## The Career Benefit of Having a "Good" Name

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The impact of a person's given name on their life and career success is often questioned. There is limited evidence linking names to long-term economic well-being, such as salaries. To address this gap, this study examined a salary dataset for Missouri State employees, investigating whether the origin of a given name influenced salaries. The study also explored how the interaction between name origins and gender affected salaries. The findings supported the association between names, particularly their origins, and an individual's economic well-being. Additionally, the study revealed that name origins interacted with gender to impact inequity.

Keywords: biblical names, name origin, gender inequity, salary, career success, Christianity

## INTRODUCTION

There are rules and customs for naming people, and these conventions reflect the cultural and social contexts. When parents name their children, they have many reasons for doing so. Some parents pass down the same names from one generation to another, as their familial cultures and traditions require. Some honor their grandparents by naming grandchildren after them. Some use anecdotal evidence to justify the names they give to their children. Some mirror the names of celebrities, while others select biblical names (Hebrew, Greek, or Islam).

Despite findings that parents are more and more likely to get a unique and distinct name for their children (Kim & Markus, 1999; Twenge, Abebe & Campbell, 2010) and that fathers are less likely to name their children with common popular names (Varnum & Kitayama, 2010), some names persist in being popular among Americans. Americans, it appears, love to name their children after biblical figures whose names have rich connections with God in various meanings.

Do parents believe that giving their children biblical names can lead to success? Do the names individuals bear have implications for their life and career achievements? Researchers may wonder: "Is there empirical evidence linking names, the origin of names in particular, with career success?" Our research is a direct attempt to address the former question and the knowledge gap in the existing literature. Using public salary data for Missouri State employees from 2016, we explored the empirical linkage between first name origins and the person's career success, as measured in salary. This study is one of the few empirical studies on this topic. Our findings support the view that names, especially the origin of the names, impact a person's economic well-being. For example, in a society dominated by Christianity, having biblical names likely provides economic benefits.

Furthermore, we investigate the interaction of name origins, gender, and their relationship to economic inequality. Per previous studies, male employees make more money than their female peers. However, our data show that contrary to all other groups, females with English-origin names have higher salaries than males with English-origin names. In other words, depending on the different origins of the names, the gender difference in income varies.

This study contributes to the existing literature in multiple ways. First, this is one of the few empirical studies utilizing a large dataset to provide evidence of the possible impact of a name on a person's career success. As mentioned before, up to now, existing literature only offers some anecdotal evidence for the linkage between name and career success. While previous experimental studies have shown the existence of such an association, they lack external validity. The current study provides valuable empirical support for the linkage claims. Second, this is one of the first studies to explore how name can interact with gender to impact career success. While numerous studies have shown that females tend to earn less than males, our study shows that it is not necessarily so, depending on the different name origins. Third, our study focuses on the origin of the names, and this focus has important implications for the U.S., a country of immigrants from diversified cultural and social backgrounds. Fourth, many existing studies emphasize the effect of names on people's employability from the short-term first impression. Our study sheds new light on the long-term sustaining influence of a given name on an individual's economic benefit such as annual salary.

In the following sections, we will first discuss the most popular names in the U.S. Then we will develop the hypotheses based on the related theories and empirically test them with salary data from the Missouri State Employee database. After presenting the results, the paper will summarize key findings and discuss the study's limitations.

## THEORY DEVELOPMENT AND HYPOTHESES

#### Top Names in the U.S.

The Pew Research Center estimates that about 64% of the population in the United States were Christian in 2020 (Nadeem, 2022), and many commonly used names such as David, Sarah, Rachel, Noah, Emma, Ethan, Jacob, Ava, etc. are biblical names. Table 1 shows the top 10 list of the Social Security Administration's (SSA) 100 most popular baby names in the United States of America for each of the three decades from 1980 to 2009. Table 2 shows the top 37 unique masculine and feminine names by SSA's records.

Biblical names can have profound meanings in religious cultures. Americans, it appears, love to name their children after biblical figures whose names have rich connections with God in various meanings. Particularly notable is that the top names over the 30 years are profoundly biblical in meaning and origin. Biblical names with Hebrew, Greek, and Germanic origins frequently appear in the above lists. Table 1 shows that the name Michael was given to 1,359,400 children. Michael is classified as a masculine name, which means "Which man is like God." Another example is the feminine name, Jessica, from 'The Merchant of Venice,' by Shakespeare, and it means "Daughter of Shylock" (Behindthename.com). Jessica was given 772,468 times to children (1980-1999). Jacob and Emily were given to children 571,909 and 460,818 times in the USA (1990-2009), respectively.

