

# Lean In in Poland: Psychological Determinants of Women's Labor Market Success

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## INTRODUCTION:

In 2013, Sheryl Sandberg, the Chief Operating Officer of Facebook, published her book *Lean In: Women, Work, and the Will to Lead*. The book focuses mostly on women in high status occupations and the gender gap in leadership positions. Sandberg's goal was to empower women to be assertive and ambitious in the workplace regardless of institutional and psychological barriers. Sandberg's book is set in America, with a comparatively high level of gender egalitarianism than Poland (Inglehart and Norris 2003: 178, Appendix C, Tesch-Romer 2008). Post-Communist Poland is an ideal setting to test Sandberg's message because women's rights also underwent a transformation in terms of women's success in life and in the workplace (Pollert 2003, Tomescu-Dubrow 2011). During Communism women were formally considered equal, especially in the workplace, but the housework and child-raising were also considered their responsibility. Poland also has a relatively similar level of female economic activity in their labor market according to the HDR 2002 scale developed by C. Tesch-Romer et al, which makes Poland a good candidate as a comparison to the United States.

The purpose of this research project is to explore the validity of the *Lean In* theory using longitudinal panel data collected over five year increments. Sandberg suggests two different psychological determinants of women's labor market success, beliefs about the chances of success, in terms of ambition and hard work and confidence. Here I define labor market success in terms of high level occupational attainment, from here on out that is how I will refer to labor market success.

## THEORY AND HYPOTHESIS:

In 2013, Sheryl Sandberg published *Lean In*, and her goal was to inspire women to be more assertive in the workplace—to “lean in” instead of “sitting back”—in order to overcome labor market discrimination. The book was also designed for women and men to understand the various barriers that women face in the work

setting; for example, it features anecdotes by successful women who share their experience as a female in a sector that has been long run by men. Sandberg brings light to an important aspect of what she suggests makes a modern woman successful: having high ambitions and following them.

Cross-national research on women's occupational attainment offers various perspectives of women's labor market success. Country context matters a lot for women's employment opportunities, where women in countries characterized by strong welfare states help women into the labor market, but not necessarily to attain high status occupations (Mandel and Semyonov 2006; see also WinterEbmer and Zweimuller 1997). Cross-national research shows that women face gender inequality and various barriers to occupational attainment. Across nations, employed women are expected to do the majority of the work at home (Roeters 2013) and are disproportionately criticized by their employers for tipping the work-life balance (Lyness and Judiesch 2014).

Panel data on occupational attainment shows that women face unique barriers, including the “glass ceiling,” a growing gap between women and more privileged groups in attainment of high status occupations over the life-course (Maume 2004). Warren et al (2002) find that, indeed, over time traditional factors such as gender gaps in returns to education gaps are persistent over the life course (i.e. comparing men and women with the same level of education, men have higher levels occupational attainment, controlling for other factors; see also Miech et al 2003 and Warren et al 1998).

There are few studies featuring panel data that examine the psychological factors of occupational attainment. Gelissen and de Graaf (2006) found that personality traits are correlated to earnings. The authors employed a personality scale to show how women and men share a positive correlation between earnings and emotional stability, but that men also show a positive relationship with extraversion and earnings. Out of five

main personality traits (extraversion, agreeableness, conscientiousness, stability, and openness to experience) those were the only ones to show a correlation. Tomescu-Dubrow (2011) found that one's future expectations of attainment effect their location in the social structure in post-communist Poland. Using POLPAN, Tomescu-Dubrow demonstrated that pessimistic, ambivalent, and optimistic attitude about future achievement influences class position.

Beliefs in success and self-esteem are attitudinal and personality factors that Sandberg suggests should matter for women's occupational attainment. Using cross-sectional data, Hanson and Dang (2005) examined determinants of beliefs in success between the Eastern and Western Europe; they found that in 1992, there was no a significant gender gap in attitudes in the East relative to the West, but when the survey was administered again in 1999, there was an East-West gap. They did not, however, examine how these beliefs impact occupational attainment. In the United States, Wang et al (1999) found that self-esteem is positively associated with occupational attainment, a finding that was matched using European cross-national data (Jackson 2006).

I test the *Lean In* hypothesis that women who have a strong belief that the chances of success are dependent on ambition and hard work will increase their likelihood of attaining a high status occupation, controlling for other factors such as marital status, presence of children and educational attainment (Sandberg 2013). I also examine the role of self-esteem: women who have high self-esteem increase their likelihood of attaining a high status occupation, controlling for other factors such as marital status, presence of children and educational attainment.

