

Elevating Woman in leadership, self-efficacy and leadership styles, career levels, development and psychological empowerment at work.

Sarah Byrne

Submitted in partial fulfilment of the requirements of the BA Hons in
Psychology at Dublin Business School, School of Arts, Dublin.

Supervisor: Dr. Ronda Barron

March 2020

Department of Psychology

Dublin Business School

Contents

Declaration	3
Acknowledgements	3
1.Introduction	4
1.1. Why Woman in Leadership?	4
1.2. An Inclusive Culture & Guidelines	5
1.3. Barriers to woman in leadership	6
- 1.3.1 Unconscious Bias, recruitment & selection.....	6
- 1.3.2 Glass ceiling & sticky floor.....	7
1.4. Self- Efficacy	8
1.5. Mentoring & Sponsorship	11
1.6. Development Opportunities	12
1.7. Leadership Styles & Psychological Empowerment	13
1.8. Behaviours & beliefs of successful woman	15
1.9. Knowledge Sharing	16
1.10. Hypotheses	17
2. Method	18
2.1. Participants	18
2.3. Materials	20
2.4. Procedure	22
2.5. Ethics	23
2.6. Hypotheses	24
3.Results	24
3.1. Overview of results	24
3.2. Descriptive statistics	25
<i>Figure 1: Graph displaying age ,sex & career level</i>	27
<i>Figure 2: Scatter plot displaying general self-efficacy across psychological empowerment.</i>	28
<i>Figure 3: Scatter plot displaying general self-efficacy across transformational leadership.</i>	29
<i>Figure 4: Scatter plot displaying general self-efficacy across individual consideration</i> 30	
4.Discussion	31
4.1. Overview of study aims	31
4.2. Interpretation of findings	31
H1: Sex, age & career levels.....	31
H2: Career levels & self-efficacy.....	32

H3: Psychological empowerment & self-efficacy	32
H4: Transformational Leadership & self-efficacy	33
H5: Individual Consideration & self- efficacy	33
4.4. Applications and implications for future research.....	35
4.5. Conclusions	36
5.References	38
6.Appendices	57
Appendix A: Survey Link.....	57
Appendix B: Information Sheet / Consent.....	57
Appendix C: Debrief Sheet.....	58
Appendix E: General Self-Efficacy Scale (GSE)	59
Appendix F: General Self-Efficacy Scoring.....	60
Appendix G: Psychological Empowerment Instrument	61
Appendix H: Psychological Empowerment Instrument Scoring.....	61
Appendix I: Multifactor Leadership Questionnaire	61
Appendix J: Multifactor Leadership Questionnaire Scoring	64
Appendix K : Industries of some participants.....	65

Declaration

I declare that this thesis that I have submitted to Dublin Business School for the award of BA (Hons) Psychology is the result of my own investigations, except where otherwise stated, where it is clearly acknowledged by references. Furthermore, this work has not been submitted for any other degree.

Word Count: 8319

Signed: Sarah Byrne

Student Number: 10315462

Date: 15th March 2020

Acknowledgements

I would like to thank my supervisor Dr. Ronda Barron for her support. In addition, to thank my colleagues in my year group, for their help and inspiration. I have met some truly wonderful people. I would like to thank my family and friends for their support over the last four years, in addition to LHH who have supported me throughout.

*"If your actions create a legacy that
inspires others to dream more, learn
more, do more and become more, then,
you are an excellent leader." -*

Dolly Parton

Abstract

The aim of this study was to examine the relationship between self- efficacy and leadership styles, career levels, individual consideration (development opportunities) and psychological empowerment at work, on the potential to help elevate woman into leadership. A quantitative, survey design was used, 100 participants took part in this study of which 38 were male and 62 females. The variables of sex, age, career level, self-efficacy at work, psychological empowerment at work & leadership styles were examined, using a quantitative survey design. Results found a weak significant positive relationship between self-efficacy and career levels, Psychological Empowerment significantly predicted self-efficacy, Transformational Leadership was a significant predictor of self-efficacy and Individual Consideration was a significant predictor of self-efficacy. No significant relationship was found between age, sex and career levels.

1.Introduction

1.1. Why Woman in Leadership?

We are currently living in times of uncertainty. There is fear in the UK, that Brexit could lead to economic decline and cuts in funding may result in lower importance being placed on gender diversity (Fagan & Rubery, 2018). The Irish government published a report outlining the potential negative effects of Brexit on the Irish economy, (Ireland & The Impacts, 2018) which include, a decline in revenues from trade and a reduction in GDP. Research has found that as an economy declines, so does the importance which is placed on gender diversity (Eastin & Prakash, 2013). A PWC US directors survey, found support for gender diversity to be fading and currently at 38% down from 46% in 2018 (PWC'S 2019 Annual Corporate, 2019). Less than 7% of Fortune 500 companies globally are run by woman (Zillman, 2019) and only 29% are at senior management positions globally (Woman in business, 2019).

Recent research, which examined findings from 91 countries, over various industries and sectors, found organisations to be more profitable when they had more woman in c-suite positions (Noland, Moran, & Kotschwar, 2016). A study by Noland, Moran & Kotschwar, found that the largest organisational gains of elevating woman into leadership, come from

the development of a pipeline of female managers and the promotion of female board members. The emphasis should be on developing a pipeline as opposed to promoting females ad hoc (Noland et al, 2016). The positive relationship between organisational profitability and female leadership, could be reflective of an inclusive culture, or that there is better diversity of skill, when there is gender balanced leadership, which ultimately leads to a competitive advantage. (Noland et al, 2016).

Many organisations are moving to team - based models, where collaboration and strong communication is key (McDowell, Miller, Agarwal, Okamoto & Page, 2016). In the list of the top companies in which to work, many defining core values of these organisations, (Brooks, 2018) are often associated with more feminine qualities, such as collaboration and interpersonal qualities (Chin, 2011). It is these core values, which have helped to retain and attract top talent (The Role of Workplace, 2019). Attracting and retaining top talent, will be vital in today's competitive jobs market, for the overall success of any organisation.

1.2. An Inclusive Culture & Guidelines

By definition, culture is a set of “ norms, values, beliefs and expectations” which operate within a particular environment (Pless & Maak, 2004). Inclusion within an organisation is “a set of policies, procedures, programs, set of norms” where everyone has an equal access to resources and an equal opportunity to use their skills and talents to fully contribute to an organisation and reach their full potential (Mazur, 2014). An inclusive culture increases organisational commitment (Ashikali & Groeneveld, 2015), creates a more stable social system, Louis (1980), (Panda & Gupta, 2001) and can influence preferential behaviours, (Smircich, 2017; Panda & Gupta, 2001), where everyone is recognised and valued. In addition, it has been found, that if there were a

more inclusive workforce, this would substantially enhance the global economy (The power of parity, 2015).

The majority of countries in the developed world have aging populations and it will be more important than ever to encourage more female participation in the workforce. In Ireland, each public sector office and each private sector organisation have their own policies on diversity and inclusion. The department of justice National strategy for woman and girls, 2017 – 2020, stated that they are committed to advancing woman in leadership in many areas including, state, corporate, civil service and community level (The National Strategy, 2017). The national strategy states that the public sector is committed to supporting woman during and after maternity leave, flexible working, opportunities for mentoring and career development, raising awareness of gender equality and unconscious bias (The National Strategy, 2017). Family friendly policies have been found to help and encourage woman who have children to return to work or stay in the workforce with the opportunities to develop their careers (Family policies & diversity, 2014). The success of diversity and inclusion within organisations, will be dependent on the policy which each organisation implements.

1.3. Barriers to woman in leadership

- 1.3.1 Unconscious Bias, recruitment & selection

Diversity of employees within organisations brings about diverse teams. Research has found that diverse teams make better decisions 87% more of the time than individuals do on their own (Larson, 2017). Without diverse teams, the ideas of female leaders are less likely to be listened to, this includes diversity of age. In Ireland in 2018, 49% of complaints relating to equality were age related (O’Flynn & Compton, 2019). The

working population in Ireland is getting older, with almost 20% of the workforce in 2018 over 55 years of age. (Working at age 55, 2019).

Diverse organisations have been found to be able to cope with change 1.8 more times than organisations who are not diverse, in addition, diverse organisations are 1.7 times more likely to be innovative (Talent Matters, 2017). Diverse organisations are 3.8 times more likely to have the ability to performance coach and 3.6 times better able deal with personnel performance problems. In addition, 2.9 times more likely to have the ability to build a talent pipeline (Talent Matters, 2017). Diverse and inclusive organisations and teams have been found to be more competitive and profitable (Noland et al, 2016).

Unconscious bias can stand in the way of diversity within organisations. Unconscious bias is “Attitudes or stereotypes that affect our understanding, actions and decisions in an unconscious manner” (Understanding implicit bias, 2015). Unconscious bias can unfairly affect candidate selection, pay, development opportunities, promotional opportunities and performance evaluations (Ashcraft, Mclain & Eger, 2016). Decisions may be made that unintentionally favour certain groups (Understanding implicit bias, 2015). One of the explanations given for unconscious bias, is that high level thinking takes up energy and it may be easier for people to take shortcuts and make decisions quickly (Evans 2003; Staats, 2016). This can make the difference in who gets hired and promoted. Unconscious bias training can mitigate for unconscious bias (Strategies to address, 2013).

- **1.3.2 Glass ceiling & sticky floor**

The glass ceiling is the inability to break through to the top ranks of the corporate ladder, which many women struggle to do. Sponsorship is seen as one of the most prominent ways

of shattering the glass ceiling (Ang, 2018; Sandberg, 2015). Sponsors are people who advocate and open doors. Sheryl Sandberg, chief operating officer, Facebook, was sponsored by her former economics professor, Larry Summers. Larry helped her in securing her first senior role at the World Bank, and following this, at the Clinton Administration (Ang, 2018; Sandberg, 2015). These senior positions gave Sheryl a good standing and allowed her to quickly elevate through the ranks of Google and Facebook and reach the top career level. (Ang, 2018; Sandberg, 2015). The sticky floor is a mindset of self-doubt (Carrillo, Gandelman & Robano, 2014) in other words, women are holding themselves back, because of a lack of self-efficacy. We may need to help women to achieve an identity shift to enable more women to view themselves as leaders (Ibarra & Kolb, 2013). Organisations can do this by changing organisational practice, individual behaviours and organisational culture to support women's development in the workplace and elevate more females into leadership positions (National Women's, 2017), (Ibarra & Kolb, 2013).

1.4. Self- Efficacy

Self-efficacy is the perceived belief in one's own abilities to accomplish a specific task, or in other words one's own belief in their ability to succeed (Bandura, 1982). Yet even with emphasis being placed in the corporate world, on supporting women in their careers, in addition to the positive contribution made by women to the economy (Noland et al, 2016), women tend to have less self-belief, compared to their male counterparts. Women tend to demonstrate lower self-efficacy than men (Nissen, & Shemwell, 2016). It has been found that females rate themselves lower academically than males, even though females have been found to perform stronger academically. (Matějů & Smith, 2015; Baum, Kurose & McPherson, 2013). In addition, it has been found that women and girls often attribute their success to hard work and effort, whilst men attribute their success to ability (Tirri &

Nokelainen, 2010). Imposter syndrome, where woman undermine themselves, may explain this (Tiefenthaler, 2018). Clance & Imes (1978) undertook research on high achieving woman and found that many felt that their success was due to luck as opposed to talent. They felt as if they were a fraud and would be found out, as if they were imposters (Clance & Imes, 1978).