	Most Popular Names (1980-1989)				
Ranking	Male	Frequency	Female	Frequency	
1	Michael*	663,445	Jessica	469,415	
2	Christopher*	554,725	Jennifer	440,818	
3	Matthew*	458,831	Amanda	369,679	
4	Joshua*	396,511	Ashley*	352,122	
5	David	383,527	Sarah	272,522	
6	James	356,309	Stephanie	218,109	
7	Daniel*	345,359	Melissa	217,887	
8	Robert	321,556	Nicole	210,438	
9	John	320,960	Elizabeth*	198,914	
10	Joseph*	299,323	Heather	191,823	
		<u>Most Popular N</u>	<u>Names (1990-1999)</u>		
Ranking	Male	Frequency	Female	Frequency	
1	Michael*	462,265	Jessica	303,053	
2	Christopher*	360,170	Ashley*	301,773	
3	Matthew*	351,569	Emily	237,206	
4	Joshua*	329,072	Sarah	224,191	
5	Jacob	298,219	Samantha	223,979	
6	Nicholas	275,267	Amanda	191,015	
7	Andrew	272,759	Brittany	190,806	
8	Daniel*	272,067	Elizabeth*	172,561	
9	Tyler	262,254	Taylor	169,008	
10	Joseph*	260,574	Megan	160,346	
		Most Donulon N	Jamag (2000-2000)		
Ranking	Mələ	Frequency	Fomalo	Frequency	
1	Jacob	272 600	Emily	222 612	
2	Jacob Michael*	275,090	Ellilly Medicon	102.091	
3	Incluer Iochuo*	230,420	Emmo	193,001	
4	Joshua Matthaw'*	231,000	Olivia	101,174	
5	Danial*	221,445	Ulivia	155,626	
6	Christopher*	203,002		155,020	
7	Androw	203,104	Auigali	130,014	
, 8	Allulew	202,303	Samenthe	147,430	
9	Luian Iosoph*	104 592	Samanuna Flizabath*	134,210	
10	William	194,303	A shlev*	133,303	
2 3 4 5 6 7 8 9 10 <b>Ranking</b> 1 2 3 4 5 6 7 8 9 10	Michael* Christopher* Matthew* Joshua* Jacob Nicholas Andrew Daniel* Tyler Joseph* Male Jacob Michael* Joshua* Matthew'* Daniel* Christopher* Andrew Ethan Joseph*	402,205 360,170 351,569 329,072 298,219 275,267 272,759 272,067 262,254 260,574 Most Popular N Frequency 273,690 250,420 231,808 221,443 203,602 203,184 202,363 201,701 194,583 194,237	Ashley* Emily Sarah Samantha Amanda Brittany Elizabeth* Taylor Megan Vames (2000-2009) Female Emily Madison Emma Olivia Hannah Abigail Isabella Samantha Elizabeth* Ashley*	303,033 301,773 237,206 224,191 223,979 191,015 190,806 172,561 169,008 160,346 <b>Frequency</b> 223,612 193,081 181,174 155,951 155,626 150,814 149,436 134,216 133,305 132,988	

TABLE 1TOP 10 USA MOST POPULAR BABY NAMES OVER THREE DECADES: 1980-2009

Note: \* Denotes a name that appears in the top lists of each of the three decades (Enduring name). Source: https://www.ssa.gov/oact/babynames/decades/index.htm