#### DATA AND VARIABLES:

To test the *Lean In* theory that particular psychological determinants matter for occupational attainment requires panel data. To conduct my research, I employ logistic regression to analyze POLPAN, a nationally representative panel dataset of Poles who were interviewed every five years since 1988; I focus on the 2003, 2008, and 2013 waves. The most current wave was collected in 2013. The survey collects data in several different spheres of a participant's life, including those pertinent to this study: occupational attainment, beliefs and attitudes toward success, and mental health, along

with demographics such as gender, age, marital status and number of children.

My main dependent variable is occupational attainment, as measured by social class position. Using occupational variables available in POLPAN, I use the Erickson-Goldthorpe-Portocarero (EGP) class schema. The detailed version of the EGP - devised by Erikson and Goldthorpe (1992) - will be collapsed to six basic categories: (i) higher professionals and managers (referred by Goldthorpe to the "service class"), (ii) other non-manual employees (clerical, sales and service), (iii) owners, (iv) skilled manual workers (v) unskilled manual workers, and (vi) agricultural categories (farmers and agricultural laborers). Theoretical justification of the categories themselves derives from the conceptions developed for the market society which take into account ownership, work character, qualifications, and a position in the organization hierarchy. I consider high social class positions as "higher professionals and managers" and "owners" and define them in my data as one variable: "privileged class."

My main independent variables, aside from gender, are "beliefs about chances of success" and self-esteem. I measure *Lean In* psychological determinants with two beliefs about the chances of success. Given Likert scale categories of strongly agree to strongly disagree, the participants responded to the survey item, "Chances of success is dependent on..." The first belief is "...ambition" and the second is "...hard work." To test the *Lean In* theory, I compare outcomes of women who are ambitious versus women who are not, and men who are ambitious and men who are not, based on those variables of ambition and hard work.

The *Lean In* theory also suggests a strong role for positive self-esteem. To measure self-esteem, I use the following questions from the 2003 wave, with Likert scale response categories: "I feel good about myself" and "I have a tendency to think I do not succeed" (used the negative responses for this particular question) and combine them into one category called "self-esteem".

To know whether the *Lean In* variables are relevant to the empirical model above and beyond traditional variables that impact occupational attainment, I also include level of educational attainment, age, marital status, and presence of children in the household for the 2003, 2008, and 2013 waves.

Name of variable (year of POLPAN wave in parentheses)	Original variable as listed in the data set	Coding of the variable as used in this paper	Distribution	
			Means or proportions	Standard Deviation
<b>Dependent Variable(s)</b>				
Privileged Class (2013)	class2013	privc13	Privileged[1]: 11.89% Not Privileged[0]: 88.11%	
<b>Independent Variables</b>				
Belief in Ambition & Hard Work (2008)	Ambition: VG01A Hard Work: VG01C	AMHW08	Do Believe[1]: 42.43% Don't Believe[0]: 57.57%	
Self Confidence (2003)	Do Not Succeed: WY01C Feel Good about Myself: WY01G	CONFIDENCE03	Confident [1]: 26.96% Not Confident [0]: 73.04%	
<b>Control and other Additional Variables</b>				
Privileged Class (2008)	CLASS_LAST_2008	privc08	Privileged[1]: 14.59% Not Privileged[0]: 85.41%	
Marital Status (2008)	VR01	Single08	Single[1]: 24.01% Not Single[0]: 75.99%	
Children in Household (2008)	VR19NUM	numchildren08	.18 Number of Children	.61 Number of Children
Years of Education (2013)	EDU_YEARS_2013	EDU_YEARS2013	11.93 Years	3.06 Years
Age (2013)	AGE2013	AGE2013	45.54 Years Old	19.58 Years
Privileged Class (2003)	ClsCat03	privc03	Privileged [1]: 20.33% Not Privileged [0]: 79.67%	
Marital Status (2003)	WR01	Single08	Single[1]: 17.83% Not Single[0]: 82.17%	
Presence of Children in Household under 18yrs (2003)	childyes03	childyes03	Child Present[1]: 62.38% No Child[0]: 37.62%	
Years of Education (2003)	Eduyrs03	Eduyrs03	11.51 Years	3.06 Years
Age (2008)	VAGE	VAGE	48.40 Years Old	18.09 Years

Table 1. Descriptive statistics for all variables used in this paper.

