2026 WiCyS Cyber Talent Study

Preliminary Executive Findings

Executive Summary

The 2026 Cyber Talent Study represents a workforce intelligence collaboration between Women in CyberSecurity (WiCyS) and skillrex. Using the skillrex Baseline Assessment, this study measures performance across Technical, Organizational, Professional, and Leadership competencies and compares WiCyS members against an industry cohort of other participants of skillrex's Baseline Assessment (referred to as "All Others" in this report).

The empirical evidence builds upon a systemic performance advantage—referred to as the "**WiCyS Edge**." In the previous https://skillrex.io/2025-wicys-talent-study/, the overall WiCyS cohort outperformed their industry counterparts in 16 of 20 NICE Framework areas, achieving an aggregate composite score ("WiCyS Edge") roughly 10% higher than the industry baseline. However, a surface-level acknowledgement of this historical outperformance obscures profound second- and third-order operational insights revealed in the current 2026 research.

The new preliminary data shows the performance delta is highly elastic, fluctuating significantly based on the practitioner's career stage, the underlying nature of the competency (Technical capabilities versus Power/Soft Skills), the specific functional group to which the practitioner belongs, and—critically—down to the individual competency and skill level. Unlike prior analyses that emphasized NICE Framework Areas alone, this research drills into discrete competencies and skills, enabling a more granular understanding of where strengths concentrate and where targeted development opportunities emerge.

The WiCyS Performance Edge: The Longitudinal Performance Curve

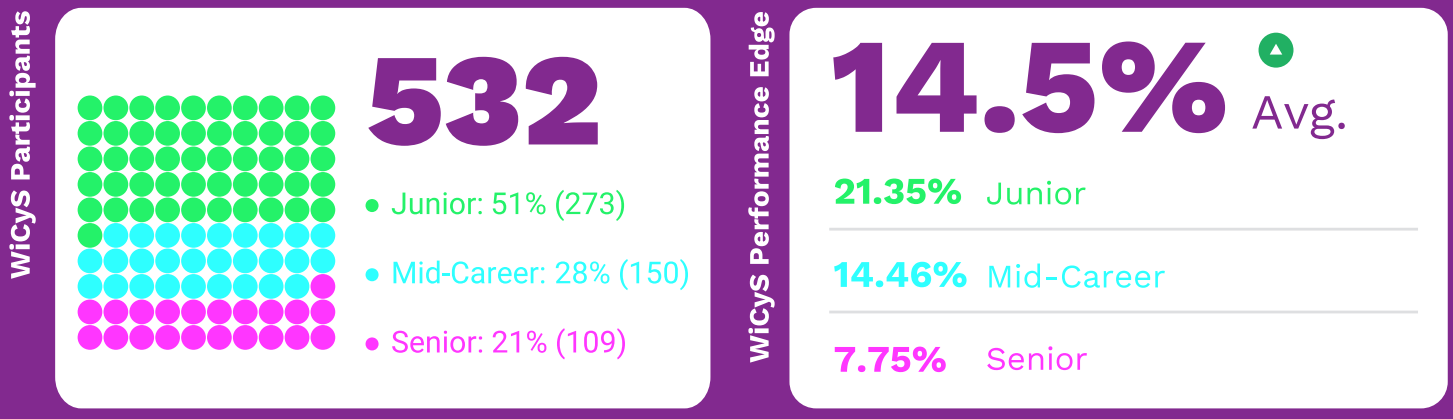
Because the proportional distribution of Junior, Mid-Career, and Senior practitioners differs between the WiCyS cohort and the comparison group ("All Others"), overall composite percentages can mask more meaningful performance dynamics.

For this reason, the experience-stratified analysis that follows provides a more precise and operationally relevant view of the WiCyS Edge. Breaking down performance by career stage reveals where the advantage is most pronounced, how it evolves over time, and where targeted development opportunities exist.

When stratified by experience level (n=532 WiCyS participants), a clear maturity pattern emerges with Performance Edge:

- WiCyS's Junior-Level Edge: 21.35%
- WiCyS's Mid-Career Edge: 14.46%
- WiCyS's Senior-Level Edge: 7.75%

The WiCyS Edge—calculated as the percentage difference in average composite assessment scores between WiCyS participants and the comparison cohort—is strongest at entry level and compresses as practitioners advance.



