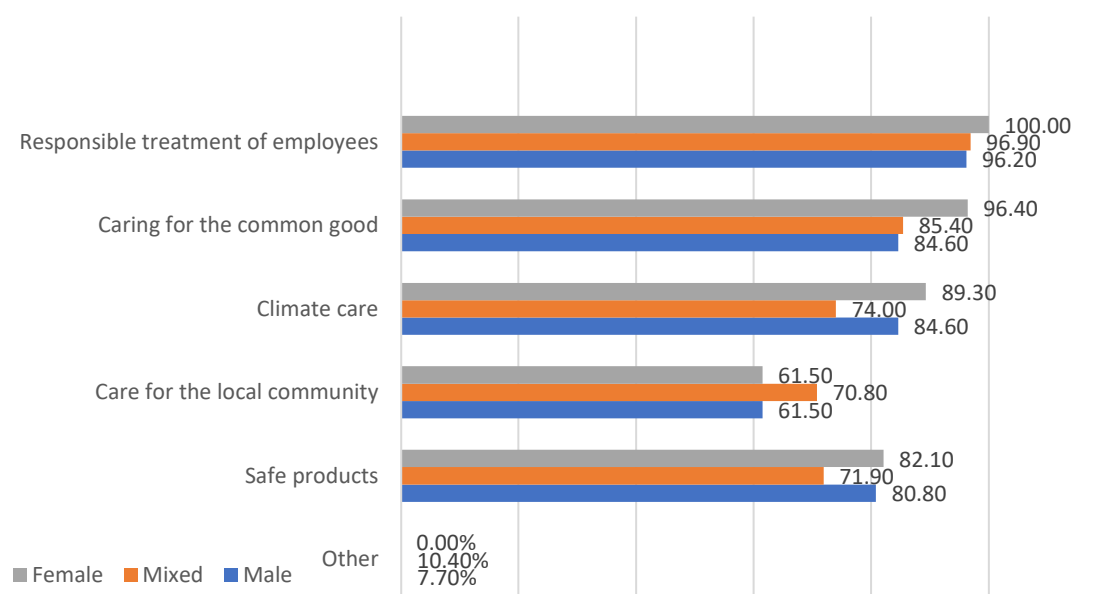


Figure 9. Areas of activities for social responsibility and the social culture of the respondents' gender (n=150) in percentage

Source: own elaboration.

Figure 9 shows the results of answers to the question regarding the areas in which the surveyed enterprises make efforts to promote corporate social responsibility, distinguishing the answers given by respondents assigned to the individual types of social gender culture. In this case, the chi-square test used did not show that social gender culture was a factor that differentiated the respondents' answers in a statistically significant way ($p > 0.05$). It was also not the status of the company run by the respondents (family/non-family) ($p > 0.05$).

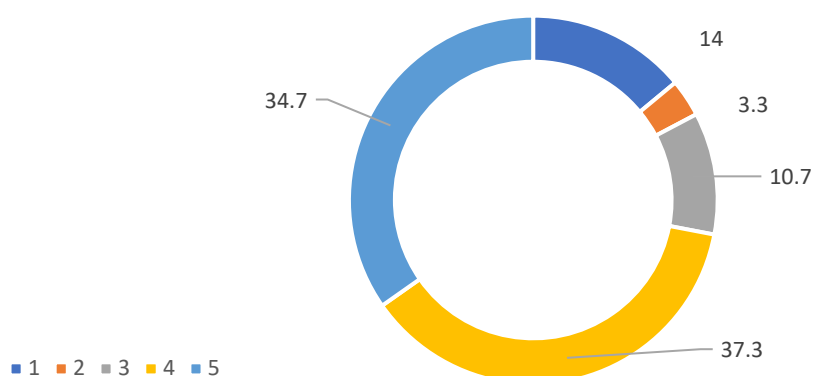


Figure 10. The intensity of activities undertaken for social responsibility (n=150) in percentage

Source: own elaboration.

In the next question, we asked the respondents to determine the intensity of their companies' social responsibility activities. The respondents assessed it using a 5-point scale, on which 1 meant that the company does not undertake social responsibility activities or these activities are sporadic, and 5 meant that it undertakes such activities with very high intensity. The question was closed, single-choice.

The largest number of survey participants answered this question with a rating of '3' – 56 people. In total, 52 people chose the rating '4' and 21 participants marked the rating '5'. Moreover, 5 and 16 respondents gave the ratings 1 and 2, respectively. The arithmetic mean of all the ratings given by the respondents was 3.45. The research results obtained in this way allowed us to conclude that the rep-

representatives of the surveyed enterprises generally conduct activities in the area of social responsibility with slightly above-average intensity.

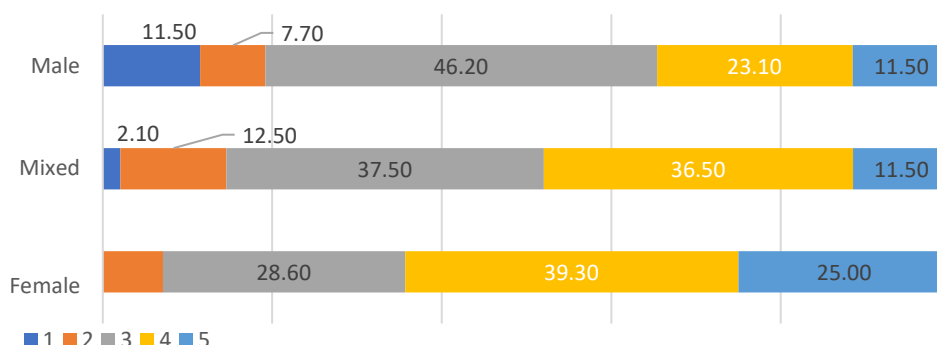


Figure 11. Intensity of activities for social responsibility and social gender culture (n=150) in percentage

Source: own elaboration.