**METHOD OF ANALYSIS:**

To test my hypothesis, women who have a strong belief that the chances of success are dependent on ambition and hard work will increase their likelihood of attaining a high status occupation, I use logistic regression. In that regression, I use my “privileged class” (high status occupation) as my dependent variable, and I treat all other variables as independent. The main independent variable in the 2008-2013 case is “ambition and hard work 2008”, controlling for other factors such as marital status, age, presence of children and educational attainment. My controls are set as other independent variables. I also examine the role of self-esteem with the theory that women who have high self-esteem increase their likelihood of attaining a high status occupation. I perform a logistic regression for 2003-2008 with my dependent variable being “privileged class 2008” and my main independent being “self-esteem 2003”, controlling for other factors such as marital status, age, presence of children and educational attainment as my other independent variables.

**RESULTS**

Table 2 illustrates the relationship between women who do believe in ambition and hard work and those who do not. My hypothesis that women who are ambitious will end up in the privileged class is supported by the data. Using a probability level of  $p < 0.1$ , it is clear that women who believe in ambition and hard work in 2008 are 1.934 times more likely to be in the privileged class in 2013 while controlling for class 2008, age, marital status, education, and number of children.

Table 3 displays the relationship between men who believe in ambition and hard work and men who do not. This is an interesting comparison in relation to Table 2 because in this case, ambition and hard work are not statistically significant. Therefore, for men it is not important whether they believe in ambition and hard work when controlling for class 2008, age, marital status, education, and number of children. Because education and privileged class can be highly correlated, I ran the regression without education as a control and it showed little change in the results; ambition and hard work were still a statistically insignificant factor.

Independent variables	Privileged Classes, 2013 DV = log (p / p-1)		
	B	Robust SE	Exp(B)
Privileged Class 2008 [1=Privileged 0=Not Privileged]	0.368	0.459	1.445
Ambition and Hard Work 2008 [1=Believe 0=Does not Believe]	0.660+	0.394	1.934
Age 2013	-0.050**	0.017	0.952
Single 2008 [1= Single 0=Married/Other]	-0.458	0.618	1.016
Years of Education 2008	0.970**	0.174	2.637
Number of Children 2008	0.0163	0.236	1.177
Constant	-3.781**	3.044	--
<i>Fit statistics</i>	Wald chi2 = 47.63 (df=6) Pseudo R <sup>2</sup> = 0.512 Log likelihood = -79.757		

N = 468; \*\* p < 0.01; \* p < 0.05 ; + p < 0.1

Table 2: Logistic Regression of Being in Privileged Class (2013) on Ambition and Hard Work (2008) Among Women



Independent variables	Privileged Classes, 2013 DV = log (p /p-1)		
	B	Robust SE	Exp(B)
Privileged Class 2008 [1=Privileged 0=Not Privileged]	1.267**	0.487	3.550
Ambition and Hard Work 2008 [1=Believe 0=Does not Believe]	0.084	0.359	1.088
Age 2013	-0.068**	0.014	.934
Single 2008 [1= Single 0=Married/Other]	-0.598	0.538	0.550
Years of Education 2008	0.653 **	0.094	1.921
Number of Children 2008	0.270	0.094	1.410
Constant	-7.884**	1.502	--
<i>Fit statistics</i>	<i>Wald chi2 = 87.82(df=6)</i> <i>Pseudo R<sup>2</sup> = 0.4515</i> <i>Log likelihood = -101.413</i>		

N = 468; \*\* p< 0.01; \*p < 0.05 ; + p< 0.1

Table 3: Logistic Regression of Being in Privileged Classes (2013) on Ambition and Hard Work (2008) Among Men

Finally, I ran a regression on the population as a whole and I found that ambition and hard work is not a statistically significant indicator as to whether a person will be in the privileged class in 2013 or not. However, the data does support the general theory that men are 2.441 more times as likely than women to be in the privileged class in 2013 with a significance level of  $p < 0.01$  when controlling for class 2008, ambition and hard work, age, marital status, education, and number of children.

When testing the second hypothesis, women who have high self-esteem increase their likelihood of attaining a high status occupation, I found that confidence was never a significant factor in determining whether women would be in high status occupations. All three regressions (Table 2, 3, 4) were repeated with confidence as the independent variable and confidence did not prove to be significant.

