

Do opinions on fair salaries vary with gender in South Africa?

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Abstract

This study uses two survey experiments to test whether South African respondents perceive fair salaries differently for male and female workers in identical roles. Respondents were randomly assigned to evaluate vignette-based job descriptions in which only the character's gender (indicated by names) varied. Across both experiments (one using open-ended salary estimates and the other a closed-ended comparison), we find no evidence of gender bias in wage fairness perceptions. Respondents did not assign lower pay to women than to men, even after introducing signals of productivity or caregiving responsibilities. Instead, salary judgments varied by job type, with lower pay suggested for roles traditionally held by women (cashier and nurse), regardless of the character's gender. These results suggest that public attitudes may support pay equity, with persistent gender wage gaps in South Africa perhaps rooted in occupational sorting and structural inequalities, rather than attitudinal bias.

Key words: Gender bias; gender wage gap; fair wage perceptions

JEL classification: C91; D90; D91; J31

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1 Introduction

Gender wage gaps persist in virtually all labour markets. Across countries, women, on average, earn less than their male counterparts, with recent surveys and meta-analyses confirming that a substantial gap remains even after controlling for observable characteristics such as education, experience, occupation, and other productivity-related factors (Blau & Kahn 2017). In South Africa, as elsewhere, the gender wage gap is persistent. While some convergence occurred in the post-apartheid era, women continue to earn less than men (Pleace et al. 2023), with studies documenting a sizable unexplained differential (Bhorat & Goga 2013; Mosomi 2019). This residual gap in the labour market, which typically ranges between 15 and 25%, suggests that factors beyond human capital are at play.

One hypothesized mechanism is gender differences in perceived fairness or entitlement in wages. A long-standing puzzle in the wage differential literature, termed the "paradox of the contented female worker", suggests that women frequently report satisfaction with objectively disadvantaged pay or working conditions (Crosby 1982; Phelan 1994). Other studies have documented a related phenomenon of "depressed entitlement," wherein women set lower salary expectations and accept lower pay as fair compensation compared to men in equivalent positions (Hogue & Yoder 2003; Hogue et al. 2007; Buchanan 2005; Davison 2014; Mueller & Kim 2008; Valet 2018; Pfeifer & Stephan 2019). If women do not see their lower earnings as unfair, they may be less likely to negotiate for raises or pursue higher-paying opportunities, which could perpetuate the gender wage gap. Studies focusing on single countries have found that women often perceive their earnings as more fair than men do, despite women earning less. For example, in Germany, women consistently report higher perceived pay fairness than men in similar roles (Valet 2018, Pfeifer & Stephan 2019). This paradox may reflect internalized social norms, lower reference points (women comparing their wages to other women at a lower level), and occupational social structure.

Although recent research appears to contradict this paradox, with Adriaans & Targa (2023) showing that women report more intense feelings of unfairness regarding their earn-

ings than men in 15 out of 28 European countries, these authors also find that greater perceived unfairness does not translate into larger gaps (mark-up expectations) between current wage and perceived fair wage among women. Pfeifer & Stephan (2019) finds that workers of both genders who perceive their wages as unfair tend to experience faster wage growth in subsequent years, suggesting that fairness perceptions may lead to corrective actions. If women are less likely than men to perceive their wages as unfair, this may reduce their opportunities to close existing wage gaps. Adriaans & Targa (2023) note, however, that despite perceiving unfairness in current earning differences, women's modest mark-up expectations limit the extent to which these perceptions are likely to drive efforts to reduce gender wage gaps. Lower fair wage expectations for women are also influenced by reference points: Valet (2018) shows that women working in gender-segregated occupations are more likely to perceive lower wages as fair because of these reference points.

Gender norms also matter: Lang & Groß (2020) finds that both males and females consider it fair for men with children to earn more than women with children, reflecting the persistence of the male breadwinner ideal in shaping normative expectations about pay. Traditional gender norms can affect women's behavior in different ways. In the United States, for instance, Bertrand et al. (2015) demonstrates that women reduce labour supply when their potential income exceeds their husband's, reflecting a social discomfort with women out-earning men. At a broader level, Owen & Wei (2021) finds that regions with a higher prevalence of sexist attitudes exhibit larger residual gender wage gaps after accounting for workers' characteristics. Maloney (2022) constructs an index of explicit misogyny and shows that it is a significant predictor of the unexplained portion of the gender wage gap. Evidence from highly patriarchal settings further demonstrates the role of norms in shaping women's labour market outcomes and the gender wage gap. In Saudi Arabia, Bursztyn et al. (2020) find that many men privately support women working outside the home but vastly underestimate the support for female employment among other men. Firms in Saudi Arabia cite cultural reservations and gender-role expectations as primary obstacles to hiring women,

suggesting normative biases can directly influence hiring and wage-setting decisions (Eger et al. 2022). Similarly, gender norms and domestic role expectations significantly reduce women's labour force participation, even among highly educated women in China (Xiao & Asadullah 2020).

Institutional factors can also either exacerbate or mitigate the gender wage gap. Despite the existence of equal-pay-for-equal-work legislation, pay secrecy policies and work-place cultures can prevent women from contesting pay gaps. Kim (2015) highlights how organizational pay secrecy and cultural discouragement of discussing wages undermine the effectiveness of equal pay laws. Sector-specific studies provide additional insight into how gender gaps manifest and persist. In contexts where women have made substantial educational gains, such as STEM, significant wage gaps remain even as more women enter these fields (Dinerstein et al. 2024). These authors attribute wage gaps to persistent stereotypes and women's under-representation in senior positions. This finding echoes evidence from other settings suggesting that education and skills training alone are insufficient to close the gender wage gap. Market forces themselves do not guarantee the elimination of gender wage disparities. Berik et al. (2004), analyze the impact of trade liberalization in East Asia and find that increased competition did not reduce the gender wage gap in Taiwan and South Korea. In export-oriented and male-dominated sectors, wage disparities between men and women widened.

