

Gender, Career & Unconscious Bias in Greece

Findings from a Large-Scale Implicit Association Test Study (wave 1)

1,145

PARTICIPANTS

$D = 0.17$

MEAN IMPLICIT BIAS

$p < .001$

STATISTICALLY SIGNIFICANT

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IAT PLATFORM

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Wave 1 findings are exploratory. Confirmatory claims will be made exclusively on the basis of preregistered Wave 2 analyses (N > 2,000).

EXECUTIVE SUMMARY	2
1. INTRODUCTION	4
1.1. The Problem: Implicit Bias and the Gender-Career Gap.....	4
1.2. Why Greece, Why Now.....	4
1.3. Study Objectives.....	5
2. METHOD	6
2.1. Study Design.....	6
2.2. The Implicit Association Test.....	6
2.3. Platform & Data Collection.....	8
2.4. Participants & Exclusion Criteria.....	8
2.5. Measures.....	9
2.6. Analytical Strategy.....	9
2.7. Robustness and Sensitivity Checks.....	10
2.8. Ethical Considerations.....	10
3. SAMPLE DESCRIPTION	11
3.1. Participation and Completion.....	11
3.2. Demographic Composition.....	11
3.3. Attitudinal Profile.....	12
3.4. Sample Representativeness.....	13
4. FINDINGS	14
4.1. Overall Implicit Bias.....	14
4.2. Gender Differences.....	15
4.3. Age & Generational Patterns.....	16
4.4. Education.....	16
4.5. Attitudinal & Mindset Variables (labelled Exploratory).....	17
4.6. An Exploratory Interaction: Gender × Explicit Profile.....	18
4.7. Summary: What Predicted Implicit Bias?.....	18
5. DISCUSSION	21
5.1. Main Narrative.....	21
5.2. Limitations.....	22
5.3. Looking Ahead: Wave 2.....	22
6. IMPLICATIONS & RECOMMENDATIONS	24
7. REFERENCES	26
Acknowledgements & Transparency	28
Acknowledgements:.....	28
Transparency Note.....	28
APPENDICES	29
Appendix A - IAT D-Scoring Algorithm.....	29
Appendix B - Exclusion Criteria & Data Quality.....	30
Appendix C - Full Statistical Output.....	32
Appendix D - Open Science.....	39

EXECUTIVE SUMMARY

Gender inequality persists despite decades of legislative progress and widespread explicit support for equality. Understanding why requires looking beyond conscious attitudes. This report presents findings from the first large-scale, publicly accessible Gender-Career Implicit Association Test (IAT) study conducted in Greece, examining the automatic cognitive associations between gender and career / family roles in a sample of 1145 participants (wave1).

The IAT measures response-time differences in a categorisation task to capture implicit associations that operate below conscious awareness. Participants who respond faster when matching words from Male and Career categories, than Female and Career ones, are showing an implicit association of men with career and women with family - regardless of what they consciously believe, and vice versa. The study was conducted by KMOP – Social Action and Innovation Centre, with an IAT platform infrastructure developed by Headway S.A..

Five key findings emerge:

1. Implicit gender-career bias is widespread. The mean D-score across the full sample was 0.17 (SD = 0.35), statistically significantly above zero ($p < .001$, Cohen's $d = 0.48$). Two in three participants (67%) produced positive D-scores, indicating an automatic association of men with career and women with family. This pattern is consistent with international evidence from millions of IAT administrations across dozens of countries, and it is observed here in a sample that is disproportionately female, highly educated, and self-identified as egalitarian - a profile expected to show lower implicit bias.

2. Implicit bias is shared equally by men and women. Men ($M = 0.18$) and women ($M = 0.16$) show near-identical D-scores. The difference between them is negligible and statistically non-significant (Cohen's $d = 0.062$, $p = .514$ after correction to control the False Discovery Rate). Implicit gender-career associations are not primarily something men hold about women; they are a shared cognitive pattern shaped by cultural immersion, social stereotypes and expectations. Interventions that target men as the primary carriers of gender bias are likely to miss a substantial part of the picture.

3. Higher education does not protect against implicit bias. No significant linear relationship between education level and D-score was found after correction for multiple comparisons. A regression model suggests that bachelor-level education may be associated with higher implicit bias than secondary education - a counterintuitive pattern consistent with international findings (Napp, 2024) and a direct challenge to the assumption that more educated workforces are less biased ones.

4. Explicit attitudes and implicit associations are related but dissociated. Explicit stereotype profile was the only variable to survive statistical correction as a predictor of implicit bias. Participants with traditional gender attitudes showed higher D-scores ($M = 0.27$) than “egalitarians”, i.e. people who did not explicitly associate men and women with traditional gender roles ($M = 0.11$). However, even the egalitarian group - over half the sample - shows implicit bias above zero. Stating a belief in gender equality does not eliminate automatic

gender-career associations. This gap between declared values and implicit responses is the central paradox of the data, and the most important practical message for organisations designing equality interventions.

5. Age makes no difference. Implicit bias was consistent across generational groups, from Gen Z (M = 0.19) to Boomers (M = 0.17). The expectation that younger cohorts - raised in a more explicitly gender-equal cultural environment - would show lower implicit bias is not supported by these data.

What comes next. Wave 2 data collection is ongoing, targeting N > 2,000. The larger sample will power confirmatory tests of six preregistered hypotheses, enable multiple regression and mediation analysis, and allow more precise examination of subgroups - including Gen Z, rural residents, and sector-level comparisons - that remain underpowered at Wave 1. Preregistration, is publicly available on OSF at <https://doi.org/10.17605/OSF.IO/DJW2F>. Readers wishing to contribute to the study are invited to take the IAT (available at Greek) at iat.kmop.org/career-family.

Wave 1 findings are exploratory. All patterns reported should be treated as hypothesis-generating rather than confirmatory. Confirmatory claims will be made exclusively on the basis of preregistered Wave 2 analyses.

1. INTRODUCTION

1.1. The Problem: Implicit Bias and the Gender-Career Gap

Despite decades of legislative progress on gender equality and widespread shifts in explicit social norms, gender gaps persist across virtually all developed economies (EIGE, 2025). Women remain underrepresented in senior leadership, overrepresented in part-time and precarious employment, and subject to a gender pay gap that has proven remarkably resistant to policy intervention. Understanding why these gaps persist - in contexts where explicit discrimination is both illegal and socially condemned - requires looking beyond conscious attitudes and deliberate behaviour as well.

A substantial body of research in social and cognitive psychology points to implicit bias as one mechanism through which gender inequality is reproduced in the absence of overt prejudice (Lausi, 2026). Implicit biases are automatic associations that operate below the threshold of conscious awareness and intentional control. Based on implicit attitudes and implicit stereotypes, they can be shaped by cumulative exposure to cultural patterns - the images, narratives, and social structures that surround us from childhood - and they influence judgment and behaviour even in individuals who explicitly endorse egalitarian values (Greenwald & Krieger, 2006; Devine, 1989).

The Implicit Association Test (IAT), introduced by Greenwald, McGhee & Schwartz (1998), is the most widely used and extensively validated tool for measuring implicit associations. It captures the relative strength of automatic links between concept pairs through response latency differences in a categorisation task. Faster responses indicate stronger implicit associations. The Gender-Career IAT specifically measures the relative strength of associations between gender categories (Male, Female) and role categories (Career, Family). Across thousands of studies conducted in dozens of countries, the consistent finding is that the majority of people - regardless of their explicit attitudes - respond faster when Male and Career share a response key than when Female and Career do, indicating a widespread implicit association of men with career and women with family (Nosek et al., 2002).

This association is not trivial. Implicit gender-career bias has been linked to real-world outcomes including hiring decisions, performance evaluations, salary negotiations, and the distribution of domestic labour (Greenwald & Krieger, 2006; Moss-Racusin et al., 2012). Critically, it operates in both men and women, and its magnitude is not reliably reduced by higher education, professional experience, or explicit commitment to gender equality (Nosek et al., 2009). This decoupling of implicit from explicit bias is one of the most replicated and consequential findings in the field - and one of the most important for practitioners and policymakers to understand.

1.2. Why Greece, Why Now

Greece presents a particularly relevant context for this line of inquiry. According to the European Institute for Gender Equality (EIGE) Gender Equality Index, Greece consistently ranks among the lowest-scoring EU member states on gender equality, with persistent gaps in labour market participation, occupational segregation, and the distribution of care responsibilities (EIGE, 2024;

EIGE, 2025). At the same time, educational attainment among Greek women in several age cohorts exceeds that of men - creating a context where formal qualifications have not translated into labour market parity, a pattern that implicit bias research is well-positioned to help explain.

Despite this relevance, Greece has been largely absent from the international implicit bias literature. The vast majority of large-scale IAT studies have been conducted in North American and Northern European contexts, with Southern European populations significantly underrepresented in the evidence base. This study addresses that gap directly, providing the first large-scale, publicly accessible Greek Gender-Career IAT dataset from a Greek-speaking population.

The study also breaks new ground methodologically in the Greek context. By deploying the IAT through a custom digital platform with broad public reach - rather than in controlled laboratory settings with convenience student samples - it generates data that are both larger in scale and more diverse in demographic composition than what has previously been available. This approach follows the model established by Project Implicit, the Harvard-based initiative that has collected IAT data from millions of participants globally (Nosek et al., 2002), and adapts it for a national research context with limited resources but significant public interest.

1.3. Study Objectives

This study pursues three objectives, corresponding to its two-wave design.

First, it aims to measure the prevalence and magnitude of implicit gender-career bias in a large Greek-speaking sample, establishing a descriptive baseline against which future measurements can be compared and through which Greek patterns can be positioned relative to international norms.

Second, it explores whether implicit bias varies systematically across demographic subgroups - including gender, age, education, employment, and region - and whether attitudinal variables such as self-reported gender stereotypes and life-domain priorities are associated with implicit association strength. These exploratory analyses, reported in the present Wave 1 report, are explicitly hypothesis-generating rather than confirmatory.

Third, to situate Wave 1 findings within an open science framework and lay the groundwork for future confirmatory research. Consistent with best practices in transparent reporting, six directional hypotheses derived from the present exploratory patterns have been preregistered on the Open Science Framework prior to any further data collection. This ensures that any future confirmatory analyses building on these findings will be clearly distinguished from the exploratory work reported here (Wagenmakers et al., 2012; Nosek et al., 2018).

Together, these objectives position the study at the intersection of basic research - contributing to the international evidence base on implicit bias - and applied research, generating findings directly relevant to organisational practice, education, and gender equality policy in Greece.

2. METHOD

2.1. Study Design

This study employed an online, self-administered Implicit Association Test (IAT) to measure implicit gender-career associations in a Greek-speaking population. The findings reported here are based on a large research programme conducted without predetermined directional hypotheses - an approach designed to characterise the distribution of implicit bias across a broad population before moving to targeted confirmatory testing. Consistent with open science principles, six directional hypotheses derived from these patterns have been formally preregistered on the Open Science Framework (OSF) prior to any further data collection, ensuring that any future confirmatory analyses will be clearly distinguished from the exploratory work presented here (Preregistration link: <https://doi.org/10.17605/OSF.IO/DJW2F>).