Figure 11 shows differences in the assessments of respondents assigned to three distinguished types of social gender culture. The analysis of the results allowed us to conclude that the respondents assigned to the female gender generally gave ratings indicating a higher degree of intensity of activities undertaken for social responsibility than the respondents of the mixed and male genders. However, the observed differences were not statistically significant ($p > 0.05$). In the way of answering this question, we did not observe any statistically significant differences between representatives of family and non-family businesses ($p > 0.05$).

In the penultimate question in the survey questionnaire, we asked the participants to indicate whether their companies had plans to increase the intensity of social activities in the future. The respondents assessed it using a 5-point scale, where 1 meant that the company they run had no plans to increase the intensity of social responsibility activities, while 5 meant that such plans existed. The question was closed, single-choice. All survey participants answered it.

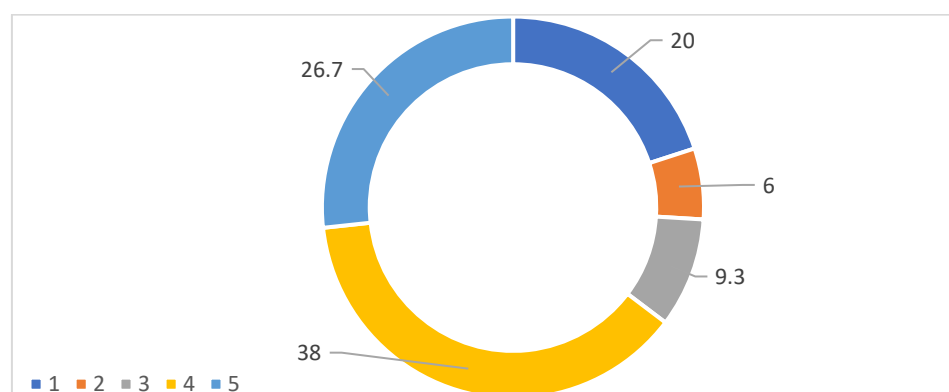


Figure 12. Plans to increase the intensity of social activities (n=150) in percentage

Source: own elaboration.

When answering the question about plans to increase the intensity of social activities undertaken, 30 people participating in the study marked the rating '5' and another 40 respondents marked the rating '4'. A total of 70 out of 150 survey participants indicated that their companies intend to take action to increase the intensity of their social activities. In total, 57 respondents chose the rating '3', 9 respondents chose the rating '1', and 14 respondents chose the rating '2'. The arithmetic mean calculated for all the ratings given by the survey participants was 3.45. Thus, the surveyed leaders planned to increase the intensity of social activities to a moderate extent. The type of social gender culture or the status of a company (family/non-family) was not a statistically significant factor differentiating the respondents' answers to this question ($p > 0.05$).

The final research question (RQ8) concerned the relationship between the leaders' entrepreneurial orientation and their social responsibility. To find out the answer to the question formulated in this way, we decided to compare the results of answers to the question which aimed to determine the entrepreneurial orientation of the leaders with the results of answers to the questions related to their social responsibility profile. In no case did the chi-square test indicate a significant statistical relationship between entrepreneurial orientation and social responsibility of the surveyed leaders ($p > 0.05$).

In light of the above, we can assume that we achieved the aim of the research project and solved the research problem. The leaders of the fastest-growing enterprises present three psychological gender cultures: male, female, and mixed, of which the latter dominates (64%). The respondents had a generally strong entrepreneurial orientation but with a relatively lower risk tolerance and a high awareness of the need for corporate social responsibility. Despite this, only half of them undertook international expansion and 18% of the respondents declared significant revenues from foreign markets and less than half of them have a positive attitude towards artificial intelligence. The differences in the impact of the identified psychological gender cultures of the leaders on selected entrepreneurial behaviours and social activity concerned only one dimension of entrepreneurial orientation and the importance of declared forms of social responsibility. The leaders presenting male gender culture showed a statistically significant greater willingness to compete in the sector and a lower orientation towards the care for climate, safe products and the care for local community compared to other cultures. We found no relationship between the entrepreneurial orientation of the identified gender cultures and their social characteristics.

Discussion

Since the research conducted is pioneering in nature, we are unable to compare its results to previous studies on similar issues. Carefully selected and cited literature including the theory of social roles, theory of higher echelons or social/psychological gender served as the context for the research project and the justification for its implementation. Moreover, the few articles on the psychological culture of gender in management presented in the literature review do not cover the scope or issues of the current research. There is a lot of literature devoted to the issue of 'gender' in management, but they treat this concept synonymously with 'biological sex'. These publications characterize the behaviour of biological men and biological women in managerial roles, disregarding the cultural context, *i.e.*, their psychological gender culture. This is the difference between them and the current paper. Therefore, the authors will refer to the extant literature relevant to the research topic and focus on those aspects that constitute research novelty and may be important for further research in the future.

The contemporary social role of a management leader, especially in small and medium-sized businesses, requires them to have both instrumental and expressive features. Instrumental features are necessary to design the enterprise's vision and mission, define its goals and strategies for their implementation, make bold decisions and face challenges related to the increasingly unpredictable environment and the growing intensity of competition and the development of broadly understood technical progress. In turn, expressive features help generate and deepen intellectual capital, create conditions of openness and support in the workplace, pro-innovation culture, teamwork and shared responsibility for the organisation. The research findings prove that it is actually possible for a person to develop both instrumental and expressive features, which determines professional success in management. In this respect, the research questions the assumptions of the social role theory, provides the basis for modifying the postulate of gender diversification in a team, considering the cultural dimension of gender in the theory of higher echelons, and finally confirms the validity of the concept of psychological gender.

The research results allowed us to outline a personality model consisting of 15 instrumental traits (out of 26 possible) and 15 expressive traits (out of 26 possible), which we identified as those with a high degree of occurrence among all the surveyed leaders (rated by them as high as 4 and 5). Table 2 provides a list of the most popular features along with the number of respondents declaring their intense occurrence.

