### DIFERENCIAS DE GÉNERO PSICOLÓGICAS Y/O COMPORTAMENTALES QUE AYUDAN A EXPLICAR LA BRECHA SALARIAL.

### ABSTRACT:

According to the INE, the wage gap in Spain in 2018 stood at 23.38% in favour of men. This research has been carried out with the aim of identifying psychological and/or behavioural variables, different in men and women, which could potentially help to explain the existence of the wage gap, beyond discriminatory reasons. The selected records were obtained from the following databases: Pubmed, PsycInfo and Web Of Science; through the search terms ("gender differences" or "sex differences") AND ("earnings gap" or "income gap" or "pay gap" or "wage gap"). The results obtained show that the wage gap is present in all employment sectors and that the most important variable determining wages is "hours worked". One of the variables to be taken into account is "interest": women show more interest in dealing with people and men more interest in dealing with "things"; this helps to explain why there is an over-representation of one gender over the other in some areas of work. In addition, there are gender differences in other variables such as personality, preferences, motherhood, attitude towards risk, etc. that have a direct relationship with pay and help to explain why men, in general terms, earn more money than women. Therefore, the difference in average pay between women and men is not always caused by injustices; it can be explained through psychological and behavioural factors that differ according to gender.

**Keywords:** gender differences; pay gap; psychological variables; behavioural variables.

#### **RESUMEN:**

De acuerdo con el INE, la brecha salarial en España en 2018 se situaba en un 23.38% en favor de los varones. La presente investigación se ha llevado a cabo con el objetivo de conocer variables psicológicas y/o comportamentales, diferentes en hombres y mujeres, que potencialmente puedan ayudar a explicar la existencia de la brecha salarial, más allá de razones discriminatorias.

Los registros seleccionados se obtuvieron de las siguientes bases de datos: Pubmed, PsycInfo y Web Of Science, a través de los términos de búsqueda ("gender differences" or "sex differences") AND ("earnings gap" or "income gap" or "pay gap" or "wage gap").

Los resultados obtenidos muestran que la brecha salarial está presente en todos los sectores laborales y que la variable más determinante sobre el salario es "horas trabajadas". Una de las variables a tener en cuenta es la de "interés": las mujeres muestran mayor interés por el trato con personas y los hombres por el trato con "cosas"; lo cual ayuda a explicar porqué hay sobre-representación de un género sobre otro en algunos ámbitos laborales. Además, existen diferencias de género en otras variables como personalidad, preferencias, maternidad, actitud hacia el riesgo... que tienen una relación directa con el salario y que ayudan a explicar porqué los hombres, en términos generales, ingresan una cantidad superior de dinero que las mujeres. Por tanto, la diferencia del salario medio entre mujeres y varones no siempre está causada por injusticias; puede ser explicada a través de factores psicológicos y comportamentales que difieren según el género.

**Palabras clave:** Diferencias de género; brecha salarial; variables psicológicas; variables comportamentales.

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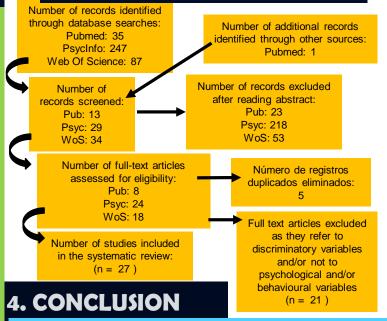
# **1. INTRODUCTION**

In the field of psychology, numerous measurable psychological differences between men and women have been discovered that may help to explain certain trends in the population. For example, gender differences in the average level of physical aggressiveness, being higher in men (Björkqvist, 1994), would help to explain the over-representation of men over women in penitentiary institutions, with 92.3%-7.7% in favour of men according to the Spanish Ministry of Interior in July 2019 (Ministerio del Interior, 2019).

Other variables that include a more voluntary and deliberate component could underlie decision-making processes, through which other types of different inclinations between men and women could be observed. For example, if more men than women are willing to engage in hazardous work that poses a health risk, the proportion of male fatalities in the working day will evidently be higher. Thus, according to the Ministry of Labour (Ministerio de Trabajo, 2018), of the 652 workers who died in Spain in 2018, 602 were men and 50 were women (92.33%-7.67%), with the transport and storage and manufacturing industry sectors producing the most deaths.