Participation was voluntary and open to the public. Recruitment relied on organic and media-driven dissemination, with no monetary incentives offered. This approach (convenience sampling) is standard in large-scale IAT research and consistent with the methodology employed by Project Implicit, the largest ongoing IAT data collection initiative internationally (Nosek et al., 2002; Xu et al., 2014).

2.2. The Implicit Association Test

The IAT is a computer-based reaction time task that measures the relative strength of automatic associations between concept pairs (Greenwald, McGhee & Schwartz, 1998). In the Gender-Career IAT, participants categorise stimuli belonging to four categories - Male, Female, Career, and Family - using two response keys.

Άνδρας	Κώστας, Χρήστος, Νίκος, Γιώργος, Τάσος
Γυναίκα	Ελένη, Κατερίνα, Εύα, Μαρία, Βασιλική
Καριέρα	Εργασία, Εταιρεία, Μισθός, Γραφείο, Επαγγελματίας, Διοίκηση, Επιχείρηση
Οικογένεια	Γάμος, Γονείς, Συγγενείς, Σύζυγος, Σπίτι, Παιδιά, Φροντίδα

Figure 1. Stimulus words used in the Gender-Career IAT, presented to participants in Greek. Categories: Male (Άνδρας): Kostas, Christos, Nikos, Giorgos, Tasos; Female (Γυναίκα): Eleni, Katerina, Eva, Maria, Vassiliki; Career (Καριέρα): Work, Company, Salary, Office, Professional, Administration, Business; Family (Οικογένεια): Marriage, Parents, Relatives, Spouse, Home, Children, Care. Words were selected to reflect culturally familiar and gender-neutral name frequency patterns in the Greek-speaking population.

The core logic is that responses are faster when two categories that are strongly associated share the same response key. On desktop devices, participants use two keyboard keys (A and

K) to categorise stimuli; on mobile and tablet devices, the response keys are replaced by two tap zones occupying the left and right areas of the screen. Both response modalities capture the same underlying reaction time differences and have been implemented to maintain task equivalence across devices. A participant who implicitly associates men with career will respond faster in blocks where Male and Career share a key than in blocks where Female and Career do.

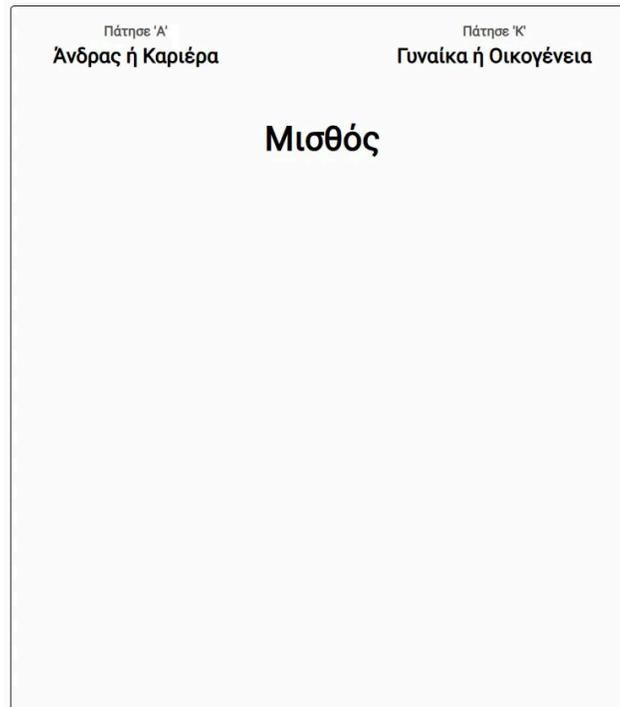


Figure 2. Screenshot of the IAT task interface (combined block, desktop version). Participants press 'A' to categorise stimuli belonging to Male or Career, and 'K' for Female or Family. The stimulus word "Μισθός" (Salary) appears at the centre of the screen and must be categorised as Career. In the reversed combined block, the pairings are reversed: Male or Family on one key, Female or Career on the other. Response time differences between combined and reversed combined blocks form the basis of the D-score calculation. On mobile devices, the key labels are replaced by tap zones on the left and right areas of the touchscreen.

The primary outcome is the D-score, computed using the improved scoring algorithm of Greenwald, Nosek & Banaji (2003). In brief, the D-score is calculated as follows: Trials with response latencies exceeding 10,000 ms are removed; participants for whom more than 10% of responses across trials are faster than 300 ms are excluded entirely; mean latencies are computed for each of the four critical and practice combined blocks; two difference scores are calculated (each standardised by the inclusive standard deviation of the relevant block pair); and the final D-score is the mean of these two standardised differences. D-scores range approximately from -2 to +2, where positive values indicate an implicit association of Male with Career (and Female with Family), and negative values indicate the reverse. Conventional

interpretation thresholds are: 0.00–0.15 negligible, 0.15–0.35 slight, 0.35–0.65 moderate, and above 0.65 strong association (Greenwald et al., 2003).

A note on IAT interpretation is warranted here. The IAT captures relative implicit associations - it does not measure absolute bias, nor does it directly predict discriminatory behaviour. The relationship between IAT scores and real-world outcomes remains an active area of debate in the literature (cf. Oswald et al., 2013; Greenwald, Banaji & Nosek, 2015), and findings from this study should be interpreted accordingly. The IAT is best understood as a measure of cognitive associations shaped by cultural exposure, not a measure of individual character or intent.

2.3. Platform & Data Collection

The IAT was administered via a custom web platform developed by Headway S.A., built to KMOP's research specifications. The platform implements the standard seven-block IAT structure with category labels and stimulus words in Greek, adapted for the Greek cultural and linguistic context. Data is stored on EU-based servers in compliance with GDPR requirements.

A pilot phase preceded the main data collection period. The pilot served to test platform stability, user interface and user experience, assess stimulus timing, and evaluate participant comprehension of instructions. All pilot data were excluded from the analyses reported here. Main data collection commenced on 19 January 2026.

The participant flow was structured as follows. Upon accessing the platform, participants were presented with a landing page describing the study and an age verification step (minimum age 18). They then proceeded through the seven IAT blocks, after which they received their individual D-score result along with a brief interpretive note. Participants were subsequently invited - on a fully optional basis - to complete a demographic and attitudinal questionnaire. Finally, those who completed the questionnaire were shown their result compared to others sharing similar demographic characteristics. This post-IAT structure was intentionally designed to ensure that demographic information could not influence IAT performance.

2.4. Participants & Exclusion Criteria

Raw session data were subjected to standard IAT quality filters prior to analysis. Participants were excluded if: (a) more than 10% of their responses across trials had latencies below 300 ms, indicating response patterns inconsistent with genuine task engagement; or (b) session data were incomplete due to dropout before the end of the IAT. Trials with individual response latencies exceeding 10,000 ms were removed at the trial level but did not trigger participant-level exclusion unless combined with other criteria. These exclusion rules follow directly from the Greenwald et al. (2003) scoring algorithm and are applied uniformly.

Participants were further classified by their level of questionnaire completion into three groups: Full Completers (IAT completed and full demographic questionnaire filled), Partial Responders (IAT completed and at least gender recorded, but questionnaire incomplete), and Full Dropouts (IAT completed but no questionnaire data). The distribution across these groups is reported in

Section 3. Analyses requiring demographic or attitudinal variables are restricted to participants with the relevant data available; the effective N for each analysis is reported accordingly.

2.5. Measures

Primary outcome. The D-score (continuous, approximately -2 to +2) serves as the sole measure of implicit gender-career bias.

Demographic variables. The optional questionnaire collected the following: Gender (categorical: woman, man, non-binary/other, prefer not to say), age (derived from reported month and year of birth; used to verify eligibility of ≥ 18 years and to compute generational group membership), highest level of education completed (six ordinal categories, subsequently grouped for analysis), region of residence (four categories: large urban centre, suburban, small city/town, rural/village), employment status (grouped into systematic employment, self-employment, student, unemployed, retired, and other), and primary professional sector (open-list, subsequently recoded).

Attitudinal and mindset variables. Three attitudinal variables were included to enable exploratory examination of the relationship between explicit attitudes and implicit bias. Stereotype profile classified participants according to their self-reported gender-role attitudes (traditional stereotype, egalitarian, or intermediate profile). Life focus captured self-reported prioritisation of career and family domains. Belief in Professional Gender Equality recorded whether participants believed men and women have equal capabilities in the professional domain.

2.6. Analytical Strategy

All analyses were conducted in R. The analysis pipeline is documented across different reproducible scripts.

Overall bias. A one-sample t-test against zero was used to assess whether the mean D-score of the sample differed significantly from chance. Effect size is reported as Cohen's d.

Group comparisons. 1Ng variables (all $p > .19$), indicating that standard and Welch's ANOVA produce equivalent results in this dataset. Welch's was retained as a conservative default robust to potential heterogeneity in subgroup analyses not reported here.

Multiple comparisons correction. Given that ten demographic and attitudinal variables were examined in the exploratory dragnet analysis, a False Discovery Rate (FDR) correction was applied using the Benjamini–Hochberg procedure (Benjamini & Hochberg, 1995). Both raw and FDR-corrected p-values are reported. Variables that did not survive FDR correction at $q < .05$ are characterised as "not significant at the corrected threshold" rather than interpreted as evidence of null effects, given the limited power of Wave 1 to detect small effects.

Subgroup analyses were conducted only for groups meeting a minimum threshold of $N = 80$. Groups with fewer than 20 participants were suppressed entirely from reporting on privacy and reliability grounds. For groups between $N = 80$ and $N = 160$, results are reported descriptively only, without inferential comparisons. Readers should exercise caution when interpreting findings from smaller subgroups, as estimates carry wider margins of error and are more susceptible to sampling variability.

What is not analysed in Wave 1. Multiple regression and mediation analysis - which would allow simultaneous modelling of predictors and testing of indirect effects - require substantially greater statistical power and are reserved for Wave 2, where a target sample of $N > 2,000$ is anticipated.

2.7. Robustness and Sensitivity Checks

Two robustness checks were conducted. First, a sensitivity analysis confirmed that participants who completed the full demographic questionnaire did not differ significantly in D-score from those who completed the IAT only ($p = .752$), supporting the inclusion of all participants regardless of questionnaire completion status. Second, a comparison of pilot and post-launch data confirmed a significant difference in mean D-scores between phases ($p < .05$), justifying the exclusion of pilot data from all analyses.

2.8. Ethical Considerations

The study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki and the APA guidelines for research with human participants. Participation was voluntary and anonymous; no personal identifiers were collected. Participants were informed of the study's purpose prior to engagement and could withdraw at any time without consequence. Data collection and storage comply fully with EU GDPR requirements, as detailed in the project's GDPR Compliance Statement (OSF: <https://osf.io/ydcz9/>). Ethical oversight was provided internally through KMOP's research governance framework.

