

WiCyS 2026 Cyber Talent Study

Executive Insights



The WiCyS Edge: Quantifying Skills Outperformance

TALENT STUDY OVERVIEW

The WiCyS Edge

14.5%

Aggregate Composite Performance Advantage

Across all experience levels, WiCyS members exhibit an aggregate composite performance advantage—referred to as the WiCyS Edge—averaging 14.5%.

Strategic Talent Alignment

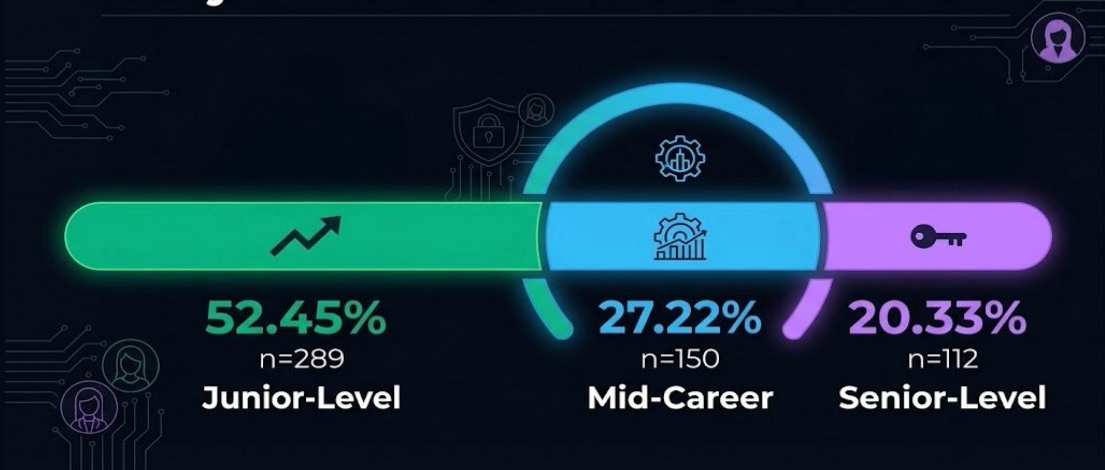
This objective, skills-first outperformance provides a significant competitive advantage for organizations shifting away from legacy recruitment toward **dynamic, skills-first talent alignment strategies**.

Study Scope & Benchmark

2026 WiCyS Cyber Talent Study

The 2026 WiCyS Cyber Talent Study evaluated **1,332 practitioners**, benchmarking **551 WiCyS members** against a global cohort of **781 non-WiCyS IT and security practitioners**.

WiCyS PARTICIPANT COMPOSITION



Dynamic Performance Edge Across Career Stages

EXECUTIVE INSIGHTS

21.35%

Junior-Level Milestone

Accelerated Readiness. Drastically compresses time-to-value for hiring organizations.

14.46%

Mid-Career Milestone

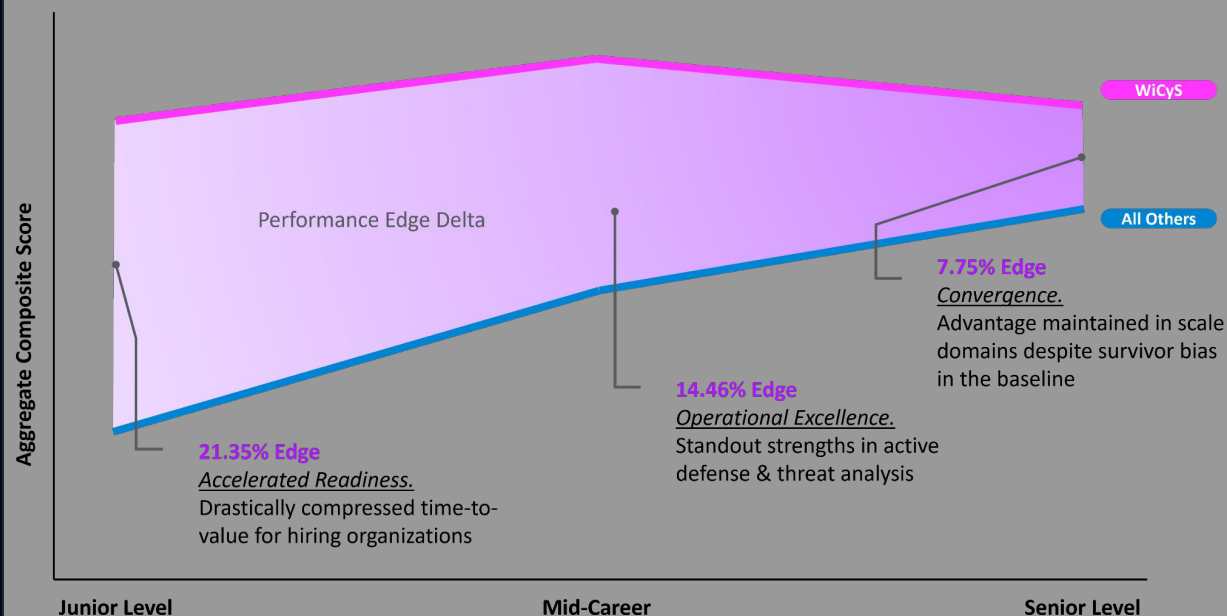
Operational Excellence. Standout strengths in active defense & threat analysis.