Junior-Level: Accelerated Readiness

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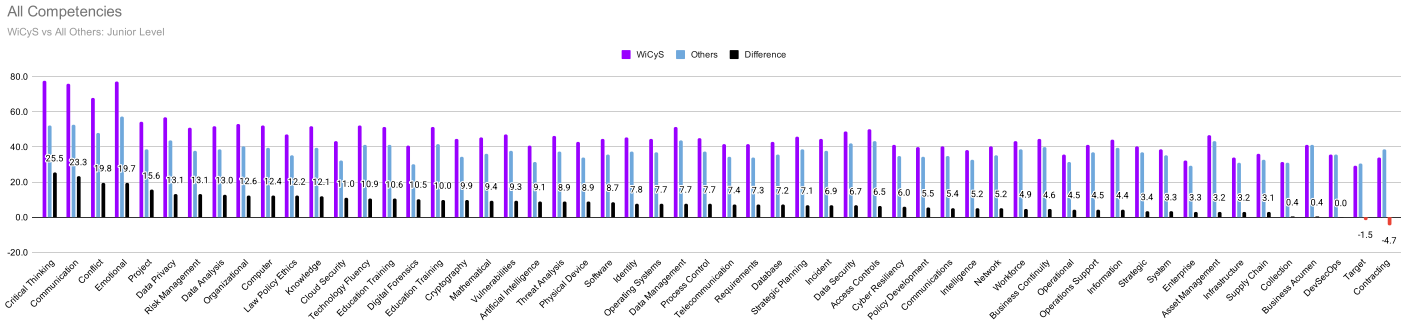
Junior-Level: Accelerated Readiness

Junior WiCyS members outperform peers by **21.35%,** indicating materially higher workforce readiness at career entry. This advantage is particularly visible in competencies such as Critical Thinking, Communication, and Emotional Intelligence—skills that are highly valuable and consistently sought-after in modern enterprise environments. This data likely indicates that women entering the cybersecurity field through the WiCyS ecosystem are significantly better prepared than the average entry-level practitioner across the broader industry. These results suggest that structured mentorship, community scaffolding, and early exposure to professional competencies significantly reduce "time-to-value" for employers.

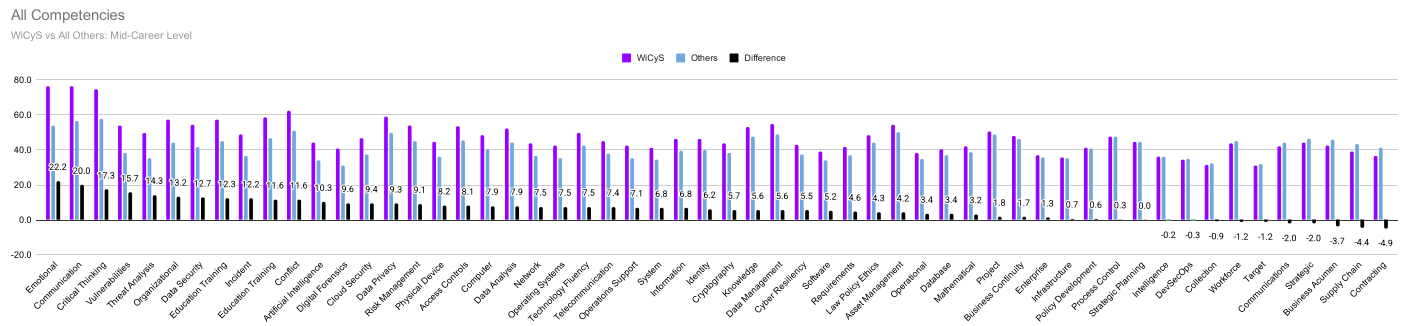
The data illustrates a profound divergence in "Power" or professional competencies. Junior WiCyS members exceed the industry baseline in Critical Thinking by over 25 points, and Communication by over 23 points. Furthermore, Technical competencies such as Data Analysis and Cloud Security show robust leads.



