BWF CGT041 Final Summary
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Prepared on: September, 27th 2021
Submitted to: Dr. Victoria McGovern, PhD
Burroughs Wellcome Fund, Career Guidance for Trainees Award

PROVIDE A BRIEF SUMMARY OF THE ORIGINAL GOALS OF THE PROPOSAL: The overall objective of our program, called <u>i</u>ndustry <u>C</u>areer <u>E</u>xploration <u>R</u>esear<u>ch</u> (iCERch; pronounced "I Search"), was to help pre- and postdoctoral research trainees get "unstuck" in their career decision making and planning processes. Our specific goals included increasing trainees' 1) understanding of their career interests and unique personality traits, 2) awareness of career options within the bioscience industry, and 3) comfort and confidence with conducting informational interviews and establishing their professional networks. We also sought to establish connections with the local bioscience industry to help our trainees better understand those varied professional environments and to inform them on the skills desired by the bioscience sector.

PROGRESS AND RESULTS:
Describe the progress made toward the original goals of the proposal. Be sure to include the impact of the project, how it has changed the career readiness of those impacted, how it was delivered to the trainees, strategies used for evaluating its impact, and, if appropriate, how the project has been expanded to reach more trainees or adopted by other institutions.

To accomplish the overall goal of helping pre- and postdoctoral research trainees (postdocs) get "unstuck" in their career decision making and planning processes, we proposed using a cohort model who would participate in four specific sets of activities: 1) self-awareness activities, 2) attending industry career panels with representatives from varied bioscience careers, 3) conducting informational interviews with local bioscience industry professionals, and 4) spending time at a local bioscience company. Although the pandemic prevented us from organizing site visits and shadowing opportunities, we successfully accomplished each of the other project goals, including building industry connections and gaining industry perspective on PhD trainees' skillsets.

IMPACT: Based on our formal evaluation of the program (see EVALUATION and FIGURES sections), it is clear that participants increased their awareness of career options, understanding of their career interests and personality strengths, and confidence with making career transitions. Our measures of participants' self-ratings of their awareness, ability, and confidence in each of these areas <u>significantly increased</u> after program participation and <u>were significantly greater</u> than peers who did not participate in the program. iCERch participants' perceptions of their abilities were aligned with objective ratings of their abilities provided by bioscience industry professionals with whom they conducted informational interviews. Aside from the formal metrics, it was also clear that participants found this program highly valuable. In a separate industry career panel series put on by CU Innovations, a former iCERch participant mentioned the program and how highly they thought of it, which led a CU Boulder faculty member to reach out to Dr. Mandt to learn more about the program. Further, despite job

placement not being a program objective, at least five of the 40 participants in the program were hired into bioscience industry positions that came about because of iCERch program activities (e.g., conducting informational interviews). We firmly believe that this program increased our PhD student and postdocs' career readiness, and we are excited to continue offering, and to expand, this program in the future.

COHORTS: We proposed enrolling two separate cohorts of PhD students and postdocs, with 10 students and 10 postdocs in each cohort. For our first cohort of trainees, who participated in the iCERch program from December 2020 to April 2021, we enrolled 9 PhD students and 13 postdocs. Of the 22 participants in Cohort 1, 19 completed the full program and attended at least 75% of the sessions: one postdoc never attended a session, one postdoc stopped attending mid-way through the program, and one PhD student withdrew towards the end of the program because they decided that they wanted to conduct a postdoc. For the second cohort, who participated from April 2021 to August 2021, we enrolled 10 PhD students and 10 postdocs. None of the 20 participants in Cohort 2 withdrew from the program or stopped attending, and 85% of the participants attended at least 75% of the sessions. All program activities (e.g., workshops, career panels) were recorded and for both cohorts, recorded sessions were made available to anyone who could not attend the synchronous sessions. In addition to participating in program activities as cohorts, smaller "sub-cohorts" of 3-4 trainees were assigned to help each other with various program activities. Each cohort was asked to attend a total of seven virtual bi-monthly cohort meetings (1-1.5 hrs each) that consisted of the following topics: 1) initial meeting and discussion of myIDP skills, interests, and values inventories; 2) StrengthsFinder personality assessment workshop; 3) utilizing LinkedIn; 4) career panel; 5) career and science story preparation; 6) informational interviewing preparation; and 7) program wrap up. When asked how important "cohorts" were for helping trainees in the program (on a scale from 1 to 5, where 1 = not at all important and 5 = very important), overall, 44% of iCERch participants rated cohorts as a 4 and 22% rated them as a 5 (Fig. 11).