7.75%

Senior-Level Milestone

Strategic Convergence. Industry baseline gains tenure; WiCyS leaders dominate scale domains.

THE WICYS PERFORMANCE EDGE: LONGITUDINAL CAREER ANALYSIS



THE JUNIOR COHORT

21.35%

Performance Advantage at Entry Level

Entry-level WiCyS members outperform their peers by a margin of **21.35%**, reflecting exceptionally high workforce readiness at the point of entry.

The quantitative metrics for this junior cohort highlight significant, objective advantages across multiple core technical competencies.

STRATEGIC VALUE IMPACT

Overcoming Development Bottlenecks

This accelerated readiness is concentrated in professional capabilities that are notoriously difficult to develop through traditional technical instruction alone.

Onboarding Cost Optimization

Mentoring, onboarding, and peer-to-peer support structures in the ecosystem provide a robust foundation. This preparation enables junior professionals to contribute to enterprise security objectives much faster, **effectively lowering onboarding costs.**

WiCyS Mid-Level: Operational Excellence & Exposure Gaps

EXECUTIVE INSIGHTS

OPERATIONAL EXCELLENCE

14.46%

Mid-Career Performance Edge

Practitioners at this tier show exceptional technical proficiency in vulnerability assessment, threat analysis, and incident management.

They are deeply integrated into active enterprise defense, securing operations centers, and hardening organizational infrastructure.

THE EXPOSURE GAP

Strategic Business Deficits

Mid-career practitioners face clear deficits in contracting, procurement, and supply chain security, alongside flat margins in business acumen.

The Leadership Bottleneck

Systemic routing into purely technical roles limits exposure to critical commercial and financial functions, creating a bottleneck for executive transitions.

WiCyS Senior-Level: Convergence with Specialization

EXECUTIVE INSIGHTS

THE SENIOR COHORT

7.75%

Performance Margin Compression

The performance margin compresses to **7.75%** as the cohort matures, with the senior average rising to 56.33 and the baseline climbing to 52.28 due to survivor bias.

Senior WiCyS leaders demonstrate exceptional strength in education training, knowledge management, and scaling operational standards.

PERSISTENT STRATEGIC GAPS

Structural Exposure Deficits

Senior members continue to face deficits in contracting, procurement, and strategic planning, confirming that the career exposure gap is a structural issue.

C-Suite Barriers to Entry

Without intentional exposure to commercial and executive strategy, senior female leaders face critical barriers to entry for C-suite roles like the **CISO position**.

The Confidence-Competence Calibration Paradox

EXECUTIVE INSIGHTS

A key insight identified in this study is the **Confidence-Competence Calibration Paradox**, which primarily affects early-career professionals when using self-assessment methods. Junior-level practitioners in theoretical programs often self-indicate higher levels of proficiency than peers already working in the field due to a transition in professional self-awareness.

1. Academic Overconfidence

While in theoretical or academic programming, candidates are exposed to idealized concepts. Lacking the friction of operational realities, they self-report highly elevated competency levels.

2. Operational Grounding

Upon securing employment, practitioners confront actual enterprise complexities—such as legacy infrastructure, configuration dependencies, budget limitations, and organizational politics.

3. Realistic Calibration

This real-world exposure leads to cognitive calibration. Practitioners become more realistic about their true capabilities, resulting in grounded, highly accurate self-assessments.