# TABLE 2TOP 37 UNIQUE USA MASCULINE AND FEMININE NAMES, WITH MEANINGS AND<br/>ORIGINS: 1980-2009

	Masculine Names			Feminine Names	
Names	Meaning	Origin	Names	Meaning	Origin
Andrew	Manly, brave	Greek	Abigail	My father is joy	Hebrew
Christopher	Bearing Christ	Greek	Amanda	Lovable, worthy of love	Latin
Daniel	God is my judge.	Hebrew	Ashley	Lives in the ash tree grove	English
David	Beloved	Hebrew	Britanny	Britons who settled in	French
				French Bretagne	
Ethan	Solid, enduring, firm	Hebrew	Elizabeth	Oath of God	Hebrew
Jacob	Holder of the heel	Hebrew	Emily	Aemilius	English
James	James the Just	Greek	Emma	Whole, universal	Germanic
John	YAHWEH is	Hebrew	Hannah	Favor of grace	Hebrew
	gracious				
Joseph	He will add	Hebrew	Heather	Small shrubs with pink or	English
				white flowers	
Joshua	God is deliverance	Hebrew	Isabella	Latinate form of Isabel	English
Matthew	Gift of YAHWEH	Hebrew	Jennifer	A Cornish form of the	Welsh
				Welsh	
Michael	Which man is like	Hebrew	Jessica	Daughter of Shylock 'The	English
	God			Merchant of Venice'	
				(1596)	
Nicholas	Victory of the	Greek	Madison	English surname meaning	English
	people			son of MAUD	
Robert	Bright dame	Germanic	Megan	Welsh diminutive of	Welsh
				Margaret	
Tyler	Tiler of roof	English	Melissa	Bee	Greek
William	Will desire, helmet,	Germanic	Nicole	French feminine form of	French
	protections			Nicholas	
			Olivia	'Twelfth Night' (1602)	Latin
			Samantha	Feminine form of Samuel	Greek
			Sarah	Lady, princess,	Hebrew
				noblewoman	
			Stephanie	Feminine form of Stephen	English
			Tavlor	Tailor, or to cut	Latin

Note: Source: behindthename.com

Table 2 shows a clear distinction in the origins of masculine and feminine names. Four masculine names are Greek in origin; two are Germanic; and only one, Tyler, is English. In contrast, there are 21 feminine names in the list, seven of which are names of English origin.

There is a difference in naming patterns for males and females. Rossi (1965) and Alford (1987) found that males were more likely than females to be named after kin, while female names were open to fashion, e.g., with French origin (Lieberson & Bell, 1992). In other words, boy names are more likely to carry on the family tradition and are more serious, while girl names are more decorative. Lieberson and Bell (1992) observed that boys were more likely than girls to have names with historical-name roots, and thus they were more likely to have names with biblical origins.

Names provide rich information about the person, including gender information. Hough (2000) found that while most biblical names and surnames were more commonly given as a man's name, feminine names

were more likely to be literary coinage and names from vocabulary words. This may be explained by parents' tendency to give boys more serious names with historical roots (Lieberson & Bell, 1992).

Researchers often wonder whether the cultural background revealed by an individual's name, especially their first name, influences their career success and if this effect applies equally to both males and females.

#### Name Change as Status Changes in the Bible

God, in the following verses from the Bible, changed Abram's name to Abraham and his wife's name from Sarai to Sarah to reflect the promised new status: the father of many nations and the princess. This initiates what becomes common practice for God: assigning a new name to those with a new status. The Bible notes several occasions when this appears.

<sup>44</sup>As for me, behold, my covenant is with thee, and thou shalt be a father of many nations. <sup>5</sup>Neither shall thy name any more be called Abram, but thy name shall be Abraham; for a father of many nations have I made thee. <sup>15</sup>And God said unto Abraham, As for Sarai thy wife, thou shalt not call her name Sarai, but Sarah shall her name be" (KJV, Genesis, 17:4-5, and 15).

The biblical account of Jacob affirms this practice. When Jacob was running from his brother he had wronged, he had an encounter with God, wrestling with Him, and because of his perseverance (Genesis 32:28, KJV), God changed his name from Jacob, which means "supplanter", to Israel, which means "God contends" (behindthename.com). With his new status, Israel reconciled his relationship with his brother and accomplished great feats in the name of God.

Simon was a fisherman in Judea, but after an encounter with God, his name was changed to Peter, and he would become the leader of the church in Jerusalem (John 1:42, KJV). After his encounter with God, Saul, a noted persecutor of the Jerusalem church, would personally change his preferred name to Paul as an indicator of his new status and new responsibility (Acts 13:9, KJV). He would become one of the greatest leaders in the Christian faith.

These examples seemingly show biblically the power of names, and how God chooses on many occasions to reassign names to indicate elevated status, new assignments, and greater responsibility. Even angel names from the Bible, such as Michael, have remained popular across generations and can be linked to prosperity and promotion in the 21<sup>st</sup> century. Although far removed from their biblical counterparts, a direct connection between name, economic status, and career success may still exist.

Anyone who studies American history will notice that many presidents share the same first names. There have been 46 presidencies since the founding of the United States of America, and five of them share the same first name: James. The top two popular first names are James and John, both of which have a biblical origin. It sounds as if a good name would lead to a better chance of success.