Belief in one's self, begins to form in childhood. Research has found how woman and girls are socialized, contributes to their tendency to underestimate their own abilities and downplay their success (DiBenedetto & Bembenuddy, 2013). It has been found that the development of self-efficacy and even career self-efficacy begins to develop in early childhood. When researchers looked at children, they found gender role stereotypes to emerge as early as age two and an emergent career identity by 10 or 12 years (Macht Jantzer, Stalides, & Rottinghaus, 2009). A study of 1200 middle schoolers looked at attitudes towards work, self-efficacy and career aspirations. Parents were identified as having the most influence on these variables, next to educators and the media. Socialized gendered roles influence the educational choices and career ambitions of girls (Shapiro, Grossman, Carter, Martin, Deyton, & Hammer, 2015). Teachers can disrupt negative influence (Shapiro et al, 2015). In addition, recent research has found that females who go to a single sex secondary school, do not suffer a dip in confidence, unlike their counterparts who attend a mixed secondary school. In addition, girls who attend a single sex school, broaden their career aspirations, with a weakened influence on gendered messages. (Fitzsimmons, Yates & Callan, 2018).

Past experiences will influence our beliefs and subsequently our actions (Bandura, 1991). Social cognitive theory (SCT) states that learning occurs through an interaction between an individual, the environment and behaviour. SCT looks at how our career

development can be impacted by self- efficacy, expectations and goals. In addition to how choices are made in terms of education and careers. (Lent, Brown & Hackett, 1994). Social cognitive theory suggests how children learn, will influence their development of self- efficacy and career aspirations. Coaching and mentoring in adulthood, can encourage behaviours that will align over time with career goals (Lent et al, 1994). Barriers which limit development, will reduce job opportunities and lead to behaviours which will limit career advancement (Lent et al, 1994).

Transformational leaders have been found to enhance an employee's self- belief. Bandura (2010) found people with a higher level of self-efficacy to have more career options available to them and were more likely to be successful at work (Bandura, 2010). A study by Aggarwal & Krishnan, analysed data from 40 females and 72 males, asking questions related to their supervisors' transformational style (Loganathan & Krishnan, 2010) in addition to their own self-efficacy (Jones, 1986). A positive significant relationship was found between transformational leadership and subordinate self-efficacy.

Social stereotyping can be a barrier to woman's career development. Male dominated jobs usually demand higher pay. (Williams, Muller & Kilanski, 2012) A study by researchers at Cornell University found that the professions and industries in which men and women work is the biggest cause of the gender pay gap. (Blau & Kahn, 2017). Another found that as more women enter more male dominated fields, the pay declines for woman for the very same jobs that more men had been previously doing. (Levanon, England & Allison, 2009).

1.5. Mentoring & Sponsorship

But while many organizations have been working hard, enhancing career opportunities for females, increasing their value within their organisations and attracting and retaining female talent, somewhere along the way, a shift happens which results in fewer female leaders. It has been found that recognising gender stereotypes and including factors to mitigate these in training, can help increase leadership self-efficacy in females (Isaac, Kaatz, Lee & Carnes, 2012). Companies continue to see their female pipelines leak at mid-to-senior levels, even after considerable investment in mentors and development programs, accounting for industry, experience, aspirations and children. Organisations are actively looking for new ways to retain and attract their female talent pipeline (Carter & Silva, 2010).

A survey of 40 high potential men and woman who were placed on mentoring programmes was carried out in 2008 and again with the same cohort in 2010 (Ibarra, Carter, Silva, 2010). Data from both surveys were analysed and compared. They were asked about the barriers they faced and what kind of support they received to help in their transitions and what promotions and new job opportunities they were offered (Ibarra, Carter, Silva, 2010). The main finding was the difference between how men and woman were mentored. Men's mentors went further and were more of a sponsor, they went further than providing feedback and advice and used his or her influence to advocate for their mentee with more senior leaders.

Unfortunately, without sponsorship, woman are less likely to be appointed to senior roles and less likely to even go for them. The more senior the mentor, the faster a person's career will advance, so this finding has a real disadvantage for woman (Ibarra, Carter, Silva, 2010). This survey also found, despite an organisation's best efforts and intentions, woman

were 15% less likely to receive a promotion than their male counterparts (Ibarra, Carter, Silva, 2010). Unfortunately, woman often have to leave their own organisation to advance their career because they are not offered the opportunities within (Ibarra, Carter & Silva, 2010). At Deutsche Bank, internal research found that the main reason female managing directors left the organisation was because they had been offered better jobs externally, which they had not been considered for internally (Human Resources Report, 2018).

1.6. Development Opportunities

Development opportunities can help give confidence and elevate more woman into leadership positions within their own organisations. In the past, people spoke of moving up a career ladder by taking a set route which was clearly laid out for them by their employer. Now, there is often no set path and we get to create our own (Ryan, 2016). It has been found that woman and men have different concepts of success. Researchers have found that woman are more intrinsically motivated, measuring success on personal achievement, development and work life balance. Whereas men are more extrinsically motivated, defining success as high salaries and senior roles (Sturges, 1999). Woman's and men's values differ; therefore, a different training approach may benefit both. Leadership development has been defined as "expanding the collective capacity of organisational members to engage effectively in leadership roles and processes" (Day, 2001). For programmes to have the most impact, they must focus in tandem at an individual level and the organisational level.

The most successful programmes are aligned with the strategic objectives of the organisation. O'Reilly, Caldwell, Chatman, Lapiz & Self (2010), found an integrated leadership strategy must be undertaken in order for most impact (O'Reilly et al, 2010). There must be accountability for leaders at all levels in addition to HR. Kanter 1977 theory of

tokenism, says that minority groups working at senior levels are more resourceful than their majority counterparts, they need to overcome unique obstacles in order to be successful (Kanter, 1977). Individuals must take responsibility for their own development and organisations should provide opportunities to do so. The most effective developmental approaches have been found to incorporate assessments, stretch assignments and support systems (Hopkins, O'Neil, Passarelli, & Bilimoria, 2008; Douglas, 2019).

1.7. Leadership Styles & Psychological Empowerment

Certain types of leadership styles may help support woman better than others. Strong leadership is critical. Organisations such as General Electric and Chrysler were turned around from bankruptcy to high profitability, by the strong leadership of Jack Welch and Lee Iacocca (Robbins & Coulter, 2007). Leaders influence groups to achieve goals. Two of the most widely known leadership theories are Transformational and Transactional leadership theories (Odumeru & Ogbonna, 2013). Research has found transformational leadership, to result in higher levels of individual, group, and organizational success. (Bass & Avolio, 1994, Howell & Avolio, 1993). Transformational leadership creates positive change in employees, they create a supportive environment where people take care of each other and act in the interests of the whole group (Kark, & Shamir, 2013).

James Macgregor Burns introduced the idea of transformational leadership, in terms of political leadership, in 1978 but the term is now widely used in the field of organisational management. (Jung & Sosik, 2002). A transformational leader inspires (transforms) people to achieve more than what they would have originally expected to achieve (Nanjundeswaraswamy & Swamy, 2014). They are concerned with the developmental needs of their employees and help them to change their way of thinking in terms of problem solving. Transformational leadership styles are positively correlated with feelings of

psychological empowerment (Ismail, Mohamed, Sulaiman, Mohamad, & Yusuf, 2011) There are four dimensions of psychological empowerment which are meaning, competence, self-determination & impact (Spritzer, 1995). Krishnan, 2012, found a strong positive relationship between empowerment and meaning of life and that transformational leadership can increase an employee's feelings of purpose (Krishnan, 2012). Transformational leaders can help an employee to feel more competent, resulting in an increase in employee's self-efficacy and have a (Krishnan, 2012; Pradhan, Panda & Jena, 2017) mediating effect on employee empowerment (Jha, 2014).

Empowering employees and giving them the freedom to act, is one of the main strategies to improve performance and organisational survival. (Zeglat, Aljaber, & Alrawabdeh, 2014). In today's competitive environment, many organisations will need transformational change, in order to survive (Transformational change, 2014). We need transformational leaders to lead change (Transformational change, 2014). Psychological empowerment is strongly linked with a number of positive individual employee and group outcomes including job satisfaction, performance, and commitment to an organisation. (Seibert, Wang, & Courtright, 2011). Transformational leadership has been found to foster diversity and creativity at work (Ashikali & Groeneveld, 2015). Research has found as a whole that woman tend to be more transformational leaders than men (Stempel, Rigotti, & Mohr, 2015). Transactional leadership is a style of leadership, unlike transformational leadership controls followers using rewards and punishments.

Transactional leaders focus on improving existing products and services rather than creating new ones. They pay close attention to how people can improve by looking for weaknesses, rather than focusing on people's strengths (Odumeru & Ogbonna, 2013). They

manage each portion of a task separately. This type of leadership is necessary when something has to be carried out in a specific way or in an emergency. (Odumeru & Ogbonna, 2013). Transactional leadership can be correlated with Maslow's hierarchy of needs, where basic needs must be met. Maslow hypothesised that we have psychological, safety, love and belonging, esteem and self-actualisation needs. The lower order needs of psychological needs and safety needs can be linked to an organisational culture of transactional leadership. Social needs would relate to the roles within an organization, the organisational roles are defined by human resources and there are different roles within each function of the organisation (Odumeru & Ogbonna, 2013).

Positive interaction between people and a healthy organisational culture, can result in higher self-esteem and self-actualisation. (Maslow, 1943; Jerome, 2013). Within transactional leadership, positive outcomes are rewarded, negative outcomes may be punished until corrective action is taken (Odumeru & Ogbonna, 2013). Transformational leaders foster diversity which may be more beneficial to woman than transactional leaders, in helping to elevate woman into more leadership positions.(Ashikali & Groeneveld, 2015).

1.8. Behaviours & beliefs of successful woman

A survey of more than 500 individuals from various countries in Europe, with a cross section of 20 industries and size ranging from 250 to 10,000 employees found three areas of focus which can make meaningful change for woman in leadership, which are, individual behaviours, leadership culture and organisational practices (Elevating Woman, 2018). The top five behaviours of woman who advance were found to be self- promotion, networking with significant stakeholders, high self- confidence, influencing upwards and having a clear career plan (Elevating Woman, 2018). French & Raven, 1959 spoke of social influence and how someone can bring about a change in the beliefs and attitudes of another "Social power

was defined as the potential for such influence, the ability of the agent or power figure to bring about such change” (Raven, 2008). Successful female leaders have been found to empower other woman and help bring about positive change for others (Latu, Mast, Lammers & Bombari, 2013).

The top four aspects of a gender inclusive culture and to bring about change, have been found to be, an organisations reputation as a good place to work for woman, equal opportunities for woman (everyone feels it is possible to develop within the organisation), organisations who recognise female leaders as role models and where leaders are committed to gender diversity (Elevating Woman, 2018). The practices that help support woman who advance were found to be, coaching and feedback that builds business knowledge, supporting flexibility at work, stretch assignments associated with key business objectives, female exposure to key senior leaders and decision makers and recruitment from a diverse pool of talent (Elevating Woman, 2018). In the past, helping woman to advance has been seen as the right thing to do. However, more and more, organisations now realise diversity of workforce better represents their customer base and local communities. In recent times, organisations are putting an onus on suppliers and partners to prove they have a diverse workforce, in order to continue with their business relationship (Elevating Woman, 2018). In addition, diversity leads to more innovative thinking (Chamorro-Premuzic, 2017).

1.9. Knowledge Sharing

In order for there to be effective learning and development, there needs to be effective knowledge management, which incorporates the learning and sharing of best practices amongst all employees, both male and female (Ghasabeh & Provitera, 2017). Organisational learning has been described as “dynamic process of strategic renewal occurring across three levels of the organisation (i.e. individual, group, and organisation)” (Crossan, 1999). in

addition, “a dynamic process of creation, acquisition and integration of knowledge aimed at the development of resources and capabilities that contribute to better organisational performance” (Lopez, Peon, Ordas, 2005). Transformational leaders facilitate the generation of new knowledge and ideas and challenge followers existing attitudes and values. (Ghasabeh & Provitera, 2017).