While the literature suggests that a complex mix of human capital, occupational sorting, and work-family tradeoffs explains much of the gender wage gap, there remains a portion attributable to gender bias, such as social norms, discriminatory attitudes, or differences in perceived wage fairness. However, most evidence on perceived wage fairness comes from developed countries (Europe, North America, or parts of Asia), with limited or no empirical evidence from African contexts. No prior study has examined whether individuals implicitly assign different "fair" wages to men and women for the same job in Africa. This study addresses that gap by leveraging a vignette experiment in South Africa to test for gender

bias in perceived appropriate wages. In doing so, we contribute new empirical evidence on the attitudinal underpinnings of the gender wage gap in an emerging market context.

We conducted a randomized controlled survey experiment in South Africa to investigate whether individuals' judgments of fair pay differ by worker gender. We recruited about 1000 respondents via an online panel. Each respondent evaluated a series of short job vignettes describing four different occupations. We randomly varied the vignette character's gender and race by assigning either a male (black/white) or female (black/white) name while keeping all job-related information constant. This between-subjects design allows us to compare the wages that respondents believe a worker "should be paid" when the worker is male versus when the worker is female, holding the same job and qualifications. The four occupations encompass a variety of blue-collar and white-collar roles, including traditionally male-dominated and female-dominated fields. The occupations are as follows: a cashier (blue-collar, female-dominated), an electrician (blue-collar, male-dominated), a nurse (whitecollar, female-dominated), and a senior manager (white-collar, male-dominated). Each respondent saw one vignette per occupation, with the character's gender fixed across all four scenarios for that respondent. Moreover, we included variations within vignettes: after an initial salary judgment, respondents were given a benchmark average salary for the job and then asked again what the person should earn, followed by two scenarios providing extra information about the worker's performance ("employee of the month" to signal high productivity) and personal life ("cares for two young children" to signal family responsibilities). This design yields between-subject comparisons (male vs. female character conditions) and within-subject comparisons (across different job types and conditions) for each respondent.

Our results reveal expected patterns across occupations and information treatments, but no evidence of gender bias in perceived fair pay. Respondents clearly differentiate between jobs. For example, the average recommended salary for the managerial role is much higher than for the cashier, consistent with actual labour market wage differentials. Providing

¹Our primary objective is to examine fair pay based on worker gender; thus, we will not discuss racial differences.

additional information also shifts wage judgments in plausible ways (e.g. a high productivity signal leads to higher suggested pay, while noting childcare responsibilities does not markedly change pay recommendations on average). However, the gender of the vignette character has no significant effect on the salaries respondents deem appropriate. Across all four jobs and conditions, the wages recommended for female characters are statistically indistinguishable from those for male characters. If anything, female characters received slightly higher mean wages, but the differences are small and not significant. This null finding is robust and somewhat surprising in light of prior studies from other settings that found biases. Previous research using survey experiments in other countries has found that gender pay gaps are perceived as fair or justified (Sauer 2020; Auspurg et al. 2017; Seitz 2023). By contrast, our South African respondents do not exhibit a measurable pro-male wage bias in their stated fairness judgments.

To ensure that this result is not an artifact of our elicitation method, we conducted a supplementary experiment with a separate smaller sample of 152 respondents. In this follow-up, we presented the same set of vignettes but immediately provided the average salary for the job in each scenario. We then asked respondents a more straightforward question: whether the character should earn "less than," "about the same as," or "more than" the average amount. This alternative, a more categorical measure of perceived fair pay, yields the same conclusion.

Consistent with our main findings, there is no significant difference in the share of respondents who believe a worker should earn above the benchmark when the vignette character is male versus when it is female. We also included an indirect question to probe social desirability effects. Respondents were asked what percentage of other respondents they thought would say the vignette character is overpaid. Our idea was that if respondents privately felt a woman "should" earn less but were unwilling to state this outright, they might project such views onto others. We find no gender difference in these third-party beliefs. Respondents do not think others are more likely to view a female character as overpaid. Our findings suggest

that societal attitudes toward equal pay largely support gender parity in South Africa. Then, efforts to close gender wage gaps in the country should focus more on structural issues such as occupational segregation, unequal access to opportunities, or discrimination by employers than on changing minds about women's deservingness per se.

2 Literature

Research on the gender pay gap spans structural, perceptual, institutional, and socio-cultural dimensions. A large body of work attributes much of the gender pay gap to differences in human capital accumulation, occupational and industry sorting, and work experience (Blau & Kahn 2017). However, after accounting for observable characteristics, a persistent residual gap remains, prompting several studies to explore the role of societal norms, attitudes, and biases.

One line of inquiry focuses on perceived fairness in earnings. Adriaans & Targa (2023) utilize European Social Survey data to compare perceived fair earnings to actual earnings across 28 European countries. They find that women are more likely than men to sense unfairness in their earnings, with 15 countries showing significantly stronger perceptions of underpayment among women. They also identify a link between the intensity of perceived unfairness and the fair wage markup individuals demand. Importantly, they argue that if women do not perceive their lower earnings as unjust, they may be less likely to seek a raise in earnings, thus perpetuating the gender wage gap. Pfeifer & Stephan (2019) also show that individuals perceiving unfair pay tend to experience wage growth subsequently, though the gains are significantly smaller for women.