SELF-AWARENESS ACTIVITIES: To facilitate trainees' understanding of their career interests and unique personality traits, cohorts were asked to complete the AAAS myIDP self-assessment and the Gallup StrengthsFinder personality assessment. The first session of each iCERch cohort began with a discussion of the AAAS myIDP in small groups and as a full cohort. This allowed for and understanding of trainees' research-based skills and interests, which many trainees found enlightening. The AAAS myIDP also provides suggestions for potential career "matches", which started to raise trainees' understanding of potential career options. Each cohort also participated in a personality assessment workshop facilitated by a certified StrengthsFinder coach who provides the workshop for all trainees at our institution. The iCERch specific workshop was tailored to prepare trainees to think about their personalities in the context of whether the careers they would explore in the program would allow them to fully utilize their unique personality talents. Cohorts were also instructed in how to use this new awareness and description of their talents on their LinkedIn profiles and while talking to industry professionals during their informational interviews. When asked how important "workshops" (e.g., strengths finder, informational interviewing) were for helping trainees in the program (on a scale from 1 to 5, where 1 = not at all important and 5 = very important), overall, 33% of iCERch participants rated career panels as a 4 and 44% rated them as a 5 (Fig. 11).

INDUSTRY CAREER PANELS: We organized two separate virtual career panels, each of which was recorded and made available to all trainees at our institution. The first career panel featured three entrepreneurs who have vast experience working in the bioscience industry. These professionals had connections to our technology transfer office, CU Innovations, and this connection was critical for enlisting their support. Panelists described the venture process, their experiences working in the bioscience industry, and advice for the types of skills that are highly valued in bioscience industry careers. The second career panel featured four individuals working at small, medium, and large bioscience companies all located within the Denver metro area. Each of the panelists had a connection to CU Anschutz, either as a former trainee or having worked with CU Innovations in some capacity. Panelists compared and contrasted the differences that can exist based on the size of a bioscience company and also provided advice on skills that are important for transitioning to a bioscience industry career. When asked how important "career panels" were for helping trainees in the program (on a scale from 1 to 5, where 1 = not at all important and 5 = very important), overall, 52% of iCERch participants rated career panels as a 4 and 36% rated them as a 5 (Fig. 11).

INFORMATIONAL INTERVIEWING: Each cohort participated in a dedicated cohort meeting to prepare them for conducting their informational interviews, which they were asked to complete between cohort meetings 6 and 7. Participants were also given access to a recorded informational interviewing workshop that is available to all trainees at our institution. During the cohort meetings, participants received feedback on their science stories (general description of their research using a non-science analogy), career stories (engaging explanation of why they do what they do and how they use their personality strengths), and identified a list of questions for interviewees. For the informational interview questions, each participant had to include at least one question about personality fit for the career they were investigating. To facilitate the process of identifying people to interview, we engaged former PhD student and postdoc alumni who were now working in the bioscience industry. Alumni were invited to opt-in to an alumni database, where they gave explicit consent for current trainees to contact them for the purposes of an informational interview. We initially reached out to 59 alumni, and of those contacted, 36 alumni signed up after one request (61% participation). We have now increased the number of bioscience alumni in this database to 60 participants and continue to invite more participation. iCERch participants were given a list of alumni who opted into this database and were instructed to select at least one alumnus to contact. Participants were instructed to conduct up to three informational interviews but were only required to conduct at least the one alumni interview. When asked how important "informational interviewing" was for helping trainees in the program (on a scale from 1 to 5, where 1 = not at all important and 5 = very important), overall, 88% of iCERch participants rated informational interviewing as a 5 (Fig. 11).