Transformational leaders can use their influence to encourage a knowledge sharing and learning culture within an organisation. Transformational leadership plays a critical role in developing a learning climate in organisations by considering each employee’s individual development needs which empowers them in the pursuit of organisational goals (Avolio, Waldman, & Yammarino, 1991). Sustainable change is only possible with sustained learning. Transformational leaders can help elevate woman in leadership by implementing meaningful change, supporting opportunities for new learning, self-development, changing attitudes, breaking down stereotypes and biases that may exist which limit woman’s career opportunities and help create opportunities to elevate woman in leadership.

Much focus on the subject of woman in leadership has focused on the lower numbers of woman than men in specific industries or professions such as science, technology, engineering and mathematics (STEM) (Hoyt & Murphy, 2016). Our research will add to previous research on woman in leadership, our sample is from various industries and professions, given the low numbers of woman in leadership roles globally, our study will hone in on self-efficacy and other factors which previous research have found to have an impact on woman in leadership.

1.10. Hypotheses

Based on findings from the literature review the following hypothesis were examined:

H1: There will be a significant relationship between sex, age & career level.

H2 There will be a significant positive relationship between career level and self- efficacy

H3 Psychological Empowerment will significantly predict self-efficacy at work.

H4 Transformational leadership will significantly predict self-efficacy at work.

H5 Individual consideration will significantly predict self-efficacy at work.

2. Method

2.1. Participants

All participants from this study were from the general population, employed and over 18 years. 100 people completed this study of which 38 were male and 62 females. This study excludes vulnerable groups. All participants indicated their age bracket according to one of the following, 18-25 years, 26 – 35 years, 36-50 years, 50+.years. Participants were asked to best describe their current career level as individual contributor/non manager, Manager (non-people), Mid-Level Manager (Manager of people) or Senior Level/C-Suite Manager (Manager of people), in addition, to the sex of their own direct line manager (see appendix D).

The participants for this study were recruited using snowball sampling through my network on LinkedIn & Facebook via survey link (see appendix A). In addition, the survey was available via the DBS Moodle page. In order to achieve a medium effect size of .80 as indicated by Cohen's primer, 64 males and 64 females would be the ideal sample size (Cohen, 1992). A total number of 100, 38 males and 62 female participants were

recruited for this study. However, the psychometric measures used in this study have been found to be robust with smaller sample size, GSE, (Fatima, Asghar, Khatoon & Fatima, 2017; Peter, 2014), Psychological empowerment (Chung & Kowalsky 2012; Schermuly, Schermuly & Meyer, 2011). MLQ, (Xu, Wubbena, & Stewart, 2016).; Popli & Rizvi 2015).

2.2. Design

A quantitative, survey design was used for this study, which enabled assessment of relationships between the variables of sex, age, career level, psychological empowerment, leadership style of direct line manager and development opportunities at work, in addition to the sex of direct line manager. Participants were given 8 questions relating to the New General Self- Efficacy scale (Chen, Gully & Eden 2001), 12 questions measuring the four dimensions of empowerment, meaning, competence or self-efficacy, self - determination and impact, using the psychological empowerment scale (Spreitzer, 1995) and 21 questions, relating to transformational and transactional leadership styles, using the MLQ, Multifactor Leadership Questionnaire (Bass & Avolio, 1992) for measuring participant managers leadership style.

Variables (all within-subjects):

H1: The dependent variable (DV) was career level, which was characterised by the independent variables (IV) of sex & age.

H2 The dependent variable (DV) was career level which was characterised by the independent variable (IV) self-efficacy at work.

H3 The dependent variable (DV) self-efficacy at work, which was characterised by the independent variable (IV) psychological empowerment.

H4 The dependent variable (DV) self-efficacy at work, which was characterised by the independent variable (IV) transformational leadership.

H5 The dependent variable (DV) self-efficacy at work, which was characterised by the independent variable (IV) individual consideration.

2.3. Materials

The materials used in this study were a self-administered online questionnaire created in Microsoft forms. The survey contained an information sheet which included terms of participation, in addition to a debrief sheet. The survey questions included demographic data (sex & age). Participants were asked to choose which of the following best describes their current career level, individual contributor/non manager, Manager (non-people), Mid-Level Manager (Manager of people), Senior Level/C-Suite Manager (Manager of people) and were also asked the sex of their direct manager. Participants were asked to complete three questionnaires which were:

2.3.1 General Self Efficacy-Scale (GSE) 10-item (Schwarzer & Jerusalem, 1995)

The GSE was used to test for perceived self-efficacy at work (see appendix E). This was a self-administered report, with 10 items. Scores were calculated on a 4-point likert scale ranging from not true at all to exactly true. Participants were asked questions such as “I can always manage to solve difficult problems if I try hard enough” and “It is easy for me to stick to my aims and accomplish my goals”. (GSE). Scores were re coded in spss for analyses with (1) not true at all to (4) exactly true. Scores were added together to get the overall score ranging from 10 to 40, with 40 being the highest self-efficacy rating

(see appendix H). Reliability was assessed using Cronbach's alpha, Cronbach's alpha was applied to assess reliability, with a coefficient alpha of .77 for self-efficacy. This is in line with findings from previous research with Cronbach's alpha. Cronbach's alpha in a study comparing the GSES scores of 25 countries were ranging from $.75 < \alpha < .91$ (Scholz, Doña, Sud, & Schwarzer 2002).

2.3.2 Psychological Empowerment Instrument 12-item (Spreitzer, 1995)

This four-factor model was used to measure a self-efficacy regarding participants role at work (see appendix F). The four dimensions were competence, meaning, self-determination and impact. An example of a competence based question was "I am confident in my ability to do my job", meaning based question was, "The work that I do is important to me, self-determination based question was, "I have significant autonomy in determining how I do my job" and impact based "My impact in what happens in my department is large". This is a self-report questionnaire. Scores were calculated taking the mean of three items which measure each dimension (see appendix I). Responses were measured on a seven-point Likert scale, ranging from (A) very strongly disagree to (G) very strongly agree, then recoded in spss for analysis with (1) very strongly disagree to (7) very strongly agree.

The higher the score the higher the rating of psychological empowerment. The psychological empowerment scale has high reliability, Cronbach's alpha was applied to assess reliability, with a coefficient alpha of .93 for overall empowerment, this is in line with previous findings. Previous studies have shown reliability, overall empowerment, 0.90 (Chung & Kowalski, 2012), 0.76 - 0.82 for the four dimensions (Schermyly et al, 2011).

2.3.3. Multifactor Leadership Scale (MLQ) 21-item (Bass & Avolio, 1995)

This seven-factor model related to transformational leadership was used to measure the leadership style of the participants direct manager at work (see appendix G). This is a self-report questionnaire. Scores were calculated taking the mean of three items which measured each dimension (see appendix J). The seven dimensions were idealized influence, inspirational motivation, intellectual stimulation, individual consideration, contingent reward, management-by-exception and laissez-faire leadership. Transformational leadership is aligned with idealized influence, inspiration motivation, intellectual stimulation and individual consideration.

Participants were asked questions relating to idealized influence such as “Others have complete faith in them” questions relating to inspirational motivation such as “They express with a few simple words what we could and should do”, questions relating to intellectual stimulation such as “They enable others to think about old problems in new ways” and individual consideration such as “They help others develop themselves.” Responses were measured on a five- point Likert scale ranging from not at all (0) to frequently, if not always (4). The scores ranged from 9-10, high, 5-8, moderate and 0-4 low. The MLQ has high reliability, Cronbach’s alpha was applied to assess reliability, with a coefficient alpha of .94, this is in line with previous findings of Cronbach’s alpha transformational leadership 0.93 (Popli et al, 2015) .086 overall MLQ (Xu et al, 2016), 0.96, transformational leadership (Aksu, 2016)

2.4. Procedure

This study was electronically posted on LinkedIn and Facebook via survey link in December 2019 until Jan 2020 (see appendix A). It was electronically posted on the DBM Moodle website in January 2020 and closed for completion on all platforms at the beginning

of Feb 2020. The survey included an information sheet (see appendix B) which spoke of the aim of the research and terms of participation. The information sheet stated that by submitting the survey, individuals were consenting to taking part. (see appendix B) Participants were asked the demographic questions of their own age, sex and the sex of their directly line manager. They were given a list and asked which best described their own career level. Participants were then also asked to complete questions from the general self-efficacy (GSE) (Schwarzer et al, 1995) survey, multifactor leadership questionnaire (MLQ) (Bass et al, 1992) and the psychological empowerment survey (Spreitzer, 1995). A debrief page appeared on survey submission. (see appendix C). It took approximately five minutes to complete this survey.

2.5. Ethics

An ethical approval form was submitted as part of the overall research proposal. This study adhered to the (Code of Professional Ethics, 2019). The category of research for this proposal was research category A, general population, over 18's, males and females, excluding vulnerable groups. All participants were advised on an information sheet (see appendix B), that by submitting the survey they were consenting to taking part and that there was no right to withdraw on submission, as no personal contact detail were collected. The email address of my supervisor together with my own, was included on the information sheet, should anyone have any questions relating to the study. All surveys were De-identified. The study was not of a sensitive nature and standardised tools were used for data collection. It was recognised that some questions may cause mild temporary discomfort. Details of professional bodies such as Aware and the Samaritans were included in the debrief sheet at the end of the survey (see appendix C). The debrief sheet informed participants of the nature of the study. The data was collected using Microsoft forms and stored on a

password protected computer, it will be kept under current data protection guidelines and deleted after 1 year. I have sole ownership of the data and this will not be distributed to any third party.

2.6. Hypotheses

Based on findings from the literature review, the following hypothesis were examined:

- H1:** There will be a significant relationship between sex, age & career levels.
- H2** There will be a significant positive relationship between career level and self- efficacy
- H3** Psychological Empowerment will significantly predict self-efficacy at work.
- H4** Transformational leadership will significantly predict self-efficacy at work.
- H5** Individual consideration will significantly predict self-efficacy at work.

3.Results

3.1. Overview of results

The aim of this study was to examine the relationship between self- efficacy and leadership styles, career levels, individual consideration and psychological empowerment at work, on the potential to help elevate woman into leadership. All data was entered into SPSS software for statistical analysis. The following analyse was conducted in SPSS, descriptive

statistics, two way between groups Anova, Pearson Correlation and Simple Linear Regression.

3.2. Descriptive statistics

In order to describe the key characteristics of the data, a preliminary analysis was run on the data to achieve measures of central tendencies. Participants consisted of 100 people, 32 (38%) Males and 64 (62%) females, ranging in age from 18 – 50+ years, with breakdown of age, 18-25 years (6%), 26-35 years (15%), 36-50 years (55%) and 50+ (24%). The main variables investigated in this study were sex (SD = .49, M = 1.62), age (SD = .80, M = 2.97), career levels (SD = 1.20, M = 2.30), general self-efficacy (SD = 3.79, M = 33.16), psychological empowerment (SD = 11.72, M = 64.98), transformational leadership (SD = 7.42, M = 35.16), Individual Consideration (SD = 2.36, M = 8.10) and sex of manager (SD = 1.38, M = .49).

Table 1: Descriptive Statistics of Psychological Measures

Variable	Mean	Standard Deviation
Sex of participant	1.62	.49
Age Category	2.97	.80
Career Level	2.28	1.20
GSE Overall	33.16	3.79
Empowerment Overall	64.98	11.72
Transformational Lead.	35.16	7.42
Indiv. Consideration	8.10	2.36
Sex of Manager	1.38	.49

3.3. Inferential statistics

3.3.1. Hypothesis 1: *There will be a significant relationship between sex, age and career levels*

A two way between groups Anova was used to test for the role of sex and age on career levels.

A two-way between-groups ANOVA examined the role of sex and age on career levels and found no significant interaction effect ($F(3, 92) = .468, p = .705$). Therefore, the null hypothesis cannot be rejected.