On the other hand, other studies, such as Valet (2018) and Pfeifer & Stephan (2019), find that women in Germany often perceive their wages as fairer than men do, even when their pay is objectively lower. One possible explanation is that women in lower-paying, female-dominated occupations may benchmark fairness within a lower reference group. Adriaans

et al. (2020) further reports that both male and female respondents in Germany view lower pay for women as justified, reflecting biased gender norms.

Studies have used vignettes and survey experiments to probe biases directly. Auspurg et al. (2017) find that German respondents assign lower appropriate pay to identical profiles when the candidate is female, controlling for all other covariates. Similarly, Sauer (2020) highlights gender bias in evaluating wages in Germany, emphasizing that a worker's gender affects perceptions of wage fairness. Recently, Seitz (2023) used nationally representative vignettes survey experiments in three Central Asian countries and documented that respondents were 13 % more likely to say wages were "too high" for women and 34 % more likely to say they were "too low" when the subject was a man. These findings suggest that individuals are not only indifferent to the gender wage gap but may actively prefer it, especially when this can be framed as aligning with productivity beliefs or social norms.

Another strand of literature links societal sexism to gender wage inequality. Owen & Wei (2021) shows that U.S. regions with higher levels of sexist sentiment have larger gender wage gaps, especially the unexplained portion. Maloney (2022) introduces novel proxies for misogyny, such as sexist Google search frequencies in the United States, and finds a strong association with wider wage disparities, even after controlling for conventional social norms.

Cultural and institutional factors are also found to shape general wage inequalities. Kim (2015) shows how pay secrecy norms in the United States obstruct enforcement of the Equal Pay Act, keeping women unaware of the gender wage gap in the labour market. Studies from developing countries emphasize the role of traditional gender norms. Jayachandran (2021) reviews evidence from countries including India, Pakistan, and Egypt, showing that social norms such as constraints on women working outside the home are among the strongest barriers to gender parity in labour markets. Dean & Jayachandran (2019) and Bursztyn et al. (2020) find that targeted information campaigns in India and Saudi Arabia were successful in shifting family or community attitudes. Arielle et al. (2018) highlights how male identity tied to being the breadwinner in India might reduce household support for women's employment.

Firm-side biases also matter. Eger et al. (2022) shows that cultural assumptions about women's commitment or customer preferences in the Netherlands shape hiring and promotion patterns in male-dominated sectors. Similarly, sectoral segregation matters. Ge (2024), focusing on the UK's STEM fields, finds that despite educational attainment gains, women's wages lag due to exclusion from networks and leadership roles. Hu & Couser (2021) reports unexplained gender pay gaps among anesthesiologists in the United States, where caregiving assumptions and part-time work contribute to disparities. From a macroeconomic perspective, Berik et al. (2004) examines Taiwan and South Korea during trade liberalization and finds that gender wage disparities persisted and worsened in competitive sectors, especially those that were male-dominated.

This study contributes to this literature by posing a simple question: Do South Africa's gender wage gaps reflect societal perceptions about the value of men's and women's work? Prior studies have primarily focused on developed countries. Given South Africa's complex history of racial and gender inequality and active anti-discrimination policies, it presents a rich context to explore fairness perceptions. We assess whether our responses show implicit biases in wage evaluations and whether these perceptions could help explain persistent gender wage gaps.

3 Methodology

3.1 Participants

Our main sample made use of an online experiment, conducted through an online panel provider (TGM Research). In total, 1012 respondents gave informed consent and then passed a simple attention check question, allowing them to respond to our survey. Of these respondents, 52.7% were female, 47% were male, and 0.3% reported a non-binary gender or preferred not to give a gender response. The average age of respondents was 34.93 years (s.d. 12.50). Race was reported as follows: 66.9% Black, 9.9% Coloured, 4.5% Indian/Asian,

18% White. In our sample, 0.8% reported either other race, or preferred not to give a race response.

To examine whether our results are driven by the elicitation method or sample composition, we conducted a second online experiment using a slightly different question format (described in the experiment subsection below). In this experiment, 152 respondents completed the survey and passed the attention check question, constituting our second sample. Of these, 50% identified as male and 50% as female. The average age was 43 years (s.d. = 16.75). The racial composition was 47.7% Black, 18.5% Coloured, 2% Indian/Asian, and 27.8% White, with 4% identifying as another race or preferring not to answer.

The demographic skews in our samples, such as the under-representation of Black South Africans, reflect the online sampling methodology and the demographic profile of panel participants. To mitigate concerns about elicitation effects, we utilized two independent online samples. While this strengthens the internal validity of our findings, the results should still be interpreted with caution when generalizing to the South African population.

3.2 Survey Design and Experimental Setup

Since we are interested in whether respondents report different appropriate salaries, on average, for men and women in identical roles, our survey experiment takes the form of a randomised controlled trial in which respondents were assigned to see otherwise identical short vignette descriptions featuring either a male or female character. The character's gender was indicated using a male or female name. Respondents saw only one character in each role, meaning that this approach gives a between-subject comparison of perceived appropriate salaries for men and women in the same role. Although our primary interest is in investigating possible differences in perceptions of appropriate salary by gender, we include two female character names and two male character names for each of the occupations included in our survey. Given South Africa's history of race-based discrimination, and given the racial diversity of our sample, we wanted to include male and female names that would

be typically associated with both Black and White people. This also allows us to check for any race-based differences in perceptions of appropriate salaries.

