**Gordon Institute
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Ambivalent sexism in upper echelon structures in corporates

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ABSTRACT

Ambivalent sexism is a phenomenon that could explain why females, even though having requisite qualifications and legitimacy, remain underrepresented in C-Suite and Boards. This research seeks to ascertain if ambivalent sexism appears in the South African context; at what levels of pervasiveness and which sexist attitudes could be more detrimental to the upward mobility of females. Building on the Ambivalent Sexism Inventory framework, this study followed a mono method, quantitative research design and an online questionnaire was distributed using a combination of purposive and snowballing non-probability sampling strategy. There were 172 responses collected from the target population consisting of members of Exco, C-suite and boards for organisations listed on the JSE. The findings of the study revealed that there were significant differences in sexism scores between males and females; but no significant differences in scores between age groups. Relationships were also found between hostile sexism and constructs of benevolent sexism. The implications of this research can inform management how to actively address the amelioration of gender inequality through co-leadership positions and fostering collaborative horizontal structures versus hierarchical structures that accentuate differences in hierarchy especially, when delineated by gender. It further affirms and ratifies the importance of the attenuating effect of a larger female representation in upper echelon, on sexism levels. Future qualitative research can also build on the expanded framework to address female underrepresentation in C-Suite and Board positions.

Keyword: Gender, Ambivalent sexism, Benevolent and Hostile Sexism, Board/C-suite and Executive Committee Structure, Strategic Management.

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

	Vanessa Govender	18/11/2019
Signed: Name	Name	Date

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CHAPTER 1: PROBLEM DEFINITION AND PURPOSE

1.1 Research problem Background

> *"Women will not rise naturally to the top,"* says Irene Natividad, president of the Global Summit of Women, an annual gathering of women leaders from around the world. *"It has to be part of the business strategy."* (Korn Ferry report, 2019. p.2)

Worldwide growing legislation, governance rules and codes of good practice, like King IV in South Africa and other international precedents mandating the progression of females and gender equality in business, seem to be bearing little fruit (Kirsh, 2018; Terjesen, Aguilera & Lorenz, 2015). Industry reports continue to tout the underrepresentation of women in senior or top echelons of business (Catalyst 2013; 2019; Grant -Thornton IBR, 2018; Korn Ferry, 2019; McKinsey 2018) Refer to Figure 1.

As indicated in Figure 1, a meagre 4.8% of CEO's are female in the S&P 500. Furthermore, only 11% represent top earners. This, despite strides being made towards women achieving close to parity in the general labour force at 44.7% (Catalyst, 2018). There is thus a significant disparity between, women entering the labour funnel and ascending the corporate ladder. A similar pattern is exhibited in South Africa, where despite having the 3rd highest representation of females in parliament globally at 42.3% (World Bank data, 2018), there is only one female CEO on the Johannesburg Stock Exchange (JSE) top forty in 2019. (JSE Industry report, 2019).

Figure 1 Pyramid diagram showing percentages of Women in Senior structures

Source: Catalyst (2018) Women CEO's of the S&P 500 Catalyst (2018)
https://www.catalyst.org/research/women-in-management/

Thams, Bendell & Terjesen (2018) contend that the proportion of women directors has stagnated the world over, prompting stronger legislation in many countries. They report only a 27.8% women directorship in the Fortune 500 firms, with a notable 2% decline from 2017. Confirmatory reports in academia all suggest, that despite the call to female empowerment and a drive for inclusivity and equality, barriers in processes, procedures and structure, inhibit the ascent of females into leadership positions (Chizema, Kamuriwo & Shinozawa, 2015; Grosvold & Brammer, 2011; Kumra & Vinnecombe, 2008; Post & Byron, 2014; Powell & Butterfield, 1994; Stamarksi & Hing, 2015; Terjesen, Aguilera & Lorenz, 2015). Universally, the progress of women to upper echelon structures responsible for executive decision making and strategic execution, is slow and insignificant.

South Africa, as a country marred by the history of Apartheid, and a legacy system of entrenched patriarchy, struggles to shed its status, as one of the most unequal countries in the world (World bank report, 2019). Despite having made great strides in democracy, the enshrined tenet of equality, and a world class benchmark constitution; the gender disparity, societally and in corporate, continues to be cause for concern according to the World Bank (2019) and World Economic Forum (WEF,2018) report. In direct opposition to strong legal evolution, current reports rank South Africa at number ninety-two in the world with regards to the gender gap (World Economic Forum report, 2018). Notwithstanding increasing regulatory pressure and corporate governance precedents to remediate the under-representation of women in senior management and ownership in South African companies, and indeed, worldwide; successful, impactful change here too mirrors that of global statistics, as almost non-consequential. (Thams et al, 2018)

With the significant shift in the burgeoning knowledge-based economy and post 4th industrial revolution ethos of our current business landscape, the value of human capital in strategic management is critical to ensuring the success of companies now and into the future. An awareness as to whether, and how sexism in its various forms affect our decision making with regards to appointments and drafting of a C-suite/Board or Executive Committee (Exco), is an absolute imperative, given the continued underrepresentation of women in upper echelons structures as evidenced by both academic and industry reports (Thams, Bendell & Terjesen, 2018).

Societally, sex is a largely binary biological classification of males and females. Gender, in modern times, is best described as a continuum, with male and female as the bookends to that spectrum. Gender differentiation is how we distinguish between, and assign traits of identification, both physical and psychological, to males or females. In social roles theory , it is asserted that our classifications and identification of what it is to be a certain gender is further convoluted by both the description of what each gender is and entails as well as compounded by, the prescription of how individuals in society believe each gender should be , should behave, and where they ought to be, positionally, from both a career and domestic point of view (Eagly & Karau, 2002; Eagly & Mladinic, 1994.; Eagly & Wood, 2011; Heilman, 2001.; Heilman & Eagly, 2008). All these classifications while necessary biologically for the differentiation of species, have come to pervade our consciousness to become psychological definitions and judgmental predispositions, which influence our decision making in the workplace. Interestingly these presuppositions, as affirmed in the research listed above, are held firmly both genders (Heilman & Eagly, 2008). This, in the context of this research lays the foundation for sexism in upper echelons and indeed every strata of society as it exists (Glick & Fiske, 2011. 2018).

Sexism could be described as an insidious construct, due to its varying nuances and ambiguous presentations and may, fundamentally be affecting the rates of diffusion of females to upper echelons. Ambivalent sexism, a refinement on the definition of sexism, described in literature as a coexistent state of both love and admiration for females, as well as resentment or prejudice, that fluctuates between a state of hostility and benevolence (Glick & Fiske, 1996), could be a key contributor to the under representation of women. This research plans to focus squarely on ambivalent sexism as a contributing factor to the documented slow ascension phenomenon, in senior management, C-Suite and board positions, specifically in the South African context in light of a significant history of discrimination in South Africa and the fact that the global reports still classify this country as "highly unequal.", with regards to gender (World Bank report, 2019, World Economic Forum, 2018). Reasons cited for this slow transformation and failure to reduce the gender gap, range from entrenched patriarchal societal conditioning to lack of skill and education among women, and or failure to progress due to maternity (Becker, G.,1985; Chizema, Kamuriwo & Shinozawa, 2015; Fuchs, V. 1988; Neumark, D. & Sanders, K. 1994; Terjesen & Singh, 2008; Waldfogel, J. 1997). An understanding of why the picture remains so bleak is worth investigation. While the researcher is cognisant that a multifaceted problem of this nature, with deep societal roots will be difficult to detangle in a limited

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research report, the shadows of deep, self-perpetuating, psycho-social constructs like sexism must be brought to light for it to be understood and ameliorated in any truly transformative manner.

Research as to the impacts of diversity on individual companies seems to tip the scales, for the argument that, diversity does, in fact produce financial and performance gains (Herring, C. 2009; Dezso` s & Ross, 2012). The competing variables to diversity, however, include religion, race, gender and age.   While the structure and composition of Boards and particularly, women on Boards, has been the focus of a significant number of research articles (Grosvold & Brammer, 2011, Kirsch, 2018), the underlying sentiment around gender inclusivity has yet to be adequately deconstructed to explain resistant bias and barriers, to effective organisational change. The persistence of a miniscule representation of women in C- Suite and Boards, suggests that despite research and governmental advocacy for equality, structures, processes and sentiment seem to impede the rate of transfer of females from the general workforce and general management structure to upper echelons. Could this be due to sexism, more specifically a concept called ambivalent sexism, which though covert in its benevolent form, may effectively produce disadvantages to aspirant females?

While most research suggests discrimination in promotions based on social constructs, some postulate that the psychological propensies of females may be an impediment to ascending the corporate ladder. Contributing research in the fields of psychology and economics seem to suggest that women are generally more risk averse (Cook & Glass, 2015), and therefore, less likely to compete. When faced with the intensely competitive and pressured environment of upper echelons and noting the decidedly agentic leadership styles of men as contrasted with the generally collaborative and stewarding leadership traits of women, women seem less inclined to actively challenge or compete for senior positions (Barbuto & Gliford, 2010; Cangemi & Baker, 2016; Carli, 2000; Cook & Glass 2015; Ely, Ibarra & Kolb, 2011; Kanter, 1977; Rosette, Zhou-Koval, & Livingston, 2016). Cangemi & Baker (2016) state: "*The ability of a minority to succeed in any environment controlled and dominated by one gender or culture, is limited unless that minority shows a high degree of commitment and willingness to compete with their male counterparts in a competitive corporate environment.*" (p.3). With a propensity for risk aversion and reticence to compete, as psychological predispositions affirmed by the research stated above, this narrows the already slim possibilities of females entering the upper echelons of management.

Legitimacy to the appointment of senior positions is afforded by the qualifications of the applicant and a combination of their track record, performance and service to an organisation. Legitimacy seems to be something females are actively in pursuit of, as indicated by the increasing numbers of tertiary and technically skilled graduates globally. In 2005, the average portion of the tertiary student population accounted for by women, sat at around 55%, which equates to 1.2 women to every man (Vincent-Lacrain /OECD report, 2008). In the 24 countries for which data were available in 1998 and 2005, a 7% increase per annum in females entering tertiary education has been recorded. (OECD, 2008). The accelerated rate and pace of females qualifying with tertiary qualifications and serving in the general work force as cited in Figure 1, creates an even wider gap in comprehension as to why the rate of ascension in corporate, to upper echelon structures does not correspond.

1.2 Purpose of the study

Underlying psycho-social sentiments like sexism (Glick & Fiske, 2001), female stereotyping and gender bias appear, from the existing literature, almost heuristic in nature (Eagly & Carli; 2007, Kanter 1977; Stamarski & Hing, 2015), and along with theories of gendered leadership styles (agentic or stewardship) build strong contributing factors, influencing the status quo of gender inequality (Rosette, Zhou-Koval, & Livingston, 2016, Barbuto & Gliford, 2010). Ultimately, despite women attaining legitimacy in greater numbers, they are still underrepresented in Boards, C-suite or Executive Management Committees (Exco's). This study seeks to suggest that ambivalent sexism is an important construct governing or underpinning the poor representation of women in top management positions.

The theory of "ambivalent sexism'', a definition of sexism that reflects that it not a static construct, but rather quite ambiguous and polymorphic, varying in intensity and form between "Hostile Sexism" and "Benevolent Sexism", (Glick & Fiske,1996, 2001), could present a plausible partial reason for the lack of females in upper echelons, bearing in mind that gender and gender dynamics is a complex social construct with many facets of influence and development. Full consideration as to why either sexism or discrimination persists despite the impetus of civil society towards egalitarianism, is beyond the scope of this cross-sectional study.

However, the notable underrepresentation of women in upper echelon management structures of business reveal that societal perceptions or attitudes towards females as being the weaker sex, filters through to corporate. Both tokenism (the construct applied when a solitary or / the minimal prescribed number of females are actually invited to senior positions) , as described by Kanter (1977) and ambivalent sexism (Glick & Fiske, 1995,1996,2001,2011), are prejudicial in nature and reduce the gravitas and accomplishment of female appointments to positions of seniority, with their varying but interdependent psychological attributes (Eagly & Carli, 2007; Eagly & Karau, 2002; Kanter,1977, 1987, 2008). Strained and attenuated workplace dynamics are a natural consequence if: The appointee feels they've been appointed solely for their gender or race and not because they are suitably qualified and proficient. Or, in a converse scenario, they actually are, inadequately prepared for the tasks at hand, due to insufficient grooming and mentoring, and now cannot authentically own, let alone direct that space. The appointee could then reasonably believe that they do not have the full support of their team and live up to the notion of their ineptitude to meet the task at hand, under confirmation bias, leading to poor or sub-standard performances that could in a vicious cycle, then reinforce the original sexist notions (Stamarski & Hing, 2015; Good & Rudman, 2010; King, Hebl, George & Matusik, 2010).

This mindset, logically, makes for weakened team dynamics and could quite plausibly lead to reduced overall performance and poor retention of female talent (King, Hebl, George & Matusik, 2010; Stamarksi & Hing, 2015). A refined awareness of what those sentiments are and how they affect a company's ability to curate and compose their C-suite and executive committees, is therefore critical to intelligent and mindful strategic planning. The implications being, that if one can find the intrinsic barriers to the implementation of successful organisational change towards better understanding of gender dynamics, as represented by the construct of ambivalent sexism, one can utilise this knowledge as a lever to create structures, as an intentional strategic plan, that enlist the full support of the organisation.

Previous studies have suggested that gender bias does influence decision making in the workplace (Heilman & Eagly, 2008; Hideg & Ferris, 2016; Kirsch 2018; Stamarski & Hing, 2015), and other studies have clearly demonstrated that ambivalent sexism is a real societal construct across different cultures and contexts (Glick & Fiske, 2018; Garagobil & Aliri, 2013), but only one published, peer -reviewed study was found that drew a direct link between the construct of *Benevolent Sexism*, a subfactor in ambivalent sexism, and

the *Board* (Oliver, Krause, Busenbark & Kalm, 2018). Although several and a growing number of research papers look at gender discrimination, the use of the term ambivalent sexism has largely been replicated in behavioural and social science texts and not very clearly labelled as such when analysing corporate structure in literature. However, when analysing the definition of sexism as a "type of prejudice" that results in "discriminatory acts", one can clearly see that the terms gender discrimination and sexism, may well be used interchangeably (Glick & Fiske 2018). A clear gap in research exists as to why, despite our legislation and corporate governance codes that females, remain underrepresented. Ambivalent sexism does clarify the inherent interpretive duality of the concept of sexism in that it is both a subjective experience as well as an objective reality. Dick (2013) legitimately argues that sexism is inherently ambiguous as a result of its polysemic nature, that has, as a practice been reinforced societally because of the processes by which the "subjective experiences of sexism gain authority" or credence to produce validity. (Dick, 2013, p645). Hence, the difficulty in firmly labelling or identifying its role in corporate decision making about who constitutes our upper echelon structures.

A deep analysis or assessment of how ambivalent sexism could influence the ascent of female executives is pertinent given the enduring pervasiveness of this issue. This research aimed to identify how ambivalent sexism is at play in this pathway of senior or upper echelon composition decisions. The goal was to uncover how, if at all, sexist attributes in males and females, affect the appointment of women to C- suite or Board positions. This study revealed opportunities and threats could be utilised by corporates as a plumb line in advancing better organisational design; and in crafting structure that promotes equality and creates competitive advantage through deliberate changes in constituting C- Suite, Exco's and Boards, in the South African context and globally.

This research seeks to ascertain if ambivalent sexism appears in the South African context; at what levels of pervasiveness and which sexist attitudes could be more detrimental to the upward mobility of females. The notable problem of the underrepresentation of women has an enduring resilience that warrants further research, both for the purposes of confirming or refuting its influence on decision making, as well as for the creation of more inclusive strategic designs for upper echelon structures.

This research builds on previous bodies of knowledge in the area of gender discrimination and sexism. It also hopes to explore and further investigate the nuanced concept of sexism as an overarching impediment to the ascent of females to upper echelons , ie the

proverbial glass ceiling phenomenon; as well as for when females are accepted into these structures, why the glass cliff scenario may play out. Clarity in understanding of the psychological climate underpinning the decisions as to the constituents of South African Boards or C- suites is important to strategic planning of these structures. This research may assist in contributing to this area of academic knowledge as well curate possible leads to the formulation of strategies that could ameliorate this inequality, if by no other means than simply creating an awareness of what exists.

1.3 Contribution to theory

Drawing on gender stereotype theories to uncover bias and ambivalent sexism as an umbrella construct for several different manifestations of gender discrimination, this research aims to unpack mindsets of resistance to new or greater numbers of female appointments and provide levers with which to offset the negative implications of these inhibitors to performance. It builds on previous studies into the fields of gender inequalities in the workplaces, but with the lens of contributing to the body of work that uncovers the psychology behind the observed phenomenon, which is the significant under representation of women in top management: meaning C -suites, Boards and Executive Committees (Kanter, 1977; Kirsch, 2018, King et al, 2010; Stamarski & Hing, 2015; Terjesen, Singh & Sealy, 2009).

Scholarly research as outlined above and in Chapter 2, reinforces that gendered organisational practices and processes are the norm. More research into the psychological climate and entrenched perceptions cultivated by a conscious or unconscious, societal practice of sexism and the effect that has on the composition of C-suite/exco and by extrapolation Boards, is warranted, particularly when it comes to drafting C-suites and Excos. Sexism as a construct, in both males and females will ultimately impact on performance both in the females appointed to seniority as well as the team who work as their subordinates. It must therefore be ascertained how this insidious construct appears in corporate, which will be uncovered as we funnel the research questions in the Ambivalent Sexism inventory of Glick and Fiske (1996), a tool to gauge sexism and its factors, from a societal to a corporate level, and whether this is evidenced by the number of females in those companies upper echelons. This study largely ratified the existing theories.

1.4 Contribution to practitioners

It is also hoped that the value for strategy in structure design will be developed. In uncovering resistant attitudes and labelling them as strongly prejudicial, action against such attitudes is stimulated. It is hoped that female inclusion then becomes an intentional part of strategic design and intent, and encourages platforms in corporates for open, honest dialogue around the issue of sexism.

1.5 Problem Statement

Despite the fact that, females continue to qualify from tertiary institutions at a rate of approximately 56 % for undergraduate degrees and 60% for post graduate degrees, with a labour force participation rate of around 44.7% (OECD 2016), earning true legitimacy, they remain underrepresented in C-Suite and Boards. Ambivalent sexism, in upper echelon structures, presents a likely perpetrator of such a phenomenon.

CHAPTER 2: THEORY AND LITERATURE REVIEW

2.1 Introduction

This literature review will first identify and define the main theories that play a role creating and embedding gender stereotypes that manifest as sexism. The literature review itself demonstrated the echoes of sexism and its inherent ambiguity that primarily led to the assertion that ambivalent sexism could well be, an all-encompassing umbrella concept in the discourse on gender inequality (See Figure 2). These biases and behaviours are critical influential factors that inform the decision-making processes involved in appointments of women to C-Suite and Boards.

Gender Diversity and its Importance	Gender bias & Social roles Theory	Ambivalent Sexism	Legitimacy, Leadership & The glass Ceiling
Designed /Constructed Psychological and organisational barriers	Gendered leadership styles: agentic versus stewardship	Critical mass theory and Tokenism	Sexism in HR and Organisational practices
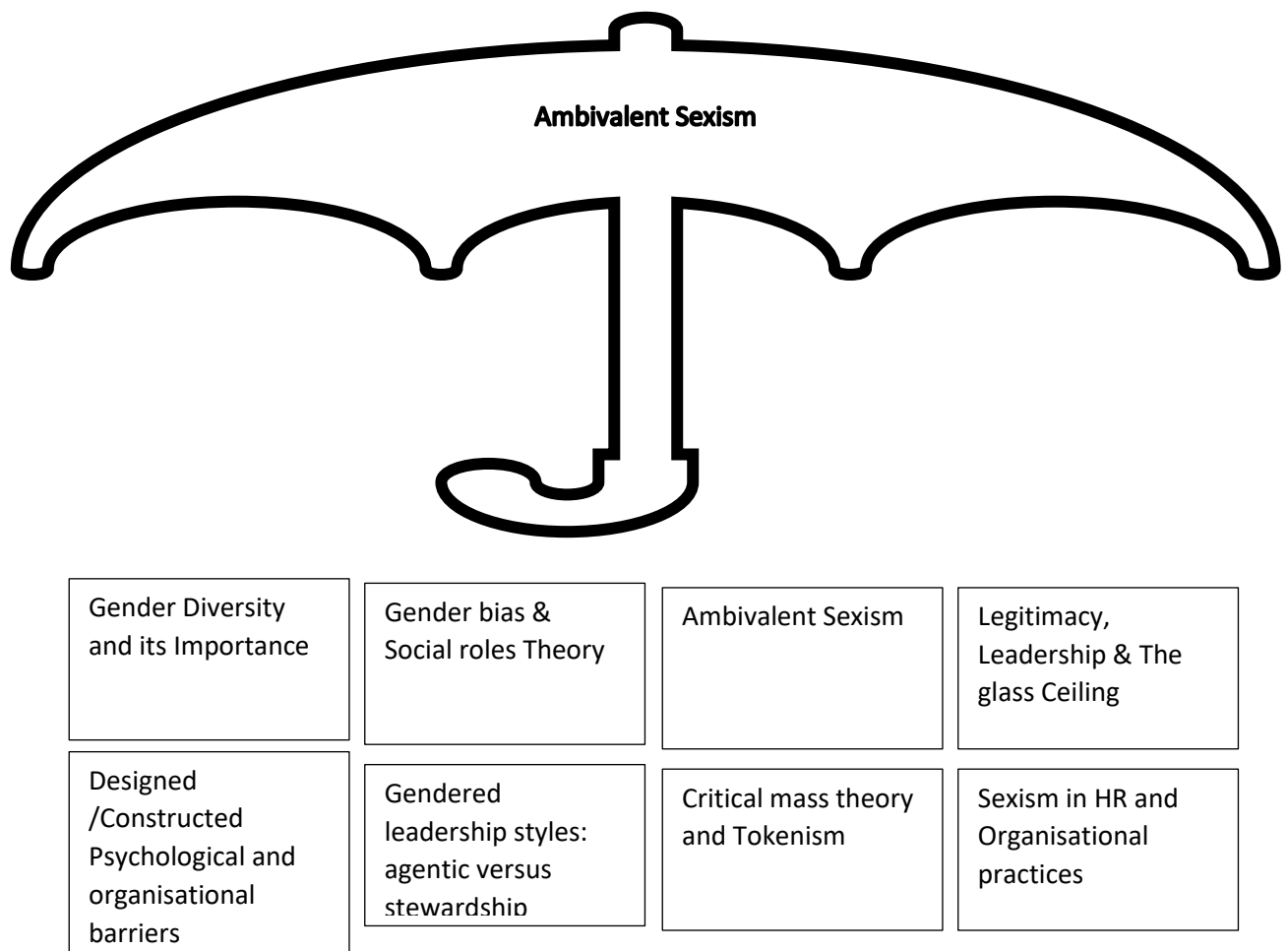
Figure 2 Literature Review Concept Map

Source: Authors Own (2019)

With a growing amount of research in this particular area around the underrepresentation of females in upper echelons, several contributing theories must be looked at, as the problem is complex and multifaceted and no one reason could be effectively singled out as 'the' reason for this persistent observation. Therefore, the contributing theories are acknowledged for their contribution to the research problem and then an in-depth analysis of the construct of ambivalent sexism will be scrutinised for its contributions to the status quo.

The literature review journey basically looked at three major barriers that describe the broader factors that contribute to sexism, but manifest as

1. **Psychological barriers**: (both in decision makers and females themselves)
2. **Institutional barriers**: presented by culture, religion, patriarchy and general concepts around social roles that lead to gender discrimination and finally,
3. **Organisational barriers**: structural barriers such a staunchly vertical hierarchies or election and decision-making processes in the pathways to promotion, inaccessible upper echelons , barriers posed by policies and practices etc that all add up to reinforce gender discrimination that ties into to sexist beliefs that maintains the status quo of gender inequality.

This awareness of what the prevailing sentiments are will facilitate the goal of dismantling or eradicating some of the sexist barriers. Finally, the academic theories on agentic and gendered leadership styles, tokenism, and the attenuating impact of critical mass will be discussed, with a view to their role in the persistence of inequality in upper echelons.

2.1 Gender diversity and why it's important

Extant literature confirms the underrepresentation of females on Boards (Hillman, Shropshire & Canella Jnr., 2007; Eagly & Carli, 2007). Amongst reasons cited for the lack of female stakeholders on boards is the lack of qualified females in the talent pipeline (Chizema, Kamuriwo, & Shinozawa, 2015). However, growing evidence out of tertiary institutions worldwide, indicate that the number of women exceed the number of males with degrees in both graduate and post graduate sectors. To this end, this review builds on OECD panel data that evidentiated the growing female talent pool (OECD, 2017). Across OECD countries 38 % of men aged 25- 34 years, have graduated from tertiary education versus 50% of females. This chasm between qualified females and males, has been widening consistently, over the last 10 years. "*Despite higher levels of education,*

only 80% of qualified females are actively employed compared to 89% employment rate for males in the same age categories, with females receiving on average 26% less in remuneration for similar job descriptions" (OECD Education report, 2017, p. 23). Qualifications as well as level of education are cited as the key legitimising determinants to ascend to upper echelon positions (Chizema, Kamuriwo, & Shinozawa, 2015; Grosvold & Brammer, 2011). With a larger qualified talent pool, this obviates the question as to why upper echelon structures are not more densely populated with females who have for the last ten years been outperforming males academically, attaining the requisite "legitimatisation"?

Brieger, Francoeur, Welzel & Ben-Amar (2017) focusing on institutional mechanisms at play in the underrepresentation of women, suggest that country level emancipative forces, like the democratic right to vote and enforced gender equality rights, influence the levels of diversity on Boards. Country level determinants are key antecedents for female presence on Boards. In those countries that poignantly emphasise the significance of female candidacy in managerial positions, there is a concerted effort towards addressing gender pay gaps (Brieger, Francoeur, Welzel & Ben-Amar, 2017). Where a deliberate and active pursuit towards the representation of females exists politically, better female representation occurs. (Terjesen & Singh, 2008). More obvious factors that cannot be overlooked for Board constituencies include the legal, cultural and religious norms of that country (Chizema, Kamuriwo, & Shinozawa, 2015); and the normative institutional forces of government, family, religion, education levels (Grosvold & Brammer, 2011; Thams, Bendell & Terjesen, 2018).