3. SAMPLE DESCRIPTION

3.1. Participation and Completion

Data collection for Wave 1 commenced on 19 January 2026. The present analysis is based on all valid sessions recorded up to 16 February 2026, yielding a total of $N = 1145$ participants with usable D-scores. As reported in Section 2.4, the drop rate following quality filtering was 0% - all recorded sessions met the inclusion criteria, indicating that the platform's implementation of the IAT produced clean response data throughout.

Participants varied in the extent to which they engaged with the post-IAT questionnaire. Of the 1,145 participants, 817 (71.4%) completed the full demographic and attitudinal questionnaire (Full Completers); 56 (4.9%) provided partial questionnaire responses, with at least gender recorded (Partial Responders); and 272 (23.8%) completed the IAT but provided no questionnaire data beyond age (Full dropouts). A t-test comparing D-scores between Full Completers and Ghosts indicated no significant difference ($p = .752$), suggesting that dropout from the questionnaire was not systematically related to implicit bias level. This finding supports the inclusion of all participants in D-score analyses regardless of completion status.

3.2. Demographic Composition

Gender. The sample was predominantly female: 55.4% of participants identified as women, 43.5% as men, and the remaining 1.1% as non-binary or other gender identities. The latter group is suppressed from all comparative analyses on privacy and reliability grounds ($N < 20$). The overrepresentation of women relative to the Greek general population is consistent with patterns observed in online IAT research internationally and is addressed in the limitations (Section 5.2).

Age. The mean age of participants was 44 years. Generational distribution was as follows: Gen Z (18–29): $N = 151$ (13.2%); Millennials (30–45): $N = 449$ (39.2%); Gen X (46–59): $N = 464$ (40.5%); Boomers (60+): $N = 81$ (7.1%). The sample skews toward middle-aged adults, with Gen Z and Boomers underrepresented relative to their population share.

Education. The sample is highly educated by any standard. Over half of participants (52.2%) held a postgraduate degree (Masters or PhD); 28.8% held a bachelor's degree or were current students; and 19.1% had secondary education as their highest qualification. This marked overrepresentation of highly educated participants is a known feature of self-selected online IAT samples and is discussed in Section 5.2.

Region of residence. The majority of participants (60.8%) reported living in large urban centres, with the remainder distributed across suburban areas, smaller cities and towns, and rural or village settings. This urban skew reflects both the online recruitment method and the broader concentration of internet access and media consumption in Greek urban centres.

Employment. 60.6% of participants reported being in systematic employment. The remainder were distributed across self-employment, student status, unemployment, and other categories.

Professional sector. Among participants who reported their sector (N = 759 with valid responses across 12 groups meeting the minimum N threshold), the largest groups were Education (N = 228), Administrative roles (N = 116), and Social Services (N = 81). Most sector subgroups fall below the defined threshold for comparative analysis at this sample size; sector-level findings are therefore reported descriptively only.

Prior IAT experience. 594 participants (51.9%) reported taking an IAT for the first time; 232 (20.3%) reported prior IAT experience; and 319 (27.9%) did not provide this information. A Welch two-sample t-test found no significant difference in D-scores between first-timers and repeaters ($p = .241$), indicating that prior IAT exposure did not meaningfully attenuate implicit bias scores in this sample.

3.3. Attitudinal Profile¹

Stereotype profile. Participants were classified into three explicit attitude profiles based on their responses to a set of questions about gender roles in professional and domestic life: Egalitarian (rejecting traditional gender role divisions), Traditional Stereotype (endorsing them), and Mixed/Other (ambivalent or inconsistent responses). Among the 787 participants with valid classifications, 420 (53.4%) were classified as Egalitarian, 257 (32.7%) as Mixed/Other, and 110 (14.0%) as Traditional Stereotype. The predominance of self-identified egalitarians is consistent with social desirability effects in explicit attitude measurement and makes the implicit findings - reported in Section 4 - particularly noteworthy.

¹ 1. How important is family to you? Extremely important - Very important – Somewhat - Slightly important – Not important at all – Do not wish to answer [Πόσο σημαντική είναι για σενα η οικογένεια; Πάρα πολύ σημαντική – Πολύ σημαντική – Μέτρια – Λίγο σημαντική – Καθόλου σημαντική - Δεν επιθυμώ να απαντήσω]

2. How important is career to you? Extremely important - Very important – Somewhat - Slightly important – Not important at all – Do not wish to answer [Πόσο σημαντική είναι για σενα η καριέρα; Πάρα πολύ σημαντική – Πολύ σημαντική – Μέτρια – Λίγο σημαντική – Καθόλου σημαντική - Δεν επιθυμώ να απαντήσω]

3. How strongly do you associate family with women or men? Strongly with women – Moderately with women – Slightly with women – I do not associate it with women or men – Strongly with men – Moderately with men – Slightly with men – Do not wish to answer [Πόσο συσχετίζεις την οικογένεια με τις γυναίκες ή τους άνδρες; Πολύ με τις γυναίκες - Μέτρια με τις γυναίκες - Λίγο με τις γυναίκες – Δεν τη συσχετίζω ούτε με τις γυναίκες ούτε με τους άνδρες - Πολύ με τους άνδρες - Μέτρια με τους άνδρες - Λίγο με τους άνδρες - Δεν επιθυμώ να απαντήσω]

4. How strongly do you associate career with women or men? Strongly with women – Moderately with women – Slightly with women – I do not associate it with women or men – Strongly with men – Moderately with men – Slightly with men – Do not wish to answer [Πόσο συσχετίζεις την καριέρα με τις γυναίκες ή τους άνδρες; Πολύ με τις γυναίκες - Μέτρια με τις γυναίκες - Λίγο με τις γυναίκες – Δεν τη συσχετίζω ούτε με τις γυναίκες ούτε με τους άνδρες - Πολύ με τους άνδρες - Μέτρια με τους άνδρες - Λίγο με τους άνδρες - Δεν επιθυμώ να απαντήσω]

5. Do you believe that women and men have equal capabilities in the professional field? Yes – No – I am not sure – Do not wish to answer [Πιστεύεις ότι οι γυναίκες και οι άνδρες έχουν ίσες ικανότητες στον επαγγελματικό τομέα; Ναι – Όχι – Δεν είμαι σίγουρος/η - Δεν επιθυμώ να απαντήσω]

Life focus. Participants were classified based on their response to two questions asking them to describe their primary life orientation: Family-Focused (prioritising family and domestic life), Career-Focused (prioritising professional goals), or Balanced Values (neither clearly dominant). Among 829 participants with valid responses, 387 (46.7%) were classified as Family-Focused, 355 (42.8%) as Balanced Values, and 87 (10.5%) as Career-Focused.

Belief in Professional Gender Equality. Participants were asked whether they believed men and women have equal capabilities in the professional domain (single item, three-option response). Among 842 participants with valid responses, 556 (66.0%) responded yes, 215 (25.5%) responded no, and 71 (8.4%) were unsure.

3.4. Sample Representativeness

This sample is not nationally representative. Self-selection via online and media-driven recruitment has produced a sample that overrepresents women, highly educated individuals, and urban residents relative to the Greek general population. These skews are typical of online IAT research - Project Implicit data from comparable studies show near-identical demographic patterns (Nosek et al., 2002) - and do not invalidate the findings, but they do constrain their generalisability. Findings describe the implicit associations of people who chose to engage with this study, a group that is likely more educated and more gender-equality-aware than the Greek population at large. If anything, this suggests that the implicit bias levels reported here may underestimate what would be observed in a fully representative sample - a consideration that strengthens rather than weakens the practical relevance of the findings.

4. FINDINGS

4.1. Overall Implicit Bias

The primary question of this study is whether participants, as a group, show an implicit association between men and career. The answer is unambiguous: yes.

Distribution of Implicit Bias Scores

N = 1145 , Mean D = 0.17 | 67% of participants showed implicit Male-Career association

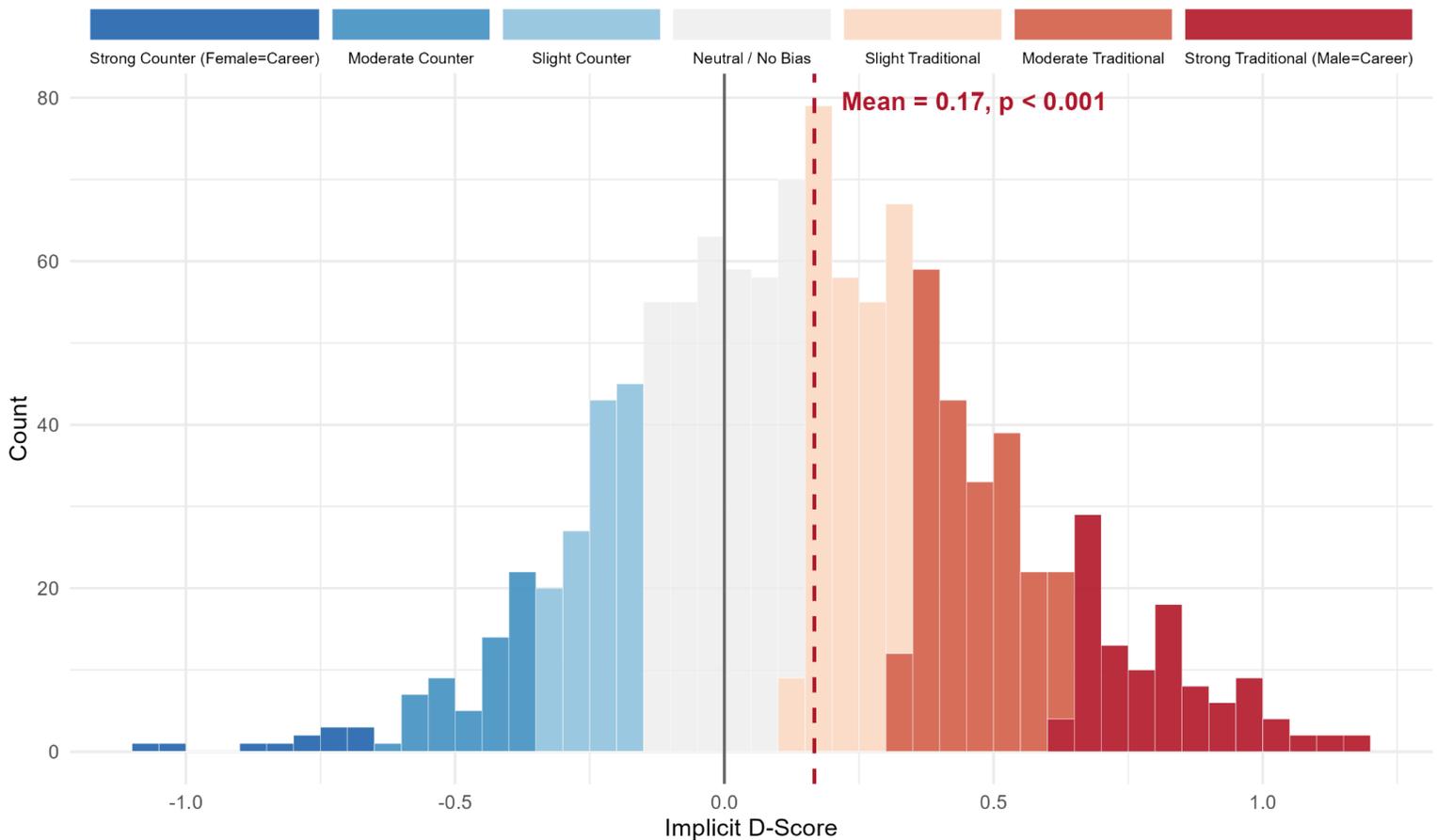


Figure 1. Distribution of implicit bias scores (D-scores) across the full sample (N = 1,145). Positive scores indicate implicit Male-Career association; negative scores indicate Female-Career association. Colour boundaries correspond to D-score interpretation thresholds (Greenwald et al., 2003); histogram bins spanning a threshold boundary display blended colours.