Mid-Career: Operational Excellence with Strategic Exposure Gaps

At mid-career, the performance advantage narrows but remains strong at a **14.46%** edge. At the mid-career stage, technical proficiency in high-stakes operational domains undergoes a sharp acceleration. Mid-career WiCyS members demonstrate exceptional leads in Vulnerabilities Assessment, Threat Analysis, and Incident Management. This confirms that women in the middle of their careers are heavily engaged in the active defense and architectural hardening of enterprise networks.

However, a critical third-order insight emerges from the negative differences. Mid-career WiCyS members trail the industry baseline in Contracting Procurement, Supply Chain Management Security, and Business Acumen. This suggests a structural barrier: while female practitioners are excelling in technical threat hunting and incident triage, they may be systemically excluded from vendor negotiations, budget allocation, and the broader commercial strategy of the Cyber department. To successfully transition into Chief Information Security Officer (CISO) or Director-level roles, exposure to procurement and business acumen is mandatory. The data identifies this as an acute developmental bottleneck.

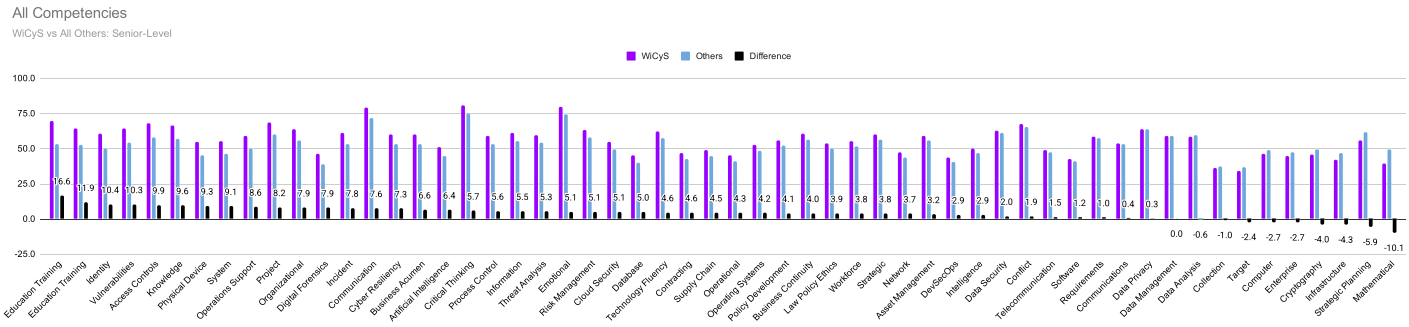


Senior-Level: Convergence with Specialization

At the Senior and Managerial level, the WiCyS average climbs to 56.33, but the industry baseline leaps significantly to 52.28, reducing the overall performance edge to **7.75%**. The compression of the performance gap is likely a natural outcome of industry attrition and survivor bias. By the time non-WiCyS professionals reach the senior level, they have acquired extensive on-the-job experience, effectively closing the competency gaps that existed at the junior and mid-career levels.

Despite the narrower overall gap, Senior WiCyS members display towering dominance in human-centric leadership areas, specifically Education Training Delivery and Knowledge Management, as well as in technical domains such as Identity Management and Vulnerabilities Assessment.

The deficit in Strategic Planning at the senior level compounds the Business Acumen deficit observed at the mid-career level. It underscores an ongoing challenge identified by WiCyS leadership: a lack of visible female role models in executive positions and systemic exclusion from the strategic, board-facing elements of enterprise security.



Competency Signature: Power vs. Technical

The NICE framework categorizes knowledge and skills into discrete building blocks. By aggregating these individual skills into broader themes of “Power Competencies” (combining Professional, Organizational, and Leadership domains) and “Technical Competencies,” highly distinct capability signatures emerge.

This aggregation enables a clearer view of how practitioners contribute value within enterprise cybersecurity programs. Technical competencies span a broad range of technical capabilities across cybersecurity work roles, influencing activities from defensive operations and investigative analysis to architecture, engineering, and systems design, while Power Competencies influence how effectively cyber professionals collaborate across business units, communicate risk to leadership, and translate technical findings into organizational action.