Some studies suggest that names may impact career success (Bertrand & Mullainathan, 2003; Jones, Pelham, Mirenberg, & Hetts 2002). However, the findings about the direct link between names and career success are inconsistent and nonconclusive. Many of the findings are anecdotal and are from experimental studies, thus lacking external validity.

#### **Association of Name Origins and Life Outcome**

Numerous theories elucidate the potential impact of names on future life outcomes. Some scholars propose that names reshape how others perceive individuals, while others focus on how name-derived perceptions might shape an individual's conduct.

According to the first stream of studies, people may unconsciously assume about others based on their names, thus introducing biases into the perception (Bertrand & Mullainathan, 2003). Some names, e.g., biblical names, because of their association with a particular religion or culture, could influence how others perceive and interact with the name bearers.

Some researchers have argued that some names are more desirable than others. Mehrabian (1992) showed that "the pleasantness and dominance connoted by names enhanced the desirability of those

names," whereas more unique names connoted greater unpleasantness and submissiveness. Through experiments, Newman et al. (2014) demonstrated that names easier to pronounce were preferred and liked more than others. Garwood et al. (1980) further showed thant subjects preferred desirable names more.

The third stream of theories focuses on how names can change the name bearer's behavior. Research on self-fulfilling prophecy (Jussim & Harber, 2005; Rosenthal & Jacobson, 1968) has demonstrated that if others have formed expectations of the name bearer's behavior and performance based on his name, he will be encouraged to behave in a way that fulfills the expectation. In addition, if the individuals have taken a hint from their own names and formed their expectations internally, they will likely go on a self-fulfilling journey to meet their internal expectations.

The fourth explanation for why and how name origins affect life outcomes argues that names and what they entail could be the extension of parental success and a reflection of parents' deeply held familial value (Varnum & Kitayama, 2011), their social status and political culture (Oliver, Wood, & Bass, 2015). Previous research has also found that higher-income families name their children differently than low-income families (Bloothooft & Onland, 2011).

#### **Existing Findings on Name and Life Outcome**

Ordinary people realize how names can change their lives, and some immigrants change their names to increase their earnings and career success. (Arai & Skogman Thoursie, 2009) However, no consensus exists on the name's role in later life outcomes.

Numerous studies have found a relationship between name origins and people's success in the job market. For example, Bertrand and Mullainathan (2003) and Pager, Bonikowski, and Western (2009) gave evidence that job applicants with "distinctively African-American names" were less likely than those with "distinctively white names" to receive phone callbacks for job interviews. Another study by Oreopoulos and Dechief (2012) showed that the callback rates for applicants with Asian-sounding names were 40% lower than those with English-sounding names in the Toronto job market in Canada. All applicants in the above two studies had the same qualifications and differed only in name. Through their studies, Pascual et al. (2015) found that first name popularity was the best predictor of employability.

Researchers have also found that teachers give preference or higher grades to students with more desirable names (Harari & McDavid, 1973; Jussim, 1989).

There have been inconsistent findings on the impact of name origins and life outcomes beyond callback rates for job interviews. Some studies suggest a great disadvantage for people with foreign-sounding names. Arai and Skogman Thoursie (2009) found that Asian/African/Slavic immigrants in Sweden could increase their earnings significantly by changing names to Swedish-sounding or neutral names. They claimed this was due to discrimination and bias. Goldstein and Stecklov (2016) found that "American"-sounding names had higher occupational achievement among Irish, Italian, German, and Polish immigrants; two-thirds of the effect size was the name itself, and one-third were socioeconomic or class differences. Willis, Willis, and Gier (1982) found that unusual names rarely existed in professional fields, especially among blacks.

Contrary to the above studies, Fryer and Levitt (2004) found no evidence that black names led to later life changes. Willis and Henderson (1994) found no correlation between popular male and female names and the person's attractiveness.

There are many different types of life outcomes, and there are many ways to measure them as well. Our paper will focus on salary as a measurement of life outcomes. While it may not be the only or the most important one, it has the potential to lead to and be an indicator of happiness, fulfillment, or success. Consistent with most of the existing literature, we hypothesize:

#### H1: Name origin is significantly associated with people's salary.

#### Gender Pay Gap and the Role of a Name

Gender has been demonstrated to affect career success. Researchers have further noted that the gender gap in salary, promotions, and other career performance metrics may be due to such reasons as marital status and having children (Ginther & Hayes, 2003; Wolfinger, Mason & Goulden, 2009; Blackaby, Booth

& Frank, 2005). One of the most comprehensive studies on the wage gap between men and women was conducted by CONSAD, commissioned by the U.S. Labor Department in 2009. The executive summary from that report dispels the political utilities surrounding alleged illegal biases between male and female salary differences, as it states:

Research indicates that women may value non-wage benefits more than men do, and as a result prefer to take a greater portion of their compensation in the form of health insurance and other fringe benefits.