The organisational benefits of gender diversity have been reinforced by the plethora of academic research which validates the argument for diversity, equality and inclusion. (Herring, C. 2009; Dezso`s & Ross, 2012). The financial and economic case for diversity suggests that firm financial performance benefits from improved corporate governance and positively related measures of Board effectiveness post the appointment of female constituents specifically (Adams & Ferreira, 2009, Campbell & Minguez-Vera, 2008). Campbell and Minguez-Vera (2008) argue that female appointments to boards are both ethical: in accomplishing social equity; and economic: in synthesising competitive advantage by enhancing problem solving skills, increasing creativity, bringing customer and employee perspectives to the board and heightened decision-making capabilities. There are also measurable benefits to stakeholder engagement and management as well as a notably stronger corporate social responsibility CSR programmes. All of which have

the resultant effect of increasing the firm's social capital and brand equity. (Hafsi & Turgut, 2013). The financial impacts have been dissected with evidence largely supporting the influence of women directors and management to improved firm financial performance (Chapple and Humphrey, 2014; Dezso` & Ross, 2012, Herring, 2009;). Dezso` & Ross (2012) further suggested that these benefits are curated through an increase in innovation. With multiple evidenced arguments for female leadership, the search for plausible suggestions as to why gender disparity in upper echelons persists, is crucial.

2.2 Ambivalent Sexism

As suggested throughout this discourse, ambivalent sexism is the term used to describe this fluctuating "ambivalent" stance that we as individuals within a collective society, both male and female, can display towards females. Sexism, with its two subsets hostile and benevolent sexism, which constitutes the "ambivalence", according to Glick and Fiske (1995, 2001) is a form of prejudice, a type of gender bias that disadvantages a group (Refer to Figure 3).

Figure 3 demonstrates that Hostile sexism has just one form that represents the overt, direct forms of discrimination and stereotyping, whereas Benevolent Sexism has three possible ways in which it subversively can create gender inequality, called Protective Paternalism, Gender Differentiation, and Heterosexual Intimacy. Protective Paternalism, the first sub-construct refers to the protective stance one can assume towards females, offering security, assurances and even mentorship, provided the women behave in a manner believed by the perpetrator to be in keeping with one's role, character or place. Gender Differentiation has to do with a strong sense of male and female differences and where those differences are most useful, i.e., with the women assuming more domestic or lower level, communal or nurturing occupations and positions, i.e.: feminine roles. This is supported by social roles theory (Heilman, 2001, 2008). Finally, Heterosexual intimacy has to do with the desire for females as a life or sexual partner to fulfil the needs of care, companionship and sexual desires (Glick & Fiske, 1996, 2001, 2011).
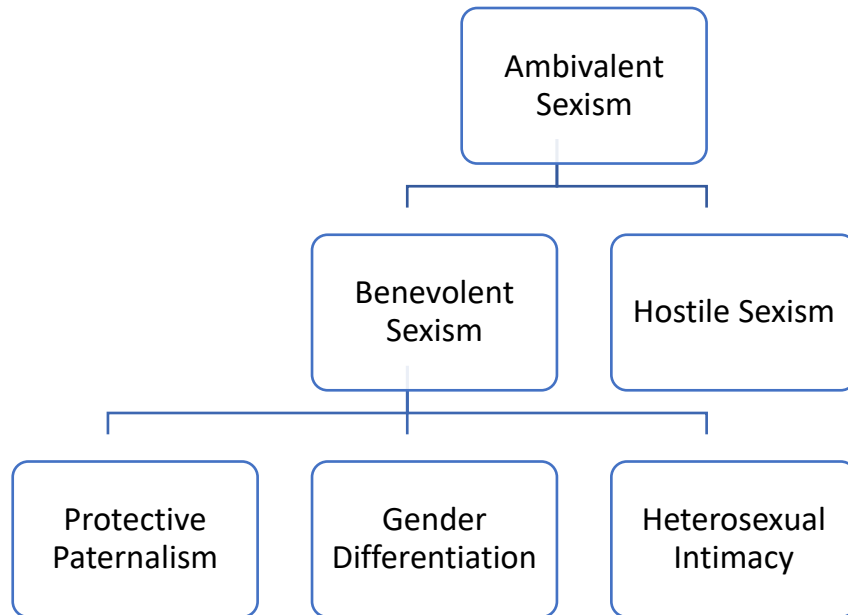
Figure 3 Theory of Ambivalent Sexism showing sub factors

Source: Adapted from Glick, P., & Fiske, S. T. (1997). Hostile and benevolent sexism: Measuring ambivalent sexist attitudes toward women. *Psychology of women quarterly*, *21*(1), 119-135.

Sexism seems to have evolved as an evolutionary concept with the strength of the male being assigned as his biological que to dominate the weaker female, that has validated the male claim to the "stronger or superior" sex (Heilmann, 2008, Eagly & Koenig, 2014). It produces inferences of superiority in important leadership attributes, which can lead to unfair discrimination. Sexism, as a construct exists on a spectrum offering varying degrees ranging from hostile to benevolent. Hostile being overt with a negative affective quality, and benevolent, being more subtle, with a positive affective tone (Glick & Fiske 1997, 2001, 2011, 2018; Hideg & Ferris, 2016). Previous studies further assert that there is a strong positive correlation between hostile sexism and older participants ie > age 64 -75 years old; and an inversely correlated relationship between educational levels and sexism. Benevolent sexism however was found to be significantly higher in males across all age categories and educational levels (Garaigordobil & Aliri, 2013; Glick & Fiske, 2011, 2018). Therefor it seems necessary to explore how sexism manifest across different age demographics, as well as different genders.

It is purported that men, in particular, both need and value women in their "role as a woman" ie, as a nurturer, lover, romantic partner, caregiver, homemaker, mother etc, and at other times are equally forceful in their stance against women in other, presumably

"masculine" roles like leadership or executive senior positions (Glick & Fiske,1997, 2001, 2011, 2018; Hideg & Ferris, 2016). Hostile or overt sexism is defined as an "adversarial view of gender relations": the perception of women being characterised as controlling of men using sexuality or feminist ideology. Benevolent sexism, on the opposite end of the continuum, idealises and elevates women as needing to be protected and supported, but necessary to men.

The implication being that women are weak but essential. The authors' postulate that benevolent sexism is a more subtle form of prejudice that does still place women at a distinct disadvantage (Glick & Fiske, 2001). They purport that sexism stems from antipathy which is defined as a "faulty and inflexible generalisation", which consciously and likely unconsciously, culminates in discriminatory acts that put the target at a disadvantage, as demonstrated in Figure 4 (Glick & Fiske, 2001, p 110). An interesting discovery was that the disadvantaged group, ie women, can often reinforce their inferior status by condoning sexism in its benevolent form of offering protection, provision or social advantages. This was corroborated by Eagly and Mladinic (1993) who also iterate that benevolent forms of prejudice create positive feedback loops between social inequities and antipathy as a sort of legitimisation or a desire to justify the existing social system (Figure 4).
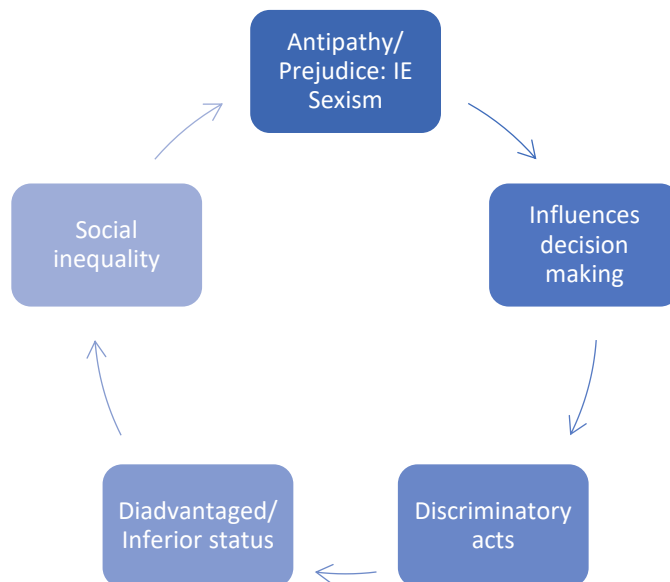
Figure 4 The development of Sexism as an insidious construct

Source: Adapted from Glick, P., & Fiske, S. T. (2001). Ambivalent sexism. In *Advances in experimental social psychology* (Vol. 33, pp. 115-188). Academic Press

These various presentations of sexism in itself lead to the postulation of ambivalent sexism as a rather Machiavellian construct. It is insidious in nature and appears favourable, but is, at its core, is patronising and disadvantageous, condoning an underlying malevolence that maintains the inequality (Eagly & Koenig, 2014, Hideg & Ferris, 2016; Oliver, Krause, Busenbark and Kalm, 2018). Particularly in its benevolent form, it offers a type of pseudo-support of women in corporates, as explained by the favourable descriptions assigned to women, which is largely welcomed by females (Eagly & Koenig 2014, Hideg & Ferris, 2016). This very support though, becomes the mechanism by which women are in fact controlled and kept in their societally designated place or position, and how gender inequality is reinforced (Hideg, & Ferris, 2016, Oliver et al, 2018; Starmarski & Hing, 2015). As explained by Hideg & Ferris (2016), women are viewed positively and even promoted, conditional to them fulfilling "feminine" positions or roles. The focal point being that no matter how it is deconstructed, the net effect of prejudice in any form, be it racism, classism or sexism, is to place the target group at a distinct disadvantage (Refer to Figure 5 for framework explaining how this type of prejudice affects decision making and reinforce inequality as proposed by Stamarksi and Hing ,2015).

Society's ambivalence towards sexism is further compounded by the fact that it can be simultaneously understood as both an "*objective reality and as a subjective interpretation"* (Dick, 2013, p662). This offers a realistic picture of society as an ambiguous one, with an intrinsic duality, in which we modify our attitudes based on present company or context and also, on how recognized our version of truth is, or how socially acceptable that version of ourselves will be (Dick, 2013). As explained by Glick and Fiske (2011), women are both adored and vilified in a love-hate dichotomy based on when they stay in character, as described by social norms. When they step out of these boundaries, much like the "*Madonna-Whore syndrome"* described by psychologists Tavris and Wade (1994) and cited in Glick & Fiske (1996), they incur a penalty. So, at different times and in different circumstances, both men and women, may display sexist attitudes in varying degrees and forms.

Hideg & Ferris (2016), hold the view that Benevolent sexism might be intrinsically more dangerous. Society tends to act or react quite strongly against overtly negative forms of prejudice which can lead to a reduction in the undesirable in society (Dick, 2013). In the case of benevolent sexism and the positive tone it assumes, the danger they speak of lies

in the fact that it has a well-veiled intention to keep women in distinctly feminine roles. This goes unnoticed under the guise of compassion and support. Benevolent sexism appears magnanimous and may in some situations produce positive outcomes, like the support of employment equity programmes, when in fact, it is actually contributing to gender inequality, as it only favours females for "feminine" positions and still leaves the females work force largely underrepresented in senior masculine structures. (Hideg & Ferris, 2016; Oliver, Krause, Busenbark & Kalm, 2018).

In the research article *BS in the boardroom: Benevolent sexism and board chair orientations,* Oliver, Krause, Busenbark & Kalm (2018), focusing on the post promotion environment around the appointment of female CEO's and analysing agency and stewardship theories, suggest that firms are more likely adopt collaborative rather than control orientations particularly in the board chair-CEO relationship. The collaboration versus control stance, of the board chair, while in appearance generous and positive, is directly attributable to benevolent sexism because females are viewed as "more conducive to or in need of, this kind of relationship." (Oliver et al, 2018, p113). Rough translation being that females are "weaker" or inept and in need of male guidance and mentorship. The interesting finding was, the more females present on boards the less likely benevolent sexism is. Leaning into the theory of tokenism and how greater numbers of women have attenuating effects on stereotypical or benevolent sexist attitudes as indicated in Appendix 1 (Kanter, 1977; Konrad, Kramer & Erkut, 2008, Oliver, Krause, Busenbark & Kalm, 2018).

2.3 Legitimacy via Qualifications and Leadership Competencies

Heilman (2001, 2008) argues that a primary inhibitor to the ascent of females in leadership stems from her evaluation as "competent" compared to her male counterparts. Evaluation processes unfairly prejudice females and thereby prevent her appointment to senior positions. Heilman (1985, 1995) developed the *Lack of Fit Model*, where she describes how women are prejudiced and set up for failures. They fail to "fit" the required perceived attributes or skill levels of the male dominated leadership roles. Consequentially, they are deemed incompetent to fill those roles. This was corroborated by Hideg and Ferris (2016) where women are only promoted to senior positions when these roles are "feminine" and will be the recipients of the acceptance and adulation of their male supporters as long as they remain in female character, under the watchful eye of "compassionate sexists" (Hideg & Ferris, 2016, p 706). This also leads to the glass cliff from where female

aspirants are precariously perched, when they are pitted against tasks already inherently risky or set up for failure (Haslam & Ryan, 2008). This state is further exacerbated as women accept their perceived status as incompetent and lose aspiration to leadership roles. (Glass & Cook, 2014; Kanter 1977; Koenig & Eagly, 2014; Ridgeway & England, 2007). Behaviours of this nature are interestingly not only relegated to males in leadership. A growing body of research seems to suggest the females in power are unable to ameliorate the existing gender inequality, despite the supposition that they might. (Maume, 2011; Maume & Ruppanner, 2015). The reasons for this could be attributed to critical mass theory in that there are not a significant enough number of females to counteract the decision of chauvinistic or sexist attitudes by males in upper echelon (Eagly & Karau, 2002; Heilman& Eagly, 2008; Konrad, Kramer & Erkut, 2008; Kanter 1977). It has also been suggested that upper echelon females, tend to display more agentic styles of leadership and sometime adopt "male" behaviours ,in order to succeed at and fit in with prevailing upper echelon descriptors of successful leadership (Eagly & Karau, 2002; Rudman & Glick, 2001; Artz & Taengnoi, 2016). This could imply a negative sentiment applied to junior females working under female bosses which alleges the possibility of the same results as sexist discrimination (Artz & Taengnoi, 2016).

Underpinning those processes involved in decision making and promotion, are the aforementioned concepts of gender bias, stereotyping, and consequent sexism, in how the evaluator thinks women are (descriptive) and defining how the evaluator thinks women should be (prescriptive) (Heilman, 2001). The assertion is that women are disadvantaged from the get-go with their competency under the lens of social roles theory, in performance evaluations. It is interesting that these assertions apply to both men and women, as women traditionally gain acceptance in both genders, by playing the typical female role which further feeds the benevolent concept of sexism (Eagly & Wood 2008; Heilman, 2001). Over and above all the overt (hostile) and Machiavellian (hidden/covert) forms of discrimination, research shows that women are less likely to develop the social ties, networks, mentorship and sharing of information that assist in upward mobility as compared to their male equivalents via the homosocial reproductive nuances, which is the term used to define these methods of information sharing, in corporates (Glass & Cook, 2016, Koenig & Eagly, 2014, 2017; Taylor, 2010). Weyer (2007) purports that all gender difference is underpinned by pre-existing bias, social roles theory and expectations theory culminating in prejudice in evaluations that have prevented women from transcending past "the glass ceiling".

The "glass ceiling" is a set perceived of barriers in an organisation that inhibits or actively prevents the ascent of women or certain minority racial or ethnic groups. (Cook & Glass, 2014; Maume, 2004).

Extending from that is, the "glass cliff" theory, which suggests that "occupational minorities" are more likely to be promoted to leadership positions in organisations that are already struggling, in crisis, or at risk to fail (Ryan & Haslam, 2008; Cook & Glass, 2014). This is supported by the assertion that women are often promoted to high risk appointments and by virtue of the nature or magnitude of the risk, may have shorter tenures and face a greater magnitude of constraints, thereby failing or falling (Eagly 2002, Heilman, 2001; Kanter, 1977). Ryan et al (2007) theorise that the "assumed emotional sensitivity", code for a feminist or stewardship type leadership style, as well as the perceived higher interpersonal skills of females may be more valuable to navigate the human capital component of crisis situations, and therefore, women may be appointed to senior positions only if those set of conditions are displayed organisationally. All of these sentiments lead to the development and reinforcement of stereotypical assignments for the separate genders which can lead to unfair discriminatory decisions.

2.4 Designed /Constructed Psychological and organisational barriers

The barriers to the ascent of females are copious but can be largely classified into three general areas: institutional barriers (Chizema, Kamuriwo, & Shinozawa, 2015, Hideg & Ferris, 2016); psychological barriers (Cangemi & Baker, 2016; Carli, 2000; Cook & Glass 2015; Ely, Ibarra & Kolb, 2011); and organisational practices in corporate human relations policies (Heilmann, 2008; Hideg & Ferris, 2016; Stamarski & Hing, 2018). While there are several factors under each broad classification, recurrent themes in literature seem to single out the following descriptors. They are discussed under the headings of leaderships styles being agentic or stewarding; the concept of tokenism and critical mass, and finally the actual barriers organisationally in HR policies and practices that reinforce inequality.

With psychological impediments to evaluations of and acceptance of women as leaders despite the current shifts towards a more egalitarian society, the leadership of organisations become an imperative lever to provide impetus to equality. As evidenced

in culture theory, "superheroes" are required to exemplify, mandate and demonstrate change until it becomes a socially accepted practice and norm (Hofstede, 1991). Institutions according to Hofstede help reinforce certain cultural identities and practices. Religious beliefs and Patriarchy are at the core of several cultures and are largely normative. It is suggested that these deeply embedded constructs can only be corroded over time with the influence and institutionalisation of powerful counter constructs demonstrated and adopted by transformative leaders (Chizema, Kamuriwo, & Shinozawa, 2015; Ely, Ibarra, & Kolb, 2011).

At face value, traditionally male-dominated, hierarchical organisations demonstrate that leadership roles are fulfilled by men (Heilman& Eagly, 2008; Eagly & Wood, 2011). The characteristics required to lead, are agentic in nature, typified culturally by the male stereotype. This leads to men inadvertently prescribing the qualities of leadership as male attributes, and by group social theory, advocating for and aggregating towards other males when leadership positions are up for review (Koenig & Eagly, 2014; Heilmann, 2008; Ely, Ibarra & Kolb, 2011; Taylor, 2010). The counter applies to females who observe this and accept that they cannot hold those positions by virtue of those "big man" traits and therefore feel inadequate to assume or pursue those roles (Ely, Ibarra & Kolb, 2011). Due to limited availability of C suite, Exco and board positions and the intense competition this might entail, risk averse females may shy away from challenging their male counterparts for the seat (Cangemi & Baker, 2016; Cook & Glass, 2015). Women have been found across several psychological studies to be less likely to survive let alone, succeed, in highly competitive environments. Females generally exhibit high levels of psychological and mental discomfort in environments that are characterised by intense competition (Cook & Glass, 2015, Heilman & Eagly, 2008; Eagly & Carli, 2003).

2.5 Gendered leadership styles: agentic versus stewardship theories

Sexism is underpinned by the notion of what we think men and women are and this contributes to their leadership skills, an essential criterion for placements in any upper echelon structure. This sculpts what society endorses as attributes for leadership which then prescriptively propagates gendered leadership styles. Given the unique psychological profiles of males' verses females, leadership traits have been grouped together and ascribed to each gender (Heilman, 2001). Agentic descriptions of leadership include independent achievements, competency, control, and self-direction, typically thought of as male attributes

of leadership whereas stewardship or communal theories are centred on close relationships, fostering networks and cooperation; typically thought of as female attributes of leadership (Rosette, Zhou-Koval, & Livingston, 2016; Barbuto & Gliford, 2010). Either gender stepping out of their socially accepted role is often met with disapproval by both sexes and consequently, discrimination. Women are often charged with an "agentic penalty": a social or economic repudiation, if they deviate from socially accepted norms of leadership style, as in demonstrating behaviours that are dominant, driven, forceful or assertive (Heilman, 2008; Eagly & Karau, 2002; Koenig & Eagly, 2014; Taylor, 2010; Rosette, Zhou-Koval, & Livingston, 2016). Labels such as aggressive, dominating, and unfeminine often follow agentic females. As demonstrated by Glick and Fiske (1997, 2001, 2011, 2018), all these psychological underpinnings insidiously foster the benevolent sexism culture as per the cycle illustrated in Figure 4.

Despite apparent disparities in gender-based leadership styles, both sexes are found at different times to utilise different or blends of leadership styles to be effective. Results indicated males and females equally and effectively utilised both communal and agentic or servant leadership directives. These findings contest prevailing gender role stereotypes in leadership (Barbuto & Gilford, 2010). A predeterminant of successful assimilation of female leaders needs to be the developing of female leadership potential and the dispelling of prescriptive stances for either sex. It is therefore hypothesised that male leaders are strategically essential, as active advocates and "sponsors" to the promotion of women. (Ibarra, Carter & Silva, p 83, 2010).

2.6 Psycho-social constructs: Stereotypes, gender bias and social role theory

While acknowledging the institutional and instrumental explanations for the underrepresentation of females in top management positions, this study largely homes in on the psycho-social constructs, especially the psychological barriers (Cangemi & Baker, 2016; Carli, 2000; Cook & Glass, 2015). The deeply embedded stereotypes of who and what a traditional female role is in society has become the accepted norm and position she must occupy (Chizema, Kamuriwo, & Shinozawa, 2015). The entrenchment of orthodox religious beliefs, coupled with the social construct of patriarchy, has reinforced gender-based stereotypes as to what the delineated roles for males and females are, and ought to be. Coupled to these beliefs are the behaviours and characteristics attributed to each gender, which cultivates gender bias in our organisational cultures. Any deviations from the norm, with regards to roles and behaviours are poorly tolerated by even members

of the same sex. (Chizema, Kamuriwo, & Shinozawa, 2015; Koenig & Eagly, 2014). Koenig & Eagly (2014) remind us that social role theory is embedded deep in our psyches by years of continuous reinforcement of our "perceived beliefs" around sex and gendered roles, as we "experience" those around us fulfilling typically or traditional social roles. The behaviours demonstrated in each group create the inferences we come to accept as defining characteristics of these groups. Gender stereotyping and bias, consciously and subconsciously, must then prejudice the decision-making process when a promotion opportunity arises. As discussed earlier, years of social conditioning create a gender-based heuristic in our decision-making capabilities. Female applicants are viewed as less capable or competent than their male counterparts (Eagly & Koenig, 2014). Homosocial reproduction, a social phenomenon where males created a network of like-minded individual males around them, implies that men tend to groom, favour and choose other males for senior positions (Glass & Cook, 2016, Kanter, 1977; Ridgeway, 1997; Ridgeway and England, 2007). In perpetuating the cycle of males for "male positions" in senior management structures, it reinforces gender inequality in these structures.

Gender discrimination has infiltrated society to the point that it is part of our accepted culture. Culture and more importantly culture change in institutionalisation processes could be successfully leveraged to facilitate the ascent of women, by remediating core beliefs and values and institutional practices, emanating from government, religious beliefs, and other organisational and societal institutional forces (Chizema, Kamuriwo, & Shinozawa, 2015, Hideg & Ferris, 2016). It must, as per the opening quotation by Irene Navidad, be a matter of conscious design and strategy. These organisational and institutional forces affect, at a root level, widely held paradigms into how men and women relate and behave towards each other, fit each other into a hierarchical social order that translates into accepted workplace norms in behaviour (Grosvold & Brammer, 2011; Koenig & Eagly 2014; Thams, Bendell & Terjesen, 2018). Research corroborates that Sexism in its current form has evolved from higher levels of Hostile versions in years gone by to its more subtle form of Benevolent sexism which is more prevalent today (Glick and Fiske 2018, Stamarksi & Hing, 2015). Largely, thanks to the efforts of the feminists of the 1960s and the growing tide of academic research validating the case for female empowerment, hostile sexism is societally unacceptable today (Dick, 2013). Glick and Fiske (1997) have provided us with a baseline scale for assessing these sexist attitudes at a societal level, by their empirical studies conducted over 19 countries as to some of the underlying constructs that produce sexism.

2.7 Critical mass theory and Tokenism

A review of sexism in senior structures would not be complete without due consideration of the recurring concept of tokenism and critical mass theory. In and off it itself, tokenism creates numerous psychological barriers both for the female in leadership and the team contributing to that division of the company (Eagly & Mladinic, 1994, Kanter 1977). Rosabeth Moss Kanter (1977) seminally, argued for the value of numbers in corporates. The attenuating effects of larger presence of minority groups on the levels of discrimination has been well documented across several academic studies (Heilman, 2008; Eagly & Karau, 2002; Koenig & Eagly, 2014; Konrad, Kramer & Erkut, 2008)

Given that the majority of national and international corporates demonstrate a numeric value of one female in senior management, gender becomes their defining differential (Konrad, Kramer & Erkut. 2008). The token theory suggests that the lone female candidate suffers immediate prejudice based on the assumption that she was appointed for certain regulatory or legislative quotas, and by virtue, any action from her, is classed as, or ascribed to, her "female" nature. The expectations of her conduct then, is tied to her gender and any deviations would incur the afore mentioned, agentic penalties. Konrad, Kramer & Erkut (2008) outline how this is true and plays out the "tokenism" attitude in both males and females in their study of critical mass on boards. Refer to Appendix 1 for summarised findings of that study.

With only one female on the Board, tokenism is the imminent prevailing paradigm. The female is met with dismissive attitudes, or exclusion and often has to work significantly harder than her male counterparts to be heard or respected (Refer to Appendix 1: Konrad Et al, 2008 study on what numbers mean). At two women, the effect of this negativity is slightly reduced, but able to produce a larger impact on the Board. At three women (termed: critical mass, the effects of tokenism and the concomitant underlying psychological effect is largely attenuated or negligible. This critical mass point produces significant positive effects both to women's contributions to the Board and their subsequent performance overall. These findings have been corroborated by longitudinal Industry reports like Catalyst (2013, 2016) and Mckinsey (2018).

Most average boards constitute 9-12 members, a critical mass of 3 or more has therefore been found to be statistically significant in attenuating the negative psychological effect of tokenism, and female participation rising beyond their gender stereotypical reactions (Konrad, Kramer & Erkut, 2008). Similar studies have found that with a higher female presence in senior management and leadership positions an organisation can reduce the instances of discriminatory practices (Stamarksi & Hing, 2015). With the dismal numbers of females on Excos, Boards and C-suites, as per companies listed in industry reports as stated in the introduction, it is clear to see why the status quo around women in strategic leadership positions has to date, not shifted significantly (Thams et al, 2018; Catalyst, 2019).