Examining these domains together provides insight into the broader capability profile of the workforce. Organizations often focus heavily on technical specialization when evaluating cyber talent, yet the effectiveness of security teams frequently depends on the integration of analytical expertise with leadership, communication, and coordination capabilities.

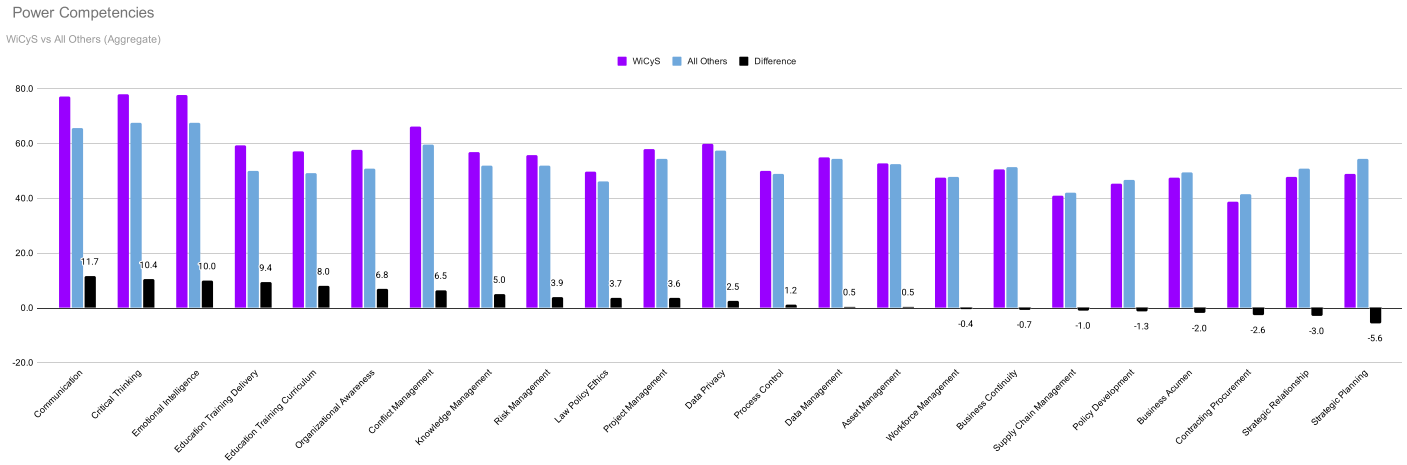
In practice, high-performing cybersecurity teams rarely succeed on technical expertise alone. Modern security operations require practitioners who can interpret complex technical signals, communicate implications to non-technical stakeholders, coordinate responses across legal, IT, and business units, and translate cyber risk into business decision-making. The interaction between technical depth and professional competencies therefore becomes a defining factor in organizational resilience and the overall maturity of cybersecurity programs.

While aggregate domain-level comparisons are directionally informative, they are inherently less precise than experience-stratified analysis due to differences in cohort composition across Junior, Mid-Career, and Senior populations. That said, even at the aggregate level, WiCyS participants continue to demonstrate a measurable performance advantage across both Power and Technical domains. As a next phase of the research, skillrex will further analyze the WiCyS dataset across Functional Domains and Experience Levels to surface more precise strengths, exposure gaps, and role-specific capability patterns.

Power Competencies

Power Competencies encompass the non-technical capabilities required to navigate complex organizational structures, articulate cyber risk to the board, and lead specialized technical teams. In this domain, the combined WiCyS cohort demonstrates a formidable average of 55.58 against the baseline of 52.66, yielding a performance edge of **5.53%**. These competencies drive crisis leadership, stakeholder alignment, and cross-functional coordination — all essential in modern cyber defense environments.

However, recurring deficits in Strategic Planning and Procurement reinforce a structural pattern: strong interpersonal leadership does not automatically translate into strategic authority without access to enterprise-level financial and planning functions.