INDUSTRY CONNECTIONS: Although we hoped to allow trainees to conduct a "deep dive" into a specific career by shadowing a bioscience industry professional, the pandemic prevented us from initiating this component of the project. To gather information on the skills desired by the bioscience industry, however, we created a survey of the skills match between PhD and postdoctoral training and the skills needs of industry professionals. This survey was designed to get the perspectives both of

individuals working in the bioscience sector and of individuals involved in the hiring process (e.g., creating job postings, making hiring decisions). The survey allows us to evaluate this data both nationally and in the state of Colorado. We identified potential participants from our list of bioscience alumni, CU Innovations partner companies, and self-identified life science employers who have posted job opportunities on our campus. We invited 199 individuals to participate in our survey and to date, 67 individuals have completed the survey (34% response rate). Although we have just begun to analyze this data, immediate observations highlight the importance of many iCERch-related activities. For example, critical thinking (22%), communication (20%), and teamwork (17%) were identified the three most important skills for PhD-trained scientists. Importantly, these same bioscience industry professionals felt that communication (17%) and teamwork (15%) were deficiency areas for current PhD training; communication and teamwork represented the largest areas of agreement of skills deficiency. Programs like iCERch could help offset this mismatch as we provide opportunities for trainees to develop comfort talking about their science in a broader context and with multiple audiences. Multiple survey participants also highlighted the critical role that networking and self-promotion play in the career transition process (e.g., "Unfortunately networking is really the most critical aspect of finding a job"; "the transition from academia to industry is not impossible and your professional network is essential to your transition"). This data will be shared with all iCERch participants and will also be included in the manuscript that we prepare on the iCERch program. Given that the survey data would not have been equally available to both cohorts, however, we opted not to share this data with participants before they took the post-assessment survey to allow for equal comparison of those groups.

EVALUATION: To evaluate the iCERch program, we engaged with the CU Denver Evaluation Center to build an assessment of program activities. The Evaluation Center administered the pre- and post-assessment to minimize any potential conflicts that participants might experience with the program directors administering the instruments. In addition to the formal program assessment, we also created a brief feedback form for the informational interviewees to provide feedback to iCERch participants.

- *Formal pre- and post-assessment:* Prior to program inception, we contracted the CU Denver Evaluation Center to assist us in developing an assessment that consisted of multiple-choice and open-ended questions to gauge trainees self-awareness, understanding of career options, and confidence with making career transitions. iCERch participants were asked to complete the program pre-assessment prior to our first cohort meeting and to complete the post-assessment within one week of completing the final cohort meeting. Of the 40 iCERch participants, 27 trainees completed at least 75% of program sessions and both pre- and post-assessments allowing for inclusion in our statistical analysis (PhD students = 13, postdocs = 14; cohort 1 = 14, cohort 2 = 13). Although the focus of the program and the assessment is on within-subjects' effects for the iCERch participants, we also wanted to be able to compare iCERch participants to their non-participant peers. In addition to iCERch participants, we also invited 3rd year or later PhD students and postdoc non-participants to complete the pre-assessment. Of the 575 invited participants (272 PhD students, 303 postdocs), 83 completed the full assessment (14% response rate; PhD students = 29; MD/PhD students = 4; postdocs = 49; Fig. 33). Full data are included in the figures at the end of this document.

Briefly, after participating in iCERch program activities, participants' ratings _significantly_ ($p < 0.05$) increased in the following measures:

1) the number of career options that they could name (Fig. 1);
2) their confidence that they could learn about career options (Fig. 2);
3) their understanding of their career interests (Fig. 4);
4) their confidence in their ability to make career transitions (Figs. 5 and 6);
5) their comfort utilizing their professional network for informational interviews (Fig. 8); and
6) their confidence in their ability to expand their professional network (Fig. 10).

Notably, after program participation, when asked how prepared iCERch trainees felt to make a career transition, 63% provided a rating of 4 and 11% provided a rating of 5 (on a scale of 1 to 5, where 1 = not at all and 5 = very prepared; Fig. 12). Full questions and individual scores are presented in the figures at the end of the document.

In addition to seeing significant increases within program participants, after program participation, iCERch trainees also exhibited _significantly_ ($p < 0.05$) greater understanding, awareness, and confidence compared to non-program participants. Specifically, compared to non-program participants, iCERch trainees demonstrated greater confidence in their abilities in the following areas:

1) learning about career options (Fig. 14);
2) identifying areas that they need to improve professionally (Fig. 16);
3) choosing a career that matches their personality (Fig. 17);
4) identifying the skills needed in their preferred career (Fig. 18);
5) setting effective goals for transitioning careers (Fig. 18); and
6) expanding their professional networks (Fig. 22).