The mean D-score across the full sample was 0.17 (SD = 0.35, Median = 0.16). A one-sample t-test against zero was highly significant ($p < .001$), with a Cohen's d of 0.48 - a small-to-medium effect by conventional standards (Cohen, 1988), and consistent with the magnitude typically reported in Gender-Career IAT studies internationally (Nosek et al., 2002). In practical terms, 67.0% of participants produced positive D-scores, indicating an implicit association of men with

career and women with family. A further 31.7% showed counter-stereotypic associations, and the remainder scored at or near zero.

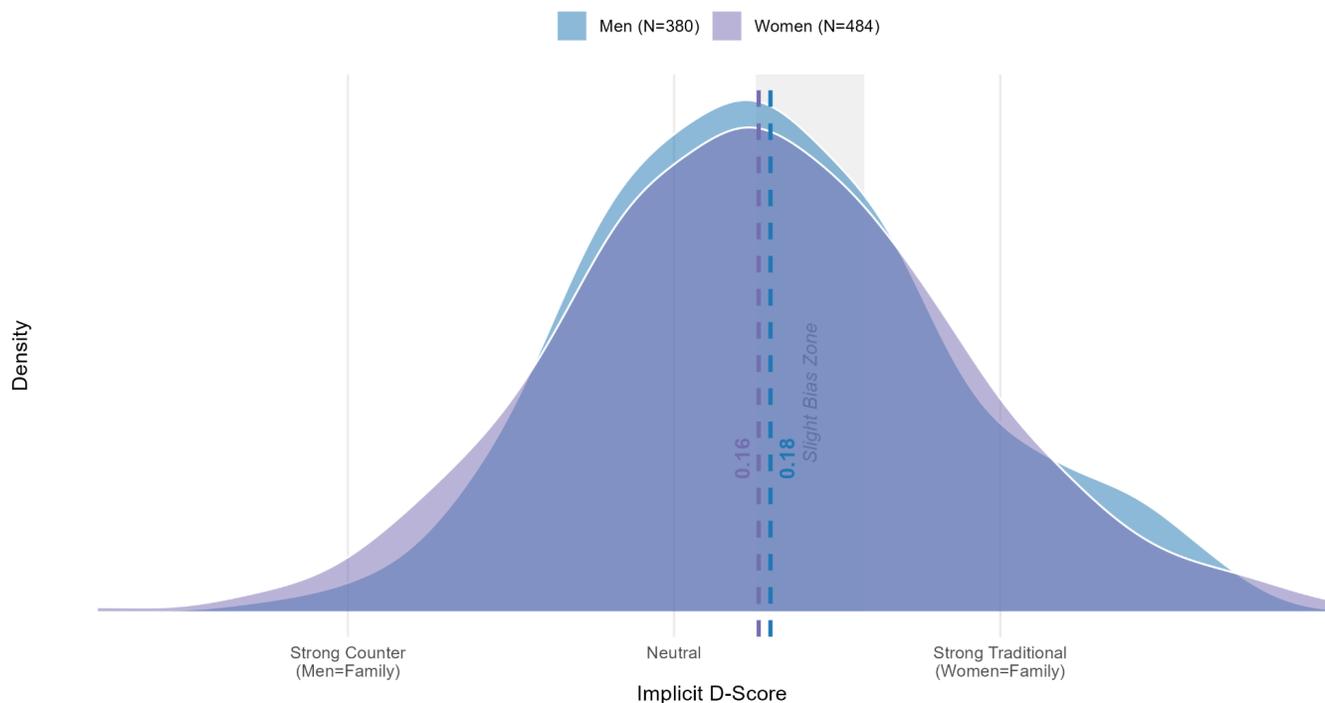
To contextualise this magnitude: a D-score of 0.17 places this sample in the "slight" implicit bias range (0.15–0.35) as defined by Greenwald et al. (2003). This is a meaningful finding. It indicates that even in a sample that is disproportionately female, highly educated, and largely self-identified as egalitarian - characteristics internationally associated with lower explicit gender bias - implicit associations favouring men in career roles remain clearly detectable.

4.2. Gender Differences

Men showed a marginally higher mean D-score (0.18) than women (0.16), a difference of 0.022 D-score units. However, this difference was not statistically significant after FDR correction ($p = .514$), and the effect size was negligible (Cohen's $d = 0.062$). The overlapping density plot confirms this: the distributions of male and female D-scores are nearly indistinguishable, with massive distributional overlap.

Implicit Bias Score Distributions by Gender

A Shared Cultural Bias



Cohen's $d = 0.06$ (Negligible Difference (Massive Overlap))
 *Excludes: 9 Non-Binary/Other and 272 missing gender.

Figure 2. Overlapping distributions of implicit bias scores (D-scores) for men and women (Men: $N = 380$, Women: $N = 484$). Dashed vertical lines indicate group means (Men: $M = 0.18$, Women: $M = 0.16$). The near-identical distributions indicate that implicit gender-career associations are shared across genders. Cohen's $d = 0.06$, $p = .514$ (FDR-corrected), indicating a negligible difference. Shaded region = "Slight Bias Zone" ($D = 0.15$ – 0.35 , Greenwald et al., 2003). Excludes 9 Non-Binary/Other and 272 participants with missing gender data.

This null finding is itself substantively important. Both men and women in this sample show implicit gender-career bias of comparable magnitude. It is a striking finding that women, who are the primary targets of gender-career stereotyping, show implicit associations that mirror those of men. This is consistent with the theory that implicit associations are formed by implicit attitudes and implicit stereotypes, with stereotypes being formed through simplified categorisations or correlations that are also affected by societal and cultural norms (Greenwald & Krieger, 2006; Devine, 1989).

Precision note: Both gender subgroups are adequately powered for reliable estimation (Women: $N = 484$, 95% CI [0.13, 0.19]; Men: $N = 380$, 95% CI [0.13, 0.23]).

4.3. Age & Generational Patterns

A correlation between age and D-score was not significant ($p > .05$), indicating no linear relationship between age and implicit bias strength in this sample. Across generational groups, mean D-scores were similarly flat: Gen Z ($M = 0.19$), Millennials ($M = 0.15$), Gen X ($M = 0.18$), Boomers ($M = 0.17$). A Welch ANOVA across these groups did not survive FDR correction.

The absence of a generational gradient is noteworthy. One might expect younger cohorts - who have grown up in a more explicitly gender-equal cultural environment - to show lower implicit bias (Napp, 2024). The data do not support this expectation, at least not at Wave 1 sample sizes. Gen Z and Boomers remain at Tier 1 descriptive status ($N = 151$ and $N = 81$ respectively), and this comparison will be revisited with greater power in Wave 2.

4.4. Education

Education showed a raw association with D-score that did not survive FDR correction in the omnibus analysis ($p = .047$ uncorrected, $p = .234$ after correction). A multivariate regression model, however, revealed a more nuanced pattern: Participants with a bachelor's degree showed higher implicit bias than those with secondary education only (mean difference ≈ 0.10 D-score units after controlling for gender, age, and explicit attitudes; $p = .009$), while the difference between postgraduate and secondary education was not statistically significant ($p = .113$).

This counterintuitive pattern - that bachelor-level education is associated with higher rather than lower implicit bias - warrants cautious interpretation. It may reflect compositional differences between education groups in this self-selected sample rather than a genuine education effect. It is nonetheless consistent with a broader pattern in the implicit bias literature suggesting that higher education does not reliably suppress implicit associations (Nosek et al., 2009), and will be examined more carefully in any future confirmatory analysis.

4.5. Attitudinal & Mindset Variables (labelled Exploratory)

4.5.1. Stereotype Profile

The strongest group-level predictor of implicit bias in this sample was self-reported stereotype profile - the only variable to survive FDR correction ($p_{\text{FDR}} < .001$). Participants classified as holding a Traditional Stereotype profile showed a mean D-score of 0.27, compared to 0.20 for Mixed/Other and 0.11 for Egalitarians - a difference of 0.153 D-score units between the extremes, with a Cohen's d of 0.452 (small effect, for Traditional group at $N = 110$).

The Ideological Clash

Egalitarian vs. Traditional Stereotype Profile, $p < 0.001$

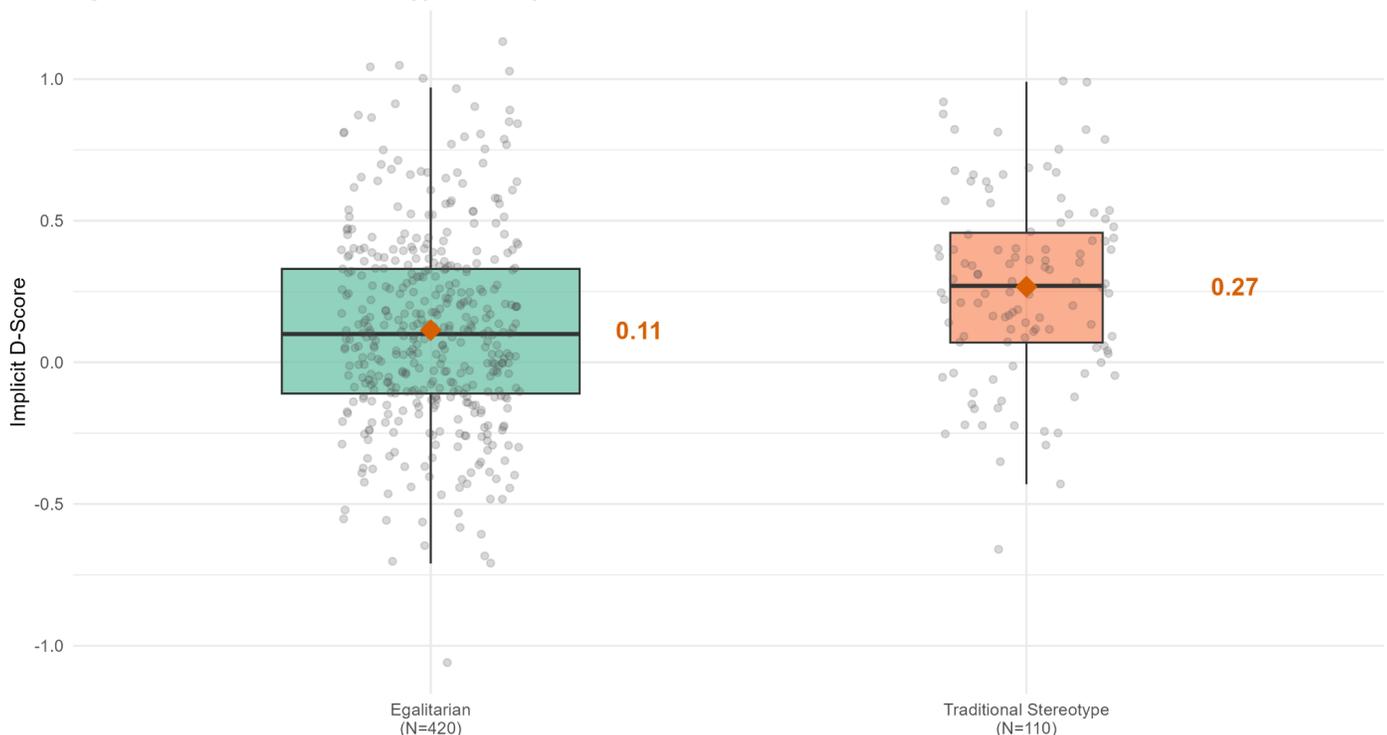


Figure 3. Implicit bias scores (D-scores) by self-reported gender attitude profile, excluding Mixed/Other group. Orange diamonds indicate group means (Egalitarian: $M = 0.11$, $N = 420$; Traditional Stereotype: $M = 0.27$, $N = 110$). Difference is statistically significant ($p < .001$, FDR-corrected) with a small effect size (Cohen's $d = 0.45$). Note that even the Egalitarian group shows a mean D-score above zero, indicating residual implicit bias despite explicitly egalitarian attitudes.