Profile Plots

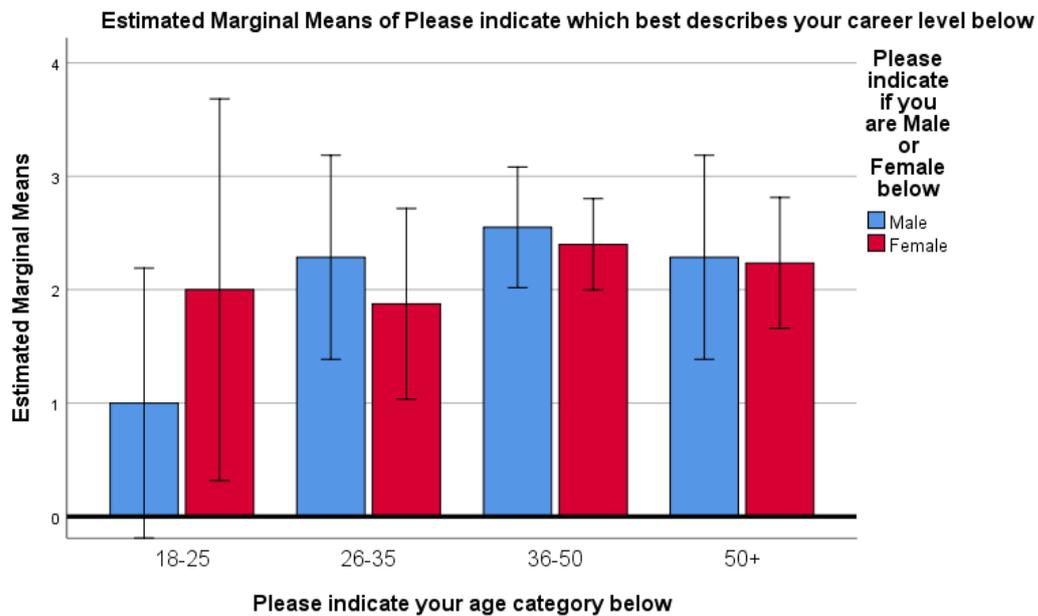


Figure 1: Graph displaying age ,sex & career level

3.3.2. Hypothesis 5: There will be a significant positive relationship between career level and self- efficacy at work.

A Pearson correlation was used to test for a relationship between career levels and general self-efficacy at work.

A Pearson correlation coefficient found that there was a weak positive significant relationship between career level (M = 2.28 , SD = 1.20) and general self-efficacy at work (M = 33.16, SD = 3.79) ($r(100) = 0.26, p .010$). Therefore, the null hypothesis is rejected. This relationship can account for 7% of variation of scores.

3.3.3. Hypothesis 6: Psychological Empowerment will significantly predict self-efficacy at work.

A simple linear regression was used to test for psychological empowerment at work as a predictor of general self-efficacy.

Using simple regression, it was found that Psychological empowerment significantly predicted general self-efficacy at work ($F(1, 88) = 4.84, p = 0.03$) Psychological empowerment, $\beta = 0.23, p = 0.03, CI(95\%) 0.01, 0.14$). Therefore, the null hypothesis is rejected.

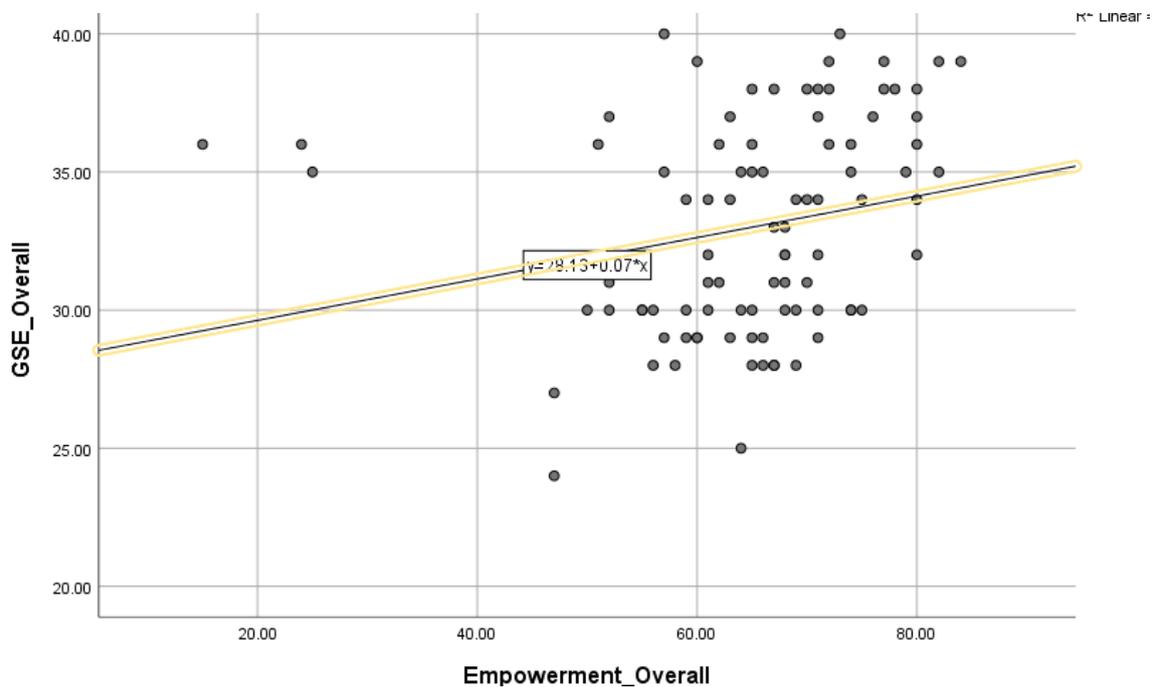


Figure 2: Scatter plot displaying general self-efficacy across psychological empowerment.

3.3.4. Hypothesis 3: Transformational leadership will significantly predict self-efficacy at work.

A simple linear regression was used to test for transformational leadership as a predictor of self-efficacy.

Using simple regression, it was found that transformational leadership significantly predicted general self-efficacy at work ($F(1, 53) = 11.14, p 0.00, R^2 = .16$) (transformational leadership, $\beta = .42, p 0.00, CI (95\%) 0.10, 0.35$). Therefore, the null hypothesis is rejected.

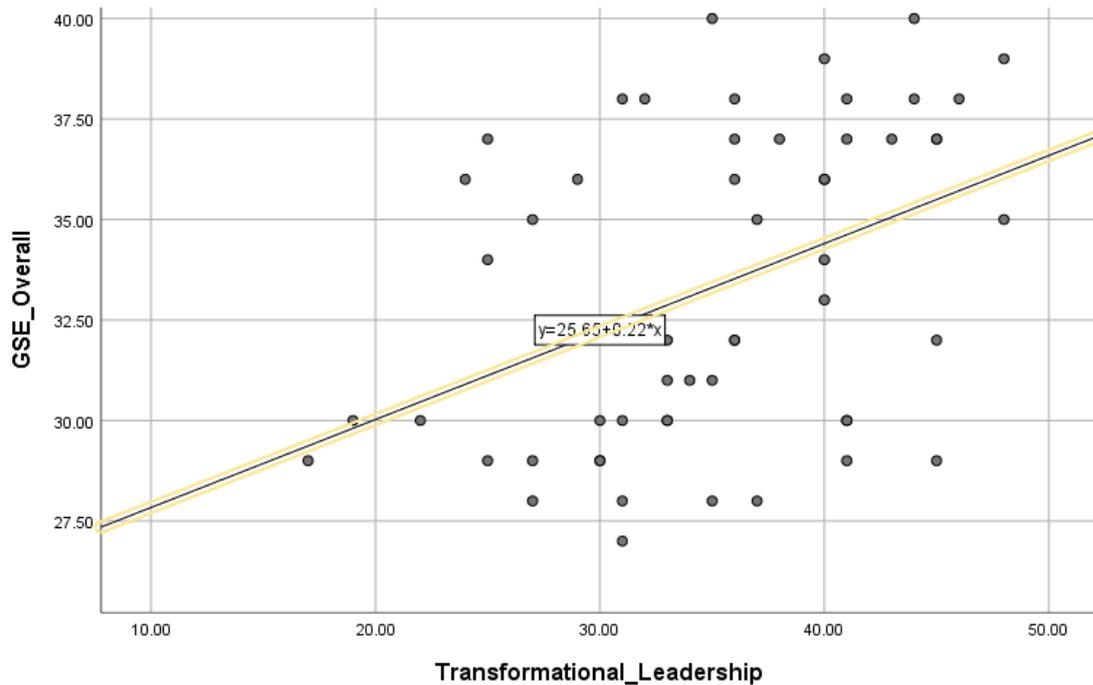


Figure 3: Scatter plot displaying general self-efficacy across transformational leadership.

3.3.5. Hypothesis 5: Individual consideration will significantly predict self-efficacy at work.

A simple linear regression was used to test for individual consideration as a predictor of employee self-efficacy at work.

Using simple linear regression, it was found that individual consideration significantly predicted general self-efficacy at work ($F(1, 65) = 8.25, p 0.01, R^2 = 0.10$) (individual

consideration, $\beta = 0.34$, $p = 0.01$, CI (95%) 0.17, 0.94). Therefore, the null hypothesis is rejected.

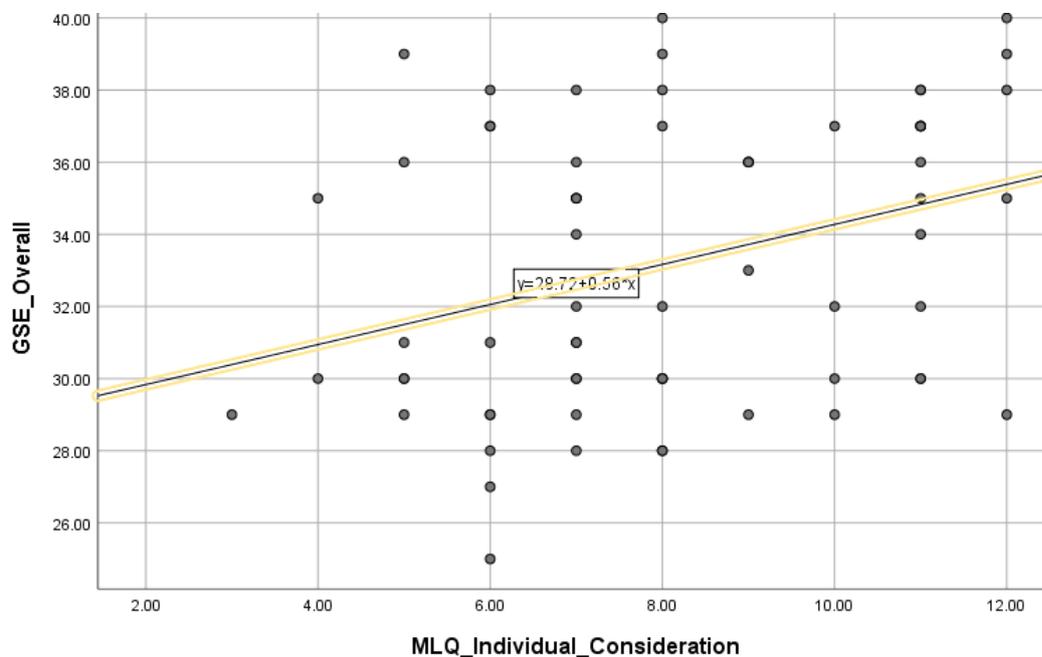


Figure 4: Scatter plot displaying general self-efficacy across individual consideration

3.4. Additional findings

An additional test, a t test was run for this study, which found men had similar levels of self-efficacy to woman (SD = 4.07, M = 32.47), (SD = 3.58, M = 33.58). Our study consisted of 62 females and 38 males, concluding, we would have expected males to score higher than females on self-efficacy should there have been an equal number of male/female participants.

Descriptive statistics found the majority of direct line managers were male (SD = .49, M = 1.38), which equates to a valid percentage of 62% male and 38% female.