In principle, more of the raw wage gap could be explained by including some additional variables within a single comprehensive analysis that considers all of the factors simultaneously; however, such an analysis is not feasible to conduct with available databases. Factors, such as work experience and job tenure, require data that describe the behavior of individual workers over extended time periods. The longitudinal databases that contain such information include too few workers, however, to support adequate analysis of factors like occupation and industry. Cross-sectional databases that include enough workers to enable analysis of factors like occupation and industry do not collect data on individual workers over long enough periods to support adequate analysis of factors like work experience and job tenure.

Although additional research in this area is clearly needed, <u>this study leads to the</u> <u>unambiguous conclusion that the differences in the compensation of men and women are</u> <u>the result of a multitude of factors and that the raw wage gap should not be used as the</u> <u>basis to justify corrective action. Indeed, there may be nothing to correct</u>. The <u>differences</u> <u>in raw wages may be almost entirely the result of the individual choices</u> being made by both male and female workers. (Reported by Charles E. James, Sr, 2009)

There are also documented reverse disparities in male compensation. Smith et al. (2005) found that when potential employers saw employment gaps in applicants' resumes, they would be harsher on male resumes than female resumes. Female applicants were more likely to be invited for interviews. Women make as much or more than men in Texas business schools at state-funded universities across all ranks at one type of Carnegie-class institution (Bell & Joyce, 2011; Bell, et al., 2014; Sutanto, et al., 2014). Kotlikoff and Burns (2012), the authors of *Clash of Generations*, found that: "Women under the age of thirty who live in cities are now earning a premium over men in their peer group. Indeed, in 147 of our 150 largest cities, the researcher found that full-time employed young women earned an average of 8 percent more... (p.76)" They also found that women earned as much as 15% higher salaries in a few cities. However, the observed income gap between males and females favored the former.

We believe different cultures view gender equality differently (Okin, 1994). The cultural differences in gender views, attitudes toward family and work, and personal choices will always reflect the gender salary gap (Munir Sidani, 2013; Grosso & Smith, 2014). With its rich cultural and social implications, a given name could interact with gender to generate different life outcomes. There is little research exploring how different name origins can affect males and females differently, but we see several studies suggesting the potential interaction effect. Coffey and Mclaughlin (2009) offered evidence that females with masculine names were more successful in legal careers than those with feminine names. Institutionally, by removing author names, the double-blind journal review process revealed an increased representation of female authors (Budden et al., 2008). Because the gender pay gap is not likely due to systemic institutional bias, there could be better, more organic explanations.

Consistent with and extending findings from existing studies, with a focus on name origin, gender, and salary, we hypothesize the following:

#### H2: Gender is significantly associated with people's salary.

## DATA AND RESULTS

The dataset consists of public salary data for Missouri State employees for 2016. The Missouri Official Manual is a publication of the Missouri Secretary of State's Office. That book has a complete listing of all State of Missouri workers. Thus, all listings in the dataset have demographic information (independent variables) and exact annual salary (dependent variable). Accordingly, persons were classified by gender and salary. For given names [not last name of family/surnames], we searched given names in a database called "behindthename.com" to determine if the name was rooted in English, French, Germanic, Greek, Hebrew, Latin, or Welsh Origins. The database tracks a name to its origin and offers the feminine or masculine tense of that name's root. A name like Michael, for example, has been used by both males and females recently, yet its origin is clearly masculine. Names were coded for gender based on their masculine or feminine root origin.

#### **Descriptive Statistics and Chi-Square Test**

Table 3 shows a description of the frequency of gender and name origins. Altogether, the data has 14,616 state employee salary data records, of which 10,068 records, or 68.9%, have masculine names, and 4,548, or 31.1%, have feminine names.