2.8 Sexism in HR and Organisational practices

Gender inequality in the workplace has been cited as a statement of fact across all the studies mentioned in this review (Eagly & Karau, 2002; Eagly & Mladinic, 1994.; Eagly & Wood, 2011;Heilman, 2001; Heilman & Eagly, 2008; Hideg & Ferris, 2016; Stamarski & Hing, 2015). It begs the questions as to how this negative phenomenon has remained so resilient? Stamarski and Hing (2015) argue that organisational structures, practices and policies have inadvertently or possibly by design, in a male-dominated work force, played a role in reinforcing the gender imbalance. They point out that decision makers levels of sexism significantly affect their tendency towards gender biased decisions/appointments. It is further asserted that the existing HR processes and practices reinforce the state of inequality in a "socialising context" for ambivalent sexism (Stamarksi & Hing, 2015. p.1) (Figure 5).
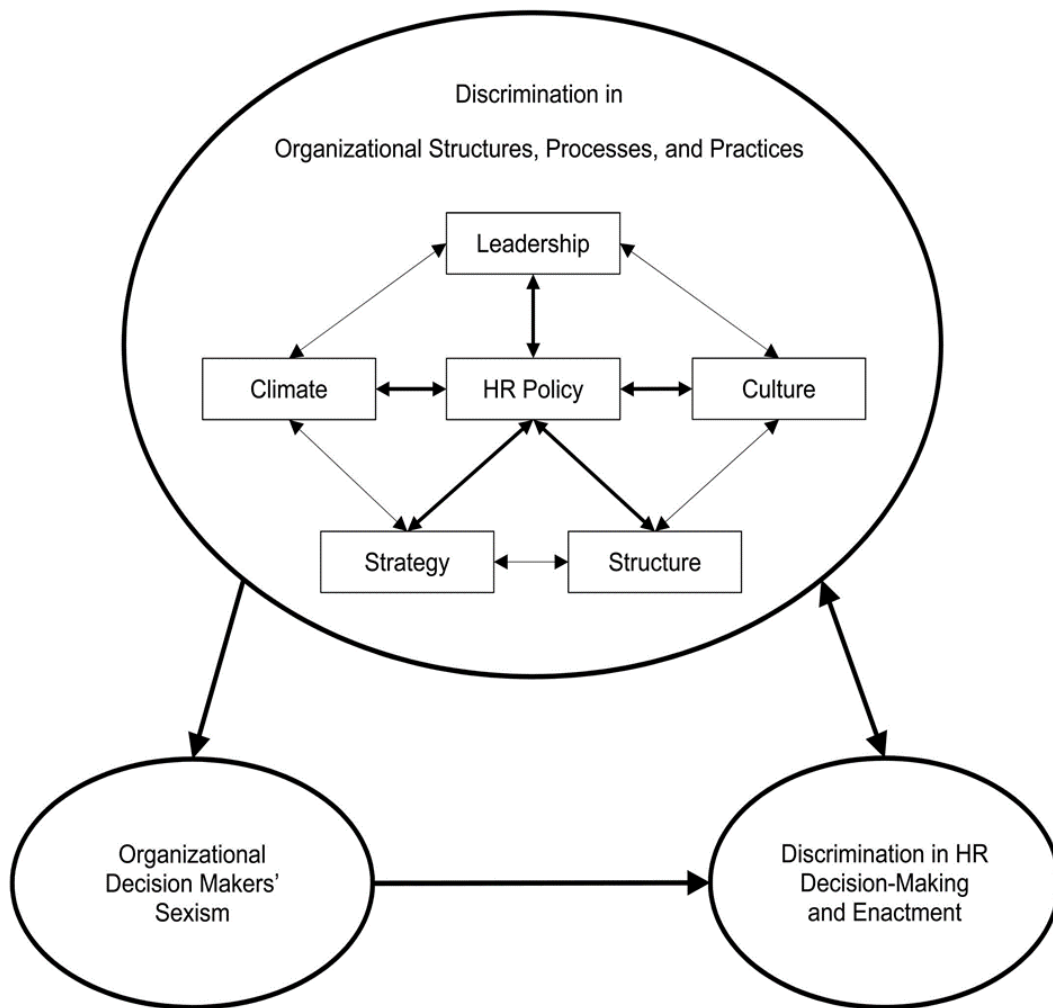
Figure 5 Gender inequalities in the workplace: the effects of organizational structures, processes, practices, and decision makers' sexism.

Source: Stamarski, C. S., & Son Hing, L. S. (2015). Frontiers in psychology, 6, 1400.

2.9 Conclusion

The literature points to the fact that gender discrimination is pervasive and can result in Ambivalent sexism, but that moderating factors to the sexism could be age, gender and educational levels (Glick & Fiske, 1997, 2001, 2011, 108: Hideg & Ferris, 2016; Garaigordobil & Aliri, 2013). From these findings, this study will focus on the suggestions that Males Sexism can lead to an underrepresentation of women as well as Female sexism, when it comes to gender, but with regards to age, those relationships are moderated only when sexism scores are at their lowest which is between ages 34-45years, with sexism levels reaching a peak post 65 years.

Extant literature provides ample argument to:

- entrenched gender discrimination and bias at a societal level, (Chizema, Kamuriwo, & Shinozawa, 2015; Eagly & Koenig 2014, Heilman, 2001; Heilman & Eagly, 2008;) as well as gender discrimination in the work place, (Hideg & Ferris, 2016; Stamarski & Hing, 2015),
- the evidence for the fact that females are equipping themselves in education and skill to assume leadership positions with legitimacy, (Chizema, Kamuriwo, & Shinozawa, 2015; Grosvold & Brammer, 2011. OECD report 2018, Thams, Bendell & Terjesen, 2016).
- strong evidence of financial and performance gains with females in key strategic upper echelon positions, (Adams & Ferreira, 2009, Campbell & Minguez-Vera, 2008; Chapple and Humphrey, 2014; Dezso`s & Ross, 2012; Herring, 2009; Hafsi & Turgut 2013).
- And strong evidence for the construct of ambivalent sexism (Glick & Fiske, 1996, 2001, 2011, 2018; Garaigordobil & Aliri, 2013; Oliver et al, 2018)

The literature also confirms the representation of females in upper echelons, key to executive decision making and company strategies, remains minimal. Drawing on the evidence presented as to the growing numbers of qualified females, benefits to companies via higher standards of corporate governance, increased innovation, better stakeholders engagement and stronger corporate social responsibility, it makes little sense that the upper echelons of top companies still have an under representation of women in key positions. Gender diversity, it appears, must be a strong factor in consideration in drafting boards, c-suites and

executive committees, to reap financial and performance benefits but also to remediate the persistence of gender inequality.

CHAPTER 3: RESEARCH QUESTIONS

3.1 Introduction

In order to begin answering the many questions the underrepresentation of women begs, and using the research in the Chapter 2 literature review, which culminated in gender bias and sexism, both psychological constructs that have been shown to influence decision making, the research questions were drafted. (Eagly & Karau, 2002; Heilman, 2008; Koenig & Eagly, 2014; Konrad, Kramer & Erkut, 2008, Stamarski & Hing, 2015).

Given the general sensitivity of topics that imply direct discrimination against any target group, the Ambivalent Sexism inventory (ASI) (Glick & Fiske, 1996) was adopted to evaluate the concept of sexism in the South African corporate context. This survey analyses in depth the ambivalence sexism evident in society and has been replicated in a variety of cultures and contexts with fairly consistent results. Also, pragmatically it offered the most sensible way to delve into a topic this contentious with a fair degree of anonymity and ease offered by the survey type electronic self-administration. The research questions the study will attempt to answer are listed below.

3.2 Research Questions

Sexism is a relatively under-explored reason for poor rates of transformation in South Africa. A dissection of extant literature reveals the "talent pipeline" and "lack of skill or qualifications" as the usual explanatory scapegoats for this occurrence, but as discussed in the literature review, these can be easily disproven in the current climate of a highly qualified and skilled female labour force. (Glass & Cook, 2015; Eagly & Wood, 2011; Chizema, Kamuriwo, & Shinozawa, 2015; Ely, Ibarra, & Kolb, 2011).

The key literature that informed the research questions came from Glick and Fiske (1996, 2001, 2011, 2018). Glick and Fiske not only measure for ambivalent sexism at a societal level, but also provide insights into the variables that form the construct. Garaigordobil & Aliri (2013) did a replication in Spain on a similar scale to the original Glick and Fiske and was used to confirm these hypotheses. Starmarski and Hing (2015), Hideg & Ferris (2016) and Oliver Et al, (2018) draw specific gender-based conclusions to the potential barriers facing women in senior echelons and were therefore utilised to draw up hypothesis 4. These Hypotheses are listed in Table 1 below.

RQ 1: Are there differences in the Ambivalent Sexism Inventory /ASI scores for males and females?

In understanding sexism, it is important to note if there are intrinsic or significant differences in the views of males and females, for the purposes of proposing levers or mechanism for change.

RQ 2: Are there differences between ASI scores in different age categories?

In understanding if age contributes to the levels of sexism, then diversity in age in upper echelon structures could be motivated as another lever to minimise the impact of such tendencies in decision making.

RQ 3: Are there significant relationships between the factors of higher order ASI constructs?

The relationship between hostile sexism and benevolent sexism in critical to noting the strength of the prevalent sentiments as well as providing clues as to which forms of sexism can be targeted for the decision makers in upper echelons to be cognisant of.

RQ 4: Is there a significant relationship between female composition in the upper echelon organisational structure and ASI scores?

The most important aim of the study was to note if any relationship could be drawn between levels of Ambivalent sexism and the representation of women in South African upper echelon structures **(Figure 6).**
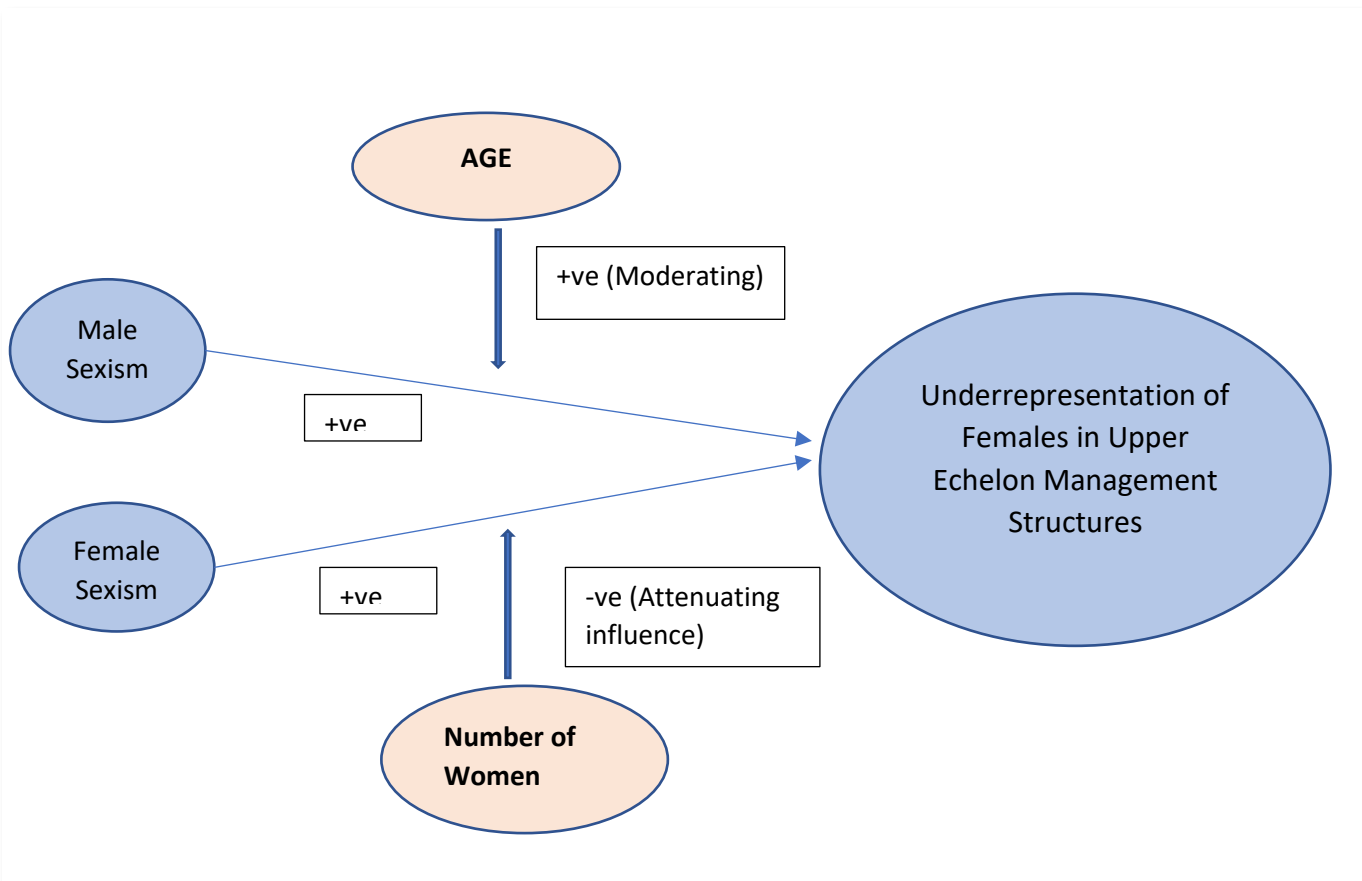
Figure 6: Proposed relationships between Hypotheses

Source: Authors own (2019)

3.3 Research Hypotheses

Table 1 Hypotheses

HYPOTHESIS	RESEARCH QUESTION	LITERATURE
H_0: There is no significant difference in sexism scores between males and females H_1: There is a significant difference in sexism scores between males and females	Are there differences in the ASI scores for males and females?	Eagly & Mladinic (1994); Eagly & Karau (2008); Heilman (1994)
H_0: There is no significant difference in sexism scores between ages H_2: There is a significant difference in sexism scores between ages	Are there differences between ASI scores in different age categories?	Glick & Fiske (196, 2001, 2011, 2018); Garaigordobil, M., & Aliri, J. (2013).
H_0: There is no significant relationship between HS and BS H_3: There is a significant relationship between HS and BS	Are there significant relationships between the factors of higher order ASI constructs?	Glick & Fiske (n 1996, 2001, 2011, 2018); Garaigordobil, M., & Aliri, J. (2013).
H_0: There is no significant relationship between sexism and composition of females in the upper echelons of corporate H_4: There is a significant relationship between sexism and composition of females in the upper echelons of corporate	Is there a significant relationship between female composition in the upper echelon organisational structure and ASI scores?	Kirsch, A (2018); Oliver, Krause, Busenbark & Kalm (2018); Stamarksi & Hing (2015)

CHAPTER 4: RESEARCH METHODOLOGY DESIGN

4.1 Introduction

4.1 Introduction

The research methodology, design and strategy adopted in this study was to test the hypotheses outlined in Chapter 3 via the research questions. As this is building on the knowledge base in the area of gender stereotypes, relations and the emergent impediments to equitable compositions in upper echelons, quantitative analysis was utilised, as it appeared as a recurrent choice in the literature review, pertaining to these areas of research. The psycho-social constructs being analysed could benefit from a mixed method approach, but previous work in the area (Glick & Fiske, 1995, 1997, 2010; Hideg & Ferris, 2016; Krause et al 2018) seems to produce a significant level of relational insights from quantitative analyses, using previously tested psychological scales. For those reasons, a quantitative approach was selected as the methodology of choice. A quick overview of the map used in this research study is illustrated in Figure 6.

As denoted in the Figure 6, which details the research process followed, the positivist, more specifically, postpositivist paradigm is assumed. This overarching epistemology and ontology represent "*a general philosophical orientation about the world and the nature of research that a researcher brings to study*" (Creswell, 2014. p.5). Postpositivist assumptions generally hold true for most quantitative research more than qualitative. The post-positivist view, as in after or following positivism, represents the shift in thought to debunk the concept of "absolute truths", as the study of human behaviour cannot be 100% certain or positive. (Phillips & Barbules, 2000, cited in Creswell, 2014).
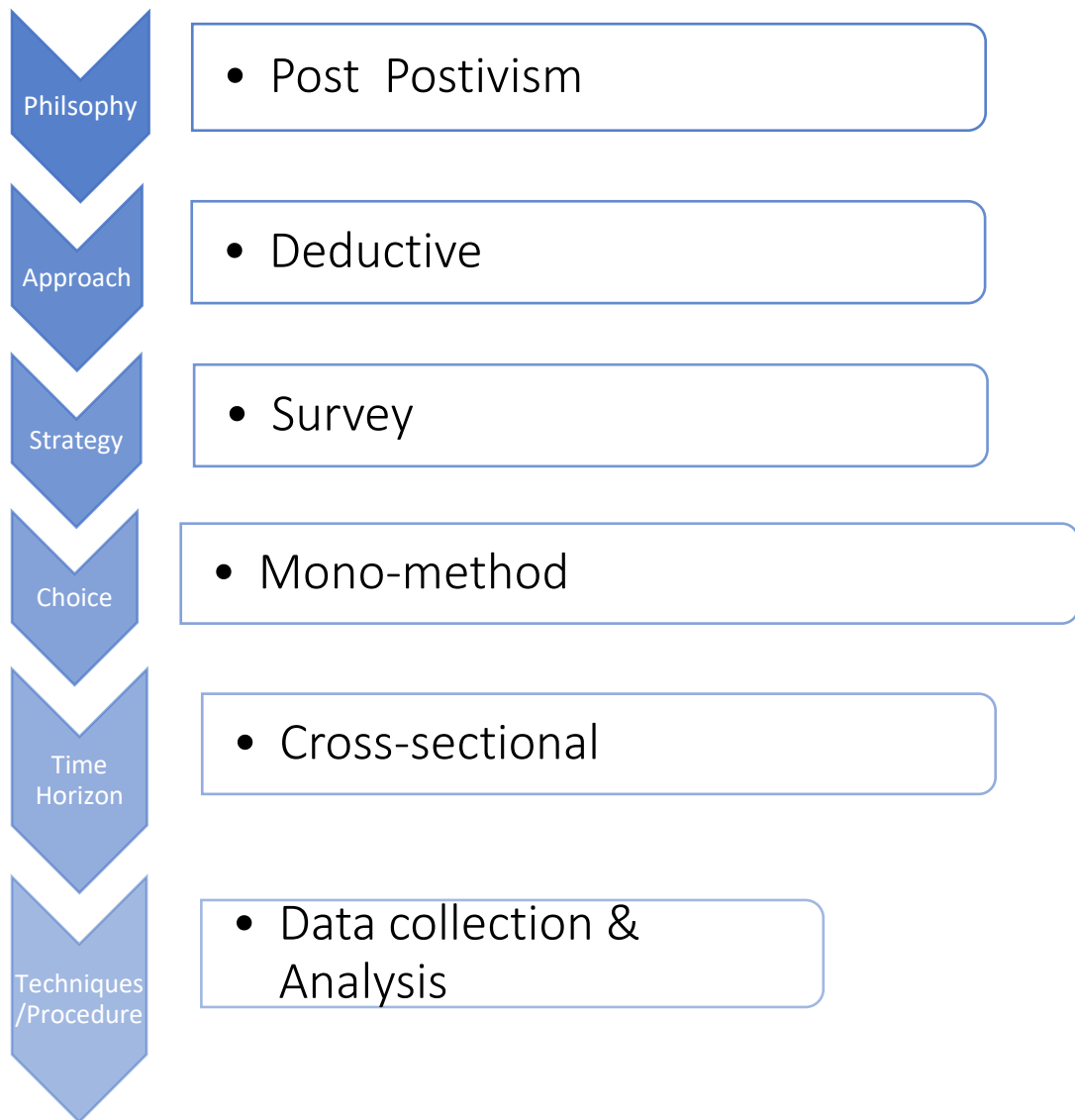
Figure 7 Research process.

Source: Adapted from Creswell, J.W., (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches.* (4TH Edition) Sage Publications, Inc.
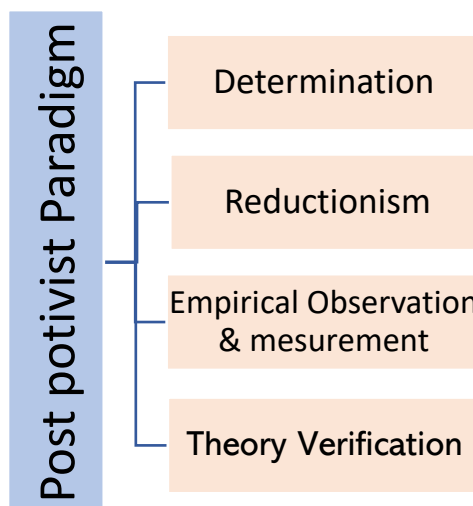
Figure 8 Research Ontology

Source: Adapted from Creswell, J.W., (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches.* (4TH Edition) Sage Publications, Inc.

The post positivist paradigm has 4 tenets outlined in Figure 7, which are, determination (identification of research problem and questions, knowing exactly what one is testing for), reductionism (breaking down into smaller variables), Empirical observation and measurements (via the testing and recording of data) and theory verification based on ones analysis of the findings (Creswell, 2014). It is suggested by Creswell (2014), the deterministic nature of the post positivist approach, as shown above in Figure 7, expects that the cause probably determines the effects. The ideas to be researched are then "reduced" into smaller variables to be tested. Knowledge is acquired through careful and structured empirical observation and measurements, that create quantifiable measures of variables. (Christensen, Johnson, Turner, & Christensen, L. B. (2011).

Finally, theories are tested to be verified, refuted or deepened in a way that helps us understand the observed reality. An appropriate way to gather data under this ontology, is to observe experiences directly or to measure them using scales, surveys or other largely quantitative instruments as they are constructs that represent "Critical realism- "real" reality but only imperfectly and probabilistically apprehendable." (Lincoln, Lynham & Guba, 2011. p 165, 166)

The approach to theory development will be deductive and is appropriate for this study as it "involves the testing of a theoretical proposition by using a research strategy deigned to

perform this test."(Saunders & Lewis, 2018. p.112). This research aims to follow the five suggested stages of deductive research as suggested by Saunders and Lewis (2018):

1. Definition of research questions from existing theories- (using the literature review process)
2. Operationalising these research questions in a specific, rigorous way so as to establish a hypothesis or inform the relationship between variables or set of hypotheses towards a theory. Using a system tested by American Psychological Association, a scale called the Ambivalent Sexism Inventory by Glick & Fiske (1995)
3. Collecting data towards generating answers to the questions/ hypotheses- Manually and, or electronically.
4. Analysing the data, to ascertain the relationship, if any between variables and to ascertain, the acceptance, rejection or modification of the hypothesis/ theory. SPSS software will be used to analyse data and test for relationships between variables.
5. Report findings and confirm or reject hypothesis/ theory.

The research questions arising out of an extensive, but not exhaustive, literature review, lend themselves to several hypothesized relationships between the under representation of women in senior management, boards and c-suite, and gender bias in its various forms. These include, age, gender, patriarchy, religion, prejudicial perceptions of inadequacy or incompetence of females, barriers created by maternity, role incongruity theory and a few psychological postulations about the mindset of females around competition and assertiveness. (Eagly & Mladinic, 1994; Eagly & Karau, 2011, Glick, 1991, Olivier et al, 2018, Waldfogel, J. 1997; Becker, G. 1985; Neumark, D. & Sanders, K. 1994; Fuchs, V. 1988; Terjesen & Singh, 2008; Chizema, Kamuriwo & Shinozawa, 2015.)

All these theories have at their heart an underpinning of the sentiment of sexism, in particular the notion of ambivalent sexism, in both males and females could represent a causal relationship to the underrepresentation of women (Glick & Fiske, 2011). This has been extensively studied by the above-mentioned researchers and quantitative methods of inquiry were adopted to identify trends and the relationships between variables as well to establish generalizability. The Ambivalent Sexism inventory (ASI) is an American Psychological association tool to gauge sexism and position the factors contributing to

sexism as either hostile or benevolent. It has shown high structural validity in over 15000 respondents in 19 countries (Glick & Fiske 2011)

The postpositivist, deductive process is supported by the use of a quantitative design strategy using surveys and experiments (Creswell, 2014). The study aims via the quantitative method outlined in the five steps (Saunders & Lewis, 2018) to ascertain the nature of the connection between the variables, namely ambivalent sexism with its variables and the representation of females to upper echelons, in particular C- suites and Boards. Quantitative research is a "strategy of inquiry" (Denzin & Lincoln, 2011, Cited in Creswell, 2014) that explains occurrences and relationships be they descriptive or causal, according to numerical data. This mono – method quantitative design will employ a survey strategy, in the hopes of securing large enough numbers to infer generalisability in the cross-sectional time dimension (Saunders, Lewis & Thornhill, 2016). This will be further discussed in the Section on the measurement instrument which is a slight adaptation on the Ambivalent Sexism Inventory (ASI) of Glick and Fiske (1997). A cross sectional time frame is being applied to provide a "snapshot" of these variables at this juncture in time in this context. The design process and flow are outlined in Figure 8, for a comprehensive overview as to what will occur during this process.
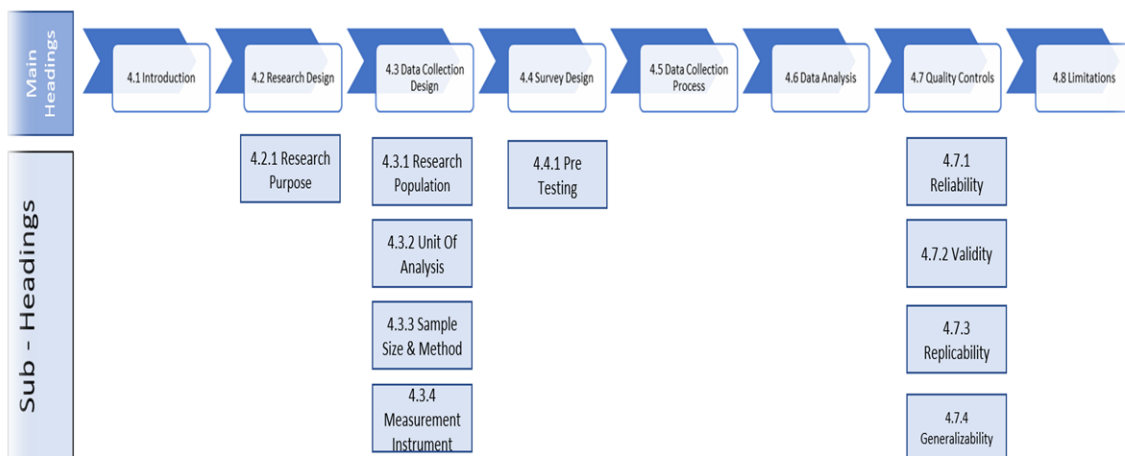
Figure 9 Research methodology and design overview

Source: Author's own adapting processes outlined in Creswell (2014)

4.2 Research Design

This, mono method, quantitative design, informed by extant literature, as outlined in Chapter 2, Literature Review, examined the hypotheses that were deduced from the literature and set out in Chapter 3, Research Questions. This study utilised a well-tested instrument and extended it slightly to tone the survey to corporate, based on previous research conducted into the construct of ambivalent sexism and its effect on the representation of females in upper echelons. This was achieved with a non-experimental research design in the form of a self- administered survey. The choice was informed by the assertion that benevolent sexism is more prevalent in boards today by Oliver, Krause, Busenbark & Kalm (2018) as well as Hideg and Ferris (2015) and Stamarski and Hing (2015). The Ambivalent Sexism inventory / ASI (Glick and Fiske, 1996, 2001) divided sexism into hostile, benevolent, protective paternalism, complementary gender differentiation and Heterosexual intimacy and is primarily a measure of sexism. It assumes the form of a Likert scale questionnaire to measure for the constructs that form the psychological tenets of the sexism in its various manifestations. These questionnaires were submitted electronically to participants. The ASI was administered to male and female Board members, C- suiters and members of Excos.