Table 2. List of instrumental and expressive traits and the number of leaders identifying them at a high level (4 or 5)

Instrumental traits leaders number with the highest ratings		Expressive traits leaders number with the highest ratings	
Responsibility	145	Honesty	141
Ambition	132	Interpersonal relations	135
Decisiveness	126	Tolerance	133
Courage	119	Cooperation	132
Sensitivity to honour	117	Openness to others	129
Confidence	116	Family nature	125
Braveness	115	Peaceful attitude	123
Stubbornness	110	Humanitarianism	121
Leadership	96	Kindness	120
Readiness to fight	79	Modesty	117
Need for success	75	Caring	115
Strength and vigour	74	Empathy	115
Assertiveness	73	Searching for consensus	114
Competitive orientation	70	Need for security	117
Pride	67	Indulgence	114

Source: own study.

In general, the intensity of expressive features is greater than the intensity of instrumental features, which proves the growing importance of the former and breaking cultural stereotypes in social leadership roles. The identified model of personality traits of leaders of successful companies has cognitive value and we can consider it one of the project's achievements and the contribution to the discussion on managerial competences (Helfat & Martin, 2015).

The dominant gender culture among the leaders of the most pro-growth Polish enterprises is a mixed culture: androgyny (50 leaders) and unspecified culture (46 leaders), constituting a total of 64% of the sample. However, cross-defined cultures are also a form of mixed traits, only with a clear predominance of the traits of the opposite biological sex, and their share in the sample was approximately 11%. That is, a total of 75% of the surveyed leaders have greater potential for behaviours and adaptation to various situations than pure male and female cultures. Therefore, we may assume that these distinct, pure cultures have a lower probability of managerial success than a mixed culture and this may only increase in the case of eminently male sectors and eminently female sectors (Nakagawa & Schreiber, 2014; Schwab *et al.*, 2016; Adusei *et al.*, 2017; Bae & Skaggs, 2019; Ali *et al.*, 2023). Although the study sample included only 6% of large enterprises, the size of the enterprise and other control variables were not related to the distribution of gender cultures. There was also no significant relationship between the nature of family/non-family enterprises and the distribution of gender cultures. The findings confirm the validity of the psychological concept of gender and the special personality potential of people representing mixed culture. Moreover, the presented results are consistent with previous research detecting a positive correlation between a manager's androgynous personality and the results of the business or division they manage (Jurma & Powell, 1994; Srivastava & Nair, 2011; Powell *et al.*, 2021). Although family and non-family businesses did not differ statistically significantly in terms of gender culture distribution, the former are known for their patriarchal management system and problems related to family succession planning. The findings prove that successors may be women, who culturally are rarely considered as candidates for leaders. However, they may be much more qualified to take over the family business than their male counterparts in the family.

As expected, the entrepreneurial orientation of the leaders of the surveyed enterprises was relatively high. For each of the five assessed features, the cumulative percentage of ratings '4' and '5' was not lower than 60.0%. Three features of entrepreneurial orientation, *i.e.*, autonomy (83.3%),

pro-activity (77.4%) and readiness to compete in the sector (74.7%) turned out to be the most intense. Readiness for competitive struggle as the only feature of entrepreneurial orientation is positively and statistically significantly correlated with male gender culture. We can take this as evidence that this trait is uniquely instrumental. In the remaining dimensions of entrepreneurial orientation, there is no statistically significant relationship with the identified three gender cultures. The female culture also presents a high level of entrepreneurial orientation. This means that not all features/components of entrepreneurial orientation have to be instrumental. Innovation can be an expressive feature (Hisrich & Brush, 1984; Sandberg, 2013). Moreover, the presence of leaders in the sample, biological men with a female social culture, could have influenced the result. The identified structure of entrepreneurial orientation of the leaders of the surveyed enterprises has cognitive value. The relatively average level of the 'readiness to take risk' dimension makes us wonder about the possible reasons. Is it a matter of our national culture or a weak education system in Poland, especially management studies?

The profile of social responsibility of the leaders of the surveyed enterprises does not show a statistically significant relationship with the social gender culture or with the control variables, which was inconsistent with expectations. It seemed that female and possibly mixed social culture would show greater inclinations in the field of corporate social responsibility. Indeed, the responses show greater sensitivity of the female and mixed cultures to social behaviour compared to the male culture, but we did not detect any statistically significant relationship. The use of the chi-square test only allows us to conclude that representatives of the male social culture were statistically significantly less likely to indicate declarative areas of corporate social responsibility: 'safe products', 'care for the climate', 'care for the local community' than those assigned to the other distinguished types of social gender culture. Similarly, we assumed that the leaders of family businesses would be more active in this area than their non-family counterparts, which is not confirmed. The lack of a statistically significant relationship between entrepreneurial orientation (its dimensions) and the social involvement of the leaders proves, that they do not perceive social activity as an important opportunity to build a competitive advantage. Noteworthy, pro-activity is a dimension of entrepreneurial orientation that is highly prevalent among leaders. The explanation for this state may be that small and medium-sized enterprises experience a resource barrier, especially financial, in their further growth and development, and therefore give higher priority to economic goals than to social ones. The size of the enterprise and its financial needs may moderate the impact of high social awareness and expressive traits of the leaders on actual activity in the field of social responsibility, which refers to national culture with masculinism as a negative moderator in women's social activities in management teams, gender diversified (Peng *et al.*, 2022).