According to the INE, the average salary of men and women in Spain in 2018 was €28,987 and €22,210 respectively (INE, 2018), setting the wage gap (unadjusted) at 23.38%. As the gap is adjusted by controlling for variables such as hours worked, level of education, willingness to relocate, sector of work, etc., the difference decreases. Sometimes these differences in pay may be unfair and may be due to discrimination against women. On other occasions, it has been proposed that they may be due to righteous reasons such as a willingness to do more risky or harmful work, as discussed in the previous paragraph. The exhaustive research on the subject has been carried out with the aim of finding out possible variables beyond discrimination that are different in men and women, and that may help to explain the manifestation of the pay gap. Are there psychological and/or behavioural variables that help to understand why women, in general terms, earn a lower amount of money?

# 2. METHOD (FLOW CHART)



Having analysed the articles, variables related to wages were found to differ between men and women. The variable with the most impact on labour income is "hours worked", which suffers a decrease in women after motherhood. Another important variable that may explain the over-representation of one gender in certain job sectors is "vocational interest": women show more interest in fields that involve dealing with people and men in fields that involve interaction with "things", which often provide higher salaries. On the "competitiveness" and "negotiation" variables, women also are disadvantaged: they have less taste for competitiveness, which is positively related to pay, and they tend to be less likely than men to initiate negotiations, which limits the chances of increasing pay. One of the factors that may contribute to women increasing their pay is the personality trait "responsibility": they score higher and it is positively related to pay. Regarding the trait of agreeableness, there are no clear results as to whether it influences earnings. Finally, there is also no evidence that men and women differ in their Locus of Control (internal or external). In conclusion, there are factors beyond discrimination that may contribute to the existence of the pay gap.

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# 3. RESULTS

It is observed that the wage gap is present in all sectors (Bishu & Alkadri, 2017) and that the variable that has the greatest impact on wages is hours worked (Mandel & Semyonov, 2014).

Research on the relationship between personality and pay, specifically on the traits of "agreeableness", "responsibility" and "extraversion", indicates that women generally have higher scores on these three traits, but that only responsibility is positively related to pay (Grönlund & Magnusson, 2018). However, Risse et al., (2018) show that the trait kindness is also higher in women and it is inversely related to salary.

Regarding Vocational Interest, Su et al., (2009) observe a higher interest of males in working with "things" and a higher interest of females in working with people, with an effect size d=0.93 in the "Things-People" dimension.

Regarding variables with a more deliberate component, it is observed that men prioritise more a substantial salary when considering job satisfaction (Weaver et al., 2015), that women prioritise having more control over the schedule and the sense of accomplishment of the job (Hollenbeck et al., (1987). Regarding risk, Kulich et al., (2011) show gender differences in risk taking. Roszkowski & Grable (2010) find that women have a lower risk tolerance and, according to Le et al., (2011), they have a lower taste for risk, which is positively related to pay.

At the bargaining level, women accept lower offers in the ultimatum game (Arceo et al., 2018), request lower salaries when applying for new jobs (Säve-Söderbergh, 2019) and are more likely to opt out of salary negotiations (Exley et al., 2016). In contrast, men initiate negotiations 1.5 times more often (Kugler et al., 2018).

Having children affects men and women differently. Gibb et al., (2014) and Erosa et al., (2016) report that women are forced to reduce their working hours after childbearing and that childbearing, in some cases, increases working hours for men. Skora et al., (2020) and Oulet et al., (2021) show that women are forced to reduce their distance to work after motherhood. Magnusson & Nermo (2017) and Mikol & Franc (2019) find that parenthood is a factor positively related to pay, known as the bread-winner effect.

Competitiveness is also a factor that differs between men and women. Kamas & Preston (2018) find that men are more likely to compete in addition tasks at work. Kleinjans (2009) indicates that women show less liking for competitiveness, generally agreeing more with the item "outside the world of sports, people should compete as little as possible". Apicella & Dreber (2015), after studying a nomadic population in Tanzania, observe that men are more competitive, especially in masculine and neutral tasks.

Finally, regarding Locus of Control, there are no conclusive results. Semykina & Linz (2010) indicate that men have a more internal locus of control than women, which is positively related to salary. The same authors in 2011 (Linz & Semykina,2011), following their previous findings, found that women with a more internal locus of control tended towards higher wages. However, Schweitzer et al., (2014) found no differences in locus of control (internal or external) between men and women.