#### CONCLUSION AND DISCUSSION:

The purpose of this paper was to test Sheryl Sandberg's *Lean In* theory. I explored two hypotheses that Sandberg mentions in her book: woman who have

a strong belief that the chances of success are dependent on ambition and hard work will increase their likelihood of attaining a high status occupation, and women who have high self-esteem will increase their likelihood of attaining a high status occupation. The results of this research supported the first hypothesis. After comparing women who did not believe ambition was necessary versus women who did believe it was important, women who did believe it was important were more likely to be in a high status occupation five years later. This supports Sandberg's claim that women who are more willing to "lean in" and fight the institutional barriers head on are more likely to obtain these high status positions. When I repeated the same logistic regression for men instead of women, I found that ambition was not an important indicator as to whether men would be in higher status position versus another man. This can be acclaimed to Sandberg's claim that ambition is an optional trait for men. Women are at an automatic disadvantage when it comes to breaking through the glass ceiling; while men have an easier time obtaining those strived for high-level leadership jobs.

Independent variables	Privileged Classes, 2013 DV = log (p / p-1)		
	B	Robust SE	Exp(B)
Privileged Class 2008 [1=Privileged 0=Not Privileged]	0.859*	0.340	2.361
Ambition and Hard Work 2008 [1=Believe 0=Does not Believe]	0.369	0.264	1.446
Age 2013	-0.062**	0.011	0.940
Single 2008 [1= Single 0=Married/Other]	-0.565	0.419	0.568
Years of Education 2008	0.728**	0.079	2.071
Number of Children 2008	0.213	0.138	1.238
Sex [0=Female 1=Male]	0.892**	0.271	2.441
Constant	-10.115**	1.388	--
<i>Fit statistics</i>	<i>Wald chi2 = 139.64(df=7)</i> <i>Pseudo R<sup>2</sup> = 0.4717</i> <i>Log likelihood = -184.254</i>		

N = 936; \*\* p < 0.01; \* p < 0.05 ; + p < 0.1

Table 4: Logistic Regression of Being in Privileged Classes (2013) on Ambition and Hard Work (2008) when also controlling for sex and other selected variables.

An interesting result emerged when I put sex as a control variable, made ambition as my main independent variable, and kept privileged class as my main dependent: I found ambition had no statistical significance. But, sex was statistically significant, supporting that men are more likely to be in the privileged class in 2013 regardless of belief in ambition. This statistic is similar in the United States, where most Fortune 500 owners and managers are men (Catalyst 2012). For the Polish population as whole, whether people believe in ambition or not does not determine if they will be in a high status position in five years; from this data we can see a clear indicator is higher education, being male, and being of younger age. The second hypothesis was that if women had higher self-esteem, they would also obtain those high status occupations in five years. I tested 2003-2008 using two variables, "I feel good about myself" and "I have a tendency to think I do not succeed" and I made them into one variable, which I describe as self-esteem or high confidence. I tested similar regressions as the previous: women vs. women, men vs. men, and population as a whole. Confidence did not come back as statistically significant in any of those regressions. Therefore, that part of Sandberg's book is not

supported by the POLPAN data.

In all of the logistic regressions performed it was also shown the marital status and number of children was not an important indicator of whether a woman would be in a higher position. Even though women in Poland and the United States are still mostly responsible for household work, it does not hinder the Polish women's chances of getting into the privileged class when controlling for education, age, and level of ambition (or in the second hypothesis case, confidence).

A limitation that POLPAN has for the hypotheses that Sandberg suggests is that POLPAN is not set in the United States. There are several previously mentioned differences in the labor market, like Poland only recently entering capitalism and a democratic system. In Poland, the idea of social mobility is relatively a new concept to both men and women; whereas in the United States it has theoretically been possible for decades (Lobodzinska 2000). Therefore, there are several differences in attitudes and definitions. Also, for the "self-esteem" portion I believe if the questions were tailored more to confidence in position in labor market-- i.e. "I believe I can reach a higher position" or "I believe I have adequate skills for a higher level position"-- then the re-

sults may have been more in favor of the *Lean In* theory. Overall, I believe there is room for exploration on these topics, especially if it is set in the United States where the *Lean In* theory was developed. I believe the POLPAN data and the Polish people have set the groundwork for further research on what it takes to achieve a high career position and the many obstacles that women have to navigate in order to get to the top.

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