3.2.1 Experiment 1: Open-ended Salary Elicitation

Our first survey started by presenting a vignette job description² and asking an open-ended question about the vignette character's salary ("How much do you think he should be paid per month after tax?"). It is worth noting that our main question of interest asked how much a vignette character "should" be paid. We selected this phrasing as we were interested not in respondents' abilities to accurately estimate existing salaries by gender, but rather in respondents' perceptions of what an appropriate salary might be, and how this fair salary might vary by gender. Respondents were randomly assigned to see either a name that would be typically associated with a Black male, Black female, White male, or White female for this vignette. We then gave information about the average after-tax salary for the job description³, to provide a benchmark, and then asked about salary expectations again ("How much do you think Sandile should be paid per month after tax?").4 As we were interested in perceptions of fair salaries, we chose the phrasing "should be paid", rather than "is paid". This approach allows for a between-subjects comparison of perceived appropriate salaries by gender and race. As no significant differences emerged by race, and because this was not our main research question, we focus on the gender question in this paper. Details on race are available from the authors upon request.

We included 4 different jobs, where each respondent saw (different) names of the same race and gender for all jobs. This gives us a within-subject comparison of appropriate

²for example, one of the vignettes read, "Sandile was promoted to a senior management position a year ago after completing his Masters in Business Administration (MBA). Today, he has a big meeting about restructuring departments within the company."

³For example, the vignette presented in footnote 2 read, "On average, a senior manager in South Africa is paid R75,800 monthly after tax."

⁴The information about average salaries was gathered in 2023 from https://www.payscale.com. Cashier: https://www.payscale.com/research/ZA/Job=Cashier/Hourly_Rate; Electrician: https://www.payscale.com/research/ZA/Job=Electrician_-_Certified/Salary/c4bc9902/Johannesburg-Commercial; Nurse: https://www.payscale.com/research/ZA/Certification=Registered_Nurse_(RN)/Salary; Senior Manager: https://www.payscale.com/research/ZA/Employer=Standard_Bank/Salary/Page-15.

salary perceptions for positions that are traditionally "blue collar" and "white collar", and also for positions that are traditionally male-dominated and female-dominated. That is, we include a blue collar, female-dominated role (cashier), a blue collar, male-dominated role (electrician), a white collar, female-dominated role (nurse), and a white collar, male-dominated role (manager).

Finally, we investigate whether salaries are expected to be higher or lower in two different instances. After requesting the appropriate salary following the average salary information, we gave additional information (randomising the order in which it was presented): we asked for the appropriate salary when the character "received the employee of the month award" (intended to signal a highly productive employee); and what the salary would be when the character "cares for 2 young children" (intended to signal child care responsibilities).

Because of the data cleaning and associated assumptions required for the first survey experiment, where raw salary estimates were elicited (discussed below), our second experiment tests the sensitivity of our findings to a slightly different elicitation approach. Here, instead of asking for salary expectations before and after giving average salary information, we simply gave average salary information in the initial vignette, and asked: "Relative to this amount, how much do you think Sandile should earn?", with closed-ended response options: "I think he should earn more than this amount", "I think he should earn about this amount", and "I think he should earn less than this amount".

One possible explanation for the lack of expected bias towards paying men more than women is social desirability bias, which might lead respondents to report salary expectations for women that are more fair than their true believed appropriate salary. We therefore included a question in our second survey asking respondents to report their beliefs about the proportion of other respondents who claimed that the vignette character was overpaid. Our expectation was that if respondents believed that women should be paid less, while they might be reluctant to report this as their own opinion, we might see this coming up in the form of beliefs about others' opinions. For this question, respondents chose from bands

ranging from 0-10% up to 90-100%.⁵

3.2.2 Data cleaning: main survey

To avoid biasing the analysis with extreme values, we dropped responses that suggested a zero salary (one response indicating R0 as an appropriate salary before the average salary information, and another after the average salary information was presented). We excluded any response suggesting a salary greater than R400,000 (after tax, per month). This led to the removal of 14 responses recorded before the average salary information, 6 responses recorded after it, and 8 responses following the productivity information. One additional response recorded after the childcare information was also above this threshold and thus excluded. Finally, for any reported salary below R1,000, we assumed the respondent meant to report the amount in thousands. These responses were therefore multiplied by 1,000, affecting 238 of the 12,054 responses. Of these 238 responses, 235 were reported as less than 100.

3.3 Analysis

3.4 Outcome Variable

For the main analysis, we use data from the first experiment to construct a panel based on the 12 appropriate salary questions asked of each respondent following the provision of average salary information. That is, for each respondent, we observe reported salaries across the four job types without extra information, with productivity information, and with child care responsibility information, yielding three salary reports per job. We focus on two main outcome variables. First, we construct a dummy variable, "underpaid," indicating whether the respondent believes the average salary for the role is too low. This variable takes a value of 1 if the appropriate salary reported after receiving the average salary information exceeds

⁵To calculate mean percentages for this question, we used the midpoint of the reported band.

⁶Histograms of reported salaries before dropping these observations are provided in the Annex.

the average salary, and 0 otherwise. Second, we use the raw reported appropriate salary after average salary information as a continuous outcome variable.

The second experiment involved a shorter survey that did not include the productivity and childcare scenarios. Here, the panel comprises four salary responses per respondent, corresponding to the four different job types. For this experiment, we treat the response "I think [the character] should be paid more than this amount" (where the amount refers to the average salary for the role) as a binary indicator of being underpaid.