This finding confirms a meaningful, if modest, correspondence between explicit gender attitudes and implicit associations. People who explicitly endorse traditional gender roles also show stronger implicit career-gender associations. This is consistent with dual-process accounts of social cognition, in which explicit and implicit attitudes, while dissociable, are not always independent (Greenwald & Krieger, 2006; Napp, 2024).

Critically, however, even the Egalitarian group - comprising over half the sample - shows a mean D-score of 0.11, which, while lower than the other groups, still trends above zero. The implicit bias does not disappear among those who explicitly reject gender stereotypes; it is merely

attenuated. This gap between stated values and implicit associations is one of the most practically consequential findings of the study.

4.5.2. Life Focus

Participants who rated family as more important than career in their personal life showed higher mean implicit bias ($M = 0.20$) than those who rated both equally ($M = 0.14$) or career above family ($M = 0.13$). This pattern did not survive FDR correction ($p = .076$ uncorrected, $p = .253$ after correction) and should be treated as a trend warranting further examination rather than a confirmed finding.

4.5.3. Belief in Professional Gender Equality

Participants who did not believe men and women have equal professional capabilities showed marginally higher D-scores ($M = 0.20$) than those who did ($M = 0.16$), but this difference did not survive FDR correction ($p = .259$). The absence of a strong systematic relationship between this explicit belief and implicit bias scores is consistent with the broader pattern observed throughout: explicit attitudes and implicit associations are related but distinct, and holding egalitarian views does not reliably translate into lower implicit bias on the IAT. Nonetheless, these findings should be interpreted with caution, considering the potential different interpretations of the question and, thus, the answer. For example, some participants may have answered negatively, believing that women are more professionally capable, compared to men.

4.6. An Exploratory Interaction: Gender \times Explicit Profile

The regression analysis revealed one significant interaction effect: Gender \times Explicit Profile ($p = .043$). This suggests that the relationship between explicit gender attitudes and implicit bias differs between men and women. Given the exploratory nature of this finding and the absence of a pre-specified hypothesis, it is reported here descriptively and flagged for confirmatory testing in Wave 2. Substantive interpretation is reserved until replication with adequate power.

4.7. Summary: What Predicted Implicit Bias?

Table 1 summarises the dragnet analysis across all ten variables tested, with FDR-corrected p-values.

Variable	p (raw)	p (FDR)	Survived FDR
Stereotype profile	< .001	< .001	Yes
Education	.047	.234	No
Life focus	.076	.253	No

Variable	p (raw)	p (FDR)	Survived FDR
Sector	.146	.366	No
Prior experience	.241	.483	No
Belief in Professional Gender Equality	.297	.494	No
Gender	.360	.514	No
Participation status	.813	.924	No
Residence	.893	.924	No
Employment	.924	.924	No

Table 1. Statistical dragnet results (Welch ANOVA, FDR-corrected). N varies by variable due to optional questionnaire completion.

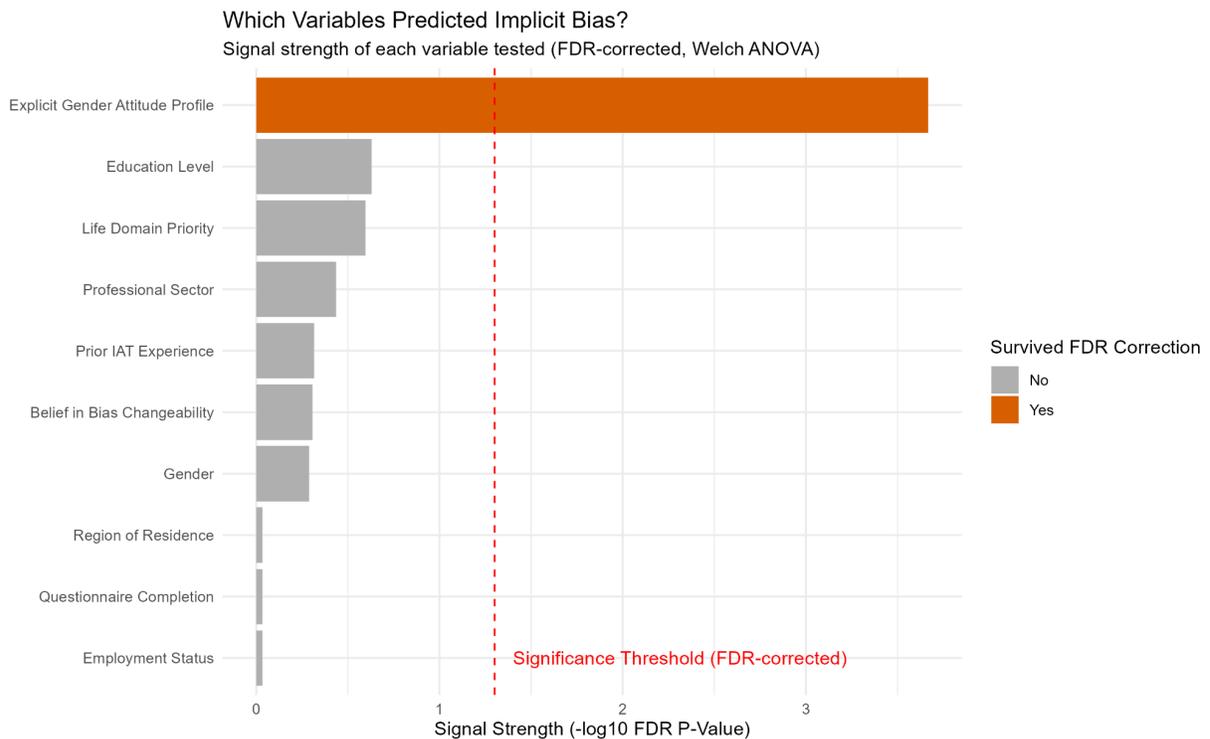


Figure 4. Signal strength of all variables tested as predictors of implicit bias (D-score), measured as $-\log_{10}$ of the FDR-corrected p-value. Bars crossing the dashed red line (significance threshold, FDR-corrected $\alpha = .05$) indicate statistically significant predictors. Only explicit gender attitude profile survived correction. All other variables showed no significant association with implicit bias at this sample size.

The picture is clear: At $N = 1145$, only explicit stereotype profile emerges as a robust predictor of implicit bias strength. All other demographic and attitudinal variables tested - including gender, age, education, and life values - either show no association or show associations that do not survive correction for multiple comparisons. This does not mean these variables have no relationship with implicit bias; it means that Wave 1 lacks the statistical power to detect effects smaller than those produced by stereotype profile.

5. DISCUSSION

5.1. Main Narrative

The findings of Wave 1 converge on a coherent and practically meaningful picture, organised around three central observations.

First, implicit gender-career bias is widespread and statistically robust in this sample.

Two in three participants produced D-scores above zero, and the sample mean of 0.17 - while modest in absolute terms - is statistically distinguishable from chance with high confidence and replicates the direction and approximate magnitude of findings from international Gender-Career IAT research (Nosek et al., 2002; Charlesworth & Banaji, 2019). This is not a marginal or ambiguous signal: it is a consistent pattern across a sample of over 1,100 people, robust to participation status and outlier sensitivity checks.

Positioning this finding in international context: The mean D-score of 0.17 is comparable to - and in some cases slightly lower than - aggregate scores reported in Project Implicit data from other European countries, though direct cross-national comparisons require caution given differences in sampling and recruitment methods. What is notable is that this level of implicit bias is observed in a sample that is disproportionately female, highly educated, and predominantly self-identified as egalitarian - precisely the demographic profile one would expect to produce lower implicit bias. The implication is that implicit gender-career associations are sufficiently culturally embedded to persist even in populations with strong explicit commitments to equality.

Second, implicit bias is a shared phenomenon - not a gendered one. The near-identical D-scores of men (0.18) and women (0.16), with a negligible and non-significant difference between them, is one of the most striking findings of this wave. It runs counter to a common intuition - that gender-career stereotyping is primarily something that men hold towards women - and aligns instead with a body of evidence showing that implicit associations are shaped by cultural immersion rather than by the social position of the perceiver (Greenwald & Krieger, 2006). Women in this sample associate men with careers almost as strongly as men do. This finding has direct implications for how organisations design interventions: awareness programmes that target men as the primary carriers of gender bias are likely to miss a substantial part of the picture.

Third, the explicit-implicit gap is real, and it is the central paradox of these data. The most powerful predictor of implicit bias in this sample is explicit stereotype profile - but even this relationship tells a story of incomplete correspondence. Egalitarians show lower implicit bias than those with traditional attitudes, as expected. But they do not show zero implicit bias: their mean D-score of 0.11 indicates that even among people who explicitly reject gender stereotypes, automatic associations favouring men in career roles remain detectable. This decoupling of what people believe from what their minds automatically do is the defining feature of implicit bias as a psychological phenomenon, and it is precisely why self-report measures alone are insufficient for understanding - let alone addressing - gender inequality in the workplace.

Taken together, these three observations paint a picture of a society in which the cultural association between men and career is sufficiently pervasive to leave measurable traces in the cognitive responses of a broadly egalitarian, well-educated, and predominantly urban sample. Whether this pattern holds - and how it varies across more precisely defined subgroups - is the central question that Wave 2 is designed to answer.

5.2. Limitations

Four limitations of the present study warrant explicit acknowledgment.