	Category	Frequency	Percent
Gender	Masculine	10068	68.9
	Feminine	4548	31.1
	Total	14616	100
Origin	English	1496	10.2
	French	285	1.9
	Hebrew	6128	41.9
	Germanic	1852	12.7
	Greek	3431	23.5
	Latin	416	2.8
	Welsh	1008	6.9
	Total	14616	100

 TABLE 3

 FIRST NAMES OF MISSOURI STATE EMPLOYEES BY GENDER AND ORIGIN (2016)

The dataset shows that some name origins are preferred over others, and the preference varies by gender. As seen in Table 4, the test result ( $\chi^2$  (6, N = 14,616) = 8,589.673, p =.000) indicates a significant relationship between gender and name origin.

Moreover, Goodman and Kruskal's (1979) tau tests (with p = .000 for both tests) show that the origin of a name is a better predictor of gender than gender is at predicting the origin of the name. Gender predicts 9.4% of the error in name origin when name origin is the dependent variable. However, origin predicts 58.8% of the error in gender when gender is the dependent variable. We can, therefore, surmise that name origin is a very important predictor of the masculine and feminine names children will receive. Origin is six times greater at predicting gender than gender at predicting a name's origin. People with masculine names are more prone to receive names with Hebrew, Germanic, and Greek origins. On the other hand, people with feminine names are more prone to receive names with origins from English, French, Latin, and Welsh. The contingency coefficient value of .608 indicates a strong relationship (p < .001) between name origin and gender. Interestingly, French, Latin, and Welsh origins had no masculine names in the frequency distribution. This problem will be later resolved in the ANOVA tests.

				Gender		
			Ν	<b>Aasculine</b>	Feminine	Total
Origin	English	Count		80	1416	1496
-	-	Expected Count		1030.5	465.5	1496
		% within Origin		5.3	94.7	100
		% of Total		0.5	9.7	10.2
	French	Count		0	285	285
		Expected Count		196.3	88.7	285
		% within Origin		0	100	100
		% of Total		0	1.9	1.9
	Hebrew	Count		5239	889	6128
		Expected Count		4221.2	1906.8	6128
		% within Origin		85.5	14.5	100
		% of Total		35.8	6.1	41.9
	Germanic	Count		1835	17	1852
		Expected Count		1275.7	576.3	1852
		% within Origin		99.1	0.9	100
		% of Total		12.6	0.1	12.7
Greek		Count		2914	517	3431
		Expected Count		2363.4	1067.6	3431
		% within Origin		84.9	15.1	100
		% of Total		19.9	3.5	23.5
	Latin	Count		0	416	416
		Expected Count		286.6	129.4	416
		% within Origin		0	100	100
		% of Total		0	2.80%	2.8
	Welsh	Count		0	1008	1008
		Expected Count		694.3	313.7	1008
		% within Origin		0	100	100
		% of Total		0	6.9	6.9
Total		Count		10068	4548	14616
		% within Origin		68.9	31.1	100
Chi-Squa	re Tests	Value	df	Asymptot	ic Significance (	2-sided)
Pearson C	hi-Square	8589.673 <sup>a</sup>	6	.000***	0	
N of Valio	l Cases	14616				

## TABLE 4MASCULINE AND FEMININE NAMES BY ORIGIN FOR MISSOURI STATE<br/>EMPLOYEES (2016)

X2 (6, N=14,616)=8,559.673, p=.000.

<sup>*a*</sup>. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 88.68. \*\*\*\*p<.001

## **One-Way Analysis of Variance Results**

Tables 5 and 6 show our testing results for H1 and H2. As can be seen in Table 5, there is a significant main effect for the origin of names, F(6, 14615) = 54.74, p = .000. Various origins (English, French,

Germanic, Greek, Hebrew, Latin, and Welsh) of names that are most popular in the United States over 30 years do differ regarding salary. Name origin is significantly associated with an economic benefit. Names with Hebrew origin are much higher in terms of salary than names with an origin in English, Greek, or Germanic for males.

The results from Table 6 show a significant main effect for gender, F(1, 14,615) = 373.96, p = .000. Consistent with existing research on gender pay disparities, masculine and feminine names do differ regarding salary. There are twice as many masculine-named employees, thus, a greater chance for a wider dispersion of types of employment is assumed.