3.5 Balance Checks

Since our gender comparisons rely on a between-subjects design, we begin by assessing balance on key demographic characteristics: age, income, employment status, gender, and race. Tables 1 and 2 show that random assignment to male versus female names resulted in well-balanced groups. In both experiments, there are no systematic differences across these demographic variables.

Table 1 – Balance check (Experiment 1, main sample)

Columns by: Vignette gender	Male	Female	Total	P-value
n (%)	496 (49.0)	516 (51.0)	1012 (100.0)	
Age, mean (sd)	34.595	35.250	34.929	0.40
	(12.446)	(12.560)	(12.502)	
Income, mean (sd)	4.968 (1.624)	4.911 (1.650)	4.939 (1.637)	0.58
Employment, n (%)				
Not employed, n $(\%)$	100 (20.2)	126 (24.4)	226 (22.3)	
Employed, n (%)	396 (79.8)	390 (75.6)	786 (77.7)	0.10
Gender, n (%)				
Female, n (%)	258 (52.1)	275 (53.5)	533 (52.8)	

Columns by: Vignette gender	Male	Female	Total	P-value
Male, n (%)	237 (47.9)	239 (46.5)	476 (47.2)	0.66
Race, n (%)				
Not black, n (%)	175 (35.3)	160 (31.0)	335 (33.1)	
Black, n (%)	321 (64.7)	356 (69.0)	677 (66.9)	0.15

 ${\bf Table} \ {\bf 2} - {\rm Balance} \ {\rm check} \ ({\rm Experiment} \ 2, \ {\rm second} \ {\rm sample})$

Columns by: Vignette gender	Male	Female	Total	P-value
n (%)	79 (52.0)	73 (48.0)	152 (100.0)	
Age, mean (sd)	43.114	42.630	42.882	0.86
	(16.998)	(16.591)	(16.750)	
Income, mean (sd)	1.2e + 04	1.1e+04	1.2e+04	0.69
	(1.8e+04)	(1.4e+04)	(1.6e+04)	
Employment, n (%)				
Not employed, n (%)	43 (54.4)	47 (64.4)	90 (59.2)	
Employed, n (%)	36 (45.6)	26 (35.6)	62 (40.8)	0.21
Gender, n (%)				
Female, n (%)	35 (44.3)	41 (56.2)	76 (50.0)	
Male, n (%)	44 (55.7)	32 (43.8)	76 (50.0)	0.14
Race, n (%)				
Not black, n (%)	40 (51.3)	39 (53.4)	79 (52.3)	
Black, n (%)	38 (48.7)	34 (46.6)	72 (47.7)	0.79

3.6 Analytical Strategy

As a first step to answering our main research question, we compare the proportion of respondents who report that the average salary for the role represents an underpayment for male and female vignette characters.

To formally test for systematic differences in perceptions of fair salaries, we conduct regression analyses that allow us to isolate the effect of vignette character gender while controlling for job type, performance cues, caregiving responsibilities, and respondent characteristics. For the first experiment, we examine two outcomes: the raw reported appropriate salary after respondents were given the average salary benchmark, and a binary variable indicating whether the reported salary exceeded the average salary (interpreted as indicating that the average is perceived as too low).

We include the following key predictors. A dummy for whether the vignette character has a female name (FemaleVignette), a dummy for whether the job is stereotypically female (FemaleJob, nurse or cashier); a dummy for whether the job is white-collar (WhiteCollarJob, manager or nurse); and two treatment dummies capturing whether the vignette included information about high performance (HighPerformer) or caregiving responsibilities (HasChildren). We also include a vector of respondent-level demographic controls (\mathbf{X}). We estimate the following model using OLS for the continuous outcome and logistic regression for the binary outcome:

$$Underpaid_{ij} = \alpha_0 + \beta_1 Female Vignette_j + \beta_2 Female Job_j + \beta_3 White Collar Job_j$$
$$+ \beta_4 High Performer_j + \beta_5 Has Children_j + \gamma X_i + \epsilon_{ij}$$
(1)

where $Underpaid_{ij}$ is an indicator variable equal to 1 if respondent i reports an appropriate salary for vignette character j that is above the average salary we provided in the survey for the role, and 0 otherwise. $FemaleVignette_j$ indicates whether character j has a

female name. $FemaleJob_j$ and $WhiteCollarJob_j$ classifies the job held by character j in the vignette by its traditional gender association and occupational category. $HighPerformer_j$ and $HasChildren_j$ capture the presence of productivity or caregiving cues in the vignette, respectively. X_i includes respondent age, gender, income, race, and employment status. In models using the continuous salary outcome, $Underpaid_{ij}$ is replaced with the raw salary estimate provided by respondent i for character j. This allows us to assess not only whether respondents are more likely to perceive a salary as too low, but also whether they assign systematically different salary values to male and female characters.

4 Results

4.1 Descriptive Results

We begin by comparing the proportion of respondents recommending a higher than average salary (Experiment 1) or reporting that the character should earn more than the average salary (Experiment 2) by the gender of the vignette character in Table 3. In Experiment 1, while the average female character's appropriate salaries are consistently slightly higher than the male character's appropriate salaries, none of these differences are statistically significant. In experiment 2, respondents were somewhat more likely to recommend that a female character be paid more than the average salary versus a male character; however, the difference was again not statistically significant. When we look at reported beliefs about what others might say, these do not differ with the gender of the vignette character.