Convenience sample. Participants were self-selected via online and media-driven recruitment. The resulting sample is not nationally representative: as documented in Section 3, it skews toward women and higher education levels relative to the Greek general population. This pattern is consistent with what is routinely observed in online IAT research internationally - Project Implicit data show similar demographic skews across national samples (Nosek et al., 2002) - and does not invalidate the findings, but it does constrain their generalisability. Reported patterns describe the associations held by people who chose to take this test, not the Greek population as a whole.

IAT as a measure. The IAT captures relative implicit associations between concept pairs - in this case, the relative strength of Male-Career versus Female-Career associations. It does not measure absolute bias, nor does it directly assess discriminatory intent or behaviour. The predictive validity of IAT scores for real-world outcomes has been the subject of substantive debate in the literature (Oswald et al., 2013; Greenwald, Banaji & Nosek, 2015; Kurdi et al., 2019), and effect sizes in IAT-behaviour correlations tend to be modest. Findings from this study are best understood as evidence of culturally-shaped cognitive associations, not as assessments of individual prejudice or as direct predictors of workplace discrimination.

Exploratory design and multiple comparisons. Ten demographic and attitudinal variables were examined without pre-specified directional hypotheses, and False Discovery Rate correction was applied to manage the elevated risk of spurious findings under multiple testing. Despite this correction, the probability of some false positives remains non-negligible at this sample size. All patterns reported here should be treated as hypothesis-generating rather than confirmatory.

Cross-sectional design. The study captures implicit associations at a single point in time. It cannot establish whether observed patterns are stable individual characteristics, situationally variable responses, or artefacts of the specific recruitment context. Longitudinal tracking and repeated measurement - beyond the scope of this study - would be required to address questions of temporal stability or change.

5.3. Looking Ahead: Wave 2

Wave 1 established a methodological baseline and generated the exploratory patterns reported here. Wave 2 is designed to subject the most theoretically and practically significant of these patterns to rigorous confirmatory testing.

Prior to any further data collection, six directional hypotheses were formally preregistered on the Open Science Framework (OSF preregistration: <https://doi.org/10.17605/OSF.IO/DJW2E>; date: February 20, 2026). Preregistration locks the hypotheses, analytical approach, and decision criteria in advance, ensuring that Wave 2 results cannot be influenced - consciously or otherwise - by knowledge of the data. This two-stage exploratory-confirmatory design follows current best practices in open psychological science (Wagenmakers et al., 2012; Nosek et al., 2018).

The preregistered hypotheses address gender differences in implicit bias, generational patterns, the relationship between explicit gender attitudes and implicit associations, and the role of life-career domain prioritisation. The target sample for Wave 2 is $N > 2,000$, a threshold that provides adequate statistical power for the planned analyses - including multiple regression and, where theoretically motivated, mediation analysis - that were not feasible at Wave 1 sample sizes.

Wave 2 data collection is ongoing. Readers wishing to contribute to the study are invited to take the IAT at iat.kmop.org/career-family.

6. IMPLICATIONS & RECOMMENDATIONS

The findings of Wave 1, while exploratory, are sufficiently consistent and theoretically grounded to support a set of evidence-based observations for practice and policy. The following recommendations are framed proportionately: Where findings are robust, language is direct; where findings are tentative, this is stated explicitly.

For organisations and human resources practitioners. The central message for organisations is that implicit gender-career bias is not a problem confined to a minority of explicitly prejudiced individuals. In this sample, two in three participants - across genders, age groups, and education levels - showed automatic associations favouring men in career roles. The fact that women show bias of comparable magnitude to men, and that self-identified egalitarians are not immune, suggests that implicit bias is a systemic feature of the cognitive environment in which workplace decisions are made, not an individual character flaw to be identified and corrected in specific employees.

This has direct consequences for intervention design. Awareness training that relies on self-reflection and explicit attitude change - the dominant model in most corporate diversity programmes - addresses only part of the problem. The evidence from this and international studies suggests that implicit associations are more resistant to conscious override than explicit attitudes, and that one-off training, usually focused on affirmation and affective states, such as supporting people to feel good about their values or trying to change how they feel with some associations, has limited demonstrated efficacy (Forscher et al., 2019). More promising approaches target the structural conditions under which implicit associations influence decisions: Blind CV screening to remove gender cues at the shortlisting stage, standardised and criterion-referenced interview scoring to reduce discretionary judgment, diverse hiring panels to introduce countervailing perspectives, and formal accountability mechanisms that track gender outcomes across recruitment, promotion, and pay review cycles.

Organisations that have already implemented explicit equality commitments - equal opportunity policies, gender balance targets, diversity statements - should not assume that these are sufficient. The data suggest that even people who endorse these values carry implicit associations that can influence judgment below the threshold of conscious awareness. Structural safeguards are not a supplement to a culture of equality; they are its operational expression.

For education and professional development. The education findings in this study are counterintuitive and warrant attention. The absence of a clear gradient - whereby higher education predicts lower implicit bias - is consistent with a well-replicated international pattern (Nosek et al., 2009) and challenges a common assumption in both policy and organisational practice: that more educated people are less biased. Education appears to increase awareness of explicit gender norms and improve the ability to articulate egalitarian values, but it does not automatically disrupt the implicit associations formed through decades of cultural exposure to gender-stereotyped representations in media, labour markets, and domestic life.

For practitioners designing training and development programmes, this suggests the need to move beyond awareness-raising toward approaches that target implicit associations more directly. Counter-stereotypic exposure - sustained and varied contact with examples that contradict dominant gender-role associations - has shown the most consistent efficacy in the experimental literature (Lai et al., 2016). Implementation in organisational settings might include deliberate representation of counter-stereotypic role models in internal communications, case studies, and leadership visibility, combined with structured reflection on the gap between stated values and automatic responses.

For policy. The value of large-scale implicit bias measurement for public policy lies in what it adds to existing gender equality data. Labour market statistics - participation rates, pay gaps, occupational segregation indices, promotion rates - describe outcomes. Implicit bias measurement speaks to one layer of the mechanisms that produce those outcomes. Greece's consistently low ranking on the EIGE Gender Equality Index suggests that structural barriers to gender equality remain substantial; the present data suggest that cognitive barriers operate alongside them, even in populations that explicitly support equality.

We would argue for the integration of implicit bias monitoring into the evidence base informing gender equality policy at both national and EU level - not as a replacement for structural indicators, but as a complementary lens. This study demonstrates that such monitoring is feasible at scale, at relatively low cost, and with high public engagement: Over 1100 people completed this IAT in less than four weeks, driven largely by organic media interest. A sustained national monitoring programme, administered periodically and across broader demographic profiles, could track change over time and evaluate the population-level impact of policy interventions in a way that self-report surveys cannot.

For researchers. This study makes a methodological contribution that extends beyond its substantive findings. It demonstrates the feasibility of deploying a psychometrically validated implicit measure - the IAT - at scale in a Greek-speaking population, through a publicly accessible digital platform, within an open science framework that includes formal preregistration and transparent reporting of both significant and null results. The analytical pipeline developed for this study, and the two-stage exploratory-confirmatory design, constitute a reusable model for NGO-led and SME-led research in under-resourced national contexts.

Several extensions suggest themselves for future work. A fully representative probability sample - even a modest one - would allow the present findings to be generalised beyond the self-selected population reached here. Longitudinal tracking of a subset of participants would enable assessment of whether implicit associations change following targeted interventions. And extension of the IAT paradigm to other dimensions of bias - ethnicity, age, disability - using the same platform infrastructure would begin to build a more comprehensive picture of the implicit cognitive landscape in contemporary Greek society.

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Acknowledgements & Transparency

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Finally, we are grateful to the 1145 participants who gave their time to complete the IAT and, in many cases, the full questionnaire. Studies of this kind depend entirely on public willingness to engage with research on difficult and personally relevant topics.

Transparency Note

The authors used Claude (Anthropic) as a writing assistance tool during the drafting of this report. All research design decisions, analytical choices, interpretation of findings, and scientific judgments were made exclusively by the authors. AI assistance was limited to structuring and drafting text based on author-provided content and direction.

APPENDICES

Appendix A - IAT D-Scoring Algorithm

The D-score was computed following the improved scoring algorithm described by Greenwald, Nosek & Banaji (2003). The procedure is as follows:

Step 1 - Remove extreme latencies. Trials with response latencies exceeding 10,000 ms are removed from the dataset entirely prior to any further computation.

Step 2 - Identify and exclude fast responders. If more than 10% of a participant's responses across all trials have latencies below 300 ms, the participant is excluded from all analyses. This threshold identifies response patterns inconsistent with genuine task engagement.

Step 3 - Compute block means. Mean response latencies are calculated separately for each of the four critical blocks: M_3 , M_4 , M_6 , M_7 .

Step 4 - Compute inclusive standard deviations. Two pooled standard deviations are calculated: SD_1 is the standard deviation of all trials in Blocks 3 and 6 combined; SD_2 is the standard deviation of all trials in Blocks 4 and 7 combined.

Step 5 - Compute difference scores. Two standardised difference scores are computed:

- $D_1 = (M_6 - M_3) / SD_1$
- $D_2 = (M_7 - M_4) / SD_2$

Step 6 - Compute final D-score. The participant's final D-score is the mean of the two standardised difference scores:

- $D = (D_1 + D_2) / 2$

Positive D-scores indicate faster responses when *Male* and *Career* share a response key - that is, an implicit association of men with career and women with family. Negative D-scores indicate the reverse. The theoretical range is approximately -2 to +2, with conventional interpretation thresholds of 0.00–0.15 (negligible), 0.15–0.35 (slight), 0.35–0.65 (moderate), and above 0.65 (strong association).

Appendix B - Exclusion Criteria & Data Quality

Metric	Value
Raw sessions (post-launch)	1,145
Excluded: >10% fast responses (<300ms)	0
Excluded: incomplete IAT	0
Final clean sample	1,145
Drop rate	0.0%
Mean D-score (clean sample)	0.17
SD	0.35

Note: The 0% drop rate indicates that the platform implementation of the IAT produced consistently valid response data throughout the data collection period. No participants were excluded on quality grounds.

Participation status breakdown:

Status	N	%
Completed Questionnaire	817	71.4%
Partial (Incomplete Questionnaire)	56	4.9%
Full Dropouts (Age + IAT Only)	272	23.8%
Total	1,145	100%

Dropout bias check: A Welch two-sample t-test comparing D-scores between Full Completers (M = 0.164) and Full Dropouts (M = 0.172) was non-significant ($p = .752$), indicating no systematic relationship between questionnaire dropout and implicit bias level.

Pilot data: A pilot phase preceded main data collection (N = 85 pilot sessions). A t-test comparing pilot and campaign D-scores indicated a significant difference (pilot M = 0.079 vs

campaign $M = 0.167$, $p < .05$), confirming that pilot data should not be merged with the main dataset. All analyses reported in this document are based exclusively on post-launch data.

Robustness checks: Primary analyses were replicated (a) using Full Completers only ($N = 817$), (b) excluding D-scores with $|D| > 1.5$ (no participants had $|D| > 1.5$, so this filter produced an identical dataset.), and (c) with bootstrapped confidence intervals (10,000 iterations) for key group comparisons. Where these replications produced materially different conclusions from the primary analyses, this is noted in the relevant section of the Findings. In all cases reported here, conclusions were stable across sensitivity analyses.