Full questions and individual scores are presented in the figures at the end of the document.

- _Interviewee feedback:_ Once iCERch participants completed their alumni informational interviews, alumni were invited to complete a brief assessment of how well prepared iCERch participants were to 1) explain their research and research interests; 2) discuss their personality fit and career goals; 3) describe their interest in the alumni's career; and 4) ask questions. Alumni were also asked to rate the overall experience of talking with iCERch trainees. A total of 18 alumni completed the feedback form, providing feedback to 26 trainees. On a scale of 1-5 (where 1 = not at all prepared and 5 = extremely well), overall, iCERch trainees received ratings of 3.9 ± 0.8 (mean $\pm$ SD) for talking about their research; 4.0 ± 0.8 for talking about their personalities; 4.3 ± 0.7 for talking about their interest in that career; 4.8 ± 0.4 for asking questions. On a 5-point scale (Excellent, Good, Average, Poor, Terrible), 50% of alumni rated their experience as Excellent, 46% rated their experience as Good, and only 1 trainee received a rating of Average (3.8%).

PROGRAM DISSEMINATION AND EXPANSION PLAN: We plan to disseminate this program both in presentations at national meetings (e.g., NPA, AAMC GREAT) and by writing a manuscript, and plan to submit a session proposal to at least the 2022 NPA annual meeting. Additionally, we have submitted this program for consideration to be included in the new P|D Hub Collections project (https://pdhub.org). The iCERch program was submitted to the initial call for pre-applications and we are waiting to hear whether we will be invited to submit the full application. At our institution, we plan to shift delivery of our career development program to the iCERch model. We received a number of open-ended comments on the post-assessment that will both allow for program modifications (e.g., make sub-groups larger) and provide rationale for expanding this program beyond industry (e.g., direct feedback to explore careers outside of industry). As such, this program will expand from being "industry" Career Exploration Research to "individual" Career Exploration Research to allow for a wider variety of potential career transitions (including those within academia). Importantly, we structured the pre- and post-assessment and program activities such that they could be applied to any career of interest, which will allow us to use these same activities and evaluation as trainees explore careers in all professional sectors (e.g., academia, government, for profit, not for profit). Our goal is to begin implementation of this new model for career delivery starting in fall 2022.

Career Transition Survey Results : Pre- vs. Post-Program

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27 scholars completed both pre and post surveys. Thus, the number of respondents was 27 for pre and post survey, respectively.

Figure 1. Awareness of Career Options (n=27)