TABLE 5
ONE-WAY ANALYSIS OF VARIANCE OF SALARY BY GENDER

Salary*Gender	df	SS	MS	F	р
Between Groups	1	361584139167.08	361584139167.078	373.96***	.000
Within groups	14614	14130274798492.23	966899876.727		
Total	14615	14491858937659.31			

\*\*\*p<.001

 TABLE 6

 ONE-WAY ANALYSIS OF VARIANCE OF SALARY BY NAME ORIGIN

Salary*Gender	df	SS	MS	F	р
Between Groups	6	318660970507.11	53110161751.19	54.74***	.000
Within groups	14609	14173197967152.20	970168934.71		
Total	14615	14491858937659.31			
***p<.001					

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## **Two-Way Analysis of Variance Results**

Table 7 presents the results from a two-way analysis of variance, testing the main effects of gender and name origins and the interaction effects between the two variables above.

## TABLE 7 TWO-WAY ANALYSIS OF VARIANCE, TESTS OF BETWEEN-SUBJECTS EFFECTS ON SALARY BY GENDER ACROSS THE ORIGIN OF NAMES

Source	df	Type III SS	MS	F	Р	PES	<b>OP</b> <sup>b</sup>
Gender	1	12143244085.42ª	12143244085	11.52**	.001	.001	.924
Origin	3	33083996623	11027998874	10.46***	0	.002	.999
Gender * Origin	3	13377718304	4459239435	4.23* *	.005	.001	.862
Error	12899	13595391785291	1053988044				
Total	12,907	39338769243049					
Corrected Total	12,906	13887135941106					

<sup>a</sup> R Squared = .021 (Adjusted R Squared = .020); Dependent Variable: Salary

<sup>b</sup> Computed using alpha = .05; PES denotes Partial Eta squared, OP denotes Observed Power

\*\**p* < .001; \*\**p* < .01

H1 is supported in Table 7, and there is a significant main effect for the origin of names, F(1, 12899) = 10.46, p = .000. Various origins (English, Germanic, Greek, and Hebrew) of names that are most popular in the United States over 30 years, excluding French, Latin and Welsh names, differ regarding salary.

There is a significant main effect for gender, F(1, 12899) = 11.53, p = .001, and thus our findings support H2. Consistent with existing research on gender pay disparities, salaries linked to masculine and feminine names differ.

The interaction effect (H3) is also supported. There was a significant interaction, F(3, 12899) = 4.23, p = .005. We have attached Tables 8 and 9 in the APPENDIX to give the reader more information. Table 8 shows the mean and standard deviations, ranked by means, for the most popular masculine and feminine names. Table 9 shows the post hoc analysis for the origin of the name.

To further illustrate how different name origins interact with gender to influence salary, we use Figure 1 to visualize the results. In Figure 1, on average, masculine names with Germanic, Greek, and Hebrew origins earn \$47,014, \$48,283, and \$45,739, respectively, while masculine names with English origin earn a much less amount of \$3,0696. Feminine names do not show such a big gap among different name origins, but they generally earn less than their masculine counterparts, except those with an English origin.





## SUMMARY OF FINDINGS

The large public employee dataset from Missouri enables us to empirically investigate the long-asked question about name and how it is associated with economic income. This exploratory study makes some important revelations about names and their impact on the economic well-being of individuals.

First, name origins seem to be associated with people's income. Consistent with some previous studies, we have also found a significant association between name and career success, measured by salary in our case. There are many reasons for this relationship. It could be due to the family's already-held socioeconomic status, or it could be the direct or indirect result of the person's name. Our study is not in a position to claim a causal relationship between name origin and career success as measured by earned salary. However, we have been able to show that there is a salary gap depending on the different name origins.

Second, name origin as a moderating variable for the gender gap in salary has long been ignored. Similar to most existing studies, our study also shows a gender gap in salary, with females earning less than

males on average. However, when adding the name variable to the model, it is evident that females of a certain name origin may make more than males of the same name origin. In our study, this "anomaly" is for people with English-origin names. Females with English-origin names have salaries higher than their male counterparts. Given society's stereotype and preference of names for different genders, it is not surprising to find the interaction effect.

Third, while there are many studies on how names impact academic performance, promotions, job interview callback chances, etc., our study uses one of the most direct and important measurements of career success, the annual earned salary data. A high salary is typically associated with higher recognition from the institution and society. Furthermore, a high salary can lead to a higher quality of life and even greater opportunities for professional growth. Arai and Skogman Thoursie (2009) found that immigrants in Sweden earned more by changing their surname to a Swedish name. Our study shows that first names in the U.S. are as important in impacting earnings.