In the twenty-first century, in the conditions of ongoing globalization and digital transformation, international expansion seems to be a natural growth strategy and a way to increase the competitive advantage of enterprises. International expansion and its course are determined by the possession of products with high value-added, leader's competences: their industry and managerial knowledge, international experience, and entrepreneurial orientation. The research shows that nearly 70% of the surveyed enterprises either do not expand internationally or do so only occasionally. This is despite offering high value-added products, strong growth, recognition on the Forbes Diamond List, and, in most cases, having highly educated leaders. Only 18% of them declared intensive expansion into foreign markets (score 4 or 5). We can explain the results by the relatively low level of risk tolerance compared to other dimensions of the leaders' entrepreneurial orientation (the arithmetic mean of risk tolerance is 3.6 on a scale of 1-5) and their poor international knowledge and experience. The latter reasons result from the civilization delays of the Polish economy, which is still undergoing socio-economic transformation. Concerning the research goal, we did not find any statistically significant correlation between gender culture, the nature of family/non-family enterprises or other control variables and the undertaking and intensity of international expansion or the attitude towards artificial intelligence.

CONCLUSIONS

Summary

We shall formulate two conclusions with implications for science and economic practice. Firstly, biological women can and should achieve managerial success in business provided they acquire and develop instrumental features in the socialization process because they are crucial in fulfilling the social role of a manager. The share of women in employment in managerial positions is lower than that of men because women demonstrate instrumental features less often than men. It is a stereotype to claim that women in the corporate sector, consisting of entities operating in an increasingly unpredictable and competitive environment and dependent on the competences of their leaders, are discriminated against in managerial functions due to their biological gender. Just like men, women are required to have competences and the desired personality profile, necessary to meet the expectations of stakeholders in the internal and external environments. Secondly, the family environment and the education system are undoubtedly of the greatest importance in the process of shaping both instrumental and expressive features of a person during their socialization process. The family may be an anthropological product and it is difficult to program the desired changes in it towards educating and consolidating positive instrumental and expressive features at the same time. A high level of awareness of the benefits resulting from a wide repertoire of behaviours of the young generation and a belief in the validity of such socialization in the twenty-first century are required. The education system is better positioned to initiate such changes. Finland and Singapore provide positive examples, where policymakers have deliberately and consistently addressed the challenge of developing soft skills and entrepreneurial attitudes among young people.

Contribution

We can consider the results of the conducted research a contribution to the development of the following paradigms: managerial competences, the role congruity theory, the theory of higher echelons, and social/psychological gender culture. The research is the first attempt to identify the personality model of managers determining the strategic culture of the fastest-growing enterprises and its impact on the entrepreneurial and social behaviours of these enterprises. Personality traits once linked to traditional gender roles – instrumental traits to men and expressive traits to women – now often appear in combination. This shift reflects broader social, cultural, and moral changes influencing the socialisation process. The literature states that people who, in addition to personality traits typical for their biological sex, have developed personality traits of the opposite biological sex are creative, innovative, talented, and have a greater potential to achieve professional and life successes and satisfy their self-actualization needs than people with a clear, pure gender culture (Klimicka *et al.*, 1987; Faulkender, 1991; Bem, 1997; Woodhill & Samuels, 2023). The results of the conducted research positively verify this view in terms of performing the functions of leaders of strongly pro-growth enterprises by people, the vast majority of whom demonstrate a combination of instrumental and expressive features in their personalities, which allows them to benefit from a wide repertoire of behaviours. In this context, biological women, thanks to the acquisition of instrumental features (a necessary condition) in the socialization process, can play managerial roles in business, in a particularly demanding environment, and achieve spectacular successes. The implication of the research for the theory of top management teams is the postulate of their diversification in terms of cultural rather than biological gender.

Another achievement of the research is the demonstration for the first time that the concept of entrepreneurial orientation (Lumpkin & Dess, 1996) does not include only instrumental features, because we found no statistically significant relationship between each of the identified gender cultures and the individual components of entrepreneurial orientation except for one of these components, *i.e.*, readiness to compete in the sector. In this respect, we can recognize that the instrumental trait is statistically significantly related to the male gender culture.

Research Limitations

An undoubted limitation of the presented research is the sample size. Although the sample in relation to the entire population of enterprises on the Forbes Diamonds List (11 000 enterprises) is large compared to samples in traditional quantitative research, as it covered 1.36% of the enterprises, its larger size would allow for examining the relationships between smaller subgroups of gender culture, separately between androgynes, unspecified culture, female intersectional culture, male intersectional culture and their entrepreneurial orientation, entrepreneurial behaviours, social responsibility. Obtaining even 150 questionnaires with complete answers was difficult due to the sensitive topic of the study and the general reluctance of entrepreneurs in Polish culture to participate in this type of scientific endeavours. Those leaders who refused to answer the questions claimed that they were too personal, despite the assurances of the anonymity of the study.

The research intention was, among others, to identify gender cultures and their impact on the entrepreneurial behaviours of leaders of enterprises with spectacular growth dynamics and therefore achieving significant strategic successes. The purposive selection of the sample ran from position 1 on the list to 2016, *i.e.*, the sample constituted 7% of the 2016 highest-ranked enterprises. Therefore, the sample included mainly micro, small and medium-sized enterprises, which, due to their size, find it easier to achieve high growth dynamics than large ones. The regularities detected in the study may be different for a group of large enterprises in terms of international expansion or actual expenditure on sustainable development.

Directions for Future Research

Research on the impact of managers' gender culture on organisational behaviours should be continued. Firstly, scholars should undertake similar research on an international scale, in various cultural circles, to determine the possible role of national culture as a moderator of results. Masculinism or feminism are possible dimensions of national culture according to Hofstede (2010). Moreover, countries around the world are diverse in terms of civilization development and the way enterprises compete (Porter, 1990), which may determine the distribution of the gender culture of leaders among the population of the fastest-growing enterprises.

We also suggest repeating the research on the population of large Polish enterprises, also from the Forbes Diamond List. Expectedly, larger enterprises, due to the achieved potential, *i.e.*, material resources, experience, knowledge, and higher strategic culture, undertake foreign expansion more often and more intensively and have greater financial possibilities to engage in sustainable development than small and medium-sized enterprises. This may mean different requirements for instrumental and expressive qualities in leadership positions.