4.Discussion

4.1. Overview of study aims

The purpose of this study was to examine the relationship between self- efficacy and leadership styles, career levels, individual consideration / development opportunities and psychological empowerment at work, on the potential to help elevate woman into leadership. The study was to build on previous research, which has found there to be more men in leadership roles than woman, that there is a relationship between self-efficacy, psychological empowerment, leadership styles, individual consideration and career levels.

4.2. Interpretation of findings

H1: Sex, age & career levels

Results did not find a significant relationship between sex, age and career levels. This is not in line with previous findings which have found that companies find a drop at mid to senior level of female managers (Carter & Silva, 2010). However, 21.1% males and 22.6% females in our study were at senior/level c-suite positions. Observing that 62 females and 38 males who undertook this study, a higher number of males to female ratio at senior level would have been expected, should there have been an equal number of male/female participants. In addition, the majority of our participants direct line managers were male (SD = .49, M = 1.38). This study found no significant relationship between age and career levels, interestingly, 24% of our respondents who were 50+ were at senior level /c suite positions as opposed to 55% of the those aged 36 – 50 years. In Ireland, 49% of complaints were related to age in 2018 (O’Flynn & Compton, 2019).

H2: Career levels & self-efficacy

Results found a weak positive significant relationship between career levels and self-efficacy. Bandura (2010) found people with a higher level of self-efficacy to have more career options available to them and were more likely to be successful at work (Bandura, 2010). Previous research has found that women tend to demonstrate lower self-efficacy than men (Nissen et al, 2016) and there are lower numbers of women at senior career levels than men, less than 7% of Fortune 500 companies globally are run by women (Zillman, 2019). There are 29% of females at senior management level globally (Woman in business, 2019).

An additional test (t test) was run for this study, which found men had similar levels of self-efficacy to women ($SD = 4.07$, $M = 32.47$), ($SD = 3.58$, $M = 33.58$). Our study consisted of 62 females and 38 males, concluding, we would have expected males to score higher than females on self-efficacy should there have been an equal number of male/female participants.

H3: Psychological empowerment & self-efficacy

Results found Psychological empowerment to significantly predict general self-efficacy at work. This supports previous research, which found a strong positive relationship between empowerment and meaning of life and that transformational leadership can increase an employee's feelings of purpose (Krishnan, 2012). Transformational leaders can help an employee to feel more competent, resulting in an increase in employee's self-efficacy (Krishnan, 2012; Pradhan et al, 2017).

H4: Transformational Leadership & self-efficacy

Results found transformational leadership to significantly predict employee's self-efficacy. This supports previous research which has found, transformational leadership styles to be positively correlated with feelings of psychological empowerment (Ismail et al, 2011). Psychological empowerment is a mediator for self-efficacy (Krishnan, 2012). Transformational leaders have been found to foster self-belief in their employees (Nanjundeswaraswamy et al, 2014). This is also supported by previous findings by (Aggarwal & Krishnan, 2013), who analysed a sample of 112 people, a similar number of this study of 100. They found a significant positive relationship between transformational leadership and self-efficacy. Transformational leaders can help an employee to feel more competent, resulting in an increase in employee's self-efficacy (Krishnan, 2012; Pradhan, Panda & Jena, 2017).

H5: Individual Consideration & self- efficacy

Results found individual consideration to significantly predict self-efficacy at work. This supports previous findings which found, developing a learning climate in organisations by considering each employee's individual development needs will empower them in the pursuit of organisational goals (Avolio, Waldman, & Yammarino, 1991). The practices that help support woman who advance were found to be, coaching and feedback that builds business knowledge, supporting flexibility at work, stretch assignments associated with key business objectives, female exposure to key senior leaders and decision makers and recruitment from a diverse pool of talent (Elevating Woman in Leadership, 2019).

Sponsorship has been found to help elevate people into leadership and encourage self-belief. (Ibarra, Carter, Silva, 2010). A sponsor is someone who will not only share

knowledge, give feedback and advice but also actively advocate for someone. Sheryl - Sandberg, COO at Facebook, was sponsored by her former economics professor, Larry Summers. Larry helped her in securing her first senior role at the World Bank, and following this, at the Clinton Administration. These senior positions gave Sheryl a good standing to be able to later quickly rise through the ranks of Google and Facebook and reach the top of the corporate ladder. The sticky floor is a mindset of self- doubt (Ehrlinger & Dunning 2003), woman may be holding themselves back because of a lack of self-efficacy. We may need to help woman to achieve an identity shift to enable more woman to view themselves as leaders (Ibarra & Kolb, 2013).

4.3. Limitations and strengths of study

Much research in the area of woman in leadership has focused on a specific industry or profession. Feedback from participant's showed that our sample came from a variety of industries, professions and career levels (See appendix J) and not just one specific industry or field. The study has also validated previous similar studies with similar findings in terms of a relationship between employee self-efficacy and leadership.

The overall limitation of this study was that there was a small sample size and an imbalance of males/females. This study did not have homogeneity of variance for the two- way Anova on sex, age and career levels, as such, the cut off point for significance was .01. The small sample size together with an imbalance of male/female participants, could account for the non-significant findings in terms of sex, age and career levels. However, considering these factors, good reliability was found of Cronbach's alpha 0.77 for General Self Efficacy (GSE) and high reliability for Psychological empowerment instrument 0.93 and multifactor

leadership questionnaire, 0.94 (MLQ). This study was a purely quantitative study and did not allow for additional comments or any explanatory information, which may have given further insight into findings.

4.4. Applications and implications for future research

Although the findings of this study on self-efficacy, leadership and psychological empowerment were in line with previous studies. Styles of leadership were developed which put emphasis on the behaviour and attitudes of a leaders as a predictor of performance and achievement. Leadership styles (Bass & Avolio 1995,). However, research into leadership behaviours and influence tactics has found that the success of any leader will also be dependent on situational factors. (Yukl, 2013). Future research should consider the situations that leaders face, as people can react differently in different situations. This would help further in the development of training models, which would consider situational demands.

The world of work is forever changing; therefore, further research has found that leadership constructs must be considered alongside other factors relating to the organisational structure, employees and the specific context/situation. (Vroom, 2007; Miner, 2015). Due to the ever-evolving world of work, ways of working, demographic change and situations which employees and leaders find themselves in, further research could be undertaken into agile leadership, an extension of the transformational leadership style which focuses on goals, organisations and culture (Kruse, 2013). Creating change which will allow organisations to continue to grow, develop and achieve, enabling an organisation and their employees to adapt to the ever-changing needs of the working environment today. (Kruse, 2013).

More and more organisations are moving to team - based models where collaboration and strong communication is key (McDowell et al, 2016). As previously mention, in the list of the top companies to work, many of their defining core values (Brooks, 2018) are often associated with more feminine qualities such as collaboration and interpersonal qualities (Chin, 2011). These core values have helped to attract and retain top talent, which is vital in today's competitive jobs market. Having the very best skilled workers and bet fit to an organisation, will significantly contribute to the overall success of a business.

4.5. Conclusions

The aim of this study was to examine relationships between self-efficacy on leadership styles, career levels, individual consideration / development opportunities and psychological empowerment at work. This was in order to expand on previous research which found transformational leaders to enhance an employee's self- efficacy (Bandura, 2010) and that psychological empowerment is interlinked with self-efficacy (Krishnan, 2012). In addition, to support that individual consideration, opportunities to develop at work, can increase self-efficacy (Mazur, 2014). In particular to examine data from professionals in various industries, professions and career levels as opposed to focusing in on one specific industry or profession (see appendix K).

The key findings of this study support previous findings and found there to be a positive relationship between career levels and self-efficacy at work and that Psychological empowerment is a predictor of self -efficacy. In addition, Transformational leadership and individual empowerment are predictors of self -efficacy. Unlike previous research, we did not find a relationship between sex age and career levels and we recognise that future research should include a larger sample size together with a balance of male/female

participants which would increase the validity of this study. In addition, future research could drill down into specific industries and professions, to see if there is any asymmetry between particular industries and professions, taking situation demands to account, which could help inform and create a tailor made approach to their organisational development programmes and policies, in helping to create an inclusive culture for all employees.

5. References

- “Code of Professional Ethics”, (2019), PSI, Retrieved 18.03.20 from file:///C:/Users/User/Downloads/Code%20of%20Professional%20Ethics%20Oct%202019_file_638.pdf
- “Elevating Woman” (2018), A European Study, Retrieved 18.03.20 from <file:///C:/Users/User/Downloads/Elevating%20women%20EU%20report%202019.pdf>
- “Family policies and diversity” (2014), Retrieved 18.03.20, from <http://www.familiesandsocieties.eu/wp-content/uploads/2014/12/WP7ThevenonNeyer2014.pdf>
- “Human resources report” (2018), Human Resources Report, Retrieved 18.03.20, from https://www.db.com/ir/en/download/Deutsche_Bank_Human_Resources_Report_2018.pdf
- “Ireland & The Impacts of Brexit”, (2018), Copenhagen Economics, Strategic implications for Ireland arising from changing EU-UK trading relations, Retrieved 17/03/20, from <https://dbei.gov.ie/en/Publications/Publication-files/Ireland-and-the-Impacts-of-Brexit.pdf>
- “National Strategy” (2017), creating a better society for all, retrieved 18.03.20 from http://www.justice.ie/en/JELR/National_Strategy_for_Women_and_Girls_2017_-_2020.pdf/Files/National_Strategy_for_Women_and_Girls_2017_-_2020.pdf
- “PWC’s 2019, Annual Corporate Directors Survey”, (2019), Support for diversity fades, Retrieved 17.03.20, from <https://www.pwc.com/us/en/services/governance-insights-center/library/annual-corporate-directors-survey.html>

- “Strategies to address unconscious bias”. (2013), Office of diversity and outreach, retrieved 18.03.20 from <https://diversity.ucsf.edu/resources/strategies-address-unconscious-bias>
- “Talent matters” (2017), How a well-designed talent experience can drive growth in emerging markets, retrieved 18.03.20 from https://www2.deloitte.com/content/dam/insights/us/articles/3422-Talent-matters/ER_3422_Talent%20matters_vFINAL.pdf
- “The power of parity”, (2015), How advancing women’s equality can add \$12 trillion global growth, Retrieved 18.03.20 from https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Employment%20and%20Growth/How%20advancing%20womens%20equality%20can%20add%2012%20trillion%20to%20global%20growth/MGI%20Power%20of%20parity_Full%20report_September%202015.ashx
- “The Role of Workplace” (2019), The role of workplace culture in recruiting talent, retrieved 17.03.20 from <https://www.robertwalters.ie/content/dam/robert-walters/country/ireland/files/whitepapers/RW%20-%20Cultural%20Fit%20Whitepaper%20-%20Ireland.pdf>
- “Transformational Change”, (2014), Forbes Insights, retrieved 18.03.20 from https://images.forbes.com/forbesinsights/StudyPDFs/Medidata_Transformational_Change_REPORT.pdf
- “Understanding implicit bias” (2015), Implicit bias review, retrieved 18.03.20 from <http://kirwaninstitute.osu.edu/research/understanding-implicit-bias/>
- “Woman in business (2019), building a blueprint for action, retrieved 17.03.20 from <https://www.grantthornton.global/en/insights/women-in-business-2019/women-in-business-report-2019/>