Wages are a factor that facilitates the full development of the individual and are fundamental to the wellbeing of all individuals in society. This review has found variables that may contribute to the existence of gender differences in average pay, although it is likely that in some cases this pay gap could be due to discrimination against women or other unfair causes. Despite the existence of these differences, it is a complex and delicate process to calculate what percentage of the pay gap is explained by each of the differences discussed in this research, as there may also be other unknown factors that may also have an impact. And it is even more complicated to explain, in each particular case, which variables justify a person's salary. That is, whether their personality traits, hours worked and bargaining skills are the factors that have contributed to their pay, or whether other variables are involved. Thus, while certain gender differences may explain pay differences in general terms in the population, at the individual level it is difficult to know the exact variables that come into play to explain the pay a person has achieved.

#### **REFERENCES:**

- Apicella, C. L., & Dreber, A. (2015). Sex Differences in Competitiveness: Hunter-Gatherer Women and Girls Compete Less in Gender-Neutral and Male-Centric Tasks. *Adaptive Human Behavior and Physiology*, 1(3), 247–269. https://doi.org/10.1007/s40750-014-0015-z
- Arceo Gómez, E. O., Campos Vázquez, R. M., Medina Cortina, E. M., & Grajales, R. V. (2018). Bargaining and economic preferences by gender: Experimental evidence from Mexico. *Trimestre Economico*, 85(339), 645–678. https://doi.org/10.20430/ete.v85i339.523
- Bishu, S. G., & Alkadry, M. G. (2017). A Systematic Review of the Gender Pay Gap and Factors That Predict It. *Administration and Society*, 49(1), 65–104. https://doi.org/10.1177/0095399716636928
- Björkqvist, K. (1994). Sex differences in physical, verbal, and indirect aggression: A review of recent research. *Sex Roles*, 30(3–4), 177–188. https://doi.org/10.1007/BF01420988
- Erosa, A., Fuster, L., & Restuccia, D. (2016). A Quantitative Theory of the Gender Gap in Wages . *European Economic Review*. 165–187 https://doi.org/10.1016/j.euroecorev.2.
- Exley, C. L., Niederle, M., & Vesterlund, L. (2016). Knowing When to Ask: The Cost of Leaning In. Journal of Political Economy, 128 (3), 816-854 https://doi.org/10.3386/w22961
- Gibb, S.J., Fergusson, D.M., Horwood, L.J. & Boden, J. M. (2014). The Effects of Parenthood on Workforce Participation and Income for Men and Women. *Journal* of Family and Economic Issues. 35, 14–26. https://doi.org/10.1007/s10834-013-9353-4
- Grönlund, A., & Magnusson, C. (2018). Do Atypical Individuals Make Atypical Choices? Examining How Gender Patterns in Personality Relate to Occupational Choice and Wages Among Five Professions in Sweden. *Gender Issues*, 35(2), 153–178. https://doi.org/10.1007/s12147-017-9194-9
- Hollenbeck, J. R., Ilgen, D. R., Ostroff, C., & Vancouver, J. B. (1987). Sex Differences in Occupational Choice, Pay, and Worth: a Supply-Side Approach To Understanding the Male-Female Wage Gap. *Personnel Psychology*, 40(4), 715–743. https://doi.org/10.1111/j.1744-6570.1987.tb00621.x
- INE. (2018). *Encuesta anual de estructura salarial*. Madrid: Instituto Nacional de Estadística
- Kamas, L., & Preston, A. (2018). Competing with confidence: The ticket to labor market success for college-educated women. *Journal of Economic Behavior and Organization*, 155, 231–252. https://doi.org/10.1016/j.jebo.2018.08.025