## LIMITATIONS

As one of the exploratory studies on name origin and its impact on people's career success, the current research has some limitations. First, the dataset only covers the public employees from one state, Missouri. Private institutions dominate the U.S. economy, and thus any data limited to public employees cannot claim to offer a complete picture. Furthermore, people living in Missouri and the local economy in Missouri are vastly different from that of other states, for example, California or Texas. Third, we use a simple and straightforward methodology for an exploratory and descriptive study. As such, we are not claiming the causality between name origin and salary discrepancy. For that claim, future studies must implement a more robust methodology and a large set of control variables.

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## APPENDIX

Nam	ne*	Origin	Gender	Mean	N	SD
1.	John	Hebrew	Masculine	\$51,061.88	1,167.00	\$41,780.75
2.	David	Hebrew	Masculine	\$49,150.01	1,209.00	\$35,169.26
3.	James	Greek	Masculine	\$48,877.48	1,299.00	\$40,506.83
4.	Robert	Germanic	Masculine	\$48,524.35	1,050.00	\$41,216.12
5.	William	Germanic	Masculine	\$47,961.21	785.00	\$40,615.32
6.	Michael	Hebrew	Masculine	\$46,654.10	1,486.00	\$31,009.67
7.	Joseph	Hebrew	Masculine	\$45,831.58	464.00	\$37,605.48
8.	Matthew	Hebrew	Masculine	\$44,801.12	531.00	\$27,650.37
9.	Daniel	Hebrew	Masculine	\$43,892.13	499.00	\$25,803.04
10.	Christopher	Greek	Masculine	\$43,636.39	596.00	\$26,522.96
11.	Nicholas	Greek	Masculine	\$41,583.80	142.00	\$33,789.24
12.	Elizabeth	Hebrew	Feminine	\$41,128.91	433.00	\$26,350.33
13.	Andrew	Greek	Masculine	\$40,721.53	346.00	\$20,568.13
14.	Abigail	Hebrew	Feminine	\$40,601.63	24.00	\$29,936.37
15.	Sarah	Hebrew	Feminine	\$37,884.32	393.00	\$21,786.67
16.	Melissa	Greek	Feminine	\$37,371.46	421.00	\$19,283.33
17.	Joshua	Hebrew	Masculine	\$37,101.51	271.00	\$23,223.78
18.	Stephanie	English	Feminine	\$37,013.17	330.00	\$17,879.14
19.	Emily	English	Feminine	\$36,684.26	161.00	\$14,930.07
20.	Heather	English	Feminine	\$34,613.94	304.00	\$14,827.91
21.	Jacob	Hebrew	Masculine	\$33,754.93	121.00	\$15,018.97
22.	Jessica	English	Feminine	\$32,962.52	363.00	\$14,717.30
23.	Emma	Germanic	Feminine	\$32,085.42	17.00	\$12,823.09
24.	Ashley	English	Feminine	\$31,665.83	251.00	\$10,998.70
25.	Tyler	English	Masculine	\$30,696.16	80.00	\$11,044.90
26.	Ethan	Hebrew	Masculine	\$29,925.13	22.00	\$16,221.36
27.	Hannah	Hebrew	Feminine	\$29,289.88	39.00	\$9,462.08
28.	Samantha	Greek	Feminine	\$28,248.51	96.00	\$10,909.25
29.	Isabella	English	Feminine	\$26,832.00	2.00	\$2,647.41
30.	Madison	English	Feminine	\$18,813.76	5.00	\$3,493.04
			Total	\$44,406.36	12,907.00	\$32,802.77

TABLE 8 ORIGIN OF NAMES RANKED BY SALARY MEAN, WITH POPULATION SAMPLE AND STANDARD DEVIATION

\*Note: Seven names originating from French, Latin and Welsh were removed because no masculine names were represented from these origins.

(I) Origin	(J) Origin	Mean Difference (I-J)	Std. Error	р
	Germanic	-11676.570*	936.2334	.000
English	Greek	-13936.831*	1128.5590	.000
	Hebrew	-10024.843*	1005.8494	.000
	English	11676.570*	936.2334	.000
Germanic	Greek	-2260.261*	860.8737	.009
	Hebrew	1651.727*	692.2362	.017
	English	13936.831*	1128.5590	.000
Greek	Germanic	2260.261*	860.8737	.009
	Hebrew	3911.988*	936.1109	.000
	English	10024.843*	1005.8494	.000
Hebrew	Germanic	-1651.727*	692.2362	.017
	Greek	-3911.988*	936.1109	.000

TABLE 9POST HOC ANALYSIS OF ORIGIN OF NAMES