- “Work at age 55” (2019), Working at age 55 and over is on the rise in Ireland, retrieved 18.03.20 from <https://www.esri.ie/news/working-at-age-55-and-over-is-on-the-rise-in-ireland>
- Aggarwal, J., & Krishnan, V. R. (2013). Impact of transformational leadership on follower’s self-efficacy: Moderating role of follower’s impression management. *Management and Labour Studies*, 38(4), 297-313, doi:10.1177/0258042X13513129
- Aksu, A. (2016). Organizational Deviance and Multi-Factor Leadership. *Educational Research and Reviews*, 11(8), 589-597. DOI: 10.5897/ERR2016.2671
- Ashcraft, C., McLain, B., & Eger, E. (2016). *Women in tech: The facts*. National Center for Women & Technology (NCWIT), retrieved 18.03.20 from https://s3.amazonaws.com/academia.edu.documents/45933027/Women_and_IT-The_Facts-Ashcraft__McLain____Eger-2016.pdf?response-content-disposition=inline%3B%20filename%3DWomen_and_IT_The_Facts.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20200318%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20200318T212119Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=2de9b52b36b9009f11a561d8479b35024909dccbc6c5386a006eab013277c34b
- Ashikali, T., & Groeneveld, S. (2015). Diversity management in public organizations and its effect on employees’ affective commitment: The role of transformational leadership and the inclusiveness of the organizational culture. *Review of Public Personnel Administration*, 35(2), 146-168. doi.org/10.1177/0734371X13511088
- Ashikali, T., & Groeneveld, S. (2015). Diversity management in public organizations and its effect on employees’ affective commitment: The role of transformational leadership and

- the inclusiveness of the organizational culture. *Review of Public Personnel Administration*, 35(2), 146-168, doi:10.1177/0734371X13511088
- Ashikali, T., & Groeneveld, S. (2015). Diversity management in public organizations and its effect on employees' affective commitment: The role of transformational leadership and the inclusiveness of the organizational culture. *Review of Public Personnel Administration*, 35(2), 146-168. doi:10.1177/0734371X13511088
- Avolio, B. J., Waldman, D. A., & Yammarino, F. J. (1991). Leading in the 1990s: The four I's of transformational leadership. *Journal of European industrial training*, 15(4). doi: 10.1108/03090599110143366
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American psychologist*, 37(2), 122-147, doi:10.1037/0003-066X.37.2.122
- Bandura, A. (1988). Organisational applications of social cognitive theory. *Australian Journal of management*, 13(2), 275-302. <https://doi.org/10.1177/031289628801300210>
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational behaviour and human decision processes*, 50(2), 248-287, retrieved 18.03.20 from <http://www.uky.edu/~eushe2/BanduraPubs/Bandura1991OBHDP.pdf>
- Bandura, A. (2010). Self-efficacy. *The Corsini encyclopedia of psychology*, 1-3. doi:10.1002/9780470479216.corpsy0836
- Bass, B. M., & Avolio, B. J. (1994). Shatter the glass ceiling: Women may make better managers. *Human resource management*, 33(4), 549-560. doi:10.1002/hrm.3930330405
- Bass, B.M. & Avolio, B.J. (1992). Developing transformational leadership: 1992 and beyond. *Journal of European Industrial Training*, 14 (5), 21-27.

- Baum, S., Kurose, C., & McPherson, M. (2013). An overview of American higher education. *The future of children*, 17-39. retrieved 18.03.20 from https://www.jstor.org/stable/pdf/23409487.pdf?casa_token=Fi8UXbQJiQoAAAAA:DJea4H78AIDAZmIsiXJ9fsV4Ux5-fYV2CmweGKF6KtYihXxXR27AXPYXLZMnloiIwCesVMKCD259HIHm3ujvwc_iEVH6RxJ-VDloHLKvomhJ3hZdPIQ
- Baum, S., Kurose, C., & McPherson, M. (2013). An overview of American higher education. *The future of children*, 17-39. Retrieved 19.12.19, from <https://files.eric.ed.gov/fulltext/EJ1015198.pdf>
- Blau, F. D., & Kahn, L. M. (2017). The gender wage gap: Extent, trends, and explanations. *Journal of Economic Literature*, 55(3), 789-865. <https://www.nber.org/papers/w21913>
- Brooks (2018), 10 Companies with core values that actually reflect their culture, Retrieved 20/10/19 from <https://peakon.com/blog/workplace-culture/best-company-core-values/>
- Caillier, J. G. (2016). Linking transformational leadership to self-efficacy, extra-role behaviors, and turnover intentions in public agencies: The mediating role of goal clarity. *Administration & Society*, 48(7), 883-906.
- Carrillo, P., Gandelman, N., & Robano, V. (2014). Sticky floors and glass ceilings in Latin America. *The Journal of Economic Inequality*, 12(3), 339-361. retrieved 18.03.20 from https://docentes.ort.edu.uy/innovaportal/file/6839/1/stickyfloors_web.pdf
- Carter & Silva, (2010), hbr.org, Woman in management, delusions of progress, Retrieved 19.12.19, from <https://hbr.org/2010/03/women-in-management-delusions-of-progress>

- Chamorro-Premuzic, T. (2017). Does diversity actually increase creativity. Harvard Business Review. P1-4, Retrieved 19.12.19, from <https://static1.squarespace.com/static/5ae89190aa49a17d6e450047/t/5b0d913570a6ada80a6123c2/1527615799289/DOES+DIVERSITY+ACTUALLY+INCREASE+CREATIVITY.pdf>
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational research methods*, 4(1), 62-83. doi:10.1177/109442810141004
- Chin, J. L. (2011). Women and Leadership: Transforming Visions and Current Contexts. In *Forum on Public Policy Online* (Vol. 2011, No. 2). Oxford Round Table. 406 West Florida Avenue, Urbana, IL 61801. 1-12, Retrieved 17.02.20 from <https://files.eric.ed.gov/fulltext/EJ944204.pdf>
- Chung, C. E., & Kowalski, S. (2012). Job stress, mentoring, psychological empowerment, and job satisfaction among nursing faculty. *Journal of Nursing Education*, 51(7), 381-388, doi:10.3928/01484834-20120509-03
- Clance, P. and Imes, S. 1978 "The Imposter Phenomenon in high achieving women: Dynamics and therapeutic intervention." *Psychotherapy: Theory, Research and Practice* 15 (3): 241-247, doi:10.1037/h0086006
- Cohen, J. (1992). A power primer. *Psychological bulletin*, 112(1), 155 – 159
doi:10.1037/0033-2909.112.1.155
- Crossan, M.M., Lane, H.W., & White, R.E. 1999, An Organizational Learning Framework: From Intuition to Institution, *The Academy of Management Review*, 24 (3), pp. 522-537, doi:10.5465/amr.1999.2202135

- Day, D. V., & Haipin, S. M. (2001). Leadership development: A review of industry best practices. Army Research Inst Field Unit Fort Leavenworth KS. 1-53, Retrieved 18.03.20 from <https://apps.dtic.mil/dtic/tr/fulltext/u2/a391440.pdf>
- DiBenedetto, M. K., & Bembenutty, H. (2013). Within the pipeline: Self-regulated learning, self-efficacy, and socialization among college students in science courses. *Learning and Individual Differences*, 23, 218-224, doi:.1016/j.lindif.2012.09.015
- Douglas, J. E. (2019). Successful seed programs: A planning and management guide. CRC Press.
- Eastin, J., & Prakash, A. (2013). Economic development and gender equality: Is there a gender Kuznets curve?. *World Politics*, 65(1), 156-186, doi:10.1017/S0043887112000275
- Eastin, J., & Prakash, A. (2013). Economic development and gender equality: Is there a gender Kuznets curve?. *World Politics*, 65(1), 156-186.
DOI: <https://doi.org/10.1017/S0043887112000275>
- Evans, J. S. B. (2003). In two minds: dual-process accounts of reasoning. *Trends in cognitive sciences*, 7(10), 454-459. doi:10.1016/j.tics.2003.08.012
- Fagan, C., & Rubery, J. (2018). Advancing gender equality through European employment policy: the impact of the UK's EU membership and the risks of Brexit. *Social Policy and Society*, 17(2), 297-317, doi:10.1017/S1474746417000458
- Fagan, C., & Rubery, J. (2018). Advancing gender equality through European employment policy: the impact of the UK's EU membership and the risks of Brexit. *Social Policy and Society*, 17(2), 297-317. DOI: <https://doi.org/10.1017/S1474746417000458>

Family policies and diversity in Europe, (2014), Retrieved 19.12.19, from

<http://www.familiesandsocieties.eu/wp-content/uploads/2014/12/WP7ThevenonNeyer2014.pdf>

Fatima, S. I., Asghar, F., Khatoon, S. S., & Fatima, A. (2017). Relationship between self-efficacy with career development among university students. *The International Journal of Indian Psychology*, 4 (3), 27-33. doi: 10.25215, 403.

Fitzsimmons, T.W., Yates, M. S., & Callan, V. (2018). Hands Up for Gender Equality: A Major Study into Confidence and Career Intentions of Adolescent Girls and Boys. Brisbane, Qld: AIBE Centre for Gender Equality in the Workplace – The University of Queensland, retrieved 18.03.20 from

https://bel.uq.edu.au/files/28153/Hands_up_for_Gender_Equality.pdf

Ghasabeh, M. S., & Provitera, M. J. (2017). Transformational leadership: Building an effective culture to manage organisational knowledge. *The Journal of Values-Based Leadership*, 10(2), 7. doi:10.22543/0733.102.1187

Hands up for gender equality, bel.uq.edu.au, 2018, 1-81, Retrieved 19.12.19 from

https://bel.uq.edu.au/files/28153/Hands_up_for_Gender_Equality.pdf

Hopkins, M. M., O'Neil, D. A., Passarelli, A., & Bilimoria, D. (2008). Women's leadership development strategic practices for women and organizations. *Consulting Psychology Journal: Practice and Research*, 60(4), 348 – 365. Doi: 10.1037/a0014093

Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of applied psychology*, 78(6), 891-902, doi:10.1037/0021-9010.78.6.891

Hoyt, C. L., & Murphy, S. E. (2016). Managing to clear the air: Stereotype threat, women, and leadership. *The Leadership Quarterly*, 27(3), 387-399.

<https://doi.org/10.1016/j.leaqua.2015.11.002>

Ibarra, Carter, Silva (2010), Why men still get more promotions, Retrieved 18.03.20 from <https://hbr.org/2010/09/why-men-still-get-more-promotions-than-women>

Ibarra, H., Ely, R., & Kolb, D. (2013). Women rising: The unseen barriers. *Harvard business review*, 91(9), 60-66. Retrieved 18.03.20 from https://www.hernewstandard.com/wp-content/uploads/2018/11/Women-Rising_-The-Unseen-Barriers.pdf.

Ireland & The Impacts of Brexit, (2018), dbei.gov.ie, Retrieved 18.12.19 from

<https://dbei.gov.ie/en/Publications/Publication-files/Ireland-and-the-Impacts-of-Brexit.pdf>

Isaac, C., Kaatz, A., Lee, B., & Carnes, M. (2012). An educational intervention designed to increase women's leadership self-efficacy. *CBE—Life Sciences Education*, 11(3), 307-322. <https://doi.org/10.1187/cbe.12-02-0022>

Ismail, A., Mohamed, H. A. B., Sulaiman, A. Z., Mohamad, M. H., & Yusuf, M. H. (2011). An empirical study of the relationship between transformational leadership, empowerment and organizational commitment. *Business and Economics Research Journal*, 2(1), 89 -107, doi:10.1.1.469.1675

Jerome, N. (2013). Application of the Maslow's hierarchy of need theory; impacts and implications on organizational culture, human resource and employee's performance. *International Journal of Business and Management Invention*, 2(3), 39-45. Retrieved 18.03.20 from https://s3.amazonaws.com/academia.edu.documents/37416838/Applications_of_Maslows_theory.pdf?response-content-

disposition=inline%3B%20filename%3DApplication_of_the_Maslows_hierarchy_of.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20200319%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20200319T200749Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=a06a9220c3cf7829bda75e459719c1b360ad3219492f63456eb362372e9f3bc6