It would be worth repeating the research among public utility organisations and those in the public/state sector. In most cases, apart from the secret services, army etc. one would expect the dominance of expressive features in the personalities of their leaders. However, linking the gender culture of managers with the criterion of management effectiveness of organisations of this type will constitute a significant difficulty.

Among other suggestions for future research on enterprise leaders, we indicate the inclusion of control variables describing the nature of a sector: male, female, neutral, having formal managerial education or not, as well as determining gender culture among startup founders. In the latter case, the relationship between gender culture and entrepreneurial orientation would be established with greater precision. It would also be worthwhile to measure the entrepreneurial and social behaviours in equal groups representing the three identified gender cultures.

REFERENCES

- Adner, R., & Helfat, C.E. (2003). Corporate effects and dynamic managerial capabilities. *Strategic Management Journal*, 24(10), 1011-102. <https://doi.org/10.1002/smj.331>

- Adusei, M., Akomea, S.Y., & Poku, K. (2017). Board and management gender diversity and financial performance of microfinance institutions. *Cogent Business and Management*, 4(1), 1-14. <https://doi.org/10.1080/23311975.2017.1360030>
- Ali, M., Metz, I., & Kulik, C.T. (2015). The impact of work–family programs on the relationship between gender diversity and performance. *Human Resource Management*, 54(4), 553-576. <https://doi.org/10.1002/hrm.21631>
- Ali, M., Shin D., & Yang, Y. (2023). The impact of management gender diversity on productivity: The contextual role of industry gender composition. *Australian Journal of Management*, 50(1), 32-54. <https://doi.org/10.1177/03128962231184664>
- Bae, K.B., & Skaggs S. (2019). The impact of gender diversity on performance: The moderating role of industry, alliance network and family-friendly policies-Evidence from Korea. *Journal of Management and Organization*, 25(6), 896-913. <https://doi.org/10.1017/jmo.2017.45>
- Bagshaw, M. (2004). Is diversity divisive? A positive training approach. *Industrial and Commercial Training*, 36(4), 153-157. <https://doi.org/10.1108/00197850410542383>
- Bear, S., Rahman, N., & Post, C. (2010). The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *Journal of Business Ethics*, 97(2), 207-221. <https://doi.org/10.1007/s10551-010-0505-2>
- Bem, S.L. (1997). Androgynia psychiczna a tożsamość płciowa. In Ph.G. Zimbardo, F.L. Ruch (Eds.) *Psychologia i życie* (pp. 435-438). Warszawa: PWN.
- Bem, S.L., & Lewis, S.A. (1975). Sex-role adaptability: One consequence of psychological androgyny. *Journal of Personality and Social Psychology*, 31(4), 634-643. <https://doi.org/10.1037/h0077098>
- Bem, S.L. (1974). The Measurement of Psychological Androgyny. *Journal of Consulting and Clinical Psychology*, 42(2), 155-162. <https://doi.org/10.1037/h0036215>
- Boulouta, I. (2013). Hidden connections: The link between board gender diversity and corporate social performance. *Journal of Business Ethics*, 113(2), 185-197. <https://doi.org/10.1007/s10551-012-1293-7>
- Brown, D., Brown, D.L., & Anastopoulos, V. (2002). Women on Boards: Not Just the Right Thing. But the “Bright” Thing. Ottawa: The Conference Board of Canada. Retrieved from <https://www.conferenceboard.ca/product/women-on-boards-not-just-the-right-thing-but-the-bright-thing/> on May 27, 2024.
- Buss, D.M. (2019). *Evolutionary Psychology: The New Science of the Mind*. New York: Routledge.
- Cannella, Jr. A.A., & Monroe, M.J. (1997). Contrasting Perspective on Strategic Leaders: Toward a More Realistic View of Top Managers. *Journal of Management*, 23(3), 213-237. <https://doi.org/10.1177/014920639702300302>
- Carpenter, M.A., Geletkanycz, M.A., & Sanders, W.G. (2004). Upper Echelons Research Revisited: Antecedents, Elements, and Consequences of Top Management Team Composition. *Journal of Management*, 30(6), 749-778. <https://doi.org/10.1016/j.jm.2004.06.001>
- Constantinople, A. (1973). Masculinity – femininity: An exception to a famous dictum?. *Psychological Bulletin*, 80(5), 389-407. <https://doi.org/10.1037/h0035334>
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334. <https://doi.org/10.1007/BF02310555>
- Czyzowska, D. (2006). Płeć psychologiczna i jej związek z rozumowaniem moralnym. *Psychologia Rozwojowa*, 11(3), 49-58. Retrieved from <https://ruj.uj.edu.pl/server/api/core/bitstreams/e4233d0e-9977-4d7b-a937-695a36c8306d/content> on May 25, 2024.
- Deaux, K., & Lewis, L.L. (1984). Structure of gender stereotypes: Interrelationships among components and gender label. *Journal of Personality and Social Psychology*, 46(5), 991-1004. <https://doi.org/10.1037/0022-3514.46.5.991>
- Dezso, C.L., & Ross, G.D. (2011). Does female representation in top management improve firm performance? A panel data investigation. *Strategic Management Journal*, 33(9), 1072-1089. <https://doi.org/10.1002/smj.1955>
- Díaz-García, C., González-Moreno, A., & Sáez-Martínez, F. (2013). Gender Diversity Within R&D Teams: Its Impact on Radicalness of Innovation. *Innovation*, 15(2), 149-160. <https://doi.org/10.5172/impp.2013.15.2.149>
- Dwyer, S., Richard, O.C., & Chadwick, K. (2003). Gender diversity in management and firm performance: The influence of growth orientation and organizational culture. *Journal of Business Research*, 56(12), 1009-1019. [https://doi.org/10.1016/S0148-2963\(01\)00329-0](https://doi.org/10.1016/S0148-2963(01)00329-0)
- Eagly, A.H. (1987). *Sex differences in social behaviour: A social-role interpretation*. Hillsdale, NJ: Erlbaum.