Strategic Blind Spot for CISOs & Leaders

Relying solely on self-reported resumes creates mismatched expectations. Organizations should prioritize **skills-based validation instruments**—such as the **skillrex Baseline Assessment**—alongside experiential programs to ensure talent onboarding is grounded in demonstrated capabilities.

Power Competencies & Early-Stage Strengths

EXECUTIVE INSIGHTS

5.75%

Aggregate Edge in
Power Competencies

14.81%

Performance Edge in
Professional Competencies

3.96%

Aggregate Performance Edge in
Technical Competencies

49.74

WiCyS Composite Average vs 47.52
Baseline

The Power Competency Edge

The **5.75% aggregate edge** is heavily anchored in Power Competencies—spanning Professional, Organizational, and Leadership domains—where WiCyS practitioners register a **55.58 composite average** against the 52.66 industry baseline.

Specifically, the WiCyS cohort holds a **14.81% performance edge** in Professional competencies, showcasing standard-setting operational execution.

Junior Early-Stage Strengths

- **Critical Thinking:** Junior cohort members demonstrate highly advanced cognitive problem-solving, achieving a **48.77% edge** over peers.
- **Communication Edge:** Early-stage practitioners registered a **44.25% margin**, indicating excellent organizational alignment capabilities.

Commanding Leads in Analytical & Architectural Functions

EXECUTIVE INSIGHTS

Workforce capability metrics reveal significant outperformance leads across core security functions compared to industry baselines.

Analysis (ANA) 83.80% Edge

High-impact outperformance zone where junior analysts achieve a **139.15% edge** in critical thinking and analytical baseline tasks.

Security Architecture & Eng. (SAE) 44.68% Edge

Demonstrates outstanding blueprint design validation, substantially outperforming industry baselines in **secure-by-design blueprinting**.

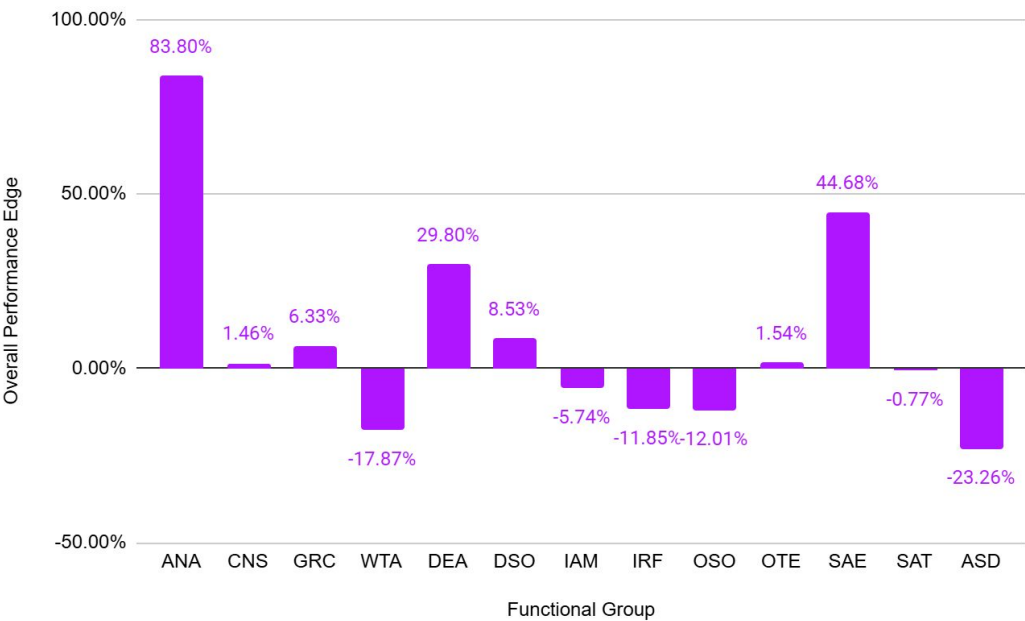
Data Engineering & Analytics (DEA) 29.8% Edge

High performance readiness, with solid technical contribution at junior level and strategic architectural mastery at senior tier.

Defensive Security Ops (DSO) 8.53% Edge

Steady operations edge heavily driven by **frontline SOC readiness**, tactical response, and advanced cloud threat monitoring.