The ASI with the minor modifications made to extrapolate the sentiments more accurately to the corporate setting, provided a descriptive view of the organisation, as well as the data required to draw correlations between the forms of sexism and the representation of females in upper echelons. The research method was chosen for the ability to reveal if sexism is prevalent and in what form, and whether a relationship could be drawn between that and the number of females present in these senior structures. The primary aim was to dissect this notion of sexism, and in particular, ambivalent sexism, and present it as a potential significant contributor to the slow rate of diffusion of females to seniority. The ASI (Glick & Fiske, 1996) afforded the researcher the opportunity to deconstruct the complexity of the construct into an underlying system of values that could then be leveraged to create a framework for successful implementation of gender policies. "*Inductive study of a socially constructed reality, focussing on meanings, ideas and practices, taking the natives point of view seriously*" (Alvesson & Deetz, 200, p.1) is the goal of this design.

The study, as in, the original work done by Glick & Fiske (1995, 1997) was replicated and reviewed with over 15 000 respondents in 19 countries by 2011 (Glick & Fiske, 2011,2018) and other researchers who have used this tool, largely indicate the presence of sexism as

a societal trait along a spectrum ranging from hostile to benevolent, both of which are prejudicial to the recipients of the sexist attitude in whichever manifestation. Correlations between age, gender, educational levels and consequent behaviours have been previously drawn (Glick & Fiske, 2018; Garaigordobil & Aliri, 2013). Eight questions will be added to the scale to generate a measure of where on the continuum, sexism, if present, manifests in upper echelon structures in corporates specifically by adjusting the questions to suggest underlying sentiments towards females in the work place, informed by theories suggested in previous research like Starmarski & Hing (2015); Eagly and Mladinic (2004); King, Hebl, George and Matusik (2010), which assert that as a result of gender bias, homosocial reproduction and existing structures, policies and pathways to promotion intrinsically favour male candidates and therefore are inhibitors to the assent of women in corporate. These questions aim to extend previous work by drawing a relationship between prevailing attitudes and the construct of Sexism and how this may show up in the representation of women in C- suites, Boards and Excos. In the case that too small a sample is garnered, then just the presence of these attitudes will be measured and recorded with in depth analysis of correlations between the different constructs. The use of a previously tested, ratified scale that has been proven fairly consistent in a variety of contexts will allow for further confirmation of existing theories and their applicability or inferences to the corporate context at hand. As pointed out, this Ambivalent Sexism inventory has largely only been used in the context of general societal relationships and not extrapolated to sentiments that exist in organisations. It adds to the extant body of knowledge in the area (Marshall & Rossman, 2011). It will contribute to the veracity of previous work in this area or prove that it may not apply or produce different results to in the local context. This method is supported for building generalizations and enhancing statistical validations. (Mertler, 2015).

4.3 Research Purpose

Overall, the purpose of a quantitative study as explained by Mertler (2015, p. 109) "typically specific and narrow". The research purpose is generally divided into 3 categories, namely: exploratory, descriptive and explanatory. Those utilised in this research are discussed below.

Descriptive research purpose is defined as 'describing the situation' or real-life event or occurrences and to ascertain the accurate descriptions of the phenomenon being discussed. (Christensen, Johnson, Turner, & Christensen, 2011; Mertler, 2015). For the purposes of this investigation, the description of what type of sexist attitudes exists in upper echelon corporates must be described.

Explanatory research seeks to explain the relationship between the variables (Christensen et al, 2011). The focus of this research was largely to draw a correlation between the construct of ambivalent sexism and the presence or lack of female representation in upper echelon organisational structures.

Overall, the nature of this inquiry lends to both a descriptive and explanatory purpose. as it looks to not only define and describe the construct of ambivalent sexism in the South African corporate context, but also the relationships that may present between the variables and explain why these relationships might occur.

The survey will involve sending an online questionnaire to a select number of people from the target population and having them respond to the questionnaire. Electronic dissemination of surveys just facilitates the research process and, in this case, attenuates the effect of social desirability bias, which would be more difficult to control for, in a face to face administration of the ASI.

The ASI was completed by CEOs and members of the Board / Exco, in large companies and banks in South Africa. It was hoped the electronic dissemination of the survey will garner a better response rate as it took into consideration, the time availability of senior executives (they could have filled in at their convenience), as well as their discomfort at some of the variable's being tested, given the general sensitivity to the topic of sexism, when contrasted with a manual / physically direct approach.

4.4 Data Collection Design

4.4.1 Research Population

Creswell (2014) and Mertler (2015) define a population as the target group from which the sample is to be chosen. In this case, as outlined previously, the study will focus squarely

on upper echelons in corporate structure being the C- suite and Boards of listed JSE companies. From this population, a sample or subgroup, was selected, using a probability sampling technique called simple random sampling, so that everyone had an equal chance of being selected and this would make generalizability to the population a little easier (Zikmund, Carr, Babin & Griffin, 2013). Accessibility to universe has been provided by a comprehensive list extracted from a public knowledge database of the JSE, with further permissions having been attained in writing so as to not be in breach of any ethical considerations on the acquisitions of contact information for these executives. Only publicly available contact details were extracted from company websites and contact was initiated via direct liaison with general HR executives in each company accompanied by a written request for permission to participate in the survey. Each company on the list was contacted to request permission to approach and for their consent to cooperate with this research before a random sampling technique was applied to members of their C- suite, Boards and Excos. However, initial surveys were met with a very low response rate, and as such the survey was then sent to all senior members in listed companies, which falls in line with purposive sampling.

The original study by Glick and Fiske (1995) has been replicated in innumerable scientific studies across various, culturally diverse countries. In 1993, Joreskog & Sorbom performed confirmatory factor analyses across 19 countries with samples ranging from 250-1600, men and women, and replicated the factor structure as proposed by Glick and Fiske in 1995, confirming its internal consistency reliability and its factor analyses. A similar study was conducted in Spain with over 5000 participants which also ratified the Glick and Fiske (1996) factor analyses, validity and findings. In 2011, Glick and Fiske revisited their study, to re-evaluate how the different factors that make up ambivalent sexism would hold up to modern scrutiny, only to find their analysis still held strong. The factor analyses indicate that hostile and benevolent sexism, the two main attributes of ambivalent sexism, were "meaningful, coherent ideologies" across different nations and consistently emerged as separate but positively correlated factors (Glick and Fiske, 2001. p.112). Although these investigations were largely conducted on undergraduate students, the general finding across the research was that correlations were smaller among respondents in nations with a higher sexism score (those who scored above the median on hostile sexism, and for me (who generally scored higher for sexism). This suggests that the descriptor factors of hostile and benevolent sexism are only "modestly related" or independent in true sexism.

In organisational structure, which is assumed to be a microcosm of the nation, we may find correlational research to either support of refute those assertions amongst our sample, in the upper echelons of JSE listed companies in South Africa.

4.4.2 Unit of analysis

The unit of analysis refers to the person, collective, or object that forms the target of the investigation (Christensen et al, 2011). It is therefore a vital component to the study as it informs the type of data that can be assimilated and the "whom or what" that constitutes one's study. It was planned that ASI will be sent to randomly selected C- Suite or board members of the of JSE listed companies in South Africa, who agree to participate in our study, however on achieving a small response rate within the allotted time frame, the sample was opened up to any individual in upper echelon who would participate using snowball sampling in the same sampling frame. Senior management was targeted as it is necessary to ascertain whether these sexist attributes are present in senior management, and if so, which factors are strongly correlated. Furthermore, whether these attributes could possibly be linked to the dearth of females in these structures, the barriers presented in the existing structures needed elucidation.

Due to the nature of the construct, the survey must be targeted at the individual as the unit of analysis. The population sample is expected to be relatively homogenous, dealing with highly educated, strong leaders who represent their companies, as the target population.

4.4.3 Sample Size and Method

The sample size was determined by the number of companies willing to participate on the study. From the comprehensive list provided by the JSE, a population of 359 listed companies, for which information on their Boards and C- suites, is publicly available, exists. The study contacted a randomly chosen 200 of these companies and their senior executives. There was a poor response rate to this method in the first three weeks of the study. As such, the researcher opened out the sample to all senior management, c- suite and boards in listed companies.

The sampling process involves defining the target population, which included members of Exco, C-suite and boards. Then choosing, a random sample from the sampling frame, using a simple random sampling technique (Mertler, 2015). Well-defined sampling techniques are characterised into two broad categories namely probability or random sampling, and non-probability sampling. Probability sampling is the chief method employed by researchers who seek to generate a representative sample (Zikmund et al, 2013; Mertler, 2015). There are different types of probability sampling including simple random sample; systematic sample; stratified random sampling and multi-stage cluster sampling (Zikmund et al, 2013; Creswell, 2014). The simple, random sampling technique was initially chosen, to ensure we get a non- biased representation of the population, but as stated ended, up with a purposive sample and snowball technique application.

4.4.4 Survey Design

The survey consists of 22 original questions form the ambivalent Sexism inventory as attached in Appendix 3. Eight questions were strategically added mirroring the same tone and language of the original ASI to test for specific corporate sentiments towards women as discussed in previous academic literature (Hideg & Ferris, 2016, Oliver et al, 2018; Stamarksi & Hing, 2015). Diversity factors include age, gender, and race, but strong commonalities are reflected in people chosen for leadership positions, so it is expected that the sample will be largely homogenous especially from a psycho-social and educational level perspective. Researchers suggest that when the sample or target population is largely homogenous, there will be smaller variance (Creswell, 2014; Mertler, 2015; Saunders and Lewis, 2018). When looking at the heterogeneity of the population, the more diverse a sample is, the more reflective it is, of a population that is highly varied. This indicates that in order to be truly reflective of the population, the sample size must be greater to cover for that (Mertler, 2015). As stated, the target group has 359 companies. All companies were approached via their publicly available email addresses and the data collected were from participants who voluntarily took the survey. This ensured that the distribution was random within the companies but isolated to the target group.

Some research shows that often only a small percentage of people engage with online surveys (Mertler, 2015). To mitigate for a poor response rate, extra questionnaires were distributed via monkey survey to HR departments of each company asking for it to be

forwarded to their upper echelon structures. In order to facilitate a better return on responses, the researcher has taken the following steps to ensure the maximum return. Refer to Table 2.

Table 2 Measure in place to facilitate good return of surveys

No.	Steps to be taken for better response rate	Plan of action
1.	Survey to be attached to cover letter stating the intent and value of the research. Due to the sensitivity of the constructs, it will be explained that confidentiality and anonymity will be maintained, and all companies will be represented by numeric values, no names.	Draft cover letter
2.	In the event of poor response rates within the first week, a gentle follow up reminder will be sent.	An email tracking system and response monitoring system via the online survey platform will be put in place to manage this task. Google forms and survey monkey are able to track responses and identify dates read and dates of follow up emails, as well as the status of responses. A notification system has been set up too, and can immediately generate a thank you email, in observance of good business etiquette.
3.	Surveys with a short engagement time. The ASI consist of 22 original questions and 8 additional questions requiring about 20-30 seconds each, as they are personal beliefs about yourself. Creswell (2014) advises that short precisely worded questions are more likely to garner responses than long, vague questions when using the survey approach.	The ASI uses a simple Likert scale to evaluate the variable contributing to the construct. It should take no longer than 7-15 minutes, or less. This will be verified through a pilot test of the ASI run amongst MBA students at GIBS 2018/2019 cohort.
4.	Clear instructions and an attractive layout improve response rates. Short and concise in nature	Survey Monkey creates attractive, user friendly templates for questionnaires that are engaging and clear.

Source: Authors own adapted from a combination of Mertler (2015) and Saunders & Lewis (2018)

4.4.5 Measurement instrument

The measurement instrument here is the survey method. The Ambivalent Sexism Inventory (Glick & Fiske, 1995) or ASI, has 22 questions answered with a simple Likert Scale, shown in Table 3, that breaks down the variables. Eight additional questions have been added in the same language, tone and style of the original to draw it closer to the context being researched in this study, It is not a replication study, but the ASI is being utilised to test how the construct of sexism appears in upper echelons like C-suites and boards. The variables are psycho-social descriptions of sexist attitudes that reveal traits of either benevolent or hostile sexism, which together create the ambivalent sexism described in Chapter 2. This instrument has proved reliable in the assessment of the psychological characteristics that contribute to the sexist attitude. According to Mertler, the survey method is advisable for generating trends especially when seeking to describe characteristics of a group or population (Fraenkel, 2012, cited in Mertler, 2015). This study had been replicated across 19 countries with sample sizes ranging from 250-1600, according to Joreskog & Sorbom (1993). Since then it has been replicated in "tens of thousands of people", reinforcing its validity as a measurement instrument (Glick, 2011).

Table 3 Six-point Likert scale anchors

Scale no.	Descriptor
1	Strongly disagree
2	Disagree somewhat
3	Disagree slightly
4	Agree slightly
5	Agree somewhat
6	Agree strongly

The electronic form of survey dissemination is ideally suited for remotely collecting data that is too large to observe directly, or that could be masked with social desirability bias displayed in face to face or telephonic surveys. (Creswell, 2014, Saunders & Lewis, 2018)

Electronic questionnaire surveys using the Survey Monkey platform was used and was preferable due to the delicate nature of the study. Surveys are discrete in nature and allow the respondent the flexibility to respond at their convenience, with minimal interference of their busy schedules. Comparative analysis of subgroups like if relationships between

variables were attenuated or accentuated by factors like the age or sex of the respondent was possible.

The benefits of survey research were that it was largely cost efficient from a financial and time perspective. It facilitated data collection from relatively large numbers of individuals and allowed for generalizability of results to large populations. It also offered versatility with regards to how and what kinds of information can be collected. (Mertler, 2015). The disadvantage included low response rates particularly when disseminated electronically. Rates from 50%-75% are generally considered acceptable for this chosen mode of deliver. (Mertler, 2015). Over sampling was therefore recommended to cover for the potential of a poor response return. Dillman (2000), cited in Mertler (2015), suggested that repeated contact with respondents is the single most effective method of increasing the rate of returns. Other major disadvantages to this approach, include bias, and self-reported data. Leedy and Ormond (2013) purport that self-reported data is fallible in that people are reporting largely on what their "perception" is of what they believe to be accurate, or they may be so prone to producing the "socially desirable" answers. While this is unavoidable, electronic dissemination may help attenuate social desirability bias to some degree. None the less, the researcher must remain cognisant that the respondents may have behaved in this manner.

4.4.6 Questionnaire design

The study while utilising the ASi is not entirely a replication study as the hypotheses vary from the original study and has been amended to approach the conversation from a more corporate level as opposed to societal level. It is however, largely informed by the work of Glick & Fiske (1995, 1996, 2001, 2011). The original ambivalent sexism inventory was obtained in writing from Professor Peter Glick, attached in Appendix 3. The researcher has extended the questionnaire, by adding eight additional questions, listed below and labelled it as Appendix 4: Amended ASI (2019).

(B) 23. Women face more barriers to leadership positions in the workplace (Stamarski & Hing, 2015)

(B) 24. Women in C-suite or Board positions need male assistance (Hideg & Ferris, 2016; Oliver et al, 2018)

(H) 25. Men are likely to be technically more proficient (Heilman, 2001; Heilman & Eagly, 2008)

(H).26. Women tend to have superior social skills (Glick & Fiske, 2001; Cangemi & Baker, 2016)

(H) 27. Men are competent at executing tough executive decisions as compared to women (Heilman, 2001; Cangemi & Baker, 2016, Gook & Glass, 2015)

(H) 28. Men often try to control and influence the decisions of Women (Oliver, Krause, Busenbark & Kalm, 2018)

(B) 29. Women should be shielded from difficult circumstances (Hideg & Ferris, 2016)

(B*) 30. Women are incomplete without men. (Reverse scored item as per original reflecting Heterosexual intimacy in relationships) (Glick & Fiske, 2001)

In adding these questions, context is a bit more workplace focused and allows for ease of inferring data from the societal arena to this specified context.

4.4.7 Pre-testing of the Questionnaire

The survey was pre-tested to confirm validity and reliability as well as to ensure that the questions being asked are easily comprehendible (Saunders & Lewis, 2018). The survey was sent to 102 individuals within the MBA and MPhil groups at the Gordon's Institute of Business Science, that met the population criteria to some degree IE: are in C- Suite, boards or possibly, very senior management.

The intention behind this was that any problems identified prior to the questionnaire being sent out to the larger group. These issues were then ameliorated to facilitate the end user experience and compliance. Feedback from the individuals proved valuable to gain insight on their experiences in completing the ASI, as well to develop some sort of basis or comparative for results obtained in the target population. The questions that were

posed to this trial group inquired if there had any problems in the pre-test process including difficulty in understanding questions, correct vocabulary and phraseology in questions, etc. The feedback gained from the trial group enabled minor modifications, prior to dissemination to the target group. The expectation was that it may take respondents roughly 10-15 minutes for completion of the survey. On average most surveys were completed in between 8-10 minutes.

4.5 Data collection process

Data collection was critical to the research process and was a carefully managed and documented process. Survey monkey allowed for the recording of all data and automatically imported to excel and SPSS platforms which minimised human errors. This process began with a collection of listed companies from the JSE.   C- suites members including CEO's, CFO's; COO's were identified via publicly available information on their companies via their company websites. These companies were then approached, as outlined previously, via email to request their participation in the study at which point access to their personal information was granted.

The source of the data was the online self-administered survey that hosted by Survey Monkey, which is an online surveying tool.   The e-survey for self-completion was distributed via Survey Monkey by the researcher, with an introductory note/ cover letter. The link to the online survey formed part of the email addressed to the potential respondents, who granted permission or consent by voluntarily subscribing to the survey.

4.6 Analysis approach

Data analysis was the most critical component of generating answers to the hypotheses and assisted in this research drawing conclusions about the issues being investigated (Zikmund et al, 2011). As a quantitative study, the analysis approach used descriptive statistics and moderated multiple regression analysis, as per previous studies (Garagobil & Aliri, 2013; Glick & Fiske, 1996, 2018).   An ANOVA was conducted on participants answers to the questions. This approach was chosen since this is a minor variation on a replication and extension study. The data gathered consists of numbers, which are

expressed in intervals according to the Likert scale. This assisted in answering the hypotheses for this study. Data was examined, using Microsoft Excel and Statistical Package for Social Science (SPSS).

4.7 Quality Controls

The criteria in ensuring the quality of quantitative research project include reliability, replicability, and validity (Creswell, 2014; Christensen et al, 2011). They are essential to produce sound research and draw accurate conclusions. These are discussed below in further detail.

4.7.1 Reliability

Reliability is defined as the internal consistency or measure of a concept. (Mertler 2015; Creswell, 2014). Reliability is a core principle to the execution of a quality quantitative study. The researcher needs to ensure the stability of the instrument and ascertain if the results of the study are repeatable. In defining if a measure is reliable or not these prominent factors need to be considered:

- Stability – this refers to steadiness of a measure over time and is not affected by fluctuations
- Internal Consistency reliability – this refers to consistency among the indicators or factors that make up the scale or index
- Inter-rater reliability – this refers to the uniformity among more than one rater when translating the data and the possibility of there being a lack of consistency in their decisions

Cronbach's alpha is used to determine internal reliability or the internal consistency, of a set of scale or test items. (Creswell, 2014). In other words, the reliability of any given measurement refers to the extent to which it is a consistent measure of a concept, and Cronbach's alpha is an appropriate way of measuring the strength of that consistency. The Cronbach's alpha is not a statistical test but a reliability coefficient (Zikmund, 2012; Osborne et al, 2008). Cronbach's alpha is a function of the number of items in a test, the average covariance between pairs of items, and the variance of the total score. This type of internal consistency reliability testing is necessary to reveal the extent to which the

measured variables within the construct of ambivalent sexism, in this specific research study, can provide consistent and reliable results (Zikmund et al, 2012).

Generally, a Cronbach's of 0.6 or more is considered acceptable but Mertler (2015), suggests that for social science research a Cronbach's of > 0.7. The original Glick & Fiske study had a Cronbach's Alpha of .787 for Ambivalent sexism or the dependant variable. Other studies produced similar or higher Cronbach's results, suggesting a high internal reliability even across diverse populations (Glick & Fiske, 2011, 2018; Garaigordobil & Aliri, 2013). Cronbach's alpha was be tested for all the constructs and compared with previous study findings. The researcher has adopted a Cronbach's alpha of 0.70 as per previous studies (Glick & Fiske, 2011, 2018; Garaigordobil & Aliri, 2013).

4.7.2 Validity

Research validity can be divided into two groups: internal and external. It refers to the degree with which the instrument can accurately measure the constructs. (Christensen, et al, 2011). It can be specified that "internal validity refers to how the research findings match reality, while external validity refers to the extent to which the research findings can be replicated to other environments" (Pelissier, 2008, p.12). It is not sufficient in quantitative analysis for a scale to be reliable; it must also be valid: as in, able to accurately measure the construct being tested. It is imperative to understand that the validity determines the accuracy of the conclusions. Validity refers, according to Pelissier (2008) and Creswell (2014) , to whether or not an indicator or set of indicators that is devised to gauge a concept, really measures that concept'. Quantitative research depends quite strongly on validity to ensure the integrity of the measurements. This scale has been rigorously tested across a variety of contexts and demonstrated high validity (Glick & Fiske 2011, 2018).

Criterion validity was established using convergent and discriminant validity. Convergent validity is a parameter that refers to the degree to which related constructs are in fact related or a measure of high correlations between related latent variables. Divergent validity on the other hand, assess for weak or low correlations between apparently unrelated variables. (Zikmund et al, 2012). Pearson's correlations are used to determine this.

4.7.3 Replicability

Replicability is the degree to which a study provides sufficient accurate information to verify the results in a repetition (replication) of the study. This is achieved by a detailed delineation of the steps and measures used in the test, often described as the recipe for the research. This is to some degree a replication with an extension. This study will approximate the process followed by Glick & Fiske (1995), except in a corporate context and with the minor modifications, in the same tone, language and classifications of the original scale.

The researcher will verify the factor structure as per the Glick and Fiske (1996) study and then execute Confirmatory Factor analyses (CFA's) as well as Principal component analyses (PCA's). A Confirmatory factor analysis (CFA) is a multivariate statistical procedure utilized to ascertain how well the measured variables represent the number of constructs. Confirmatory factor analysis (CFA) and exploratory factor analysis (EFA) are analogous statistical techniques. However, in EFA's data is simply explored and provides basic information about the factors required to represent the data. With EFA's, all measured variables are related to the latent variables. With confirmatory factor analyses (CFA's), specific numbers of factors are required in the data as well as the relationships between the measured variables and the latent variables. The Confirmatory factor analysis (CFA) intent is to confirm or reject the measurement theory (Zikmund ET AL, 2012).

Principal Components Analysis (PCA's) are factor analyses that reduce the number of linear combinations on variables in order to explain the variance in the correlations in the data matrix. (Osborne, 2008). It is argued that PCA's are not a true method of factor analysis and serves simply as a reduction tool and that factor analyses are preferable (Costello, Osborne and Kellow, 2008). In this study PCA's were chosen for their ability to reveal whether the latent variable was unidimensional or multidimensional as suggested by Zikmund et al (2012).

4.7.4 Generalisability

Quantitative research generally allows that the results can be generalized beyond the context in which the research was conducted, and results can be transferred across a population (Creswell, 2014). Generalizability can be strengthened by narrowly defining the sample population; choosing random or stratified sampling methods. Simple random sampling has been selected for this study. It must be noted however that the sample size was quite small and therefore it may prove difficult to generalize this study.

4.8 Quality controls

Following the recommendations in Zikmund (2012), the researcher exported the data collected on the Monkey Survey platform into Excel, and then used both Excel and SPSS to clean up, factorize and analyse the data. The data was coded based on the Likert Scale utilised for each of the research constructs. Data was filtered by excluding incomplete surveys. Eligibility for inclusion in the analysis was with a 100% completed survey, all other responses were excluded. This left us with 55 out of the original 82 respondents. Descriptive statistics were the performed using frequency tables. (Zikmund, 2012). Inferential statistics were conducted next to ascertain, reliability and validity, including PCA and CFA techniques. Descriptive statistics for each of the research constructs were drawn up including mean, standard deviations, skewness and kurtosis.

Finally, the analysis will:

1. Test for differences using the independent t-test and the ANOVA test
2. Test for correlations using Spearman's correlation analysis

The independent t-test was adopted by the researcher to evaluate hypothesis one of this research as the researcher sought to assess if there are significant differences in sexism scores between male and female groups. The independent t-test determines is a difference exists between the means of two groups (independent – male and female) on a dependent and continuous variable (Sexism scores) (Hair et al., 2010). Two assumptions were violated for the independent t-test as the data violated the assumption of normality through the evaluation of the Shapiro-Wilk test and two of the variables did not report homogeneity of

variances. As the independent t-test is rather robust to deviations in normality the test was continued by the researcher (Howell, 2010). The Welch t-test was interpreted for the variables that did not report homogeneity of variances through the Levene's test.

Hypothesis two was evaluated using the one-way analysis of variance technique (ANOVA) to evaluate if the are any differences in sexism scores across ages. This test was chosen as there were more than two groups within the age category for this research (Hair et al., 2010).

Correlational techniques were adopted for hypothesis three and four. The research initially sought to use the Pearson's correlational technique, but the data reported a violation of the normality assumption. The Spearman's correlational technique was therefore adopted to evaluate if relationships exist between variables of interest in this study. Furthermore, the researcher adopted the guidelines by Cohen (1988) in interpreting the correlation coefficient (small – $0.1 < r < 0.3$, medium – $0.3 < r < 0.5$, large – $r > 0.5$).