- Eagly, A.H. (1995). The science and politics of comparing women and men. *American Psychologist*, 50(3), 145-158. <https://doi.org/10.1037/0003-066X.50.3.145>
- Eagly, A.H. (1997). Sex differences in social behavior: Comparing social role theory and evolutionary psychology. *American Psychologist*, 52(12), 1380-1383. <https://doi.org/10.1037/0003-066X.52.12.1380.b>
- Eagly, A.H., & Karau, S.J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573-598. <https://doi.org/10.1037/0033-295X.109.3.573>
- Ellemers, N. (2018). Gender stereotypes. *Annual Review of Psychology*, 69, 275-298. <https://doi.org/10.1146/annurev-psych-122216-011719>
- Faulkender, P.J. (1991). Does gender schema mediate between sex-role identity and self-actualization?. *Psychological Reports*, 68(3), 1019-1029. <https://doi.org/10.2466/pr0.1991.68.3.1019>
- Fiske, S.T., & Taylor, S.E. (2013). *Social Cognition: From Brains to Culture*. Thousand Oaks, Londyn: SAGE.
- Francoeur, C., Labelle, R., Balti, S., & El Bouzaidi, S. (2019). To what extent do gender diverse boards enhance corporate social performance?. *Journal of Business Ethics*, 155(2), 343-357. <https://doi.org/10.1007/s10551-017-3529-z>
- Gardner, H. (2011). *Frames of mind: The theory of multiple intelligences* (10th anniversary ed.). New York: Basic Books.
- Gupta, S. (1996). Managerial effectiveness: Conceptual framework and scale development. *The Indian Journal of Industrial Relations*, 31(3), 392-409. Retrieved from <https://www.jstor.org/stable/27767425> on June 6, 2024.
- Hall, R.J., Workman, J.W., & Marchioro, C.A. (1998). Sex, task, and behavioral flexibility effects on leadership perceptions. *Organizational Behavior and Human Decision Processes*, 74(1), 1-32. <https://doi.org/10.1006/obhd.1998.2754>
- Hambrick, D.C. (2007). Upper Echelons Theory: an Update. *Academy of Management Review*, 32(2), 334-343. <https://doi.org/10.2307/20159303>
- Helfat, C., & Martin, J. (2015). Dynamic Managerial Capabilities: Review and Assessment of Managerial Impact on Strategic Change. *Journal of Management*, 41(5), 1281-1312. <https://doi.org/10.1177/0149206314561301>
- Hisrich, R., & Brush, C. (1984). The woman entrepreneur: Management skills and business problems. *Journal of Small Business Management*, 22, 30-37. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1505240 on June 6, 2024.
- Hinton, P.R. (2016). *The perception of people: Integrating cognition and culture*. London: Routledge.
- Hofstede, G., Hofstede, G.J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind*. New York: McGraw-Hill.
- Inesi, M.E., & Cable, D.M. (2015). When accomplishments come back to haunt you: The negative effect of competence signals on women's performance evaluations. *Personnel Psychology*, 68(3), 615-657. <https://doi.org/10.1111/peps.12083>
- Joecks, J., Pull, K., & Vetter, K. (2013). Gender Diversity in the Boardroom and Firm Performance: What Exactly Constitutes a "Critical Mass"?. *Journal of Business Ethics*, 118(1), 61-72. <https://doi.org/10.1007/s10551-012-1553-6>
- Jonsson, P., & Carlsson, I. (2000). Androgyny and creativity: A study of the relationship between a balanced sex-role and creative functioning. *Scandinavian Journal of Psychology*, 41(4), 269-274. <https://doi.org/10.1111/1467-9450.00198>
- Jurkus, A.F., Park, J.C., & Woodard, L. (2011). Women in top management and agency costs. *Journal of Business Research*, 64(2), 180-186. Retrieved from [http://www.sciencedirect.com/science/article/pii/S0148-2963\(09\)00320-8](http://www.sciencedirect.com/science/article/pii/S0148-2963(09)00320-8) on June 6, 2024.
- Jurma, W.E., & Powell, M.L. (1994). Perceived gender roles of manager and effective conflict management. *Psychological Reports*, 74(1), 104-107. <https://doi.org/10.2466/pr0.1994.74.1.104>
- Kark, R., Waismel-Manor, R., & Shamir, B. (2012). Does valuing androgyny and femininity lead to a female advantage? The relationship between gender-role, transformational leadership, and identification. *The Leadership Quarterly*, 23(3), 620-640. <https://doi.org/10.1016/j.leaqua.2011.12.012>
- Katmon, N., Mohamad, Z.Z., Norwani, N.M., & Farooque, O.A. (2019). Comprehensive board diversity and quality of corporate social responsibility disclosure: Evidence from an emerging market. *Journal of Business Ethics*, 157(2), 447-481. <https://doi.org/10.1007/s10551-017-3672-6>