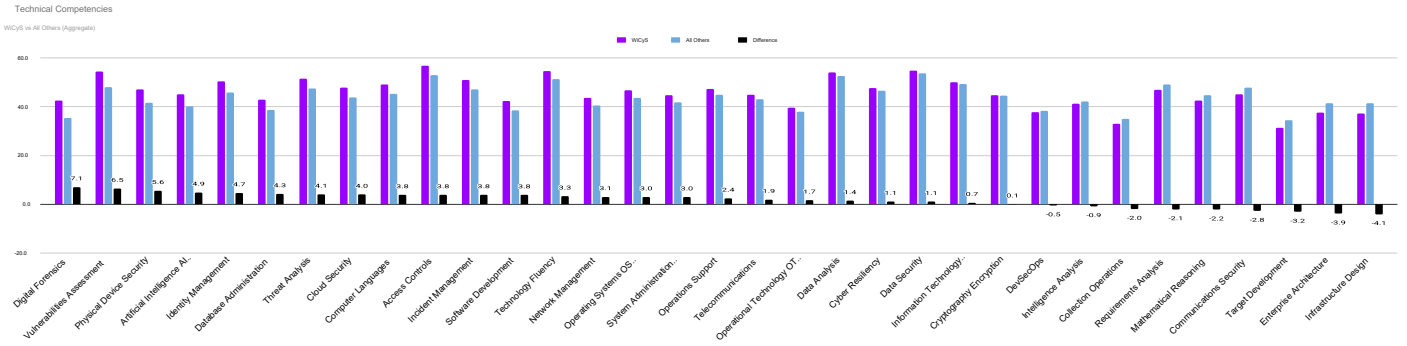


Technical Competencies

In the realm of Technical Competencies, the aggregate performance edge remains positive but narrows to **3.97%**, with the WiCyS cohort averaging 45.67 compared to the industry's 43.92.

WiCyS members maintain a decisive advantage in diagnostic technical skills. Digital Forensics and Vulnerabilities Assessment require meticulous attention to detail, and similarly, the lead in Artificial Intelligence Security demonstrates agility in adapting to novel attack surfaces.

Conversely, the data reveals specific technical shortcomings in foundational infrastructural disciplines. In an aggregate comparison, WiCyS members trail in Enterprise Architecture, Infrastructure Design, and DevSecOps.



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Conclusion

The 2026 preliminary findings reaffirm that the WiCyS Edge is real, measurable, and strategically meaningful. It is strongest at entry level, persists across career stages, and is most pronounced in Power Competencies that influence enterprise performance beyond technical remediation.

These preliminary findings suggest three strategic conclusions:

1. The WiCyS ecosystem materially accelerates early-career readiness.
2. Power Competencies are a defining differentiator of WiCyS members.
3. Executive pathway exposure (strategy, procurement, architecture authority) remains a structural development opportunity.

The data not only validates the strength of the WiCyS community — it also provides a roadmap for how organizations can unlock even greater executive representation and strategic influence.

As a next phase of this research, skillrex will conduct deeper performance comparisons by Functional Area and Experience Level. This more discrete, cross-sectional analysis will introduce additional analytic rigor and granularity, enabling clearer visibility into where performance advantages are concentrated, where exposure gaps persist, and how targeted workforce interventions can be designed with even greater precision.

About skillrex

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

Through its Baseline Assessment, Workforce Intelligence Dashboards, and Competency-Level Analytics, skillrex enables organizations to:

- Quantify technical and power-skill performance across roles and experience levels
- Benchmark workforce capability against industry baselines
- Identify discrete competency and skill gaps
- Design targeted development pathways aligned to business and security strategy
- Measure workforce performance improvement over time

By translating skills data into actionable workforce strategy and serving as the workforce intelligence platform behind this analysis, skillrex helps enterprises strengthen resilience, accelerate leadership pipelines, and operationalize data-informed talent development.

As both a Strategic and Research Partner of Women in CyberSecurity (WiCyS), skillrex is proud to support the advancement of a more inclusive, capable, and future-ready cybersecurity workforce.

To learn more, visit: **skillrex.io**

Email: **info@skillrex.io**

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