Pearson's correlation test is covariance of the two variables X and Y, divided by the product of their standard deviations.(Osborne, 2008). Generally, five assumptions must hold in order to effectively use this coefficient. 1) Quantitative data measured on a continuous scale is required, 2) within each test there needs to be paired observation of the variables, 3) a linear association between the independent and dependent variable is required, 4) the data should not be significant outliers and 5) the data needs to approximate a normal distribution (Costello, Osborne & Kellow, 2008).

4.9 Limitations to The Research

This research was limited by several factors which include: the experience of the researcher. The researcher is a novice and could be disadvantaged by one's lack of experience in conducting academic research. The construct is one that requires an honest appraisal of one's beliefs around sexism, and may illicit answers based on the social desirability bias, so this may present some inherent flaws in the data collected. This effect can be further exacerbated by confusion with regards to interpretation of the questions or scale. The survey is based on self-reported data, and as such is subject to the individual's perceptions of the truth. The sample size collected was below expectations and as a result of the small sample, generalizability of the study is compromised. Time presents a major constraint as the research is being conducted over a limited period and further insights could have emerged should the

study have been performed over a longer period. Finally, the very select target population could make generalisability to the greater population precarious as the larger percentage of the population has a generally lower educational status than C-Suite or other upper echelon affiliates, and may therefore carry different levels and types of sexist attitudes as has been demonstrated in previous studies (Glick & Fiske 2011, 2018; Garaigordobil & Aliri, 2013).

CHAPTER 5: RESULTS

The primary aim of this chapter is to present the results to the adopted research design and analysis approach as described in the previous chapter. This chapter begins by providing descriptive statistics to the sample data obtained through the survey design. Thereafter, the research presents results for the factor analysis, reliability and CFA analytical techniques conducted. Finally, the results for each of the research questions discussed in Chapter 3 are presented with the primary aim of establishing if there are any significance findings in understanding ambivalent sexism in upper echelon structures in corporates.

5.1 Research Sample

The researcher targeted a minimum sample size of 200 respondents from the randomly chosen 200 organizations listed on the JSE as discussed in section [4.4]. Similar studies conducted by Garaigordobil and Aliri (2013) and Glick and Fiske (2018) obtained sample sizes of 5313 and 2250 respectively within the ASI study ecosystem. The actual raw sample size obtained for this research was 188. Once the data was extracted from the survey instrument platform (SurveyMonkey), the researcher evaluated the data for completeness by assessing if any of the respondents had a completion rate less than 50% (Zikmund et al., 2012).

As summarized in Table 4, sixteen of the respondents reported a completion rate of 0%, meaning that they failed to answer any of the research questions in the self-administered survey. No respondents reported a completion rate between 50 and 100% and therefore no data imputation was conducted on the sample data. The final sample size achieved for this research was 172 which was considered adequate by the researcher based on the statistical tests being used to assess each research question.

Table 4 Sample attributes

Sample attribute	Total
Raw sample size	188
Respondents with less than 50% completion	16
Respondents with 100% completion	172
Respondents with between 50 - 100% completion	0
Data points imputed (MAR assumed)	0
Final sample size	**172**

5.2 Descriptive statistics

Within the context of this research a total of three demographic questions were initially included in the survey (Gender, age and respondents position in their organisation), afterwards a total of four additional demographic questions (Number of males and female in c-suite, board level, senior exco and senior management) were posted on the survey to gain a deeper understanding of specific conditions that would provide the researcher with more context with regard to understanding ambivalent sexism in upper echelon structures in corporates.

As summarized in Table 5, 53% of the respondents reported their gender as being female whilst 47% reported their gender as being male in this research. Garaigordobil and Aliri (2013) reported a similar split of 52% female and 48% male in their research which was similar across the 5 studies conducted by Glick and Fiske 2018 as summarized on Table 5 below.

Table 5 Comparative Prior studies Demographics Summary

Research	Current research		Garaigordobil & Aliri (2013)		Glick & Fiske (2018)	
Gender category	Male	Female	Male	Female	Male	Female
Percentage	47	53	48	52	46	55

Table 6, below, summarizes the age categories reported by the survey respondents in this research. 33.1% of the respondents reported their age as being between 34 and 44 years age, 32.6% of the respondents reported their age as being between 45 and 54 years of age, 18% reported their age as being between 25 and 34 years of age whilst 12.2% reported their age as being between 55 and 64 years of age.

Table 6 Age Demographic summary

Age

Category	Frequency	Percent
18 - 24 years	2	1.2
25 - 34 years	31	18.0
34 - 44 years	57	33.1
45 - 54 years	56	32.6
55 - 64 years	21	12.2
> 65 years	5	2.9
Total	172	100

Table 7 provides a summary of the level of seniority that the survey respondents indicated they were within their respective organisations. 18.6% of the respondents indicated that they were directors of the board of their organisations, 14% indicated that they were department heads, 12.2% indicated that they were at senior management levels, whilst 16.9% did not provide a response. Furthermore, only 1.7% of the respondents indicated that they were in Chairperson roles in their respective organisations.

Table 7 Summary of Respondents' Positions or Seniority Level in the organisations

Position / Title in Corporate

Category	Frequency	Percent
Blank	29	16.9
Director on board	32	18.6
C-Suite	17	9.9
President	7	4.1
Vice president	11	6.4
Chairperson	3	1.7
Divisional director	12	7.0
Department head	24	14.0
Member of executive committee	16	9.3
Senior manager	21	12.2
Total	172	100

The remaining demographic questions focused on the compositions of males and females in the respondents C-suite, board, exco and senior management. Only 54 respondents completed data for these questions. Therefore, hypothesis four was tested using these 54 respondents only.

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5.3 Internal Consistency Reliability

Following the positions described in Chapter 4, internal consistency reliability was assessed by evaluating the Cronbach's alpha score.

The inter-item correlation tables were evaluated for both the Hostile sexism and Benevolent sexism scales as an output of the Cronbach's alpha test. Seven of the 15 items (HS 4, H 10 – 15) in the Hostile sexism scale were removed as they reported no inter-item correlations greater than 0.3 which would create issues in sampling adequacy in subsequent analysis. Furthermore, two items were removed from the Benevolent sexism scale (BS 12 and BS 13) as they also did not report any inter-item correlations greater than 0.3 (Refer to Appendix 6).

The reliability scores obtained in this research are comparable with those from previous research as ASI scale reported a reliability score of 0.88 in this study which was comparable to those obtained by Glicke and Fiske (2018) who reported scores between 0.83 and 0.92 in their six studies and 0.91 by Garaigordobil and Aliri (2013). Furthermore, the HS and BS subscales reported in this research was 0.73 and 0.85 respectively which were slightly lower with those reported by Garaigordobil and Aliri (2013) who reported reliability scores of 0.86 and 0.90 for HS and BS respectively. Whilst, Glicke and Fiske (2018) reported reliability scores ranging from 0.80 – 0.92 for HS and 0.75 – 0.85 for BS. As all latent variables reported a Cronbach alpha score greater than 0.70, therefore internal consistency reliability of the research variables within this research was therefore confirmed.

Table 8 Internal Consistency Reliability of Hostile and Benevolent sexism

Scale	Number of items after to Cronbach alpha	Number of items prior to Cronbach alpha	Cronbach Alpha
Hostile sexism	15	8	0.73
Benevolent sexism	15	13	0.85
ASI	30	21	0.88

5.4 Factor Analysis

Following the methodologies conducted by both Garaigordobil and Aliri (2013) and Glicke and Fiske (2018), the researcher conducted a PCA and CFA to confirm the factor structure of the ASI scale.

The inter-item correlations for each scale was evaluated during the reliability analysis whereby only the items that reported a correlation co-efficient of at least 0.30 with one other items in the same scale were retained. Table 10 highlighted that The KMO scores for both the HS and BS scales were classified as meritorious ($0.80 < KMO < 0.89$), whilst the Bartlett's test for sphericity reported a $p < 0.05$ indicating the suitability of the data for factor analysis. The HS scale reported only one extracted component whilst the BS scale extracted 3 components which is congruent with previous research by Garaigordobil and Aliri (2013) and Glicke and Fiske (2018). As the BS scale was classified as multi-dimensional internal reliability scores were conducted on each of the BS subfactors which reported reliability scores in excess of 0.70 as summarized in Table 10.

Table 9 Factor Analyses summary

Construct	KMO	Bartlett's test of Sphericity	Number of Components extracted	Cumulative %
Hostile sexism	0.86	0.00	1	52.28
Benevolent sexism	0.82	0.00	3	57.00

Table 10 Internal Reliability of Benevolent Sexism Scores

Scale	Number of items after to Cronbach alpha	Number of items prior to Cronbach alpha	Cronbach Alpha
BS1 Factor 1- Protective Paternalism	6	6	0.77
BS2 Factor 2-Gender Differentiation	3	3	0.75
BS3 Factor 3-Hetersexual intimacy	4	4	0.72

[Factor 1 – BS 2, 5, 6, 8, 10 and 14] [Factor 2 – BS 4, 9 and 11] [Factor 3 – BS 1, 3, 7 and 15]

A CFA was further conducted on the research model to confirm the model fit indices as well as verify the loadings of each item on the latent variables. All latent variables reported a SRMR score less than 0.08 (Hu & Bentler, 1998), whilst only the overall ASI scale

reported a RMSEA score less than 0.10 (Hair et al., 2010). The model fit indices of AGFI and GFI were reported less than 0.90 for all variables thus indicating an unacceptable model fit. Furthermore, the discrepancy function Cmin/df was less than 5 for all but reported a significance $p < 0.05$ further indicating that the model was unacceptable. The possible reasons for this are twofold: 1) the sample size obtained was less than 200 (Fan, Thompson and Wang, 1999) and 2) the data violated the assumption of normality (Hu & Bentler, 1998).

Table 11 Confirmatory Factor Analyses

Scale	SRMR	RMSEA	AGFI	GFI	Cmin/df
Hostile sexism	0.06	0.12	0.85	0.89	3.49
Benevolent sexism	0.07	0.14	0.83	0.89	2.48
ASI	0.07	0.09	0.76	0.81	2.44

The researcher decided to continue with the analysis as the PCA confirmed the factor composition of the data, even though the CFA did not provide acceptable model fit indices because the sample size was below 200 and not normally distributed, which affects the outcomes of the CFA analysis, following the guidelines from Beavers et al (2013).

5.5 Construct Descriptive Statistics

Table 12 provides a summary for the descriptive statistics for the research variables. Descriptive statistics forma a baseline for our analysis as they reveal where the differences and variations between the various constructs are numerically. HS or Hostile Sexism reported a mean of 4.23 ± 0.96 whilst BS (Benevolent sexism) reported a mean of 3.79 ± 0.90. The overall ASI scale reported a mean of 4.01 ± 0.79. Furthermore, the BS3 factor reported the highest mean for the BS sub scales (3.92 ± 1.12). The HS and BS3 scales reported a distribution that was negatively skewed whilst all the other constructs reported a positively skewed distribution. The Kurtosis statistics for all the constructs was negative indicating the flatness of the distribution curve. Furthermore, the researcher assessed the data for normality by interpreting the Shaprio-Wilk test for normality (Table 13). With the exception of the overall ASI scale, all constructs reported a $p < 0.05$ indicating that the construct data was not normally distributed.

Table 12 Descriptive statistics

Descriptive Statistics							
Construct	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
HS	172	4.23	0.96	-0.16	0.19	-0.76	0.37
BS1	172	3.67	1.05	0.25	0.19	-0.63	0.37
BS2	172	3.79	1.17	0.15	0.19	-0.55	0.37
BS3	172	3.92	1.12	-0.04	0.19	-0.55	0.37
BS	172	3.79	0.90	0.41	0.19	-0.57	0.37
ASI	172	4.01	0.79	0.19	0.19	-0.35	0.37

Table 13 Tests of normality

Tests of Normality			
Construct	Shapiro-Wilk		
	Statistic	df	Sig.
HS	0.98	172	0.01
BS1	0.98	172	0.01
BS2	0.97	172	0.00
BS3	0.98	172	0.03
BS	0.97	172	0.00
ASI	0.99	172	0.22

5.6 Assessment of research hypotheses

The following section considers the 4 research questions postulated and developed in Chapter 3 and evaluated the research hypothesis using various statistical techniques.

5.6.1 Hypothesis One

Research question one

Research question one sought to evaluate if there were differences in sexism as a function of gender. This research question was analyzed by evaluating an independent t-test.

H_0: There is no significant difference in sexism scores between males and females

H_1: There is a significant difference in sexism scores between males and females

There were 81 male and 91 female respondents in this study. An independent t-test was run to determine if there were differences in sexism scores between males and females. The sexism scores for the overall ASI scale was evaluated as approximately normally distributed through the assessment of the Shapiro-Wilk test for normality ($p > 0.05$) whilst the scores for HS, BS, BS1, BS2 and BS3 were reported a $p < 0.05$ for the Shapiro-Wilk test for normality. However, Howell (2009) states that the independent t-test is robust to deviations in normal distribution as the sample sizes were fairly equal and therefore the researcher continued with the analysis even though the sub constructs of the ASI scale reported a violation of the assumption of normality.

As summarised in Table 14, the overall ASI scores for females (4.18 ± 0.86) were much higher than males (3.82 ± 0.67). In addition, the overall HS scores for females (4.33 ± 1.05) were much higher than males (4.11 ± 0.83). Furthermore, the overall BS scores for females (4.03 ± 0.92) were much higher than males (3.53 ± 0.82).

The researcher further analysed the subscales scores of BS which reported the BS1 scores for females (3.98 ± 1.03) were much higher than males (3.31 ± 0.97). In addition, the BS2 scores for females (3.89 ± 1.27) were much higher than males (3.69 ± 1.04). Furthermore, the BS3 scores for females (4.22 ± 1.08) were much higher than males (3.59 ± 1.08).

There was homogeneity of variances reported for the overall ASI scores, BS scores, BS1 and BS3 scores as evaluated through the Levenes test for equal variances ($p > 0.05$). Whilst, no homogeneity of variances was reported for the HS scores and BS2 scores ($p < 0.05$). Therefore, the researcher interpreted the equal variances assumed results for the ASI scores, BS scores, BS1 and BS3 scores and the Welch t-test (equal variances no assumed) for the HS and BS2 scores.

Table 14 Group Statistics

Group Statistics						
Construct	Gender	N	Mean	Std. Deviation	Std. Error Mean	Effect size
ASI	Male	81	3.82	0.67	0.07	0.46
	Female	91	4.18	0.86	0.09	
HS	Male	81	4.11	0.83	0.09	0.23
	Female	91	4.33	1.05	0.11	
BS	Male	81	3.53	0.82	0.09	0.57
	Female	91	4.03	0.92	0.10	
BS1	Male	81	3.31	0.97	0.11	0.66
	Female	91	3.98	1.03	0.11	
BS2	Male	81	3.69	1.04	0.12	0.17
	Female	91	3.89	1.27	0.13	
BS3	Male	81	3.59	1.08	0.12	0.59
	Female	91	4.22	1.08	0.11	

As summarised in Table 15, the **overall ASI scores** for females were higher than males and reported a **significant difference** of 0.36 with a small effect size of 0.46 ($0.2 < d < 0.5$) at the 95% significance level ($p = 0.00$). In addition, **The HS scores** for females were higher than males and reported a **non - significant difference** of 0.22 at the 95% significance level ($p = 0.13$). In addition, **The BS scores** for females were higher than males and reported **a significant difference** of 0.50 with a medium effect size of 0.57 ($0.5 < d < 0.8$) at the 95% significance level ($p = 0.00$).

The subscales of BS were further assessed and the **BS1 scores** for females were higher than males and reported a **significant difference** of 0.67 with a medium effect size of 0.66 ($0.5 < d < 0.8$) at the 95% significance level ($p = 0.00$). Furthermore, the **BS2 scores** for females were higher than males and reported a **non - significant difference** of 0.20 at the 95% significance level ($p = 0.26$). Finally, the **BS3 scores** for females were higher than males and reported a **significant difference** of 0.63 with a medium effect size of 0.59 ($0.5 < d < 0.8$) at the 95% significance level ($p = 0.00$).

The null hypothesis was accepted for the HS and BS2 subscales as the significance reported was $p > 0.05$. The null hypothesis was rejected for the overall ASI scores, BS, BS1 and BS3 scales and the alternative hypothesis was accepted as there was a significant difference in sexism scores for males and females at the 95% significance level.

Table 15 Independent Samples tests

<table>
<tr><th colspan="11">Independent Samples Test</th></tr>
<tr><th colspan="2" rowspan="3">Test</th><th colspan="2" rowspan="2">Levene's Test for Equality of Variances</th><th colspan="7">t-test for Equality of Means</th></tr>
<tr><th rowspan="2">t</th><th rowspan="2">df</th><th rowspan="2">Sig. (2-tailed)</th><th rowspan="2">Mean Differenc e</th><th rowspan="2">Std. Error Differenc e</th><th colspan="2">95% CI of the Difference</th></tr>
<tr><th>F</th><th>Sig.</th><th>Lowe r</th><th>Upper</th></tr>
<tr><td rowspan="2">ASI</td><td>Equal variance s assumed</td><td>3.6 0</td><td>0.06</td><td>-3.03</td><td>170</td><td>0.00</td><td>-0.36</td><td>0.12</td><td>-0.59</td><td>-0.13</td></tr>
<tr><td>Equal variance s not assumed</td><td></td><td></td><td>-3.07</td><td>167.5 3</td><td>0.00</td><td>-0.36</td><td>0.12</td><td>-0.59</td><td>-0.13</td></tr>
<tr><td rowspan="2">HS</td><td>Equal variance s assumed</td><td>5.3 0</td><td>0.02</td><td>-1.50</td><td>170</td><td>0.14</td><td>-0.22</td><td>0.15</td><td>-0.51</td><td>0.07</td></tr>
<tr><td>Equal variance s not assumed</td><td></td><td></td><td>-1.52</td><td>168.0 3</td><td>0.13</td><td>-0.22</td><td>0.14</td><td>-0.50</td><td>0.07</td></tr>
<tr><td rowspan="2">BS</td><td>Equal variance s assumed</td><td>2.5 2</td><td>0.11</td><td>-3.76</td><td>170</td><td>0.00</td><td>-0.50</td><td>0.13</td><td>-0.76</td><td>-0.24</td></tr>
<tr><td>Equal variance s not assumed</td><td></td><td></td><td>-3.78</td><td>170.0 0</td><td>0.00</td><td>-0.50</td><td>0.13</td><td>-0.76</td><td>-0.24</td></tr>
<tr><td rowspan="2">BS 1</td><td>Equal variance s assumed</td><td>0.9 2</td><td>0.34</td><td>-4.35</td><td>170</td><td>0.00</td><td>-0.67</td><td>0.15</td><td>-0.97</td><td>-0.36</td></tr>
<tr><td>Equal variance s not assumed</td><td></td><td></td><td>-4.37</td><td>169.4 8</td><td>0.00</td><td>-0.67</td><td>0.15</td><td>-0.97</td><td>-0.37</td></tr>
<tr><td rowspan="2">BS 2</td><td>Equal variance s assumed</td><td>4.8 3</td><td>0.03</td><td>-1.12</td><td>170</td><td>0.27</td><td>-0.20</td><td>0.18</td><td>-0.55</td><td>0.15</td></tr>
<tr><td>Equal variance s not assumed</td><td></td><td></td><td>-1.13</td><td>169.0 1</td><td>0.26</td><td>-0.20</td><td>0.18</td><td>-0.55</td><td>0.15</td></tr>
<tr><td rowspan="2">BS 3</td><td>Equal variance s assumed</td><td>0.0 3</td><td>0.87</td><td>-3.85</td><td>170</td><td>0.00</td><td>-0.63</td><td>0.16</td><td>-0.96</td><td>-0.31</td></tr>
<tr><td>Equal variance s not assumed</td><td></td><td></td><td>-3.85</td><td>167.7 2</td><td>0.00</td><td>-0.63</td><td>0.16</td><td>-0.96</td><td>-0.31</td></tr>
</table>

5.6.2 Hypothesis Two

Research question two

Research question two sought to evaluate if there were differences in sexism as a function of age. This research question was analyzed by evaluating an ANOVA test.

H0: There is no significant difference in sexism scores between ages

H2: There is a significant difference in sexism scores between ages

There were 172 respondents in this study with two between the ages of 18 – 24 years, 31 between the ages 24 – 34 years, 57 between the ages 35 – 44 years, 56 between the ages 45 – 54 years, 21 between the ages 55 – 64 years and 5 over the age of 65. An ANOVA test was run to determine if there were differences in sexism scores between males and females.

The sexism scores for the overall ASI scale was evaluated as approximately normally distributed through the assessment of the Shapiro-Wilk test for normality ($p > 0.05$) whilst the scores for HS, BS, BS1, BS2 and BS3 were reported a $p < 0.05$ for the Shapiro-Wilk test for normality. However, Sawilowsky and Blair (1992) states that the ANOVA test is robust to deviations in normal distribution as the sample sizes were fairly equal and therefore the researcher continued with the analysis even though the sub constructs of the ASI scale reported a violation of the assumption of normality.

There was homogeneity of variances reported between all variables as the Levenes test reported all $p > 0.05$ (refer to Appendix 8). Tables 16 and 17 highlighted that even though the age groups reported different means from each other with the age group 34 – 44 years reporting the highest ASI scores (4.10 ± 0.82), HS scores (4.34 ± 0.94), BS 2 score (3.92 ± 1.18) and the age group 44 – 54 years reporting the highest BS scores (3.88 ± 0.92), BS 1 score (3.88 ± 1.09) and the 18 – 24 year age group reporting the highest BS 3 score (4.13 ± 0.53) the differences between these age groups and sexism scores was not statistically significant, $p > 0.05$.

Table 16 Descriptive' s of the constructs within ASi

Construct	Age	N	Mean	Std. Deviation	Std. Error	95% CI for Mean		Min	Max
						Lower Bound	Upper Bound		
ASI	18 - 24 years	2	3.44	0.01	0.01	3.35	3.53	3.43	3.44
	25 - 34 years	31	3.89	0.80	0.14	3.59	4.18	2.33	5.75
	34 - 44 years	57	4.10	0.82	0.11	3.88	4.32	2.60	6.00
	45 - 54 years	56	4.05	0.81	0.11	3.84	4.27	2.37	5.76
	55 - 64 years	21	3.93	0.70	0.15	3.62	4.25	3.03	5.86
	> 65 years	5	3.90	0.84	0.38	2.85	4.94	2.73	5.01
	Total	172	4.01	0.79	0.06	3.89	4.13	2.33	6.00
HS	18 - 24 years	2	3.50	0.00	0.00	3.50	3.50	3.50	3.50
	25 - 34 years	31	4.06	0.97	0.17	3.71	4.42	1.88	6.00
	34 - 44 years	57	4.34	0.94	0.12	4.09	4.59	2.50	6.00
	45 - 54 years	56	4.23	1.02	0.14	3.96	4.50	2.00	6.00
	55 - 64 years	21	4.14	0.87	0.19	3.75	4.54	3.00	6.00
	> 65 years	5	4.68	0.90	0.40	3.55	5.80	3.13	5.38
	Total	172	4.23	0.96	0.07	4.09	4.37	1.88	6.00
BS	18 - 24 years	2	3.38	0.02	0.01	3.20	3.55	3.36	3.39
	25 - 34 years	31	3.71	0.83	0.15	3.40	4.02	2.47	5.50
	34 - 44 years	57	3.86	0.94	0.12	3.61	4.11	2.28	6.00
	45 - 54 years	56	3.88	0.92	0.12	3.63	4.12	2.11	5.72
	55 - 64 years	21	3.73	0.79	0.17	3.37	4.09	2.72	5.72
	> 65 years	5	3.12	1.28	0.57	1.54	4.71	2.33	5.28
	Total	172	3.79	0.90	0.07	3.66	3.93	2.11	6.00
BS1	18 - 24 years	2	2.67	0.47	0.33	-1.57	6.90	2.33	3.00
	25 - 34 years	31	3.28	1.00	0.18	2.91	3.65	1.83	6.00
	34 - 44 years	57	3.72	1.03	0.14	3.45	4.00	1.50	6.00
	45 - 54 years	56	3.88	1.09	0.15	3.59	4.17	2.00	6.00
	55 - 64 years	21	3.73	0.87	0.19	3.33	4.13	2.00	5.17
	> 65 years	5	3.23	1.59	0.71	1.26	5.21	1.17	5.00
	Total	172	3.67	1.05	0.08	3.51	3.83	1.17	6.00
BS2	18 - 24 years	2	3.33	0.00	0.00	3.33	3.33	3.33	3.33
	25 - 34 years	31	3.81	1.23	0.22	3.35	4.26	1.00	6.00
	34 - 44 years	57	3.92	1.18	0.16	3.61	4.24	1.33	6.00
	45 - 54 years	56	3.71	1.22	0.16	3.38	4.03	1.67	6.00
	55 - 64 years	21	3.75	0.98	0.21	3.30	4.19	1.67	6.00
	> 65 years	5	3.53	1.30	0.58	1.91	5.15	2.33	5.67
	Total	172	3.79	1.17	0.09	3.62	3.97	1.00	6.00
	18 - 24 years	2	4.13	0.53	0.38	-0.64	8.89	3.75	4.50
	25 - 34 years	31	4.04	1.17	0.21	3.61	4.47	2.00	6.00
	34 - 44 years	57	3.92	1.07	0.14	3.64	4.21	1.50	6.00
	45 - 54 years	56	4.05	1.06	0.14	3.76	4.33	1.75	6.00
	55 - 64 years	21	3.70	1.10	0.24	3.20	4.20	1.75	6.00

BS3	> 65 years	5	2.60	1.70	0.76	0.49	4.71	1.00	5.50
	Total	172	3.92	1.12	0.09	3.75	4.09	1.00	6.00

Table 17 Anova For Each Construct

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
ASI	Between Groups	1.85	5	0.37	0.58	0.72
	Within Groups	106.00	166	0.64		
	Total	107.86	171			
HS	Between Groups	3.75	5	0.75	0.82	0.54
	Within Groups	152.68	166	0.92		
	Total	156.43	171			
BS	Between Groups	3.55	5	0.71	0.87	0.51
	Within Groups	135.96	166	0.82		
	Total	139.51	171			
BS1	Between Groups	10.34	5	2.07	1.91	0.10
	Within Groups	179.79	166	1.08		
	Total	190.14	171			
BS2	Between Groups	2.19	5	0.44	0.31	0.90
	Within Groups	231.41	166	1.39		
	Total	233.60	171			
BS3	Between Groups	11.17	5	2.23	1.82	0.11
	Within Groups	203.52	166	1.23		
	Total	214.69	171			

5.6.3 Hypothesis Three

Research question three

Research question three sought to evaluate if there was a relationship between HS and BS. The research question was analyzed using the Spearman's correlation test.