Appendix C - Full Statistical Output

C1. One-sample t-test (Overall Bias)

Statistic	Value
Mean D-score	0.17
SD	0.35
Median	0.16
t	16.387
df	1,144
p	< .001
Cohen's d (vs zero)	0.48
95% CI	[0.147, 0.187]

Distribution of Implicit Bias with Density Overlay

Full sample, N = 1145. Solid vertical line = zero (no bias); dashed line = sample mean (D = 0.17)
Shaded regions indicate strong implicit associations ($|D| > 0.65$).

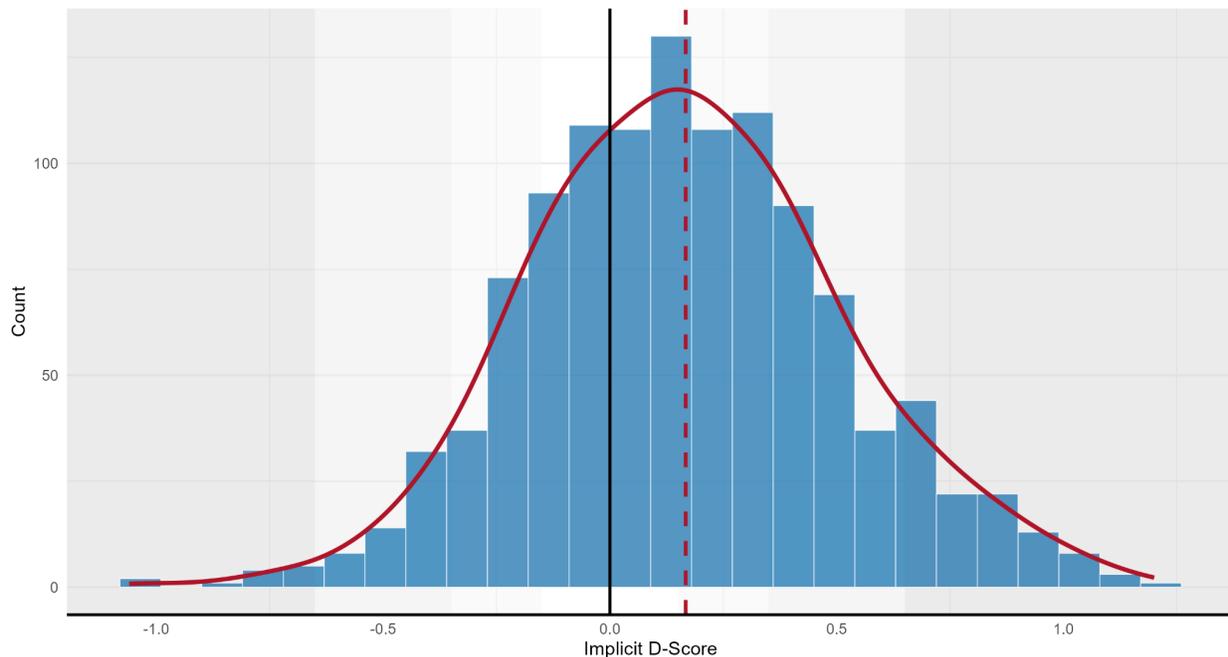


Figure A1. Distribution of implicit bias scores with density overlay, full sample (N = 1,145). Solid vertical line = zero (no bias); dashed line = sample mean (D = 0.17). Shaded regions indicate strong implicit associations ($|D| > 0.65$). See Table C1 for corresponding descriptive statistics.

C2. Dragnet Results - All Variables (FDR-Corrected)

Variable	p (raw)	p (FDR)	Survived FDR	N used
Stereotype profile	< .001	< .001	Yes	787
Education	.047	.234	No	850
Life focus	.076	.253	No	829
Sector	.146	.366	No	759
Prior experience	.241	.483	No	826
Belief in Professional Gender Equality	.297	.494	No	842
Gender	.360	.514	No	864
Participation status	.813	.924	No	1,145
Residence	.893	.924	No	819
Employment	.924	.924	No	812

C3. Key Effect Sizes (Cohen's d)²

Comparison	N ₁	M ₁	N ₂	M ₂	Cohen's d	Interpretation
Sample vs zero	1,145	0.17	-	0	0.48	Small
Men vs Women	380	0.18	484	0.16	0.062	Negligible
Gen X+ vs Gen Z	545	0.18	151	0.19	-0.047	Negligible
Traditional vs Egalitarian	110	0.27	420	0.11	0.452	Small

Implicit Bias by Self-Reported Gender Attitude Profile
 Egalitarian: N=420 | Mixed/Other: N=257 | Traditional: N=110

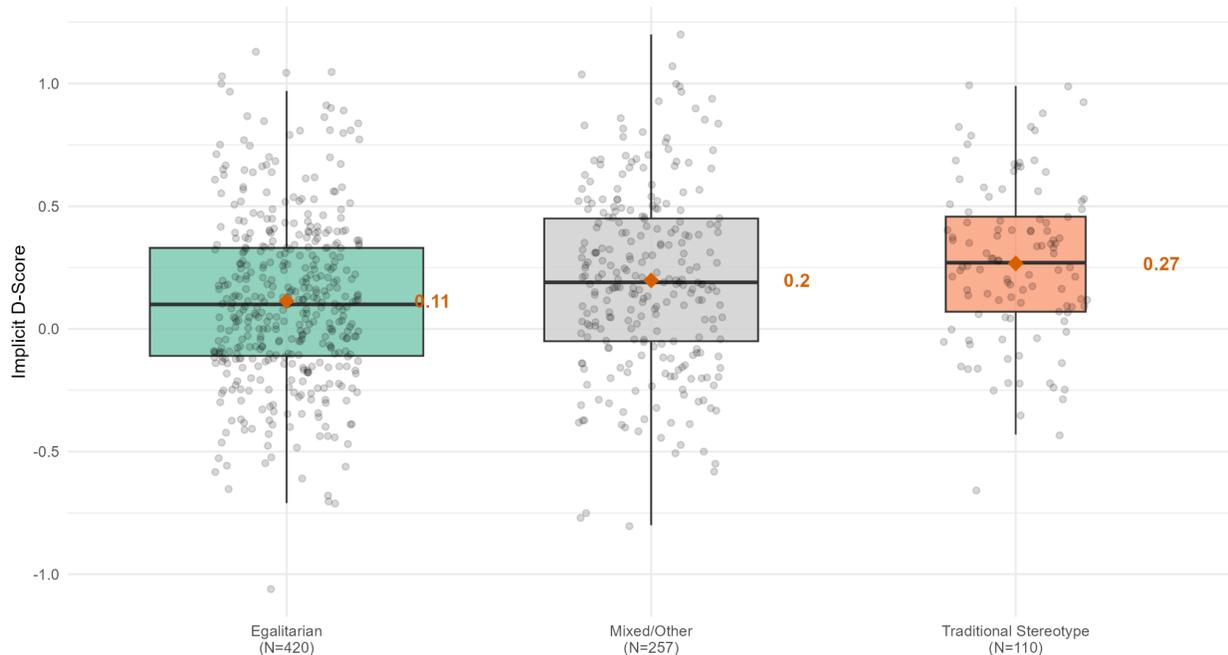


Figure A2. Implicit bias scores (D-scores) across all three self-reported gender attitude profiles. Orange diamonds indicate group means (Egalitarian: $M = 0.11$, $N = 420$; Mixed/Other: $M = 0.20$, $N = 257$; Traditional Stereotype: $M = 0.27$, $N = 110$). Welch ANOVA: $p < .001$ (FDR-corrected). Box width proportional to group N . See Figure 3 in main text for direct Egalitarian vs. Traditional comparison.

² Gen X+ combines Gen X (46–59) and Boomers (60+) for this comparison.

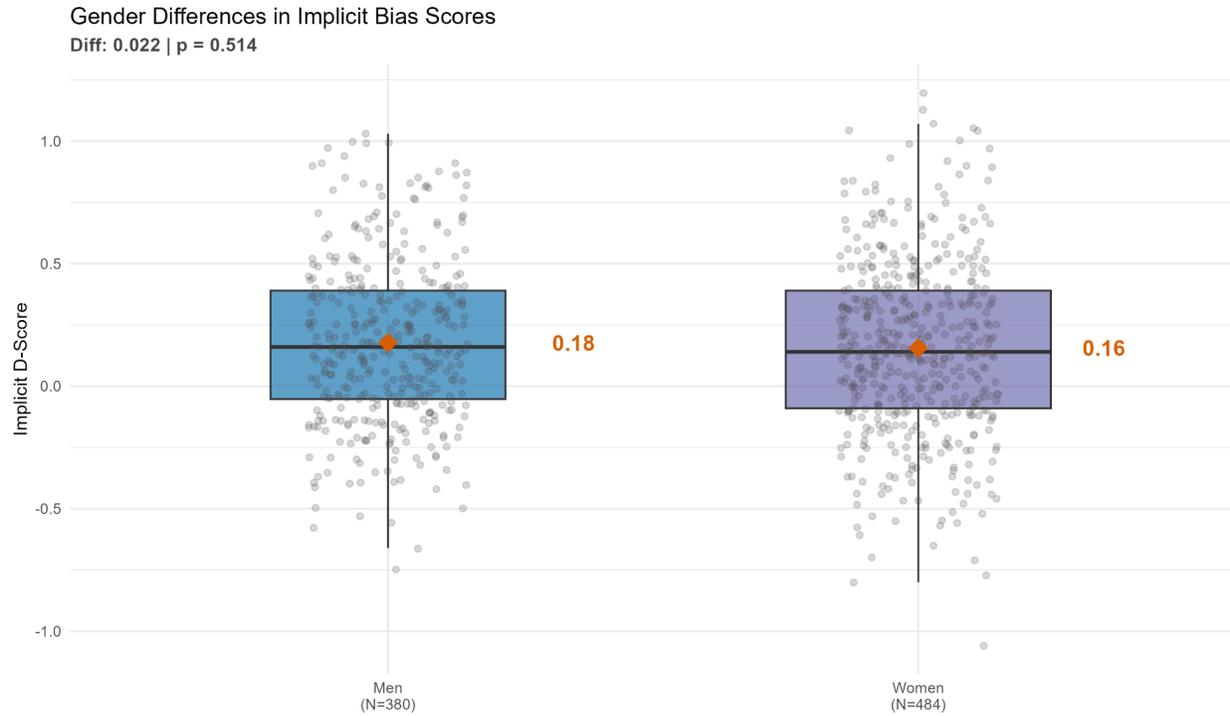


Figure A3. Distribution of implicit bias scores (D-scores) by gender. Orange diamonds indicate group means (Men: $M = 0.18$, $N = 380$; Women: $M = 0.16$, $N = 484$). Difference = 0.022, $p = .514$ (FDR-corrected). See Table C3 for full effect size statistics.