- Kleinjans, K. J. (2009). Do gender differences in preferences for competition matter for occupational expectations? *Journal of Economic Psychology*, 30(5), 701–710. https://doi.org/10.1016/j.joep.2009.03.006
- Kugler, K. G., Reif, J. A. M., Kaschner, T., & Brodbeck, F. C. (2018). Gender differences in the initiation of negotiations: A meta-analysis. *Psychological Bulletin*, 144(2), 198–222. https://doi.org/10.1037/bul0000135
- Kulich, C., Trojanowski, G., Ryan, M. K., Alexander Haslam, S., & Renneboog, L. D. R. (2011). Who gets the carrot and who gets the stick? Evidence of gender disparities in executive remuneration. *Strategic Management Journal*, 32(3), 301– 321. https://doi.org/10.1002/smj.878
- Le, A. T., Miller, P. W., Slutske, W. S., & Martin, N. G. (2011). Attitudes towards economic risk and the gender pay gap. *Labour Economics*, *18*(4), 555–561. https://doi.org/10.1016/j.labeco.2010.12.007
- Linz, S. J., & Semykina, A. (2011). Gender Differences in Personality and Earnings: Evidence from Russia. *Emerging Markets: Economics*, 791. https://doi.org/10.2139/ssrn.904335
- Magnusson, C., & Nermo, M. (2017). Gender, Parenthood and Wage Differences: The Importance of Time-Consuming Job Characteristics. *Social Indicators Research*, *131*(2), 797–816. https://doi.org/10.1007/s11205-016-1271-z
- Mandel, H., & Semyonov, M. (2014). Gender Pay Gap and Employment Sector: Sources of Earnings Disparities in the United States, 1970–2010. *Demography*, *51*(5), 1597–1618. https://doi.org/10.1007/s13524-014-0320-y
- Mikol, F., & Franc, C. (2019). Gender differences in the incomes of self-employed French physicians: The role of family structure. *Health Policy*, *123*(7), 666–674. <u>https://doi.org/10.1016/j.healthpol.2019.05.002</u>
- Ministerio de Trabajo y Economía Social. (2018). *Estadística de accidentes de trabajo 2018*. Madrid: Ministerio de Trabajo y Economía Social
- Ministerio del Interior. (2019). *Informe General 2019*. Madrid: Ministerio del Interior Secretaría General de Instituciones Penitenciarias.

Oulet, A. L. R., Cahuc, P., Haultfoeuille, X., Ganault, J., Katz, L., Kircher, P., Lalive, R., Lentz, R., Masella, P., Oster, E., & Petrongolo, B. (2021). Gender differences in job search: Trading off commute against wage. *The Quarterly Journal of Economics*, 136(1), 381–426. https://doi.org/10.1093/qje/qjaa033.Advance

Risse, L., Farrell, L., & Fry, T. R. L. (2018). Personality and pay: Do gender gaps in confidence explain gender gaps in wages? Oxford Economic Papers, 70(4), 919– 949. https://doi.org/10.1093/oep/gpy021

- Roszkowski, M. J., & Grable, J. E. (2010). Gender differences in personal income and financial risk tolerance: how much of a connection? *Career Development Quarterly*, *58*(3), 270–275. https://doi.org/10.1002/j.2161-0045.2010.tb00192.x
- Säve-Söderbergh, J. (2019). Gender gaps in salary negotiations: Salary requests and starting salaries in the field. *Journal of Economic Behavior and Organization*, 161, 35–51. https://doi.org/10.1016/j.jebo.2019.01.019
- Schweitzer, L., Lyons, S., Kuron, L. K. J., & Ng, E. S. W. (2014). The gender gap in pre-career salary expectations: A test of five explanations. *Career Development International*, 19(4), 404–425. https://doi.org/10.1108/CDI-12-2013-0161
- Semykina, A., & Linz, S. J. (2010). Analyzing the gender pay gap in transition economies: How much does personality matter? *Human Relations*, 63(4), 447–469. https://doi.org/10.1177/0018726709339094
- Skora, T., Rüger, H., & Stawarz, N. (2020). Commuting and the motherhood wage gap: Evidence from Germany. *Sustainability (Switzerland)*, 12(14). https://doi.org/10.3390/su12145692
- Su, R., Rounds, J., & Armstrong, P. I. (2009). Men and Things, Women and People: A Meta-Analysis of Sex Differences in Interests. *Psychological Bulletin*, 135(6), 859–884. https://doi.org/10.1037/a0017364
- Weaver, A. C., Wetterneck, T. B., Whelan, C. T., & Hinami, K. (2015). A matter of priorities? Exploring the persistent gender pay gap in hospital medicine. *Journal of Hospital Medicine*, 10(8), 486–490. https://doi.org/10.1002/jhm.2400