- Jha, S. (2014). Transformational leadership and psychological empowerment. *South Asian Journal of Global Business Research*, 18-35, doi: 10.1108/SAJGBR-04-2012-0036
- Jones, G. R. (1986). Socialization tactics, self-efficacy, and newcomers' adjustments to organizations. *Academy of Management journal*, 29(2), 262-279, doi:10.5465/256188
- Jung, D. I., & Sosik, J. J. (2002). Transformational leadership in work groups: The role of empowerment, cohesiveness, and collective efficacy on perceived group performance. *Small group research*, 33(3), 313-336 doi:10.1177/10496402033003002
- Kanter, R. M. (1977). Some effects of proportions on group life. In *The gender gap in psychotherapy* (pp. 53-78). Springer, Boston, MA. P44-427, retrieved 18.03.20 from https://www.researchgate.net/profile/Jose_Marques5/publication/11792395_Being_Better_by_Being_Right_Subjective_Group_Dynamics_and_Derogation_of_In-Group_Deviants_When_Generic_Norms_Are_Undermined/links/0c96052a22424927a4000000.pdf#page=54
- Kark, R., & Shamir, B. (2013). The dual effect of transformational leadership: Priming relational and collective selves and further effects on followers. In *Transformational and Charismatic Leadership: The Road Ahead 10th Anniversary Edition* (pp. 77-101). Emerald Group Publishing Limited, doi:10.1108/S1479-357120130000005010

- Krishnan, V. R. (2012). Transformational leadership and personal outcomes: empowerment as mediator. *Leadership & Organization Development Journal*, 550-563, doi:10.1108/01437731211253019
- Kruse, K. (2013). What is leadership. *Forbes Magazine*, 3.
- Larson, 2017, New Research, Diversity & Inclusion = better decision making at work, retrieved 18.03.20 from <https://www.forbes.com/sites/eriklarson/2017/09/21/new-research-diversity-inclusion-better-decision-making-at-work/#686c74cbfa06>
- Latu, I. M., Mast, M. S., Lammers, J., & Bombari, D. (2013). Successful female leaders empower women's behaviour in leadership tasks. *Journal of Experimental Social Psychology*, 49(3), 444-448. doi:10.1016/j.jesp.2013.01.003
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of vocational behaviour*, 45(1), 79-122; doi:10.1006/jvbe.1994.1027
- Levanon, A., England, P., & Allison, P. (2009). Occupational feminization and pay: Assessing causal dynamics using 1950–2000 US census data. *Social Forces*, 88(2), 865-891, doi: 10.1353/sof.0.0264
- Loganathan, N., & Krishnan, V. R. (2010). Leader's femininity and transformational leadership: Mediating role of leader's emotional intelligence. *Great Lakes Herald*, 4(2), 53-72, retrieved 18/03/20 from https://www.researchgate.net/profile/Venkat_Krishnan2/publication/256009643_Leader's_Femininity_and_Transformational_Leadership_Mediating_Role_of_Leader's_Emotional_Intelligence/links/0046352952d8f7ecb6000000.pdf

- Lopez, S. P., Peón, J. M. M., & Ordás, C. J. V. (2005). Organizational learning as a determining factor in business performance. *The learning organization*, 227-245, <https://doi.org/10.1108/09696470510592494>
- Macht Jantzer, A., Stalides, D. J., & Rottinghaus, P. J. (2009). An exploration of social cognitive mechanisms, gender, and vocational identity among eighth graders. *Journal of Career Development*, 36(2), 114-138, doi:10.1177/0894845309345841
- Maslow, A. H. (1943). A theory of human motivation. *Psychological review*, 50(4), 370-396, doi:10.1037/h0054346
- Matějů, P., & Smith, M. L. (2015). Are boys that bad? Gender gaps in measured skills, grades and aspirations in Czech elementary schools. *British Journal of Sociology of Education*, 36(6), 871-895. doi:10.1080/01425692.2013.874278
- Matějů, P., & Smith, M. L. (2015). Are boys that bad? Gender gaps in measured skills, grades and aspirations in Czech elementary schools. *British Journal of Sociology of Education*, 36(6), 871-895. <https://doi.org/10.1080/01425692.2013.874278>
- Mazur, B. (2014). Building diverse and inclusive organizational culture-best practices: A case study of Cisco Co. *Journal of Intercultural Management*, 6(4-1), 169-179. DOI 10.2478/joim-2014-0043
- McDowell, Miller, Agarwal, Okamoto & Page (2016), Organizational Design, The Rise Of Teams, Retrieved 17.02.20 from <https://www2.deloitte.com/us/en/insights/focus/human-capital-trends/2016/organizational-models-network-of-teams.html>
- Miner, J. B. (2015). Expectancy theories: Victor Vroom, and Lyman Porter and Edward Lawler. In *Organizational Behavior* 1 (pp. 110-129). Routledge. Retrieved 08/03/20 from https://s3.amazonaws.com/academia.edu.documents/55990506/Miner_J.B.__-

_Organizational_Behavior_I_Essential_Theories_Of_Motivation_And_Leadership_2005__M.E._Sharpe.PDF?response-content-disposition=inline%3B%20filename%3DMiner_J.B._-_Organizational_Behavior_I_E.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20200308%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20200308T210133Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=7a761e6f61e44b58538d1f77b51e265b3f973369476446f16c143ec3e99f91c6#page=110

Mizuho A, (2015), Female Empowerment, Retrieved 19.12.19 from

<https://www.japantimes.co.jp/news/2015/09/07/reference/female-empowerment-law-first-step-male-oriented-work-culture-must-change-experts/#.Xftj6kf7TIU>

Nanjundeswaraswamy, T. S., & Swamy, D. R. (2014). Leadership styles. *Advances in*

management, 7(2), 57 – 62, Retrieved 18.03.20 from

https://s3.amazonaws.com/academia.edu.documents/51993044/leadership_styles.pdf?response-content-disposition=inline%3B%20filename%3DLeadership_styles.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20200319%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20200319T120909Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=367d486e377318ef6711f35a6976e64b5cac03771833528c18693d67cdedc24

b

- Nissen, J. M., & Shemwell, J. T. (2016). Gender, experience, and self-efficacy in introductory physics. *Physical Review Physics Education Research*, 12(2), 020105. 1-16, doi:10.1103/PhysRevPhysEducRes.12.020105
- Noland, M., Moran, T., & Kotschwar, B. R. (2016). Is gender diversity profitable? Evidence from a global survey. Peterson Institute for International Economics Working Paper, (16-3). doi:10.2139/ssrn.2729348
- Noland, M., Moran, T., & Kotschwar, B. R. (2016). Is gender diversity profitable? Evidence from a global survey. Peterson Institute for International Economics Working Paper, (16-3). <http://dx.doi.org/10.2139/ssrn.2729348>
- O'Flynn & Compton (2019), Age in the workplace, retrieved 18.03.20 from <https://www.iodireland.ie/sites/default/files/documents/age-in-the-workplace-2019%20optimised.pdf>
- Odumeru, J. A., & Ogbonna, I. G. (2013). Transformational vs. transactional leadership theories: Evidence in literature. *International Review of Management and Business Research*, 2(2), 355 – 361, Retrieved 18.03.20 from https://s3.amazonaws.com/academia.edu.documents/37688994/1371451049.pdf?response-content-disposition=inline%3B%20filename%3DTransformational_vs._Transactional_Leadership.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20191220%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20191220T095809Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=ef75dd72f932f13f1a654cfaa39cbbcd73421ac26f7931ed7d31a8abc4a8af3

- O'Reilly, C. A., Caldwell, D. F., Chatman, J. A., Lapiz, M., & Self, W. (2010). How leadership matters: The effects of leaders' alignment on strategy implementation. *The Leadership Quarterly*, 21(1), 104-113, doi:10.1016/j.leafqua.2009.10.008
- Panda, A., & Gupta, R. K. (2001). Understanding organizational culture: A perspective on roles for leaders. *Vikalpa*, 26(4), 3-20. doi.org/10.1177/0256090920010402
- Peter, C., Cieza, A., & Geyh, S. (2014). Rasch analysis of the General Self-Efficacy Scale in spinal cord injury. *Journal of health psychology*, 19(4), 544-555, doi:10.1177/1359105313475897
- Pless, N., & Maak, T. (2004). Building an inclusive diversity culture: Principles, processes and practice. *Journal of business ethics*, 54(2), 129-147. Retrieved 17/03/20 from https://www.researchgate.net/profile/Nicola_Pless/publication/36383581_Building_an_Inclusive_Diversity_Culture_Principles_Processes_and_Practice/links/5481902c0cf22525dcb62278/Building-an-Inclusive-Diversity-Culture-Principles-Processes-and-Practice.pdf
- Popli, S., & Rizvi, I. A. (2015). Exploring the relationship between service orientation, employee engagement and perceived leadership style: a study of managers in the private service sector organizations in India. *Journal of Services Marketing*, 59-70, DOI 10.1108/JSM-06-2013-0151
- Pradhan, R. K., Panda, M., & Jena, L. K. (2017). Transformational leadership and psychological empowerment. *Journal of Enterprise Information Management*, 82-95, doi: 10.1108/JEIM-01-2016-0026
- PWC's Annual Corporate Directors Survey (2019), pwc.com, Retrieved 18.12.19, from <https://www.pwc.com/us/en/services/governance-insights-center/library/annual-corporate-directors-survey.html>

- Raven, B. H. (2008). The bases of power and the power/interaction model of interpersonal influence. *Analyses of social issues and public policy*, 8(1), 1-22. doi:10.1111/j.1530-2415.2008.00159.x
- Robbins, S. P., & Coulter, M. (2007). Principles of management. Translated by Seyyed Mohammad Arabi and Mohammed Ali Hamid Rafiee and Behrouz Asrari Ershad, Fourth Edition, Tehran: Office of Cultural Studies. Retrieved 18.03.20 from https://wagnerhigh.net/ourpages/auto/2011/10/5/64504902/LE400_CH00_FM_pi-xiii_cd.pdf
- Ryan (2016), Is My Career On Track, retrieved 19.03.20 from <https://www.forbes.com/sites/lizryan/2016/03/29/is-my-career-on-track-at-age-thirty/#19525fca77f4>
- Sadker, D., & Zittleman, K. R. (2009). Still failing at fairness: How gender bias cheats girls and boys in school and what we can do about it. Simon and Schuster.
- Sandberg, S. (2015). Lean in-Women, work and the will to lead, 3-11, <https://doi.org/10.1177/0974173920150225>
- Sax, L. J., Gilmartin, S. K., Lee, J. J., & Hagedorn, L. S. (2008). Using web surveys to reach community college students: An analysis of response rates and response bias. *Community College Journal of Research and Practice*, 32(9), 712-729. <https://doi.org/10.1080/10668920802000423>
- Schermuly, C. C., Schermuly, R. A., & Meyer, B. (2011). Effects of vice-principals' psychological empowerment on job satisfaction and burnout. *International Journal of educational management*, 252-264, DOI: 10.1108/09513541111120097

- Scholz, U., Doña, B. G., Sud, S., & Schwarzer, R. (2002). Is general self-efficacy a universal construct? Psychometric findings from 25 countries. *European journal of psychological assessment, 18*(3), 242 – 251, doi: 10.1027//1015-5759.18.3.242
- Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.
- Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: A meta-analytic review. *Journal of applied psychology, 96*(5), 981-1003, doi:10.1037/a0022676
- Shapiro, M., Grossman, D., Carter, S., Martin, K., Deyton, P., & Hammer, D. (2015). Middle school girls and the “Leaky Pipeline” to leadership: An examination of how socialized gendered roles influences the college and career aspirations of girls is shared as well as the role of middle level professionals in disrupting the influence of social gendered messages and stigmas. *Middle School Journal, 46*(5), 3-13, doi:10.1080/00940771.2015.11461919
- Smircich, L. (2017). Concepts of culture and organizational analysis. In *The Anthropology of Organisations* (pp. 255-274). Routledge, 339-358, Retrieved 18.03.20 from <https://pdfs.semanticscholar.org/db47/f5c8c8616485b4fa90433ddbfddeabdb815f.pdf>
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of management Journal, 38*(5), 1442-1465. doi: 0.5465/256865
- Staats, C. (2016). Understanding Implicit Bias: What Educators Should Know. *American Educator, 39*(4), 29 – 33, Retrieved 18.03.20 from <https://files.eric.ed.gov/fulltext/EJ1086492.pdf>