Overall WiCyS Performance Edge by Functional Group



Elastic & Non-Linear Capability Trajectories

EXECUTIVE INSIGHTS

A more granular cross-sectional analysis—stratifying Performance Edge by functional group across Junior, Mid-Career, and Senior experience levels—reveals that the WiCyS Edge is highly elastic and non-linear across career stage.

1. Early-Stage Outperformance

Entry-level WiCyS members demonstrate extraordinary frontline readiness, led by **Analysis (ANA: +139.15%)** and **Security Architecture & Engineering (SAE: +134.99%)**, dramatically compressing onboarding timelines.

2. Mid-Career Grounding

Performance surges at the mid-career layer in governance and testing, notably in **Governance, Risk & Compliance (GRC: +50.84%)** and **Security Assessments & Testing (SAT: +132.75%)**, as practitioners apply theory in live enterprise environments.

3. Senior Exposure Gaps

Deltas compress or turn negative at senior tiers in **Communications & Network Security (CNS: -6.67%)** and **Incident Response & Forensics (IRF: -29.75%)**, highlighting structural career exposure gaps and persistent industry barriers.

WiCyS Performance Edge by Functional Group & Experience

Functional Group	Junior	Mid	Senior	Aggregate
ANA	139.15%	57.79%	172.75%	83.80%
CNS	61.05%	52.11%	-6.67%	1.46%
GRC	33.56%	50.84%	4.24%	6.33%
WTA	-32.44%	-23.04%	-4.34%	-17.87%
DEA	62.06%	63.79%	18.24%	29.80%
DSO	83.87%	7.78%	8.80%	8.53%
IAM	-9.59%	10.54%	-4.58%	-5.74%
IRF	123.61%	-0.04%	-29.75%	-11.85%
OSO	-4.50%	-13.37%	-24.46%	-12.01%
OTE	8.52%	7.19%	-5.90%	1.54%
SAE	134.99%	-45.04%	67.53%	44.68%
SAT	-56.59%	132.75%	2.61%	-0.77%
ASD	-22.42%	-12.23%	-21.69%	-23.26%

Bridging the Executive Exposure Gap

EXECUTIVE INSIGHTS

The Career Exposure Gap

Mid-career and senior female practitioners consistently **match or exceed technical execution baselines**, yet face a persistent career exposure gap. Systemic barriers block access to high-visibility commercial loops, stalling advancement to the C-suite.

Commercial Loop Exclusion

Systemic exclusion is heavily concentrated in critical business operations:

- Contracting & Vendor Procurement
- Third-Party Risk Management (TPRM)
- Corporate Strategic & Financial Planning

C-SUITE STRATEGY

Dismantling Exclusion Through Rotational Exposure

To build a resilient and diverse pipeline, **CISOs must intentionally rotate** high-performing technical women into financial leadership and board-level risk reporting functions.

Standardized talent rotation turns C-suite development into a predictable risk mitigation discipline.

Targeted Rotational Actions:

- 01. Financial Rotation:** Assign direct oversight of budgeting, commercial procurement, and business case ROI.
- 02. Board-Level Risk:** Position candidates to lead risk reporting and strategic presentations to board members.
- 03. Strategic Integration:** Embed practitioners into corporate planning loops and TPRM governance.

About skillrex

skillrex is a cyber workforce intelligence firm specializing in data-driven capability measurement, benchmarking, and strategic workforce optimization.

Key Offerings & Outcomes:

- **Quantify performance** across roles and experience levels
- **Benchmark capability** against industry baselines
- **Identify gaps** in discrete competencies and skills
- **Design pathways** aligned to business and security strategy
- **Measure improvement** in workforce performance over time

By translating skills data into actionable workforce strategy, skillrex helps enterprises strengthen resilience and operationalize talent development.

Web: skillrex.io

Email: info@skillrex.io

About WiCyS

Women in CyberSecurity (WiCyS) is a premier non-profit organization with international reach dedicated to the recruitment, retention, and advancement of women in cybersecurity.

Founded by Dr. Ambareen Siraj through a National Science Foundation grant in 2013, WiCyS offers opportunities, training, events, and resources for its global community.

Tier 1 Strategic Partners include:

Amazon, Bloomberg LP, Cisco, Ford Motor Company, Google LLC, Lockheed Martin, Microsoft, Palo Alto Networks, SentinelOne, Tenable.

Partner: wicys.org/support/strategic-partnerships