Table 3 – Descriptive comparisons by vignette character gender

	Female character	Male character	z-score
Experiment 1			
Wage before (ZAR)	$33,478 \ (28,757)$	32,772 (26,747)	0.56
Wage after (ZAR)	31,495 (26,720)	30,754 (25,570)	0.85
Wage productive (ZAR)	34,286 (28,210)	33,754 (28,144)	0.59
Wage childcare (ZAR)	$33,123 \ (27,700)$	32,628 (28,879)	0.52
Underpaid	0.63 (0.48)	0.61 (0.49)	1.03
Overpaid	0.24 (0.43)	0.25 (0.43)	0.38
Experiment 2			
	,		
Underpaid	$0.56 \ (0.50)$	$0.50 \ (0.50)$	1.51
Overpaid	$0.021 \ (0.14)$	0.035 (0.18)	1.07
Beliefs others overpaid	26.63 (28.17)	26.4 (26.07)	0.28

4.2 Regression Results

4.2.1 Experiment 1

Table 3 presents regression results from Experiment 1, estimating the relationship between vignette character attributes and perceptions of underpayment, as well as reported appropriate salaries. Columns 1–3 show coefficients from logistic regressions using a binary variable that takes the value 1 where the appropriate salary reported is above the average salary for the role, and 0 otherwise. Columns 4–6 report OLS regressions using the raw appropriate salary amount provided by respondents (after dropping outliers, as described earlier). Both outcomes are based on salary estimates given by the respondent after they saw average salary information. Each respondent answered 12 salary questions, i.e, 4 different vignette characters with three conditions (baseline, high performer, and caregiving responsibilities). Our estimates, therefore, cluster standard errors at the individual level.

 $^{^{7}}$ We replicate these regressions in the Appendix using the reported appropriate salaries prior to receiving information about the average salary. Results are similar, overall, with the exception that the female vignette character dummy is a marginally significant (p<0.1) predictor of the underpayment dummy taking the value of 1.

We begin in columns 1 and 4 with a specification including the vignette character's gender (VignetteFemale), the traditional gender association of the job (FemaleJob), and whether the role is classified as white collar (WhiteCollarJob). In columns 2 and 5, we add demographic controls, as well as our prompts for high performance (HighPerformer) and child support responsibilities (HasChildren). In columns 3 and 6, we interact these two measures with the vignette character's gender to see whether this information impacts salary expectations differently for male versus female characters. There is no evidence that respondents assign lower salaries to female characters. Since our stereotypically female jobs' actual average salaries were lower than our stereotypically male job salaries, lower reported appropriate wages for these jobs are unsurprising. We do see perceptions that these jobs should be paid better, with more respondents reporting appropriate salaries above the average for the role than with the other jobs considered. Similarly, white collar jobs' appropriate salaries are higher, on average, in line with actual salaries. Given these higher salary levels, it is perhaps unsurprising that respondents are less likely to recommend salaries above the average for these roles.

Considering our demographic variables, we do not see significant differences for most of these. The exception is income, where higher income respondents suggest higher salaries (including above the average for the role) on average. Both high performance and child support information are associated with higher appropriate salary recommendations. This might be due to experimenter demand effects, since respondents might note that this information is given before they are asked for a new salary estimate. With high performance, it would be clear that the experimenters anticipated a salary increase; with child support, this might be less clear (for example, child care responsibilities might be seen to interfere with performance). Interestingly, neither of these measures interacts significantly with the gender of the vignette character.

Table 4 – Effects of Vignette Gender, Job Type, and Treatment Conditions on Perceived Underpayment and Salary Estimates (Experiment 1)

	(1)	(2)	(3)	(4)	(5)	(9)
	Underpaid (Logit)	Underpaid (Logit)	Underpaid (Logit)	Salary (OLS)	Salary (OLS)	Salary (OLS)
VignetteFemale	0.054	0.065	0.087	324.536	376.862	515.464
	(0.060)	(0.060)	(0.070)	(442.530)	(442.070)	(469.830)
FemaleJob	0.415***	0.424***	0.424***	-25717.966***	-25748.647***	-25748.647***
	(0.060)	(0.060)	(0.060)	(383.700)	(383.940)	(383.970)
White Collar Job	-0.940***	-0.962***	-0.962***	35071.408***	35096.907***	35096.907***
	(0.060)	(0.060)	(0.060)	(384.770)	(385.040)	(385.080)
Age		-0.005	-0.005		-56.634***	-56.634***
		(0.002)	(0.002)		(18.290)	(18.290)
Male		-0.056	-0.056		-843.140	-843.140
		(0.080)	(0.080)		(512.340)	(512.380)
Degree		0.064	0.064		405.696	405.696
		(0.090)	(0.090)		(544.220)	(544.260)
Employed		-0.055	-0.055		-493.971	-493.971
		(0.110)	(0.110)		(649.770)	(649.820)
Income		0.098***	0.098***		542.707***	542.707***
		(0.030)	(0.030)		(165.500)	(165.520)
HasChildren		0.458***	0.453***		1723.867***	1826.599***
		(0.030)	(0.040)		(246.740)	(292.070)
$\operatorname{HighPerformer}$		0.766***	0.810***		2891.731***	2998.304***
		(0.040)	(0.050)		(246.560)	(326.100)
Female \times Children			0.009			-204.089
			(0.050)			(436.240)
Female \times Performer			-0.087			-211.720
			(0.070)			(447.470)
Constant	1.138***	0.487**	0.476**	27984.140***	26251.488***	26181.719***
	(0.060)	(0.190)	(0.190)	(410.560)	(1052.990)	(1055.920)
Observations	12054	12021	12021	12054	12021	12021
Pseudo \mathbb{R}^2 (logit)	0.043	0.064	0.064			
* n:0.10 ** n:0.05 ***	* n:0.10, ** n:0.05, *** n:0.01. Standard errors clustered at respondent level	llistered at respondent le	yel.			