H$_0$: There is no significant relationship between HS and BS

H$_3$: There is a significant relationship between HS and BS

As the HS and BS construct data reported a violation of the normality assumption through the evaluation of the Shapiro-Wilk test for normality (refer to Appendix 9 for histograms), a Pearson's correlation could not be conducted as the assumption of normality was violated as described in section 4.7. A Spearman's correlation test was therefore run to evaluate the relationship between HS and BS on a sample size of 172 respondents (Zikmund, 2012).

A pre-liminary analysis reported the relationship between HS and BS to be monotonic as evaluated through a visual inspection of the scatter plot (see Appendix 10). There was a statistically significant, medium positive correlation ($0.3 < r < 0.5$) between HS and BS $r = 0.45$, p = 0.00. In addition, HS reported a medium and positive relationship with BS1 and BS3 and a small positive relationship ($0.1 < r < 0.3$) with BS2.

In addition, as summarized in Table 18, each of the BS subfactors reported higher correlations with other BS subfactors (r ranged from 0.41 – 0.57) and the overall BS construct (r ranged from 0.77 – 0.84) than each was with the HS construct (r ranged from 0.27 – 0.48).

Table 18 Spearman's Correlation tests for ASi

Correlations			HS	BS	BS1	BS2	BS3
Spearman's rho	HS	Correlation Coefficient	1.00	**.45**[**]	.48[**]	.27[**]	.33[**]
		Sig. (2-tailed)		0.00	0.00	0.00	0.00
		N	172	172	172	172	172
	BS	Correlation Coefficient	.45[**]	1.000	.84[**]	.77[**]	.81[**]
		Sig. (2-tailed)	0.00		0.00	0.00	0.00
		N	172	172	172	172	172
	BS1	Correlation Coefficient	.48[**]	.84[**]	1.000	.50[**]	.57[**]
		Sig. (2-tailed)	0.00	0.00		0.00	0.00
		N	172	172	172	172	172
	BS2	Correlation Coefficient	.27[**]	.77[**]	.50[**]	1.000	.41[**]
		Sig. (2-tailed)	0.00	0.00	0.00		0.00
		N	172	172	172	172	172
	BS3	Correlation Coefficient	.33[**]	.81[**]	.57[**]	.41[**]	1.00
		Sig. (2-tailed)	0.00	0.00	0.00	0.00	
		N	172	172	172	172	172
**. Correlation is significant at the 0.01 level (2-tailed).							

5.6.4 Hypothesis Four

Research question four

Research question four sought to evaluate if there was a relationship between the composition of woman in the upper echelons of corporate and sexism scores. The research question was analyzed using the Spearman's correlation test.

H$_0$: There is no significant relationship between sexism and composition of females in the upper echelons of corporate

H$_4$: There is a significant relationship between sexism and composition of females in the upper echelons of corporate

As the HS and BS construct data reported a violation of the normality assumption through the evaluation of the Shapiro-Wilk test for normality, a Pearson's correlation could not be conducted as the assumption of normality was violated as described in section 4.7.2. A Spearman's correlation test was therefore run to evaluate the relationship between HS and BS on a sample size of 54 respondents (who provided descriptive statistics regarding the organizations c- suite, board or exco gender composition). Even though the overall ASI scale did not violate the assumption of normality, a Spearman's correlation test was still conducted.

A pre-liminary analysis reported the relationship between FCS and ASI to be monotonic as evaluated through a visual inspection of the scatter plot (see Appendix 10). There was no statistically significant, small negative correlation ($0.1 < r < 0.3$) between FCS and ASI $r = -0.14$, $p = 0.32$. Whilst only BS2 reported a statistically significant, medium negative correlation ($0.3 < r < 0.5$) between FCS and ASI $r = -0.40$, $p = 0.00$.

Table 19 Correlations of HS and BS

Correlations									
			FCS	ASI	HS	BS	BS1	BS2	BS3
Spearman's rho	FCS	Correlation Coefficient	1.00	-0.14	-0.15	-0.09	-0.118	-.40[**]	0.03
		Sig. (2-tailed)		0.32	0.28	0.52	0.40	0.00	0.86
		N	54	54	54	54	54	54	54
**. Correlation is significant at the 0.01 level (2-tailed).									

A pre-liminary analysis reported the relationship between FBP and ASI to be monotonic as evaluated through a visual inspection of the scatter plot (see Appendix 10). There was no statistically significant, negligible negative correlation ($r < 0.1$) between FBP and ASI $r = -0.05$, $p = 0.74$. Furthermore, FBP reported no significant relationship with any of the sexism subfactors.

Table 20 Spearman's Correlations

Correlations									
			FBP	ASI	HS	BS	BS1	BS2	BS3
Spearman's rho	FBP	Correlation Coefficient	1.00	-0.05	-0.14	0.03	-0.07	-0.20	0.08
		Sig. (2-tailed)		0.74	0.30	0.84	0.62	0.14	0.58
		N	54	54	54	54	54	54	54

A pre-liminary analysis reported the relationship between FHOD and ASI to be monotonic as evaluated through a visual inspection of the scatter plot (see Appendix 10). There was no statistically significant, negligible negative correlation ($r < 0.1$) between FHOD and ASI $r = -0.05$, $p = 0.73$. Furthermore, FHOD reported no significant relationship with any of the sexism subfactors.

Table 21 Spearman's RHO

Correlations									
			FHOD	ASI	HS	BS	BS1	BS2	BS3
Spearman's rho	FHOD	Correlation Coefficient	1.00	-0.05	-0.08	0.00	0.14	-0.20	0.00
		Sig. (2-tailed)		0.73	0.56	0.99	0.30	0.14	0.99
		N	54	54	54	54	54	54	54

A pre-liminary analysis reported the relationship between FSM and ASI to be monotonic as evaluated through a visual inspection of the scatter plot (see Appendix 10). There was no statistically significant, negligible negative correlation ($r < 0.1$) between FBP and ASI $r = -0.01$, $p = 0.95$. Furthermore, FSM reported no significant relationship with any of the sexism subfactors.

Table 22 Spearman's Rho Continued

Correlations									
			FSM	ASI	HS	BS	BS1	BS2	BS3
Spearman's rho	FSM	Correlation Coefficient	1.00	-0.01	-0.22	0.10	0.07	-0.08	0.13
		Sig. (2-tailed)		0.95	0.12	0.48	0.63	0.58	0.34
		N	54	54	54	54	54	54	54

5.7 Conclusion

The primary aim of this research was to establish a significant understanding of ambivalent sexism in upper echelon structures in corporates. Four research questions were tested as discussed in Chapter 3 through the research design and analytical approach discussed in Chapter 4. Research question one and two sought to evaluate if there were any differences is the sexism scores as a function of demographic variables (gender and age). Research question one was accepted as there was a significant difference between male and female sexism scores with females reporting a higher mean difference of 0.36 with an effect size of 0.46 than males. In addition, females reported higher sexism scores for all the sexism sub scales with BS1 reporting a higher mean difference of 0.67 with an effect size of 0.66 for females over males. Research question two was rejected as there was no significant difference between the sexism scores across ages as interpreted through an ANOVA test, which is in keeping with previous research in the area , which only found positive correlations between respondents older than 65 and HS. Research question three sought to evaluate if HS and BS had a significant relationship and this was confirmed through the evaluation of the Spearman's correlation test. A medium strength correlation coefficient of 0.45 was reported. Research question 4 sought to establish of there was a significant relationship between the female composition of the upper echelons in corporate and sexism scores. Only the sexism subfactor BS2 reported a medium strength negative relationship with the Female composition at a C-Suite level.

CHAPTER 6 DISCUSSION OF RESULTS

6.1 Introduction

The results in chapter 5 confirmed the validity of the ASI with a Cronbach's Alpha of 0.72-0.77, above the set expectation of 0.70 set for research involving social constructs. Overall, this study largely ratified previous findings for the factor analyses and correlations except for one significant finding in both HS and BS sexist levels in females. Across our sample, females in upper management exhibited higher scores on both constructs in direct opposition to previous work by Glick & Fiske (1996, 2018) and Garaigordobil & Aliri, 2013). The results are discussed in further detail under the main sections analysed.

6.2 Sample Demographics

Table 5 highlighted that there were marginally more female respondents (91) than male respondents (81). This sort of split was fairly consistent across the various studies. Garaigordobil and Aliri (2013) who reported a similar split of 52% female and 48% male in their research which was also comparable across the 5 studies conducted by Glick and Fiske (1996, 1997, 2001, 2011, 2018). This implies that there were no biases brought into the study as a result of having uneven ratios of male to female participants.

Furthermore, Table 6 highlighted that the majority of respondents were between the ages of 34 and 54 (65.7%). The results of Garaigordobil and Aliri (2013) report significantly higher scores in men of HS in all age groups; and higher scores in males in BS up to 54 years of age. Their conclusion was sexism increases in age but not linearly. A high score of BS was found in ages between 14 and 18 years of age, then the BS score decreased between 34 to 54; and then increased progressively with older ages in a U-Shaped graph.

Our study was firmly placed in upper echelon management structures and therefore did not test the two outlying age segments mentioned in previous studies, being the teenagers or very young adults (there were only 2 respondents <24 years of age) and the elderly to geriatric populations (Only 5 respondents >65 Years of age). Outlying groups were not the specific focus of this study. Generally lower scores of both HS and BS are found for

females. (Garaigordobil & Aliri, 2013; Glick & Fiske, 1996, 2018). The results in the study, which was double checked due their surprising revelation was that both HS and BS were higher in this specific target population. This could be explained firstly by the narrow segment of females studied and also by previous research describing the attributes of females that are in this elite group as being more agentic and having to adopt "male like" characteristics to survive at this level (Appelbaum, Audet & Miller, 2003; Barbuto & Gifford, 2010; Heilman & Eagly, 2008, Oakley, 2000). Some research also suggests that females that have made it to this level make take a harder line in their views with regards to performance from fellow females and can make working environments more intrepid for aspirant females looking for promotion, possibly to their level (Appelbaum, Audet & Miller, 2003; Artz, & Taengnoi, 2016).

Table 7 illustrated that all respondents were from senior positions ranging from direct board members, executive committee members, c-suit, executive members to Presidents and department heads (83.1%). 12.2 % of this composition were senior managers, so also possibly part of decision making starts in their organisations, clearly highlighting that the appropriate target sample for the objectives of this research was achieved. However, there was quite a high number of respondents that did not answer the question of position in company (16.9%); highlighting some of the expected sensitivity of the nature of this study. These findings are supported by Ryan et al (2007) who theorised that sentiments lead to the development and reinforcement of stereotypical assignments for the separate genders which can lead to unfair discriminatory decisions, which may potentiate the desire to remain completely anonymous for a survey that may lead to the establishment of sexist behaviour. This may indicate that respondents at very senior levels are also sensitive to being singled out for anything that may suggest a prejudice on their parts.

6.3 Discussion around ASI

Table 12 highlights the descriptive statistics for each of the relevant constructs.

Based on the data collected for this study for HS, the mean score was 4.23 (SD = 0.96) highlighting that respondents were in slight agreement regarding the constructs that revealed <u>hostile sexism.</u> This was expected based on previous studies in the area, however what was not expected was that this score would be higher for females. This

means that hostile sexism is still a characteristic readily observed in the workplace in upper echelons despite declining levels of HS being observed the world over (Glick & Fiske, 2011). The fact that females displayed a higher score though is open to interpretation, both form the lens that the scale itself largely breaks the constructs down into sentiments as would be expressed by a male towards a female, meaning it is for all intents and purpose measuring for sexism with the male as the perpetrator and the female as the recipient. In fact, the original definition of sexism as cited in Glick & Fiske (1996) is "*Antipathy or hostility towards women.*" For this, as in HS, to be levelled by women against women may confirm theories that may indicate either high inter-female competitiveness, as occurs in this sphere of corporates, or generally being less tolerant of underperformance or domestic traits, by a subset of their equals (Appelbaum, Audet & Miller, 2003; Artz, & Taengnoi, 2016). The results of this study seem to lend credence to those theories.

Analysing the data collected for BS1, the mean score was 3.67 (SD = 1.05) highlighting that respondents were in again slight agreement regarding protective paternalism. These findings are supported corroborate findings across other two comparative studies of Glick & Fiske (1996, 1997) and Garagobil & Aliri (2013).This suggest that both males and females who exhibited similar scores for this construct, have ideas that either perpetrate or tolerate trait of protection, assurances and mentorship of women or condone males who exhibit traits of protective paternalism. Other studies verify this characteristic of women being more forgiving of people who still exhibit some qualities of sexism but offer positive views of affirmation for women (Eagly & Karau, 2002; Hideg & Ferris, 2016; Oliver et al, 2018). It is disappointing to note that despite higher levels of education and intensified discussions around legislations driving employment equity and gender parity, we are still not discerning enough to separate positive affection form limiting behaviours, which itself presents a reason for the "self- reinforcing nature" of sexism spoken off in Stamarski and Hing's (2015) discourse on gender inequalities in the workplace.

Reviewing data collected for this study for BS2, the mean score was 3.79 (SD = 1.17) highlighting that respondents were in slight agreement regarding gender differentiation. These findings are support those of Heilman & Eagly, (2008) and Eagly & Karau (2002). This reveals that men and women have very definite prescriptive ideologies around the behaviours of each sex, hence they apply serious lenses to discrimination between the sexes. While strong senses of identities could be seen as an advantage to leadership traits particularly in powerful positions, it does offer a potential source of weakness in

organisational culture when that lens cause some to apply agentic penalties to females who step out of their prescribed character. The findings of previous research with regards to strong gender differentiation and prescriptive ideologies are ratified (Heilman, 2001; Heilman & Eagly, 2008; Eagly & Karau, Stamarski & Hing, 2015)

Based on the data collected for this study for BS3, the mean score was 3.92 (SD = 1.12) highlighting that respondents were in slight agreement regarding heterosexual intimacy. These findings are supported by Glick & Fiske (1996, 1997, 2001, 2011). This means that both men and women value or have positive acceptance of their roles as intimate partners, however this often lead to both sexes often viewing that as their primary role or a tool with which to manipulate the opposite sex (Glick & Fiske, 2018). This is alluded to in several of the discussions around social roles theory and corroborates suggestions of the complicated interactions between males and females. (Eagly, & Karau, 2002; Eagly & Mladinic, 1994; Eagly & Wood, 2011; Heilman, 2001; Heilman & Eagly, 2008). Given that this study aligned with tests conducted over larger sample size by Glick and Fiske (1996) and Garaigordobil and Aliri (2013), it was again surprising that all these constructs were again marginally higher for females.

An analysis of the data pertaining to BS reveals : the mean score was 3.79 (SD = 0.90) highlighting that respondents were in slight agreement regarding benevolent sexism as a total construct thereby ratifying theories put forth by Hideg & Ferris (2015) , Heilman and Eagly (2008) and Oliver et al (2018) that BS is not only tolerated by females but possible enacted by females too. The implications of this being that glass ceiling effects are perpetuated by two constructs: the psychology of the females in these levels and sexist attributes by both males and females (Eagly, & Karau, 2002 ; Eagly, & Mladinic, 1994 ; Eagly & Wood, 2011; Heilman, 2001; Heilman & Eagly, 2008).

Based on the data collected for this study for the overall construct of Ambivalent Sexism/ ASI, the mean score was found to be 4.01 (SD = 0.79) highlighting that respondents were in slight agreement regarding the Ambivalent Sexism Inventory. These findings are supported by the bodies of work mentioned above and basically indicate that sexism is prevalent in upper echelon, more in its benevolent form, but still pervasive enough to present a likely candidate for under representation of females in these

structures. (Eagly, & Karau, 2002; Eagly, & Mladinic, 1994 ; Eagly & Wood, 2011; Heilman, 2001; Heilman & Eagly, 2008; Hideg & Ferris, 2015).

6.4 Research Question One

Research question one sought to evaluate if there were differences in sexism as a function of gender. Table 15 highlighted that the significant differences between males and females were found for only the ASI (t-statistic = -3.03, p-value < 0.05), BS (t-statistic = -3.76, p-value < 0.05), BS1 (t-statistic = -4.35, p-value < 0.05) and BS3 (t-statistic = -3.85, p-value < 0.05) constructs. Although females came in higher with regards to all sexism constructs measure in the ASI, the findings were only marginally higher and not of statistic relevance. These findings are related to several studies where agentic leadership is stereotypical of male leaders; whereas females who observe this and accept that they cannot hold those positions by virtue of those "big man" traits and therefore made to feel inadequate to assume or pursue those roles. (Koenig & Eagly, 2014; Heilmann, 2008; Ely, Ibarra & Kolb, 2011; Taylor, 2010; Ely, Ibarra & Kolb, 2011).

However, the constructs which are reviewed in current discourse as reinforcing of gender inequality is benevolent sexism, for which we found statistically significant higher levels for females but also relatively high for males in upper echelons. This is supported by the findings of Glick & Fiske (2011) but also lends foundational support to theories of females being condoning of the BS representation of Sexism (Eagly & Karau, 2002, Hideg & Ferris, 2016).

6.5 Research Question Two

Research question two sought to evaluate if there were differences in sexism as a function of age. Table 17 highlighted that no significant differences were found between the age groups and each of the constructs (p-value > 0.05 for all). These findings are related to studies that found that qualifications as well as level of education are cited as the key legitimising determinants to ascend to upper echelon positions (Chizema, Kamuriwo, & Shinozawa, 2015; Grosvold & Brammer, 2011).

However, research by the OECD clearly indicates that the number of women exceed the number of males with degrees in both graduate and post graduate sectors (OECD

Education report, 2017, p. 23); yet males still dominate the highest positions within organisations. Furthermore, support for these findings can be found in previous studies (Glick & Fiske, 1996, 2011, 2018; Garaigordobil & Aliri, 2013) which reveal that while age is important for inclusivity, it should not impact on upper echelon levels of sexism and therefore should not skew appointments to seniority.

6.6 Research Question Three

Research question three examines if there is a relationship between HS and BS. Table 18 highlighted that there are significant correlations between HS and each of the constructs. The strongest relationship was found between HS and BS1 ($r = 0.48$, p-value <0.05), followed by BS ($r = 0.45$, p-value <0.05), BS3 ($r = 0.33$, p-value <0.05), and BS2 ($r = 0.27$, p-value <0.05). These findings are primarily supported both by the foundational Glick/Fiske and Garaigordobil/Aliri studies. This means that the constructs being inherently correlated can represent the social and structural elements of gender dynamics as highly intertwined or interdependent. In fact, Glick & Fiske (2001) suggest that Sexism in its BS form legitmises sexist behavior cross- culturally, and by virtue of that link can perpetuate the gender inequality by constructing a palatable version of itself.

On the other hand, the view that females are "weaker" or inept and in need of male guidance and mentorship seems to be contradictory when there are more females present on boards the less likely benevolent sexism is. This leans into the theory of tokenism and how greater numbers of women have attenuating effects on stereotypical or benevolent sexist attitudes (Kanter, 1977; Oliver, Krause, Busenbark & Kalm, 2018); which could possibly explain why gender differentiation was found to have the weakest relationship with hostile sexism.

6.7 Research Question Four

Research question four sought to evaluate if there was a relationship between the composition of woman in the upper echelons of corporate and sexism scores. Table 19 highlighted that the FCS index only correlated strongly with BS2 (Gender Differentiation – $r = -.040^{**}$, p-value < 0.05). This was an interesting finding because no statistically significant relations could be found between the subconstructs of sexism and the representation of females in upper echelons, but this was somewhat expected, even

though the researcher hoped it would prove more conclusive, as we know the dearth of women in upper echelon, is a multifactorial phenomenon.

Furthermore, these findings are related to the suggestion that strained and attenuated workplace dynamics are a natural consequence if the appointee feels they've been appointed solely for their gender or race and not because they are suitably qualified and proficient. Based on these conditions and feeling that there is not enough support could create a confirmation bias, leading to poor or sub-standard performances that could in a vicious cycle, then reinforce the original sexist notions (Stamarski & Hing, 2015; Good & Rudman, 2010; King, Hebl, George & Matusik, 2010).

There was however the afore- mentioned correlation between BS 2, which is gender differentiation, and the number of females represent in C- Suites only. In light of this, Stamarksi and Hing (2015) have argued that organisational structures, practices and policies have inadvertently or possibly by design, in a male-dominated work force, played a role in reinforcing the gender imbalance. Here again, could a very strong sense of feminine or masculine identities be at play or a tolerance of benevolent sexism by females? Therefore, the reason could be, as suggested previously, open to one's interpretations, as no direct link could be found and certainly no causation can be inferred, but it does create grounds for further investigation.

CHAPTER 7 CONCLUSION

7.1 Introduction

This study sought to offer an umbrella construct as a potential reason for the reported dearth of females in upper echelon structures in organisations globally, but particularly in the South African context of entrenched inequality as outlined in depth in Chapter 1. In attempting to explain the underrepresentation of women in upper echelon structures in South African Corporates, it became evident that further research is required to confirm the pervasiveness of ambivalent sexism as a contributor to the phenomenon. In previous studies on the construct, sample sizes ranged from 200-5000+(Garagobil & Aliri, 2013; Glick and Fiske, 2011, 2018), and the sample size in this study even though adequate to conduct statistical analyses were far from significant enough to infer generalizability to all corporates in South Africa. While no causation can be inferred, there is substantive corroborative research globally that attests to

the effects of Sexism on decision makers actions (Hideg & Ferris, 2016, Oliver, Krause, Busenbark & Kalm, 2018; Stamarksi & Hing, 205; Thams, Bendell &Terjesen 2018).

Despite the inability to say conclusively that sexism is at play, the researcher was able through a through literature analysis, display that the concepts of gender differentiation can present as sexist beliefs and has an inherent ambivalence as described by Glick and Fiske (1996, 2018) and confirm the findings of previous bodies of literature (Garagobil & Aliri, 2013; Glick and Fiske, 2011, 2018) in drawing similar correlations with regards to the age and gender constructs and its relation to ambivalent sexism. The intent to draw conceptual clarity around the contributing factors to sexism was accomplished by the comprehensive analysis of previous literature around gender discrimination and its influence on decision making processes involved in the appointment of females to upper echelon structures. (Eagly & Karau, 2002; Heilman, 2008; Hideg & Ferris, 2016; Koenig & Eagly, 2014; Konrad, Kramer & Erkut, 2008, Stamarski & Hing, 2015). Ambivalent sexism is an important influence to the ascent of women up the organisational ladder but mostly in its benevolent form as the world sees declining levels of Hostile sexism (Glick & Fiske, 2011. 2018). As mentioned in Chapter 1, identification of the form of sexism as it appears in corporates would be vital to shed light on and address the issue. The research does confirm sexism as an umbrella construct to gender inequality in upper echelon. The principal findings of this study will be discussed and suggestions for future research as well as limitations of the study will be presented.

7.2 Principal findings

Findings in this study corroborate the work done on a much larger scale by Glick & Fiske (1996). As illustrated in the table below, no differences in the recorded level of ambivalent sexism was noted between different age categories, and the category for which Glick and Fiske found significance in Hostile sexism (Age 64-75), was not tested in this study, as all participants were of working age in South Africa. So, Hypothesis one did not reveal anything significant about the influence of age on ambivalent sexism. The "X" denotes where differences were observed and is illustrated for ease of reference in Table 23. The large implication being that short of having very senior or geriatric populations on your upper echelon structures, age is not a factor one has to be mindful off when seeking to redress gender the negative effects of sexism in the workplace.

With regards to hypothesis two, suggesting that there would be no differences in scores between males and females, the null hypothesis was rejected, as there were statistically significant differences between genders. Overall ASi scores showed differences between

male and female respondents, with a clear significance in benevolent sexism scores which were higher for both males and females when compared to previous studies (Glick & Fiske, 1997, 2011; Garaigodobil & Aliri, 2013); but interestingly, were **more** significant in females in our sample. It would appear that as much as sexism is purported in existing literature to be a sentiment directed by males towards females, the directionality of sexism could be either way, or directed by females to females. This finding also suggests that in the intense focus of redressing racial inequality in South Africa, given the glaring historic evidence, ground may have been lost in the battle against gender discrimination, due to the contrast of the clarity around what racism is, and the lack if conceptual clarity around sexism in its many forms (Dick, 2013; Eagly & Wood, 2011).

The ideas of gender differentiation as identified by the construct BS2 in our research was significant higher for females in South Africa at **BS scores** for females higher than males at a s**ignificant difference** of 0.50 with a medium effect size of 0.57 ($0.5 < d < 0.8$) at the 95% significance level ($p = 0.00$). This demonstrates clearly that females have a very strong notion of what they believe females are or should be and affirm the concept of gender differentiation (Eagly & Karau, 2002; Eagly & Mladinic, 1994; Eagly & Wood, 2011; Heilman, 2001; Heilman & Eagly, 2008).

The implications of this finding is quite significant in that it presents an opening into the investigation of Sexism as a female construct too and what the implications of this could be to the ascent of females up the corporate ladder, as alluded to in previous research (Maume, 2011; Maume & Ruppanner, 2015). At a pragmatic level in business, mechanisms to address gender inequality in the workplace, needs to be much more nuanced and clear because of the deeper psycho-social beliefs among both men and women that continues to constrain the efforts to arrest gender discrimination.

Table 23 Differences found in this study

Constructs	Gender	Age
ASI - Ambivalent Sexism Inventory	X	
HS - Hostile Sexism		
BS - Benevolent Sexism	X	
BS1 - Protective Paternalism	X	

BS2 - Gender Differentiation (Inferior)		
BS3 - Heterosexual Intimacy (Relationships Only)	X	

Table 24 Ranking of Benevolent Sexism Subconstructs

Rank				2	1	4	3
Constructs	ASI	HS	BS	BS1	BS2	BS3
HS	N/A	N/A	X	X	X	X
FCS - Female Composition of C-Suite					X	

As indicated by table 24, while gender differentiation is strongly correlated with sexism in the south African context, Protective Paternalism as revealed by the construct labelled BS1, ranks highest when looking at the correlations between Ambivalent sexism and the representation of women in upper echelons. A strong sense of a male or female identity, is not necessarily seen as a problem (Heilman, 2001; Heilman & Eagly, 2008, Eagly & Wood, 2011). In fact, strong identities are seen as a contributing attitude to confidence, self-belief and determination, which are seen as predictors of successful leaders (Appelbaum, Audet & Miller, 2003; Barbuto & Gilford, 2010). Gender Differentiation in essence, reflects that we hold firm beliefs about the roles of females and males.