- Katz, R.L. (1974). Skills of an effective administrator. *Harvard Business Review*, 52, 90-102. Retrieved from <https://hbr.org/1974/09/skills-of-an-effective-administrator> on 10 July, 2024.
- Kaymakam, G. (2023). *The Impact of Gender Diversity within R&D Teams*. Radboud: University Press.
- Klimicka, T.M., Sheppard, P.L., Wakefield, J.A., & Cross, H.J. (1987). Relationship between psychological androgyny and self-actualization tendencies. *Psychological Reports*, 61(2), 443-446. <https://doi.org/10.2466/pr0.1987.61.2.443>
- Koch, A.J., D'Mello, S.D., & Sackett, P.R. (2015). A meta-analysis of gender stereotypes and bias in experimental simulations of employment decision making. *Journal of Applied Psychology*, 100(1), 128-161. <https://doi.org/10.1037/a0036734>
- Koenig, A.M., & Eagly, A.H. (2014). Extending role congruity theory of prejudice to men and women with sex-typed mental illnesses. *Basic and Applied Social Psychology*, 36(1), 70-82. <https://doi.org/10.1080/01973533.2013.856789>
- Kor, Y., & Mesko, A. (2013). Dynamic Managerial Capabilities: Configuration and Orchestration of Top Executives' Capabilities and the Firm's Dominant Logic. *Strategic Management Journal*, 34(2), 233-244. <https://doi.org/10.1002/smj.2000>
- Krishnan, H.A., & Park, D. (2005). A few good women – on top management teams. *Journal of Business Research*, 58(12), 1712-1720. <https://doi.org/10.1016/j.jbusres.2004.09.003>
- Lay, M. (1994). The value of gender studies to professional communication research. *Journal of Business and Technical Communication*, 8(1), 58-91. <https://doi.org/10.1177/1050651994008001003>
- Liao, L., Luo, L., & Tang, Q. (2015). Gender diversity, board independence, environmental committee and greenhouse gas disclosure. *The British Accounting Review*, 47(4), 409-424. <https://doi.org/10.1016/j.bar.2014.01.002>
- Lipinska-Grobelny, A., & Wasiak, K. (2010). Job satisfaction and gender identity of women managers and non-managers. *International Journal of Occupational Medicine and Environmental Health*, 23(2), 161-166. <https://doi.org/10.2478/v10001-010-0015-6>
- Lott, B., & Maluso, D. (1993). The social learning of gender. In A.E. Beall & R.J. Sternberg (Eds.), *The psychology of gender* (pp. 99-123). New York: The Guilford Press.
- Lumpkin, G.T., & Dess, G.G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *The Academy of Management Review*, 21(1), 135-172. <https://doi.org/10.2307/258632>
- Mandal, E. (2000). *Podmiotowe i interpersonalne konsekwencje stereotypów związanych z płcią*. Katowice: Wydawnictwo Uniwersytetu Śląskiego.
- Maxfield, S., Shapiro, M., Gupta, V., & Hass, S. (2010). Gender and risk: Women, risk taking and risk aversion. *Gender in Management*, 25(7), 586-604. <https://doi.org/10.1108/17542411011081383>
- May, A., & Spangenberg, J.J. (1998). Androgyny and coping in men with a managerial orientation. *South African Journal of Psychology*, 27(4), 244-249. <https://doi.org/10.1177/008124639702700407>
- Miller, T., & Triana, M.C. (2009). Demographic Diversity in the Boardroom: Mediators of the Board Diversity-Firm Performance Relationship. *Journal of Management Studies*, 46(5), 755-786. <https://doi.org/10.1111/j.1467-6486.2009.00839.x>
- Moir, A., & Jessel, D. (1992). *Brain sex: Real Difference Between Men and Women*. New York: Delta.
- Moscu, R.G. (2013). The impact of gender and age diversity on company performance. *Knowledge Horizons – Economics*, 5(4), 215-219. Retrieved from https://orizonturi.ucdc.ro/arhiva/2013_khe_4_pdf/khe_vol_5_iss_4_215to219.pdf on July 14, 2024.
- Nakagawa, Y., & Schreiber, G.M. (2014). Women as drivers of Japanese firms' success: The effect of women managers and gender diversity on firm performance. *Journal of Diversity Management*, 9(1), 19-40. <https://doi.org/10.19030/jdm.v9i1.8620>
- Nielsen, S., & Huse, M. (2010). Women Directors and Board Strategic Decision Making: the Moderating Role of Equality Perception. *European Management Review*, 7(1), 16-29. <https://doi.org/10.1057/emr.2009.27>
- Norlander, T., Erixon, A., & Archer, T. (2000). Psychological androgyny and creativity: Dynamics of gender-role and personality trait. *Social Behavior and Personality*, 28(5), 423-435. <https://doi.org/10.2224/sbp.2000.28.5.423>
- Østergaard, C., Timmermans, B., & Kristinsson, K. (2011). Does a different view create something new? The effect of employee diversity on innovation. *Research Policy*, 40(3), 500-509. <https://doi.org/10.1016/j.respol.2010.11.004>