* pi0.10, ** pi0.05, *** pi0.01. Standard errors clustered at respondent level.

4.2.2 Experiment 2

Table 5 presents the results from our second, smaller experiment, which used a closed-ended elicitation. Columns 1 and 2 use the full sample and include our main variables (the gender of the vignette character (FemaleVignette), job characteristics (FemaleJob) and (WhiteCollarJob), and, in Column 2, respondent-level demographic controls). We note very similar results to our first experiment here, suggesting that our initial findings were not simply an artefact either of the elicitation method or of our data cleaning decisions. Column 3 disaggregates responses by combinations of respondent and vignette character gender, showing suggestive evidence that female respondents may be somewhat more likely to indicate that female characters are underpaid.⁸ However, this effect is only marginally significant (p<0.10).

Taken together, the findings reinforce those from the first experiment. We find no evidence that average salary recommendations differ by vignette character gender, across two different question formats and two different samples.

⁸This analysis is repeated in the Appendix for Experiment 1, where no significant differences emerge.

 ${\bf Table~5} - {\bf Logit~estimates:~Relationship~between~vignette~character~attributes~and~perceived~underpayment~(Experiment~2)}$

	(1)	(2)	(3)
	Underpaid	Underpaid	Underpaid
FemaleVignette	0.277	0.229	
	(0.19)	(0.21)	
FemaleJob	0.267*	0.403**	
	(0.15)	(0.16)	
White Collar Job	-1.353***	-1.501***	
	(0.18)	(0.19)	
Age		-0.004	
		(0.01)	
Male		-0.189	
		(0.21)	
Degree		0.447*	
		(0.23)	
Employed		-0.172	
		(0.23)	
Income		0.023	
		(0.05)	
Female \times Female Vignette			0.436*
			(0.22)
Female \times MaleVignette			0.177
			(0.24)
$Male \times FemaleVignette$			0.185
			(0.25)
Constant	0.529***	0.553	-0.091
	(0.17)	(0.37)	(0.16)
Observations	608	532	608
Pseudo R ²	0.083	0.108	0.005

^{*} p<0.10, ** p<0.05, *** p<0.01

5 Discussion

This study used two survey experiments to examine whether South African respondents perceive fair salaries differently for male and female workers in identical roles. Both experiments relied on randomized vignette designs, assigning respondents to evaluate hypothetical characters where only the gender varied (indicated by character names). In Experiment 1, respondents were presented with four vignette-based job descriptions (cashier, electrician, nurse, or manager) and asked to state how much the character should be paid. After their initial response, respondents were given the average salary for that job type in South Africa and asked the question again. We then added productivity (the character had won an employee award) and caregiving signal (the character cared for two young children). Each respondent evaluated all four occupations, and we used this within-respondent variation to test for gendered wage perceptions under different role types and information treatments. In the second experiment, a shorter follow-up survey designed to check the robustness of our main findings, we used a simpler format with closed-ended salary comparisons. Respondents were shown a vignette that included the average salary and asked whether they thought the character should earn more than, the same as, or less than this amount. We also included a supplementary question asking participants to estimate how many other people believed the character was overpaid, to indirectly probe for potential social desirability bias.

Across both experiments, we find no evidence that South African respondents assign lower pay to women than to men in identical roles. This result holds even after introducing information about performance or caregiving responsibilities. In fact, if anything, respondents were slightly more likely to recommend higher salaries for female characters than male, though these differences were not statistically significant. Our findings contrast with earlier studies from high-income countries like Germany (Auspurg et al. 2017, Sauer 2020) as well as three countries in Central Asia (Seitz 2023), where gender-based differences in fair wage perceptions were observed. One possible explanation is the context of the country. In South Africa, gender equity is a visible topic in public discourse, and women frequently shoulder

the burden of family care-taking. For example, the share of female-headed households has risen significantly over decades, from approximately 32% in 1991 to nearly 50% in 2022, a proportion that stands well above the African average, where female household headship is around 26% (Garenne & Stiegler 2024). This social environment may have contributed to more egalitarian wage expectations, especially among online survey participants who tend to be younger and more urban, and among those who are raised in female-headed households.

Social desirability in responses might be expected to explain some of the apparent lack of bias. However, in the second experiment, we included an indirect measure asking what respondents thought others believed. Responses to this item were not systematically different by character gender, suggesting that even when asked indirectly, participants did not perceive that others would be gender biased. Further, since each respondent evaluated only one gender, reporting social desirability biased answers would have required respondents to accurately guess the details of our study design, and then to condition on accurate beliefs about others responses.

While the absence of a gender pay preference gap is encouraging, the results do not explain South Africa's actual gender wage gap. Our findings indicate that people assign higher salaries to while collar jobs (managerial roles, for instance) regardless of the worker's gender. However, female-dominated roles such as cashier and nurse were associated with substantially lower appropriate salary estimates, even when the vignette character was male. This suggests that occupational sorting, rather than within-job discrimination, may be a more salient driver of the gender wage gap. This argument is consistent with earlier studies in South Africa that attribute wage differences primarily to job type and industry (Bhorat & Goga 2013, Mosomi 2019). Other factors, such as career interruptions due to caregiving or employer discrimination in hiring and promotions, might make the gender wage gap persistent. These would not be detected in our vignette setup but remain an important mechanism. Finally, we also explored whether male and female respondents differed in their salary judgments. Unlike some studies that found women to be more supportive of equal

pay or biased in favor of other women (Adriaans et al. 2020), we found no such pattern.