C4. Multivariate Regression (Predictors of D-score)

Predictor	β	SE	t	p
Intercept	0.028	0.059	0.471	.638
Gender (female)	-0.025	0.026	-0.933	.351
Age	0.002	0.001	1.543	.123
Education: Medium	0.100	0.038	2.601	.009
Education: High	0.056	0.035	1.587	.113
Explicit traditional	0.114	0.037	3.100	.002

Model fit: $R^2 = .025$, Adjusted $R^2 = .018$, $F(5, 755) = 3.827$, $p = .002$. All VIF values < 1.09 , indicating no multicollinearity concerns.

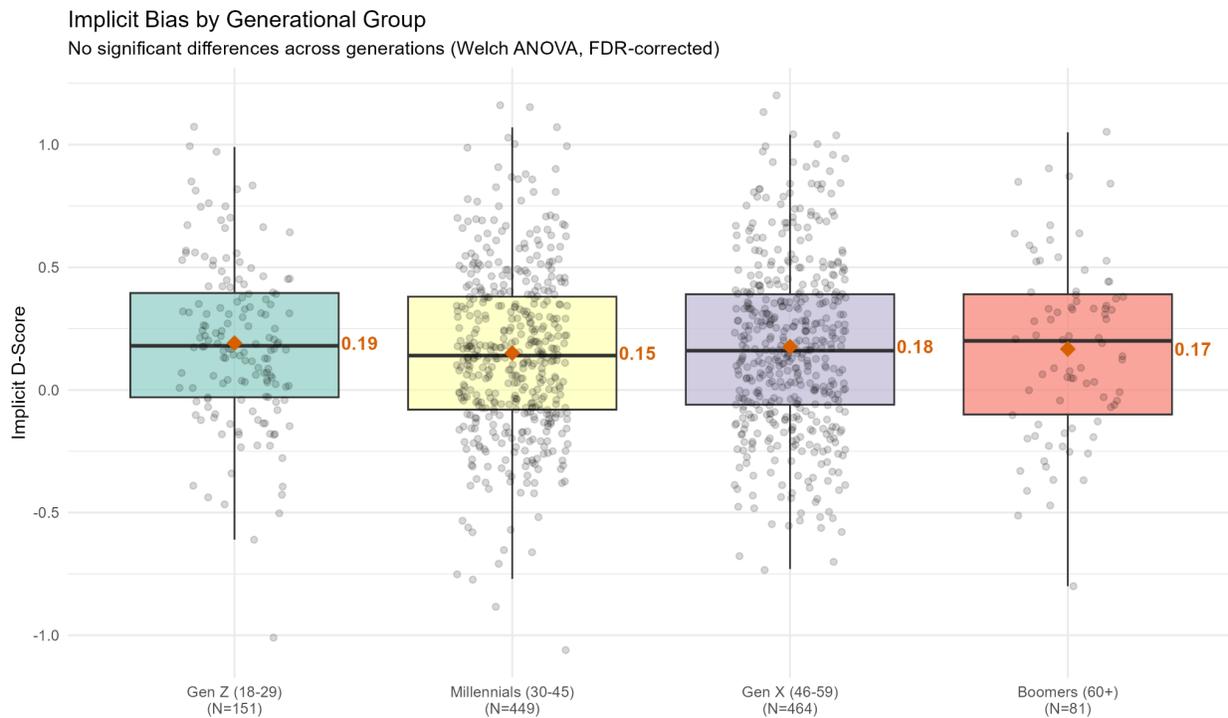


Figure A4. Implicit bias scores (D-scores) by generational group. Orange diamonds indicate group means (Gen Z: $M = 0.19$, $N = 151$; Millennials: $M = 0.15$, $N = 449$; Gen X: $M = 0.18$, $N = 464$; Boomers: $M = 0.17$, $N = 81$). No significant differences across groups after FDR correction.

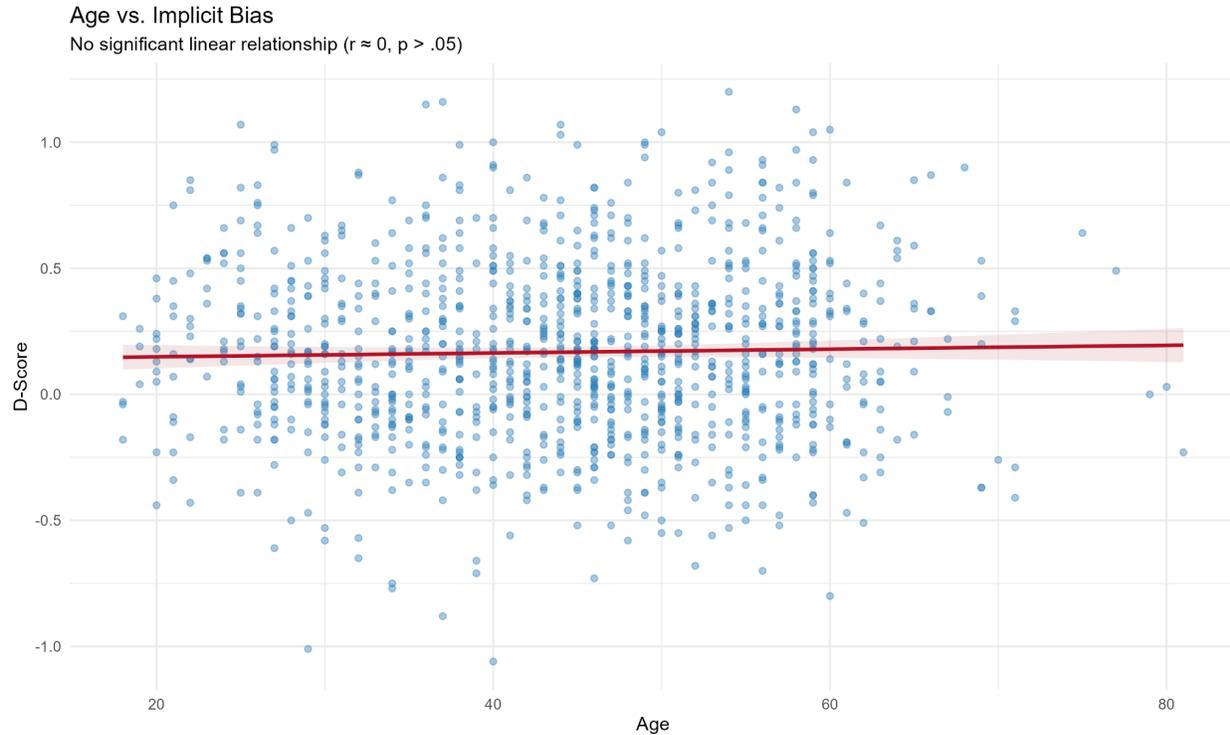


Figure A5. Scatterplot of implicit bias score (D-score) by participant age, with linear regression line and 95% confidence interval. The near-horizontal slope indicates no meaningful linear relationship between age and implicit bias ($r \approx 0$, $p > .05$). $N = 1,145$.

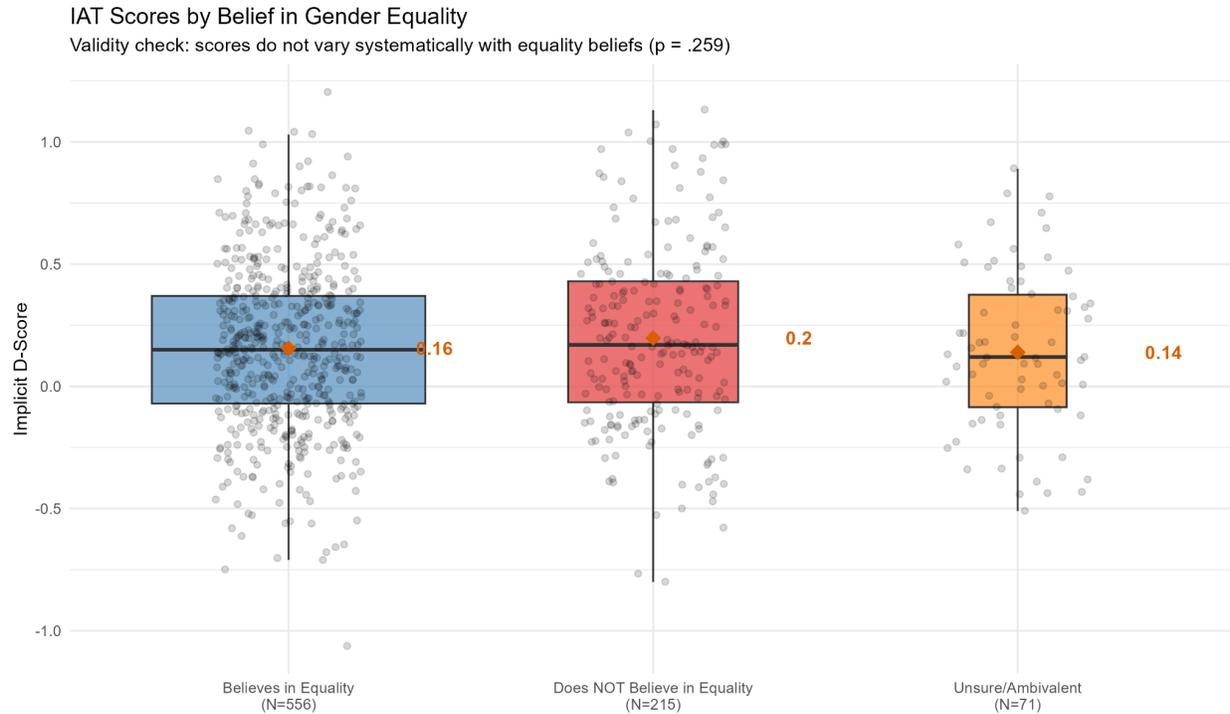


Figure A6. Implicit bias scores (D-scores) by self-reported belief in gender equality, included as a validity check. Orange diamonds indicate group means (Believes in Equality: $M = 0.16$, $N = 556$; Does Not Believe in Equality: $M = 0.20$, $N = 215$; Unsure/Ambivalent: $M = 0.14$, $N = 71$). No significant differences across groups ($p = .494$, FDR-corrected). The absence of a strong systematic relationship between explicit equality beliefs and implicit bias scores supports the validity of the IAT as a measure distinct from social desirability responding.

C5. Significant Interaction Effect

Interaction	β	p
Gender \times Explicit Profile	0.152	.043

Note: All other interaction terms tested (Gender \times Age, Education \times Explicit Profile) were non-significant. The Gender \times Explicit Profile interaction is exploratory and flagged for confirmatory testing in Wave 2. The interaction was tested within the multivariate regression framework (see C4), with Explicit Profile binarised as Traditional Stereotype vs all other profiles.

Appendix D - Open Science

All open science materials for this project are hosted on the Open Science Framework (OSF) at <https://osf.io/76emp/>.

Document	Status
Wave 2 Preregistration	Public
Variables Codebook	Public
GDPR Compliance Statement	Public
Wave 1 Summary Statistics	Public
Wave 2 Confirmatory Results	Forthcoming
Analysis Scripts	Available upon reasonable request
Raw Data	Available as synthetic dataset upon reasonable request