- Stempel, C. R., Rigotti, T., & Mohr, G. (2015). Think transformational leadership—Think female? *Leadership*, 11(3), 259-280. doi:10.1177/1742715015590468
- Sturges, J. (1999). What it means to succeed: Personal conceptions of career success held by male and female managers at different ages. *British journal of management*, 10(3), 239-252, doi:10.1111/1467-8551.00130
- Tiefenthaler, I. (2018). Conquering Imposter Syndrome. *University of Montana Journal of Early Childhood Scholarship and Innovative Practice*, 2(1), 4 – 28, Retrieved 18.03.20 from <https://scholarworks.umt.edu/cgi/viewcontent.cgi?article=1011&context=ecsip>
- Tirri, K., & Nokelainen, P. (2010). The influence of self-perception of abilities and attribution styles on academic choices: Implications for gifted education. *Roeper Review*, 33(1), 26-32, doi.org/10.1080/02783193.2011.530204
- Vroom, V. H., & Jago, A. G. (2007). The role of the situation in leadership. *American psychologist*, 62(1), 17-24, doi: 10.1037/0003-066X.62.1.17
- Williams, C. L., Muller, C., & Kilanski, K. (2012). Gendered organizations in the new economy. *Gender & Society*, 26(4), 549-573, doi:10.1177/0891243212445466
- Xu, L., Wubbena, Z., & Stewart, T. (2016). Measurement invariance of second-order factor model of the Multifactor Leadership Questionnaire (MLQ) across K-12 principal gender. *Journal of educational administration*, 727-748, DOI: 10.1108/JEA-01-2015-0001
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.
- Zeglat, D., Aljaber, M., & Alrawabdeh, W. (2014). Understating the impact of employee empowerment on customer-oriented behaviour. *Journal of Business Studies*

Quarterly, 6(1), 55 – 67, Retrieved 18.03.20, from

<https://pdfs.semanticscholar.org/72d6/c2cc5f32e8ea8917eb4da9defd34baf341e3.pdf>

Zillman, C (2019), The Fortune 500 Has More Female CEO's Than Ever Before, Retrieved

17/03/20, from <https://fortune.com/2019/05/16/fortune-500-female-ceos/>

6. Appendices

Appendix A: Survey Link

<https://forms.office.com/Pages/ResponsePage.aspx?id=6qYKXSBmY0ielZ7LFAIivDfGAUeNuRpKs7tLz8nCYtVUM0s3UEVQRVZXRFg3MzVUTTJNTjgxN0VZSS4u>

Appendix B: Information Sheet / Consent

My name is Sarah Byrne and I am conducting research through the Department of Psychology at Dublin Business School (DBS), that explores gender diversity in the workplace.

At this point I have enough women in the study however I do need men to participate.

This research is being conducted as part of my studies and will be submitted for examination.

You are invited to take part in this study. Participation involves completing the attached anonymous survey via this link. While some questions may cause minor negative feelings, all questions used in this survey have been widely used in research. If any of these questions do raise difficult feelings for you, contact information of support services are included on the final page.

Please note that by submitting this survey you are consenting to taking part.

Participation is completely voluntary and so you are not obliged to take part. Participation is anonymous and confidential and therefore cannot be attributed to any one person, for this reason, it will not be possible to withdraw from participation once the survey has been collected.

You must over 18 or over to complete this survey.

Should you require any further information about the research, please contact:

Sarah Byrne at [REDACTED]@mydbs.ie or my supervisor

Ronda Barron at [REDACTED]@dbs.ie

Thank you taking the time to complete this study.

Appendix C: Debrief Sheet

The study is concerned with five overall questions. Are there differences between males and females, age and self-efficacy. Is there a relationship between males and females and career levels. Is there a correlation between transformational leadership and psychological empowerment. Is there a relationship between an organisational culture of development and employee psychological empowerment on males and females. Is there a relationship between an organisational culture of development, leadership styles and males and females. The rationale behind this study is that there are less woman in senior leadership positions than men, to highlight this and the benefits of supporting woman to develop into leadership positions at work.

Contact details of support services:

Aware 01 661 721

Samaritans Ireland 01 671 0071

Appendix D: Demographic Questions

The screenshot displays a survey interface with a light blue header. On the left, a tab labeled 'Questions' is active, and on the right, a tab labeled 'Responses' shows a progress indicator of 100%. Below the header, a message reads 'Thank you taking the time to complete this study.' A section header 'Section 1' is followed by six questions:

1. Please indicate if you are male or female below *
 - Male
 - Female
2. Please indicate your age category below *
 - 18 - 25
 - 26 - 35
 - 36 - 50
 - 50+
3. Please indicate which best describes your career level below *
 - Individual contributor/Non manager
 - Manager (non-people)
 - Mid-Level Manager (Manager of people)
 - Senior Level/C-Suite Manager (Manager of people)
4. Please indicate if you direct manager is male or female below *
 - My manager is male
 - My manager is female
5. What industry do you work?
6. What is your profession?

Appendix E: General Self-Efficacy Scale (GSE)

General Self-Efficacy Scale (GSE)

About: This scale is a self-report measure of self-efficacy.

Items: 10

Reliability:

Internal reliability for GSE = Cronbach's alphas between .76 and .90

Validity:

The General Self-Efficacy Scale is correlated to emotion, optimism, work satisfaction. Negative coefficients were found for depression, stress, health complaints, burnout, and anxiety.

Scoring:

	Not at all true	Hardly true	Moderately true	Exactly true
All questions	1	2	3	4

Appendix F: General Self-Efficacy Scoring

The total score is calculated by finding the sum of the all items. For the GSE, the total score ranges between 10 and 40, with a higher score indicating more self-efficacy.

Appendix G: Psychological Empowerment Instrument

Psychological Empowerment Instrument

Listed below are a number of self-orientations that people may have with regard to their work role. Using the following scale, please indicate the extent to which you agree or disagree that each one describes your self-orientation.

A. Very Strongly Disagree		E. Agree
B. Strongly Disagree	D. Neutral	F. Strongly Agree
C. Disagree		G. Very Strongly Agree

- ___ I am confident about my ability to do my job.
- ___ The work that I do is important to me.
- ___ I have significant autonomy in determining how I do my job.
- ___ My impact on what happens in my department is large. impact
- ___ My job activities are personally meaningful to me.
- ___ I have a great deal of control over what happens in my department. impact
- ___ I can decide on my own how to go about doing my own work.
- ___ I have considerable opportunity for independence and freedom in how I do my job.
- ___ I have mastered the skills necessary for my job.
- ___ The work I do is meaningful to me.
- ___ I have significant influence over what happens in my department.
- ___ I am self-assured about my capabilities to perform my work activities.

Appendix H: Psychological Empowerment Instrument Scoring

The scale is composed of 4 subdimensions: meaning, competence, self-determination, and impact. You may use the subdimensions individually (taking the mean of the 3 items measuring one dimension) or take the mean of the 4 subdimension means to create an overall empowerment score. The validation of the instrument is described in Spreitzer (1995; 1996). The instrument has been used successfully in more than 50 different studies in contexts ranging from nurses to low wage service workers to manufacturing workers.

Appendix I: Multifactor Leadership Questionnaire

Multifactor Leadership Questionnaire (MLQ) Form 6S

INSTRUCTIONS: This questionnaire provides a description of your leadership style. Twenty-one descriptive statements are listed below. Judge how frequently each

statement fits you. The word others may mean your followers, clients, or group members.

KEY

0 - Not at all 1 - Once in a while 2 = Sometimes 3 = Fairly often 4 = Frequently, if not always

1. I make others feel good to be around me.....0 1 2
3 4
2. I express with a few simple words what we could and should do.....0 1 2
3 4
3. I enable others to think about old problems in new ways.....0 1 2
3 4
4. I help others develop themselves.....0 1 2
3 4
5. I tell others what to do if they want to be rewarded for their work.0 1 2
3 4
6. I am satisfied when others meet agreed-upon standards.....0 1 2
3 4
7. I am content to let others continue working in the same ways always.....0 1 2
3 4
8. Others have complete faith in me.....0 1 2
3 4
9. I provide appealing images about what we can do.....0 1 2
3 4
10. I provide others with new ways of looking at puzzling
things.....0 1 2 3 4
11. I let others know how I think they are doing.
.....0 1 2 3 4
12. I provide recognition/rewards when others reach their
goals.....0 1 2 3 4
13. As long as things are working, I do not try to change anything.
.....0 1 2 3 4
14. Whatever others want to do is OK with me
.....0 1 2 3 4
15. Others are proud to be associated with me.
.....0 1 2 3 4
16. I help others find meaning in their work.
.....0 1 2 3 4
17. I get others to rethink ideas that they had never questioned
before.....0 1 2 3 4.
18. I give personal attention to others who seem
rejected.....0 1 2 3 4
19. I call attention to what others can get for what they
accomplish.....0 1 2 3 4
20. I tell others the standards they have to know to carry out their
work.....0 1 2 3 4

21. I ask no more of others than what is absolutely
essential.....0 1 2 3 4

Appendix J: Multifactor Leadership Questionnaire Scoring

The MLQ-6S measures your leadership on seven factors related to transformational leadership. Your score for each factor is determined by summing three specified items on the questionnaire. For example, to determine your score for factor 1, Idealized influence, sum your responses for items 1, 8, and 15. Complete this procedure for all seven factors.

Idealized influence (items 1, 8, and 15)	_____	Factor 1
Inspirational motivation (items 2, 9, and 16)	_____	Factor 2
Intellectual stimulation (items 3, 10, and 17)	_____	Factor 3
Individual consideration (items 4, 11, and 18)	_____	Factor 4
Contingent reward (items 5, 12, and 19)	_____	Factor 5
Management-by-exception (items 6, 13, and 20)	_____	Factor 6
Laissez-faire leadership (items 7, 14, and 21)	_____	Factor 7

Score range: HIGH = 9-12, MODERATE = 5-8, LOW = 0-4

Appendix K : Industries of some participants

5. What Industry do you work?

100 Responses

ID ↑	Name	Responses
1	anonymous	Biopharmaceuticals
2	anonymous	HR
3	anonymous	Architecture
4	anonymous	HR consultancy
5	anonymous	Management Consultancy
6	anonymous	Social care
7	anonymous	Recruitment
8	anonymous	Sports and leisure
9	anonymous	IT
10	anonymous	Consulting
11	anonymous	Consulting
12	anonymous	Education
13	anonymous	Medical devices



5. What Industry do you work?

100 Responses

14	anonymous	Civil Service
15	anonymous	Tech entertainment
16	anonymous	Pharmaceutical
17	anonymous	Consultancy
18	anonymous	Financial services
19	anonymous	Consulting
20	anonymous	Pharmaceutical
21	anonymous	Management Consultancy
22	anonymous	Community
23	anonymous	Information Technology
24	anonymous	Recruitment
25	anonymous	Fintech
26	anonymous	IT
27	anonymous	Business Coaching & Training
28	anonymous	Construction





5. What Industry do you work?

100 Responses

29	anonymous	Regulation
30	anonymous	Information technology
31	anonymous	Engineering
32	anonymous	Learning & Development
33	anonymous	Education
34	anonymous	Not for profit change management
35	anonymous	Kitchen design
36	anonymous	Club
37	anonymous	Engineering
38	anonymous	HR
39	anonymous	Transport
40	anonymous	Shared Services
41	anonymous	Public Sector
42	anonymous	Leadership consultancy



5. What Industry do you work?

100 Responses

43	anonymous	Health Care
44	anonymous	Government
45	anonymous	Consulting
46	anonymous	Manufacturing Engineering
47	anonymous	Higher Education
48	anonymous	Financial Services
49	anonymous	Third level education
50	anonymous	Aviation
51	anonymous	Adult education
52	anonymous	Education
53	anonymous	Cruise industry
54	anonymous	Financial Services
55	anonymous	Hospitality
56	anonymous	Management Consultancy