These stoic beliefs could be utilised as an opportunity to turn a perceived negative quality into one that could be leveraged to create competitive advantage for organisations in South Africa. In educating people about the harmful societal consequences of discrimination in perpetuating social inequality between the genders, one can also emphasise the unique qualities of each sex to approach problems differently and the cumulative advantage of pooling our differences. As suggested in the arguments for how diversity produces corporate governance, creative solutions and innovative thinking in companies that had more females in management in Chapter 2. This research leads to preliminary indications by this outcome, that merging strengths of different genders as opposed focussing on biological and psychological differences, could be the way forward for Boards, C- Suites and EXCO's in South Africa. Dual leadership is a concept garnering more attention in recent years (Wexler, 2006).

7.3 Implications for management and relevant stakeholders

In the process of continuing societal evolution, the psycho-social manifestations of the archaic construct of sexism has the potential to be deconstructed, as evidentiated by the actions of the feminist and anti-racism movements of the sixties (Dick, 2013) and replication of the Ambivalent Sexism inventory (Glick & Fiske 1996), revealing consistently declining levels of Hostile or overt sexism (Glick & Fiske, 2018). It suggests that in labelling these constructs more accurately one can curb the tide of societal inequality by shifting the focus on to the eradication of negative constructs, hence the recommendation for nuanced, cooperative, educational mechanism to alleviate gender discrimination in upper echelon or the suggestions for dual leadership (Wexler, 2006).

Management can use this information to actively address the amelioration of gender inequality through co-leadership positions and fostering collaborative horizontal structures versus hierarchical structure that accentuate differences in hierarchy especially, when delineated by gender. Open, dialogue and continuing education programmes around gender sensitivity to alert members of our organisation as to what constitutes a discriminatory action or decision should be a norm as education and information is the first step to any successful change management process. The salience of gender as a consideration for senior positions is an imperative given the strategic rationale behind increased firm performance financially, in corporate governance and better decision making. As indicated at the outset, in the astute quotation by Irene Navidad: gender inequality needs to be addressed in our organisations as a matter of intentional strategic design (Catalyst, 2018)

7.4 Research limitations

The study was significantly smaller than previous studies which does limit the ability to generalize any findings. So, scope and scale could qualify as a limitation. The nature of the instrument led to views largely directed or open to interpretation from a male perspective. This could be construed as male bias. It has led to an assumption that only males could answer the specific questions leading to the view that sexism is a male led construct, which the findings of this study contests. Race was also left out due to the complexities it presented with regards to under representation in upper echelon structures, particularly in the South African context of inequality having both a race, and gender dimension.

7.5 Suggestions for future research

As pointed out, race was not factored in as a descriptive, as it complicates the extenuating influencers to decision making in upper echelon appointments, when combined with sexism. It is suggested that future research in the South African context, consider the impact of race on decision making. Also, it could be more impactful to conduct this type of study as a mixed method, or qualitative study to afford greater richness of understanding. A larger sample size and scope is also recommended for future research.

A further consideration is the amendment or extension of the ASi to a more gender-neutral tone or one that could be more cognisant of sexism as a construct applying to both sexes, especially in light of declining hostile sexism scores as recorded by Glick and Fiske (2011), and Garagobil & Aliri (2013); and the high levels of female sexism revealed by this study. The questions were largely weighted as a male led construct which predisposes it to a sexist slant. The declining hostile sexism scores, while serving as a beacon of hope in the war against gender inequality in upper echelon structures, also presents an opportunity for a qualitative analysis into a discourse, in which ways society is evolving and what implications this has for the future of management.

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APPENDIX 1: KONRAD, KRAMER AND ERKUT 2008

EXHIBIT 1   WHAT DIFFERENCES DO NUMBERS MAKE?

One woman	Two women	Three or more women
<u>Possible impact but real risks of tokenism</u>	<u>Situation often improves but tokenism can still exist</u>	<u>Critical Mass</u>
Hypervisibility: being in the spotlight	Increased feelings of inclusion and comfort	Normalization – gender is no longer a barrier to acceptance and communication
Invisibility: being ignored, dismissed, not taken seriously, or otherwise excluded	Validation, reinforcement, and having a strategy partner	Women more comfortable being themselves and associating with one another
Being stereotyped and also viewed as representing all women: not seen as individuals	Decrease in stereotyping	More supportive atmosphere
Needing to work very hard to be heard, included, and have an impact	Larger impact on the board	Women not seen as representing all women
	But:	Women freer to raise issues, be more active
	Women may still be stereotyped	Women more likely to be heard
	Women still having to work to be heard	Noticeable impact on content and dynamics in the boardroom; increased collaboration and inclusiveness
	Women keeping their distance from each other – concerned about being seen as conspirators	

Source : Table adapted from Konrad, Kramer & Erkut, 2008:147

APPENDIX 2: STAMARKSI AND HING 2015
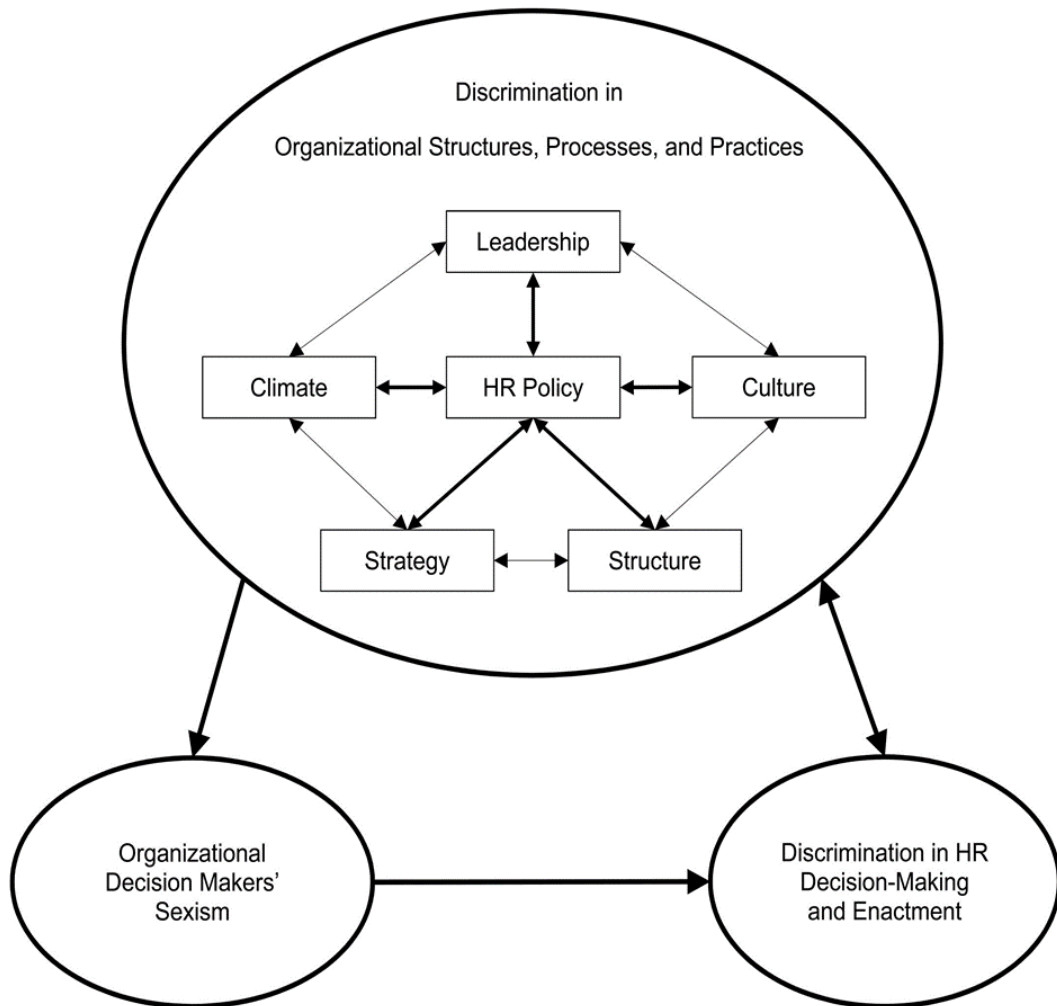
Adapted from: Stamarski, C. S., & Son Hing, L. S. (2015). Gender inequalities in the workplace: the effects of organizational structures, processes, practices, and decision makers' sexism. Frontiers in psychology, 6, 1400.

APPENDIX 3: AMBIVALENT SEXISM INVENTORY

The Ambivalent Sexism Inventory (ASI)

Relationships Between Men and Women

Below is a series of statements concerning men and women and their relationships in contemporary society. Please indicate the degree to which you agree or disagree with each statement using the following scale: 0 = disagree strongly; 1 = disagree somewhat; 2 = disagree slightly; 3 = agree slightly; 4 = agree somewhat; 5 = agree strongly.

B(I) ___ 1. No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.

H ___ 2. Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality."

B(P)* ___ 3. In a disaster, women ought not necessarily to be rescued before men.

H ___ 4. Most women interpret innocent remarks or acts as being sexist.

H ___ 5. Women are too easily offended.

B(I)* ___ 6. People are often truly happy in life without being romantically involved with a member of the other sex.

H* ___ 7. Feminists are not seeking for women to have more power than men.

B(G) ___ 8. Many women have a quality of purity that few men possess.

B(P) ___ 9. Women should be cherished and protected by men.

H ___ 10. Most women fail to appreciate fully all that men do for them.

H ___ 11. Women seek to gain power by getting control over men.

B(I) ___ 12. Every man ought to have a woman whom he adores.

B(I)* ___ 13. Men are complete without women.

H ___ 14. Women exaggerate problems they have at work.

H ___ 15. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.

H ___ 16. When women lose to men in a fair competition, they typically complain about being discriminated against.

B(P) ___ 17. A good woman should be set on a pedestal by her man.

H* ___ 18. There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances.

B(G) ___ 19. Women, compared to men, tend to have a superior moral sensibility.

B(P) ___ 20. Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives.

H* ___ 21. Feminists are making entirely reasonable demands of men.

B(G) ___ 22. Women, as compared to men, tend to have a more refined sense of culture and good taste.

Note. Copyright 1995 by Peter Glick and Susan T. Fiske. Use of this scale requires permission of one of the authors. A Spanish-language version of the ASI is available from the authors. H = Hostile Sexism, B = Benevolent Sexism, (P) = Protective Paternalism, (G) = Complementary Gender Differentiation, (I) = Heterosexual Intimacy, * = reverse-scored item.

Scoring Instructions

The ASI may be used as an overall measure of sexism, with hostile and benevolent components equally weighted, by simply averaging the score for all items after reversing the items listed below. The two ASI subscales (Hostile Sexism and Benevolent Sexism) may also be calculated separately. For correlational research, purer measures of HS and BS can be obtained by using partial correlations (so that the effects of the correlation between the scales is removed).

Reverse the following items (0 = 5, 1 = 4, 2 = 3, 3 = 2, 4 = 1, 5 = 0): 3, 6, 7, 13, 18, 21.

Hostile Sexism Score = average of the following items: 2, 4, 5, 7, 10, 11, 14, 15, 16, 18, 21.

Benevolent Sexism Score = average of the following items: 1, 3, 6, 8, 9, 12, 13, 17, 19, 20, 22.

Received April 12, 1994
Revision received September 6, 1995
Accepted October 19, 1995 ■

Source: Glick, P. & Fiske, S. (1996) The Ambivalent Sexism Inventory: Differentiating Hostile and Benevolent Sexism. *Journal of Personality and Social Psychology*. American Psychological Association, Inc. 1996, Vol. 70, No. 3, p 12.

APPENDIX 4: RESEARCH INSTRUMENT

Gordon Institute of Business Science
University of Pretoria

1. Welcome. Your contribution to Academic research at GIBS is valuable.

Thank you for participating in our survey. Your feedback is important and critical to contributing to the body of knowledge around gender dynamics in the workplace.

Your participation is entirely voluntary and you may opt-out at any time. All information received will be strictly confidential and only aggregated data will be used. No names of respondents or companies involved will be identified. By continuing on with this survey, your consent is implied and noted.

* 1. Gender

[ ]

* 2. Age

[ ]

* 3. Position / Title in Corporate

[ ]

[ ]

4. Company Name: (Optional)

Company [ ]

* 5. How many people in C-suite positions?

Male: [ ]

Female: [ ]

* 6. How many people in Board positions?

Male: [ ]

Female: [ ]

* 7. How many people serve in Senior ExCo or Heads of Department?

Male: [ ]

Female: [ ]

1

96

* 8. How many people in senior management?

Male:

Female:

2.

* 9. No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 10. Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of "equality".

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 11. In a disaster, women ought not necessarily be rescued before men.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

3

* 12. Most women interpret innocent remarks or acts as being sexist.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 13. Women are too easily offended.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 14. People are often truly happy in life without being romantically involved with a member of the other sex.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 15. Feminists are not seeking for women to have more power than men.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

4

* 16. Many women have a quality of purity that few men possess.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 17. Women should be cherished and protected by men.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 18. Most women fail to appreciate fully all that men do for them.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 19. Women seek to gain power by getting control over men.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

5

* 20. Every man ought to have a woman whom he adores.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 21. Men are complete without women.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 22. Women exaggerate problems they have at work.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 23. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

6

* 24. When women lose to men in a fair competition, they typically complain about being discriminated against.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 25. A good woman should be set on a pedestal by her man.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 26. There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male
advances.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

7

* 27. Women, compared to men, tend to have a superior moral sensibility.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 28. Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 29. Feminists make entirely reasonable demands of men.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 30. Women, as compared to men, tend to have a more refined sense of culture and good taste.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

8

* 31. Women, as compared to men, face more barriers when in leadership, in the workplace.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 32. Women, in the C-suite or Board level, need the assistance of their male counterparts.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 33. Men are more proficient at most tasks.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 34. Men are more likely to be more intelligent and competent than women.

○ Strongly agree

○ Agree

○ Somewhat agree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

* 35. Women tend to have superior social skills.

    ◯ Strongly agree

    ◯ Agree

    ◯ Somewhat agree

    ◯ Somewhat disagree

    ◯ Disagree

    ◯ Strongly disagree

* 36. Men often try to control and influence their female counterparts, even in equal positions in the Corporate Structure.

    ◯ Strongly agree

    ◯ Agree

    ◯ Somewhat agree

    ◯ Somewhat disagree

    ◯ Disagree

    ◯ Strongly disagree

* 37. Women should be shielded by men in difficult work situations.

    ◯ Strongly agree

    ◯ Agree

    ◯ Somewhat agree

    ◯ Somewhat disagree

    ◯ Disagree

    ◯ Strongly disagree

* 38. Women are incomplete without men.

    ◯ Strongly agree

    ◯ Agree

    ◯ Somewhat agree

    ◯ Somewhat disagree

    ◯ Disagree

   ◯ Strongly disagree

10

39. Any comments:

## APPENDIX 5: DESCRIPTIVE STATISTICS FOR MEASURED VARIABLES

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Benevolent1	172	1.00	6.00	3.4767	1.78838	0.038	0.185	-1.390	0.368
Hostile1	172	1.00	6.00	4.5988	1.40866	-0.693	0.185	-0.615	0.368
Benevolent2	172	1.00	6.00	3.4826	1.68750	-0.080	0.185	-1.342	0.368
Hostile2	172	1.00	6.00	4.2151	1.25433	-0.343	0.185	-0.909	0.368
Hostile3	172	1.00	6.00	3.9477	1.49957	-0.257	0.185	-0.984	0.368
Benevolent3	172	1.00	6.00	4.0465	1.45020	-0.373	0.185	-0.957	0.368
Hostile4	172	1.00	6.00	4.1802	1.51293	-0.474	0.185	-1.009	0.368
Benevolent4	172	1.00	6.00	3.8895	1.46080	-0.159	0.185	-1.038	0.368
Benevolent5	172	1.00	6.00	2.7442	1.54228	0.747	0.185	-0.446	0.368
Hostile5	172	1.00	6.00	3.7907	1.39436	-0.170	0.185	-0.946	0.368
Hostile6	172	1.00	6.00	4.3779	1.21981	-0.348	0.185	-0.780	0.368
Benevolent6	172	1.00	6.00	3.6221	1.60123	-0.064	0.185	-1.170	0.368
Benevolent7	172	1.00	6.00	3.2907	1.52842	0.304	0.185	-1.019	0.368
Hostile7	172	1.00	6.00	4.2442	1.26986	-0.539	0.185	-0.517	0.368
Hostile8	172	1.00	6.00	4.2326	1.36089	-0.388	0.185	-0.842	0.368
Hostile9	172	1.00	6.00	4.4302	1.19981	-0.594	0.185	-0.291	0.368
Benevolent8	172	1.00	6.00	3.7791	1.57763	-0.127	0.185	-1.217	0.368
Hostile10	172	1.00	6.00	4.2500	1.39810	-0.715	0.185	-0.318	0.368
Benevolent9	172	1.00	6.00	3.6105	1.41608	0.104	0.185	-0.887	0.368
Benevolent10	172	1.00	6.00	4.0756	1.53710	-0.431	0.185	-0.941	0.368
Hostile11	172	1.00	6.00	3.4767	1.32653	0.073	0.185	-0.782	0.368
Benevolent11	172	1.00	6.00	3.8779	1.42336	-0.213	0.185	-0.835	0.368
Benevolent12	172	1.00	6.00	1.9535	1.01920	1.301	0.185	1.948	0.368
Benevolent13	172	2.00	6.00	4.3430	1.34373	-0.428	0.185	-0.999	0.368
Hostile12	172	2.00	6.00	5.0058	0.94589	-0.809	0.185	0.394	0.368
Hostile13	172	2.00	6.00	5.3953	0.79882	-1.393	0.185	1.994	0.368
Hostile14	172	1.00	6.00	3.8198	1.46581	-0.111	0.185	-1.077	0.368
Hostile15	172	1.00	6.00	3.0349	1.18418	0.488	0.185	-0.309	0.368
Benevolent14	172	1.00	6.00	4.3023	1.30290	-0.562	0.185	-0.474	0.368
Benevolent15	172	1.00	6.00	4.8721	1.27776	-1.068	0.185	0.223	0.368