- Owuamalam, C.K., & Zagefka, H. (2014). On the psychological barriers to the workplace: When and why meta-stereotyping undermines employability beliefs of women and ethnic minorities. *Cultural Diversity and Ethnic Minority Psychology*, 20(4), 521-528. <https://doi.org/10.1037/a0037645>
- Padavic, I., Ely, R.J., & Reid, E.M. (2020). Explaining the Persistence of Gender Inequality: The Work–Family Narrative as a Social Defense against the 24/7 Work Culture. *Administrative Science Quarterly*, 65(1), 61-111. <https://doi.org/10.1177/0001839219832310>
- Peng, X., Qi, T., & Wang, G. (2022). Board Gender Diversity, Corporate Social Disclosures, and National Culture. *SAGE Open*, 1-19. <https://doi.org/10.1177/21582440221130946>
- Peng, X., Yang, Z., Shao, J., & Li, X. (2021). Board diversity and corporate social responsibility disclosure of multinational corporations. *Applied Economics*, 53(42), 4884-4898. <https://doi.org/10.1080/00036846.2021.1910620>
- Porter, M. (1990). *The Competitive Advantage of Nations*. New York: The Free Press.
- Powell, G.N., & Butterfield, D.A. (2015). The role of androgyny in leader prototypes over four decades. *Gender in Management*, 30(1), 69-86. <https://doi.org/10.1108/GM-07-2013-0082>
- Powell, G.N., Butterfield, D.A., & Jiang, X. (2021). “The “Good manager” Over Five Decades: Towards an Androgynous Profile?”. *Gender in Management: An International Journal*, 36(6), 714-730. <https://doi.org/10.1108/GM-01-2021-0023>
- Rao, K., & Tilt, C. (2016). Board composition and corporate social responsibility: The role of diversity, gender, strategy and decision making. *Journal of Business Ethics*, 138(2), 327-347. <https://doi.org/10.1007/s10551-015-2613-5>
- Richard, O.C., Kirby, S.L., & Chadwick, K. (2013). The impact of racial and gender diversity in management on financial performance: How participative strategy making features can unleash a diversity advantage. *The International Journal of Human Resource Management*, 24(13), 2571-2582. <https://doi.org/10.1080/09585192.2012.744335>
- Ruble, D.N., Martin, C.L., & Berenbaum, S. (2006). Gender development. In W. Damon, N. Eisenberg (Eds.), *Handbook of child psychology: Personality and social development* (pp. 858-932). New York: Wiley Publishers. <https://doi.org/10.1002/9780470147658.chpsy0314>
- Ruigrok, W., Peck S., & Tacheva, S. (2007). Nationality and gender diversity on Swiss corporate boards. *Corporate Governance: An International Review*, 15(4), 546-557. <https://doi.org/10.1111/j.1467-8683.2007.00587.x>
- Ruiz-Jiménez, J.M., & del Mar Fuentes-Fuentes, M. (2016). Management capabilities, innovation, and gender diversity in the top management team: An empirical analysis in technology-based SMEs. *Business Research Quarterly*, 19(2), 107-121. <https://doi.org/10.1016/j.brq.2015.08.003>
- Rupavatham, S.R. (2017). Shouldn't competence and compassion coexist in medical professionals? A study of psychological androgyny in doctors. *Indian Journal of Public Health Research & Development*, 8(4), 458-462. <https://doi.org/10.5958/0976-5506.2017.00385.0>
- Sandberg, S. (2013). *Lean in: Women, Work and the Will to Lead*. New York: Alfred Knopf.
- Sargent, A.G. (1979). The androgynous manager. *Planning Review*, 7(6), 37-42. <https://doi.org/10.1108/eb053897>
- Schein, V.E. (1973). The relationship between sex role stereotypes and requisite management characteristics. *Journal of Applied Psychology*, 57(2), 95-100. <https://doi.org/10.1037/h0037128>
- Schwab, A., Werbel, J.D., Hofmann, H., & Henriquesa, P.L. (2016). Managerial gender diversity and firm performance: An integration of different theoretical perspectives. *Group and Organization Management*, 41(1), 5-31. <https://doi.org/10.1177/1059601115588641>
- Seto-Pamies, D. (2015). The relationship between women directors and corporate social responsibility. *Corporate Social Responsibility and Environmental Management*, 22(6), 334-345. <https://doi.org/10.1002/csr.1349>
- Skelly, J., & Johnson, J.B. (2011). Glass ceilings and great expectations: Gender stereotype impact on female professionals. *Southern Law Journal*, 21, 59-70. Retrieved from https://southern-law-journal.s3.us-east-2.amazonaws.com/2011_1/04_slj_volume_21_2011_spring_skelly_glass_ceilings.pdf on August 2, 2024.
- Smith, N., Smith, V., & Verner, M. (2006). Do women in top management affect firm performance? A panel study of 2500 Danish firms. *International Journal of Productivity and Performance Management*, 55(7), 569-593. <https://doi.org/10.1108/17410400610702160>

- Srivastava, N., & Nair, S.K. (2011). Androgyny and Rational Emotive Behaviour as Antecedents of Managerial Effectiveness. *Vision: The Journal of Business Perspective*, 15(4), 303-314. <https://doi.org/10.1177/097226291101500401>
- Sternberg, R.J. (2020). Rethinking what we mean by intelligence. *Phi Delta Kappan*, 102(3), 36-41. <https://doi.org/10.1177/0031721720970700>
- Tabassum, N., & Nayak, B.S. (2021). Gender Stereotypes and Their Impact on Women's Career Progressions from a Managerial Perspective. *IIM Kozhikode Society & Management Review*, 10(2), 192-208. <https://doi.org/10.1177/2277975220975513>
- Terjesen, S., Couto, E.B., & Francisco, P.M. (2016). Does the presence of independent and female directors impact firm performance? A multi-country study of board diversity. *Journal of Management & Governance*, 20, 447-483. <https://doi.org/10.1007/s10997-014-9307-8>
- Torchia, M., Calabrò, A., & Huse, M. (2011). Women Directors on Corporate Boards: From Tokenism to Critical Mass. *Journal of Business Ethics*, 102, 299-317. <https://doi.org/10.1007/s10551-011-0815-z>
- Triana, M.C., Song, R., Um, C.T., & Huang, L. (2024). Stereotypical Perception in Management: A Review and Expansion of Role Congruity Theory. *Journal of Management*, 50(1), 188-215. <https://doi.org/10.1177/01492063231180836>
- Way, A., & Marques, J. (2013). Management of gender roles: marketing the androgynous leadership style in the classroom and the general workplace. *Organization Development Journal*, 31(2), 82-94. Retrieved from https://www.researchgate.net/publication/263091335_Management_of_Gender_Roles_Marketing_the_Androgynous_Leadership_Style_in_the_Classroom_and_the_General_Workplace on August 20, 2024.
- Williams, M.J., & Tiedens, L.Z. (2016). The subtle suspension of backlash: A meta-analysis of penalties for women's implicit and explicit dominance behaviour. *Psychological Bulletin*, 142(2), 165-197. <https://doi.org/10.1037/bul0000039>
- Woodhill, B.M., & Samuels, C.A. (2023). 21st Century Neo-Androgyny: What Is Androgyny Anymore and Why We Should Still Care. *Psychological Reports*, 126(5), 2322-2344. <https://doi.org/10.1177/00332941221076759>
- Zuckerman, M. (1991). *Psychobiology of Personality*. New York: Cambridge University Press.
- Zukowska, M. (2006). Wartości męskie i kobiece w polskim zaprogramowaniu kulturowym. *Racjonalista*. Retrieved from <https://www.racjonalista.pl/kk.php/s,4755> on May 20, 2024.

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Use of Artificial Intelligence

Our article is free of AI/GAI usage apart from searching engine in the literature review.

Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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