Our findings offer an optimistic view of public attitudes toward gender pay equity in South Africa. However, the persistence of gender pay gaps in the labour market (e.g. Pleace et al. 2023) points to the importance of addressing structural and institutional barriers such as occupational segregation and unequal career advancement opportunities. Our sample is unlikely to include individuals in senior management or human resource positions who directly set hiring policies and make wage decisions. This means that the results should not be interpreted as capturing the decision-making behavior of those who set wages in the labour market. Instead, our findings speak to broader social perceptions of wage fairness among the general population, which may nonetheless shape labour market outcomes indirectly through voter preferences, social norms, and pressure on policy discourse. Thus, we suggest that future studies expand on the insights of this study by examining real-world employer behavior, exploring variation across more diverse population segments, or studying how wage attitudes translate into decisions in hiring or negotiation contexts.

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6 Appendix

6.1 Main data: Interaction between rater and vignette gender

 ${\bf Table}~{\bf 6}-{\rm Relationship}~{\rm between}~{\rm the}~{\rm rater}~{\rm and}~{\rm vignette}~{\rm character}~{\rm gender}$

	(1)	(2)
	underpaid	$wage_after_1$
	b/se	b/se
Female rating Female	0.106	919.415
	(0.11)	(928.80)
Female rating Male	0.067	228.693
	(0.11)	(925.46)
Male rating Female	0.159*	809.504
	(0.09)	(1188.21)
Constant	0.286***	30631.254***
	(0.08)	(658.78)
Observations	4018	4018
Pseudo R ²	0.001	

^{*} p;0.10, ** p;0.05, *** p;0.01

6.2 Wages before receiving information

 ${\bf Table~7} - {\bf Relationship~between~the~gender~and~wage~OR~perceived~underpayment~WAGE~BEFORE}$

	(1)	(2)	(3)	(4)	(5)	(9)
	underpaid_before	underpaid_before	underpaid_before	wage_before	wage_before	wage_before
Vignette_female	0.145*	0.151*		523.335	585.329	
	(0.08)	(0.08)		(739.85)	(738.54)	
Vignette female job	0.669***	0.679***		-26134.344***	-26104.496***	
	(0.09)	(0.00)		(733.23)	(734.60)	
Vignette white collar	-3.027***	-3.054**		10869.589***	10814.172***	
	(0.09)	(0.09)		(681.74)	(680.51)	
Age		-0.004			-113.706***	
		(0.00)			(31.17)	
Male		-0.109			-1998.974**	
		(0.08)			(853.22)	
Degree		0.186**			696.353	
		(0.09)			(1001.43)	
Employed		-0.017			-1407.426	
		(0.10)			(1178.81)	
Income		0.079***			1012.070***	
		(0.03)			(309.05)	
Female rating Female			0.185**			3312.951***
			(0.08)			(1250.39)
Female rating Male			0.110			2332.526**
			(0.08)			(1112.77)
Male rating Female			0.086			322.494
			(0.09)			(1191.43)
Constant	1.813***	1.507***	0.338***	40592.282***	41145.800***	31562.877***
	(0.07)	(0.18)	(0.06)	(770.52)	(2323.75)	(801.09)
Observations	4018	4007	4018	4018	4007	4018
Pseudo \mathbb{R}^2	0.304	0.309	0.001			

* pi0.10, ** pi0.05, *** pi0.01

6.3 Robustness check

6.3.1 Others say this person is paid too much (versus average for position)

 ${\bf Table~8-OLS~estimates:~the~relationship~between~the~gender~and~beliefs~about~others'} \\$

	(1)	(2)	(3)
	beliefs_others	beliefs_others	beliefs_others
	b/se	b/se	b/se
vignette_female	1.082	-0.762	
	(2.83)	(2.91)	
Vignette female job	-9.646***	-9.808***	
	(1.56)	(1.66)	
Vignette white collar	17.184***	17.654***	
	(1.74)	(1.97)	
Age		0.014	
		(0.09)	
male		-2.678	
		(3.11)	
degree		2.410	
		(3.83)	
employed		2.042	
		(3.61)	
Income		-2.241***	
		(0.66)	
Female rating Female			3.926
			(4.23)
Female rating Male			-2.895
			(3.72)
Male rating Female			-7.108**
			(3.10)
Constant	22.035***	28.173***	27.538***
	(2.06)	(4.61)	(2.54)
Observations	631	520	631
Pseudo R ²	0.134	0.159	0.021

^{*} p;0.10, ** p;0.05, *** p;0.01

 ${\bf Table} \ {\bf 9} - {\bf Relationship} \ {\bf between} \ {\bf the} \ {\bf race} \ {\bf and} \ {\bf perceived} \ {\bf underpayment}$

	(1)	(2)	(3)
	underpaid	underpaid	underpaid
	b/se	b/se	b/se
underpaid			
Black vignette	-0.019	-0.052	
	(0.19)	(0.21)	
Vignette white collar	-1.342***	-1.483***	
	(0.17)	(0.19)	
Age		-0.005	
		(0.01)	
male		-0.235	
		(0.22)	
Black respondent		-0.058	
		(0.27)	
degree		0.453*	
		(0.23)	
employed		-0.199	
		(0.23)	
Income		0.029	
		(0.05)	
W rating B			-0.206
			(0.22)
W rating W			-0.120
			(0.24)
B rating W			-0.059
-			(0.24)
Constant	0.799***	0.973*	0.206
	(0.18)	(0.53)	(0.15)
Observations	608	532	608
Pseudo R ²	0.077	0.100	0.001

^{*} pi0.10, ** pi0.05, *** pi0.01