APPENDIX 6: INTER-ITEM CORRELATIONS

Correlation Matrix

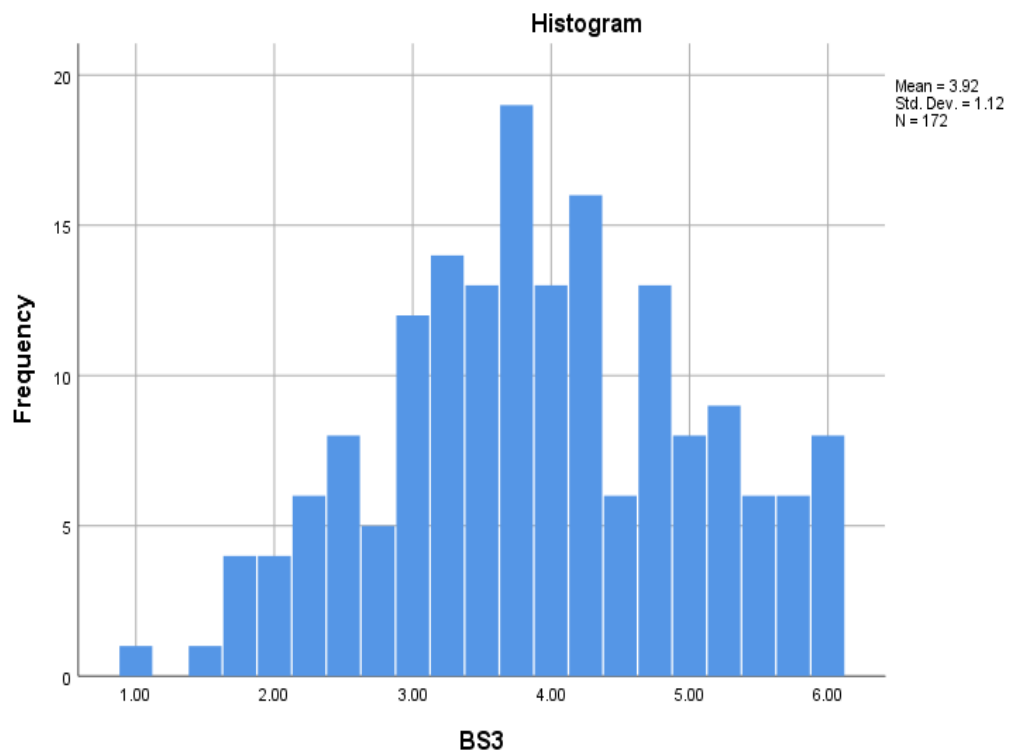| Correlation	Benevolen t1	Hostile1	Benevolen t2	Hostile2	Hostile3	Benevolen t3	Hostile4	Benevolen t4	Benevolen t5	Hostile5	Hostile6	Benevolen t6	Benevolen t7	Hostile7	Hostile8	Hostile9	Benevolen t8	Hostile10	Benevolen t9	Benevolen t10	Hostile11	Benevolen t11	Benevolen t12	Benevolen t13	Hostile12	Hostile13	Hostile14	Hostile15	Benevolen t14	Benevolen t15
Benevolen t1	1.000	0.227	0.204	0.174	0.261	0.426	0.170	0.395	0.256	0.129	0.077	0.603	0.594	0.314	0.106	0.326	0.228	0.067	0.166	0.441	-0.073	0.341	0.108	-0.023	0.220	0.160	0.240	0.041	0.285	0.486
Hostile1	0.227	1.000	0.022	0.512	0.561	0.042	0.327	0.102	0.276	0.402	0.519	0.359	0.192	0.438	0.510	0.552	0.232	0.321	0.035	0.311	0.137	0.257	-0.074	0.099	0.404	0.420	0.183	0.122	0.301	0.193
Benevolen t2	0.204	0.022	1.000	0.122	0.062	0.151	0.199	0.154	0.394	0.038	-0.085	0.301	0.143	0.148	-0.074	0.068	0.239	0.220	-0.093	0.289	0.053	0.055	0.035	0.047	0.163	0.177	-0.081	-0.198	0.096	0.231
Hostile2	0.174	0.512	0.122	1.000	0.550	0.056	0.197	0.065	0.122	0.337	0.434	0.166	0.114	0.399	0.463	0.527	0.157	0.269	-0.048	0.223	0.152	0.096	-0.128	0.051	0.360	0.482	0.028	-0.188	0.170	0.092
Hostile3	0.261	0.561	0.062	0.550	1.000	0.079	0.357	0.006	0.209	0.361	0.273	0.263	0.155	0.637	0.430	0.570	0.248	0.206	0.048	0.364	0.292	0.055	-0.043	0.092	0.301	0.302	0.093	-0.060	0.159	0.068
Benevolen t3	0.426	0.042	0.151	0.056	0.079	1.000	0.248	-0.038	0.021	-0.090	-0.013	0.227	0.258	0.117	0.053	0.106	-0.091	0.058	0.047	0.177	0.022	0.100	0.067	-0.270	0.159	0.189	0.191	-0.125	0.135	0.466
Hostile4	0.170	0.327	0.199	0.197	0.357	0.248	1.000	-0.030	0.323	0.142	0.237	0.125	-0.008	0.461	0.221	0.385	0.161	0.396	-0.061	0.269	0.476	-0.025	-0.205	0.163	0.211	0.198	-0.050	-0.150	0.077	0.162
Benevolen t4	0.395	0.102	0.154	0.065	0.006	-0.038	-0.030	1.000	0.260	0.271	-0.079	0.332	0.272	-0.003	-0.075	0.066	0.144	-0.082	0.475	0.233	-0.172	0.478	0.200	0.062	0.001	0.078	0.298	0.299	0.254	0.226
Benevolen t5	0.256	0.276	0.394	0.122	0.209	0.021	0.323	0.260	1.000	0.567	0.248	0.284	-0.048	0.296	0.143	0.384	0.256	0.195	-0.041	0.371	-0.043	0.252	0.030	0.132	0.278	0.278	-0.065	0.040	0.441	0.306
Hostile5	0.129	0.402	0.038	0.337	0.361	-0.090	0.142	0.271	0.567	1.000	0.466	0.118	-0.039	0.352	0.271	0.470	0.048	0.147	0.063	0.184	-0.025	0.089	0.125	0.108	0.220	0.227	-0.039	0.118	0.374	0.206
Hostile6	0.077	0.519	-0.085	0.434	0.273	-0.013	0.237	-0.079	0.248	0.466	1.000	0.287	-0.080	0.400	0.663	0.490	0.103	0.287	0.071	0.184	0.174	0.152	0.027	-0.037	0.403	0.280	0.198	0.018	0.167	0.005
Benevolen t6	0.603	0.359	0.301	0.166	0.263	0.227	0.125	0.332	0.284	0.118	0.287	1.000	0.444	0.445	0.295	0.419	0.430	0.059	0.346	0.430	-0.042	0.483	0.024	-0.175	0.318	0.221	0.450	0.158	0.283	0.340
Benevolen t7	0.594	0.192	0.143	0.114	0.155	0.258	-0.008	0.272	-0.048	-0.039	-0.080	0.444	1.000	0.181	0.083	0.145	0.185	-0.123	0.156	0.091	-0.067	0.074	0.049	-0.155	0.171	0.132	0.083	-0.026	0.179	0.501
Hostile7	0.314	0.438	0.148	0.399	0.637	0.117	0.461	-0.003	0.296	0.352	0.400	0.445	0.181	1.000	0.405	0.634	0.280	0.234	0.138	0.257	0.254	0.139	-0.011	0.122	0.342	0.312	0.193	-0.032	0.033	0.132
Hostile8	0.106	0.510	-0.074	0.463	0.430	0.053	0.221	-0.075	0.143	0.271	0.663	0.295	0.083	0.405	1.000	0.598	0.155	0.078	0.245	0.185	0.137	0.276	-0.168	0.076	0.627	0.484	0.293	0.042	0.210	0.112
Hostile9	0.326	0.552	0.068	0.527	0.570	0.106	0.385	0.066	0.384	0.470	0.490	0.419	0.145	0.634	0.598	1.000	0.244	0.238	0.007	0.321	0.111	0.299	-0.116	0.247	0.541	0.547	0.138	-0.076	0.167	0.218
Benevolen t8	0.228	0.232	0.239	0.157	0.248	-0.091	0.161	0.144	0.256	0.048	0.103	0.430	0.185	0.280	0.155	0.244	1.000	0.224	0.111	0.537	0.041	0.125	-0.271	-0.036	0.391	0.281	0.080	0.003	0.201	0.143
Hostile10	0.067	0.321	0.220	0.269	0.206	0.058	0.396	-0.082	0.195	0.147	0.287	0.059	-0.123	0.234	0.078	0.238	0.224	1.000	-0.167	0.371	0.170	-0.028	0.063	0.133	0.258	0.281	-0.033	-0.089	0.169	0.094
Benevolen t9	0.166	0.035	-0.093	-0.048	0.048	0.047	-0.061	0.475	-0.041	0.063	0.071	0.346	0.156	0.138	0.245	0.007	0.111	-0.167	1.000	0.113	-0.219	0.490	0.231	-0.070	0.096	0.059	0.564	0.396	0.176	0.069
Benevolen t10	0.441	0.311	0.289	0.223	0.364	0.177	0.269	0.233	0.371	0.184	0.184	0.430	0.091	0.257	0.185	0.321	0.537	0.371	0.113	1.000	0.003	0.275	-0.004	-0.090	0.387	0.331	0.216	0.009	0.417	0.201
Hostile11	-0.073	0.137	0.053	0.152	0.292	0.022	0.476	-0.172	-0.043	-0.025	0.174	-0.042	-0.067	0.254	0.137	0.111	0.041	0.170	-0.219	0.003	1.000	-0.355	-0.214	-0.068	0.027	-0.072	-0.087	-0.265	-0.135	-0.082
Benevolen t11	0.341	0.257	0.055	0.096	0.055	0.100	-0.025	0.478	0.252	0.089	0.152	0.483	0.074	0.139	0.276	0.299	0.125	-0.028	0.490	0.275	-0.355	1.000	0.093	-0.020	0.241	0.298	0.523	0.309	0.313	0.193
Benevolen t12	0.108	-0.074	0.035	-0.128	-0.043	0.067	-0.205	0.200	0.030	0.125	0.027	0.024	0.049	-0.011	-0.168	-0.116	-0.271	0.063	0.231	-0.004	-0.214	0.093	1.000	-0.009	-0.147	-0.233	0.196	0.397	0.005	-0.081
Benevolen t13	-0.023	0.099	0.047	0.051	0.092	-0.270	0.163	0.062	0.132	0.108	-0.037	-0.175	-0.155	0.122	0.076	0.247	-0.036	0.133	-0.070	-0.090	-0.068	-0.020	-0.009	1.000	0.361	0.285	-0.110	-0.025	0.091	-0.043
Hostile12	0.220	0.404	0.163	0.360	0.301	0.159	0.211	0.001	0.278	0.220	0.403	0.318	0.171	0.342	0.627	0.541	0.391	0.258	0.096	0.387	0.027	0.241	-0.147	0.361	1.000	0.772	0.293	-0.013	0.414	0.355
Hostile13	0.160	0.420	0.177	0.482	0.302	0.189	0.198	0.078	0.278	0.227	0.280	0.221	0.132	0.312	0.484	0.547	0.281	0.281	0.059	0.331	-0.072	0.298	-0.233	0.285	0.772	1.000	0.173	-0.014	0.368	0.339
Hostile14	0.240	0.183	-0.081	0.028	0.093	0.191	-0.050	0.298	-0.065	-0.039	0.198	0.450	0.083	0.193	0.293	0.138	0.080	-0.033	0.564	0.216	-0.087	0.523	0.196	-0.110	0.293	0.173	1.000	0.322	0.184	0.085
Hostile15	0.041	0.122	-0.198	-0.188	-0.060	-0.125	-0.150	0.299	0.040	0.118	0.018	0.158	-0.026	-0.032	0.042	-0.076	0.003	-0.089	0.396	0.009	-0.265	0.309	0.397	-0.025	-0.013	-0.014	0.322	1.000	0.183	-0.114
Benevolen t14	0.285	0.301	0.096	0.170	0.159	0.135	0.077	0.254	0.441	0.374	0.167	0.283	0.179	0.033	0.210	0.167	0.201	0.169	0.176	0.417	-0.135	0.313	0.005	0.091	0.414	0.368	0.184	0.183	1.000	0.358
Benevolen t15	0.486	0.193	0.231	0.092	0.068	0.466	0.162	0.226	0.306	0.206	0.005	0.340	0.501	0.132	0.112	0.218	0.143	0.094	0.069	0.201	-0.082	0.193	-0.081	-0.043	0.355	0.339	0.085	-0.114	0.358	1.000
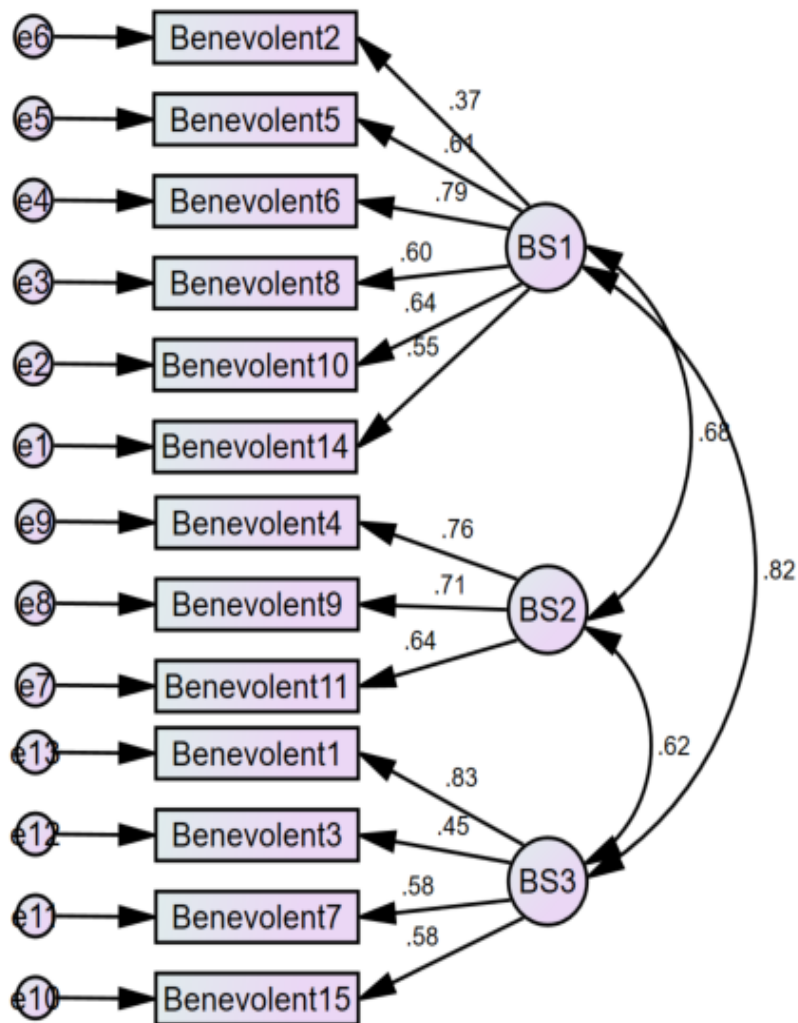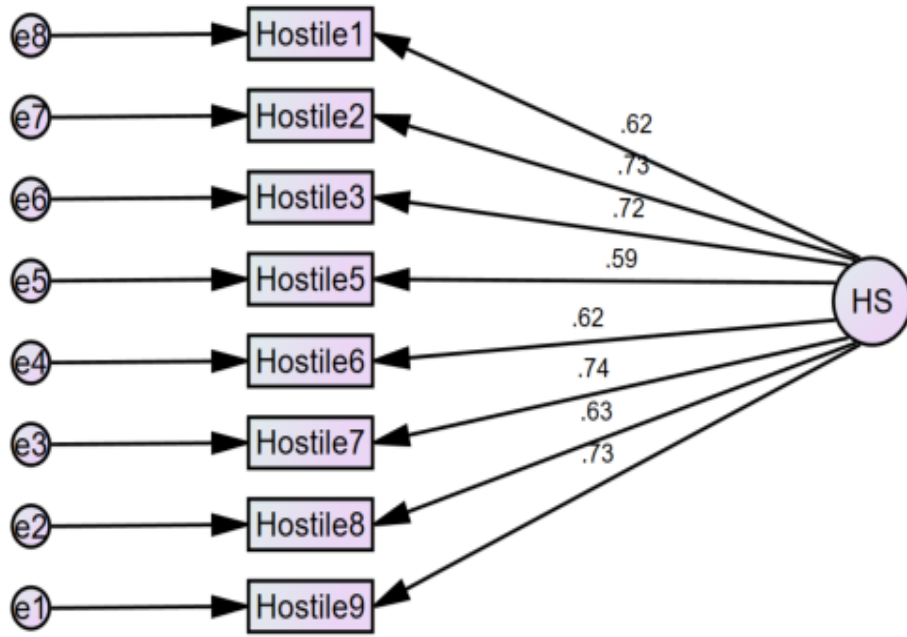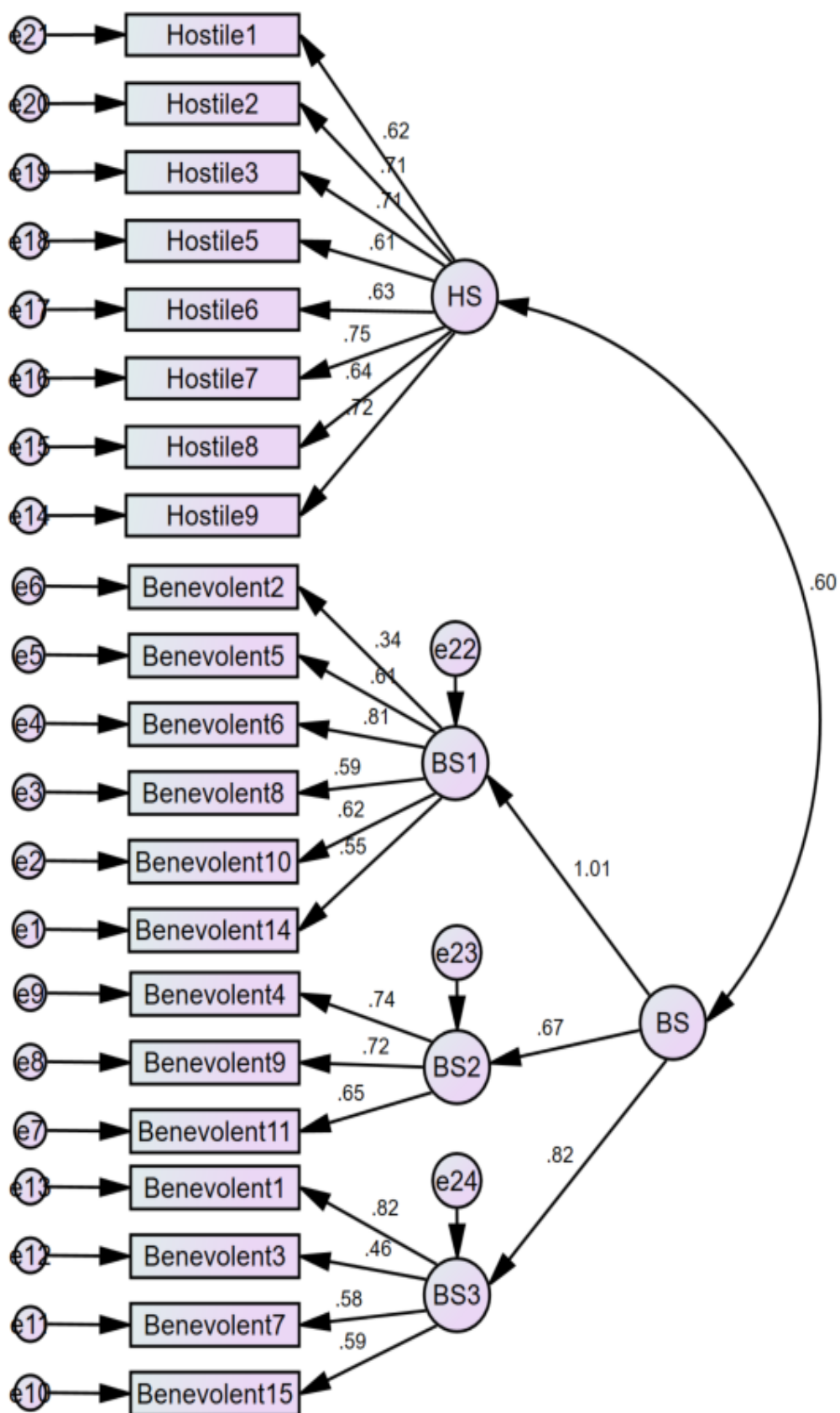
APPENDIX 8: TEST OF HOMOGENEITY OF VARIANCES

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
ASI	Based on Mean	0.89	5	166	0.49
	Based on Median	0.97	5	166	0.44
	Based on Median and with adjusted df	0.97	5	164.43	0.44
	Based on trimmed mean	0.95	5	166	0.45
HS	Based on Mean	1.05	5	166	0.39
	Based on Median	1.07	5	166	0.38
	Based on Median and with adjusted df	1.07	5	158.44	0.38
	Based on trimmed mean	1.06	5	166	0.38
BS	Based on Mean	1.28	5	166	0.28
	Based on Median	0.94	5	166	0.46
	Based on Median and with adjusted df	0.94	5	117.74	0.46
	Based on trimmed mean	1.24	5	166	0.29
BS1	Based on Mean	1.40	5	166	0.23
	Based on Median	0.91	5	166	0.48
	Based on Median and with adjusted df	0.91	5	146.278	0.48
	Based on trimmed mean	1.40	5	166	0.23
BS2	Based on Mean	1.27	5	166	0.28
	Based on Median	0.99	5	166	0.43
	Based on Median and with adjusted df	0.99	5	162.57	0.43
	Based on trimmed mean	1.23	5	166	0.30
BS3	Based on Mean	0.57	5	166	0.72
	Based on Median	0.37	5	166	0.87
	Based on Median and with adjusted df	0.37	5	130.09	0.87
	Based on trimmed mean	0.51	5	166	0.76

APPENDIX 9: HISTOGRAMS

Histogram

Mean = 4.23
Std. Dev. = .956
N = 172

HS

Histogram

Mean = 3.67
Std. Dev. = 1.054
N = 172

BS1

Histogram

Mean = 3.79
Std. Dev. = 1.169
N = 172

BS2

Histogram

Mean = 3.92
Std. Dev. = 1.12
N = 172

BS3

Histogram

Mean = 3.79
Std. Dev. = .903
N = 172

Histogram

Mean = 4.01
Std. Dev. = .794
N = 172
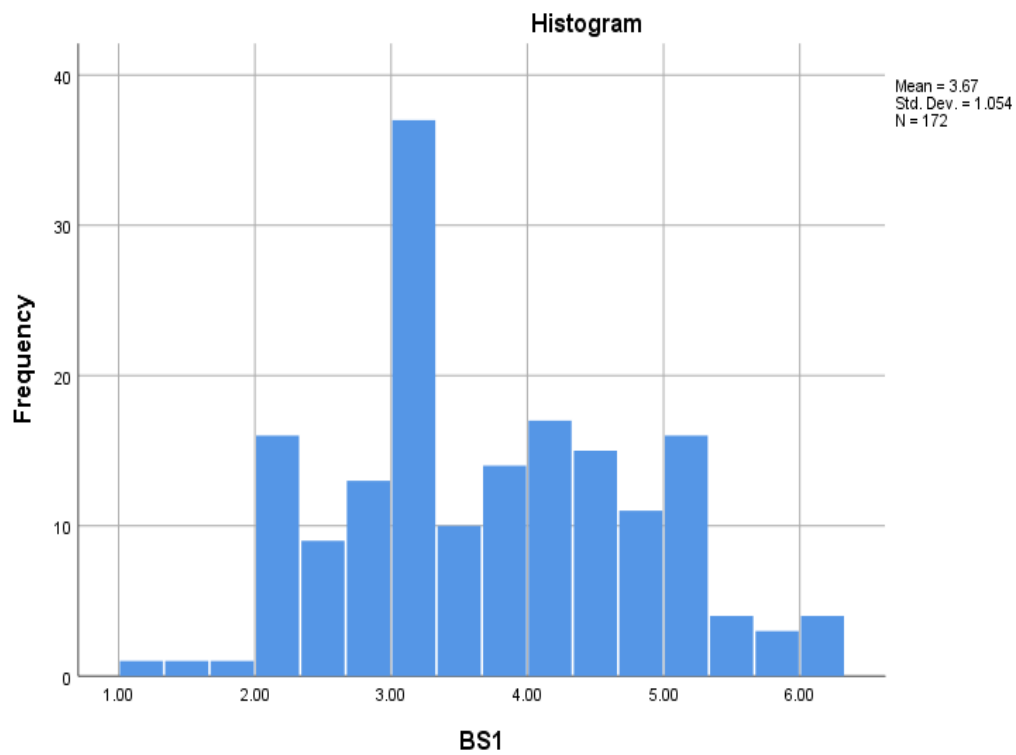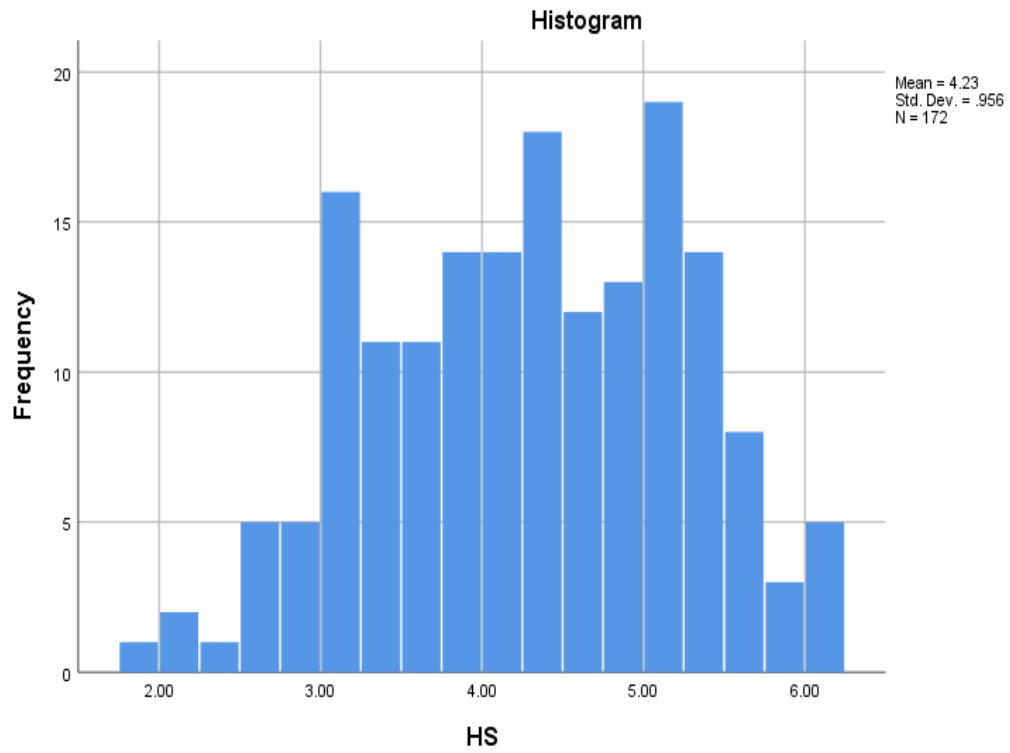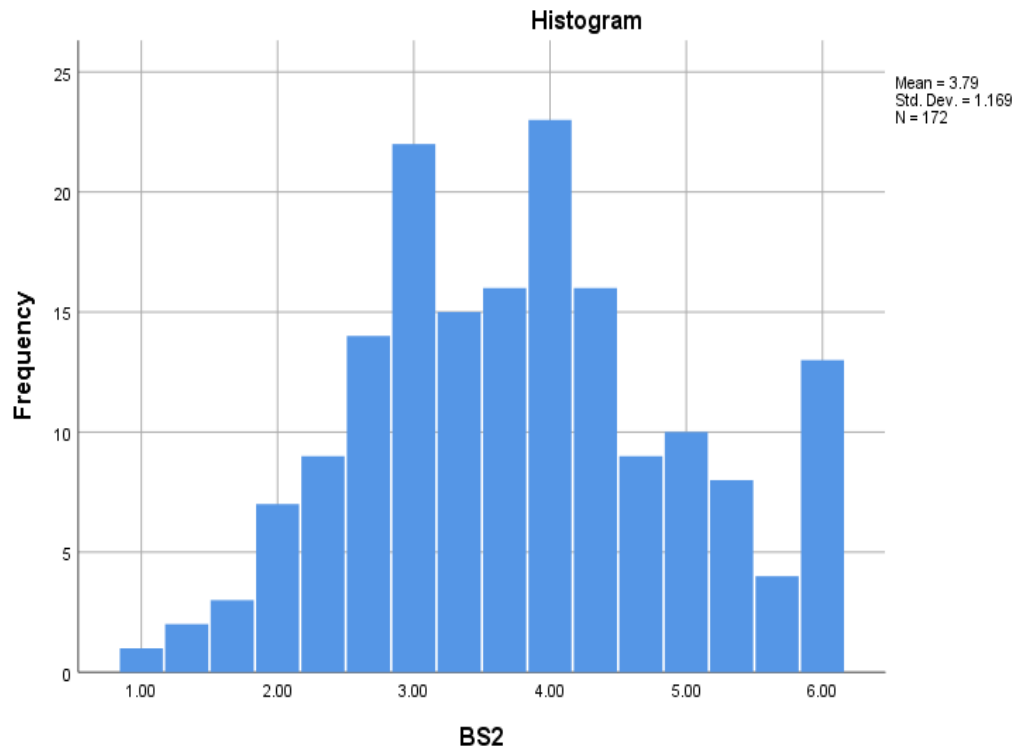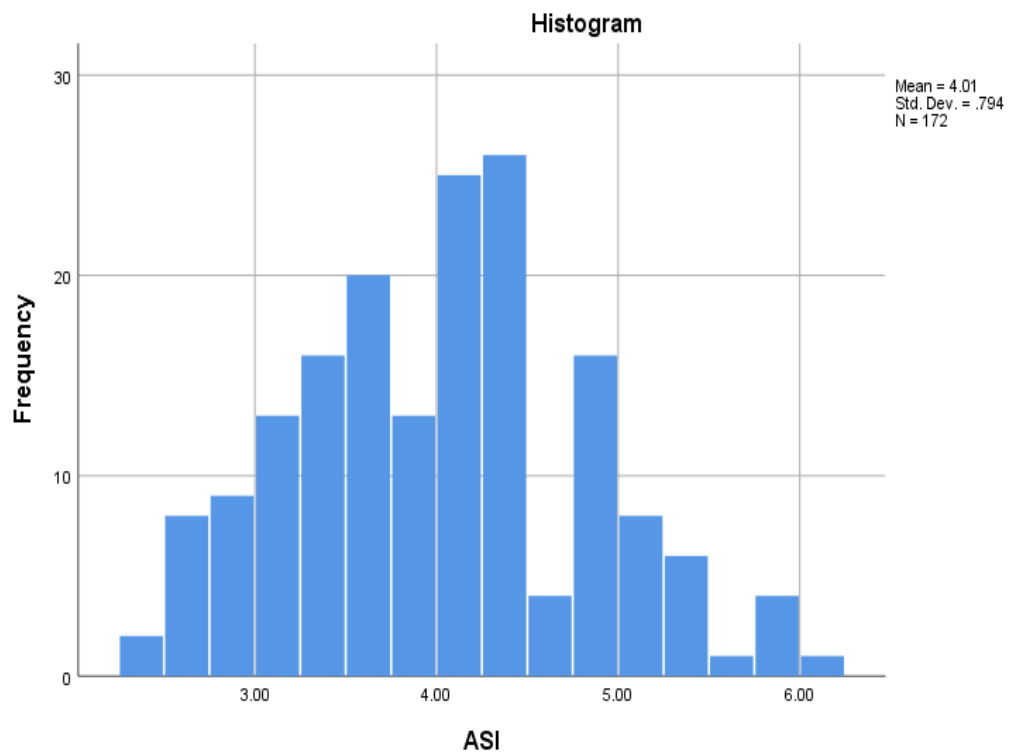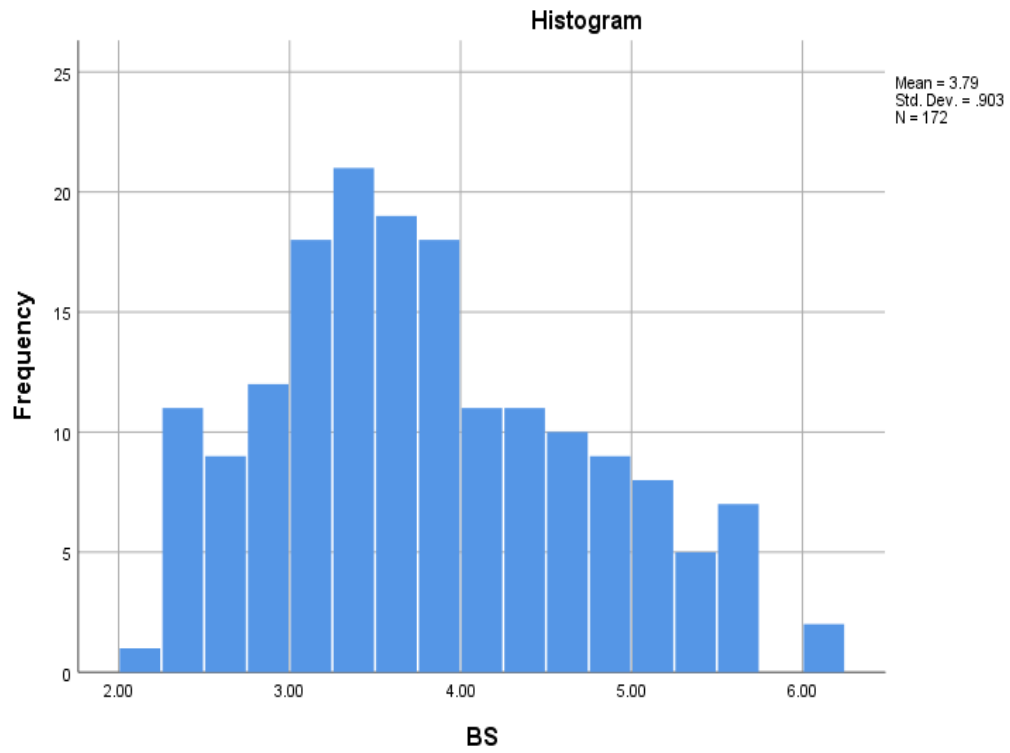
APPENDIX 10: SCATTERPLOTS

Simple Scatter with Fit Line of HS by BS

R² Linear = 0.210

Simple Scatter with Fit Line of HS by BS1

R² Linear = 0.229

Simple Scatter with Fit Line of HS by BS2

R² Linear = 0.089

Simple Scatter with Fit Line of HS by BS3

R² Linear = 0.121

Simple Scatter with Fit Line of BS by BS1

R² Linear = 0.694

Simple Scatter with Fit Line of BS by BS2

R² Linear = 0.628

118

Simple Scatter with Fit Line of BS by BS3

R² Linear = 0.653

Simple Scatter with Fit Line of FCS   by BS2

R² Linear = 0.206