|	Pre-program	Post-program
Total number	135	180
Mean number	3.05	3.39

Before
1. Scientist/industry (n=27)
2. Academic PI/Researcher (n=16)
3. Medical Science Liaison (n=14)
4. Medical/Scientific writer (n=13)
5. Consultant (n=10)
6. Business-related (n=5)
7. Clinical research (n=5)
8. Bioinformatics (n=5)
9. Law (n=5)
10. Teacher (n=4)
11. Government (n=4)
12. Regulatory affairs (n=3)
13. Policy (n=3)
14. Project Manager (n=3)
15. Administrator (n=2)
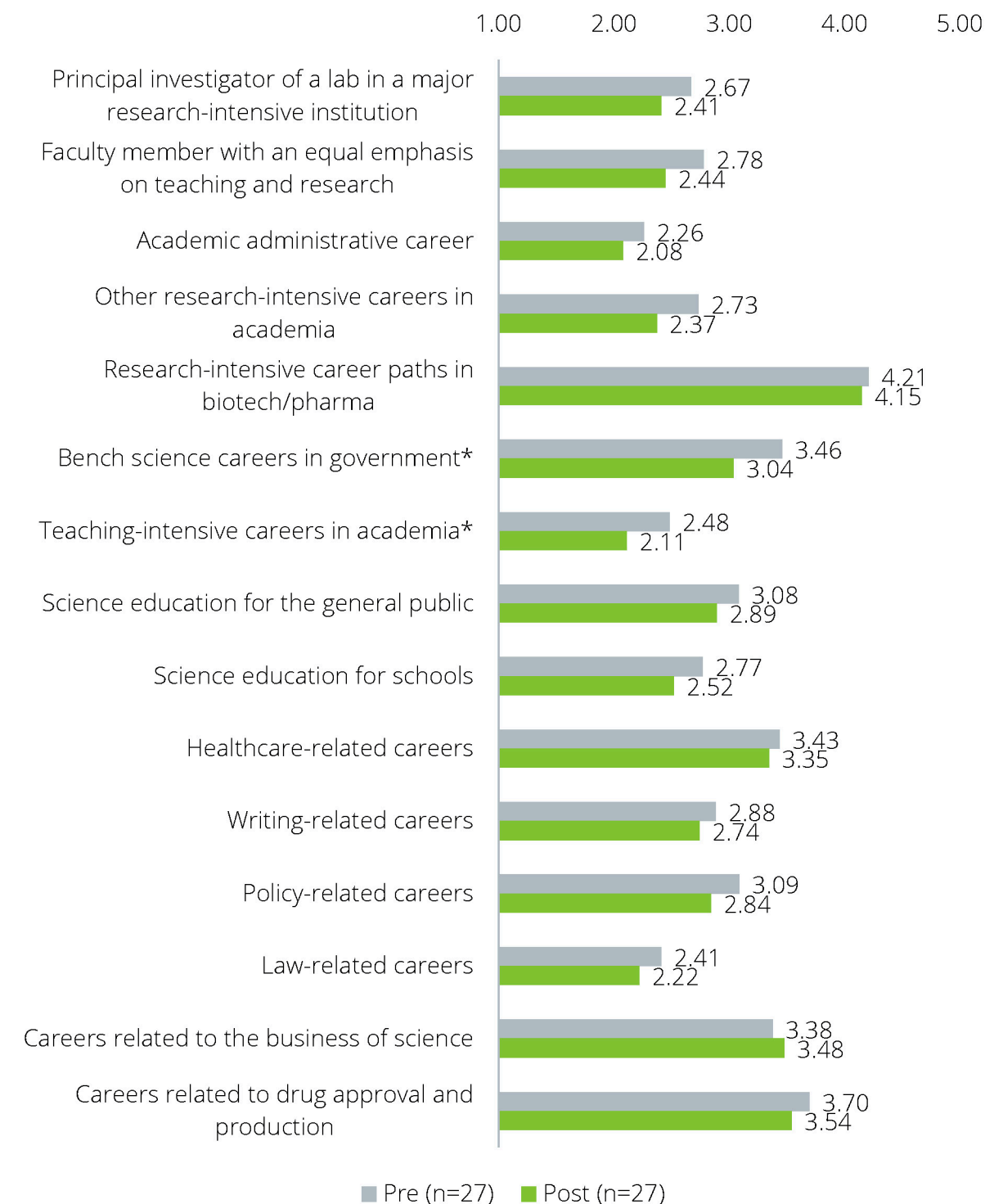16. Medical affairs (n=1)
17. Other (n=9)

After
1. Scientist/industry (n=30)
2. Medical/Scientific writer (n=21)
3. Medical Science Liaison (n=20)
4. Academic PI/Researcher (n=15)
5. Business-related (e.g. Sales, marketing, product manager, product rep) (n=10)
6. Consultant (n=9)
7. Regulatory affairs (n=8)
8. Teaching (High school teacher, College teacher, K-12 teacher) (n=7)
9. **Science Project Manager** (n=6)
10. Medical Affairs (n=5)
11. Policy (n=6)
12. Law (licensing, patents) (n=5)
13. Government (n=5)
14. Clinical research (n=4)
15. **Management** (Manager, Director, Program Director) (n=3)
16. **Field Application Specialist** (n=3)
17. **Entrepreneur** (n=3)
18. **Grants and Contracts** (n=2)
19. Bioinformatics (n=2)
20. Other (n=7)

Figure 2. How confident are you in your ability to gather information about different career options* (1=not at all and 5=very confident)

- Pre (n=27): 3.41
- Post (n=27): 4.22
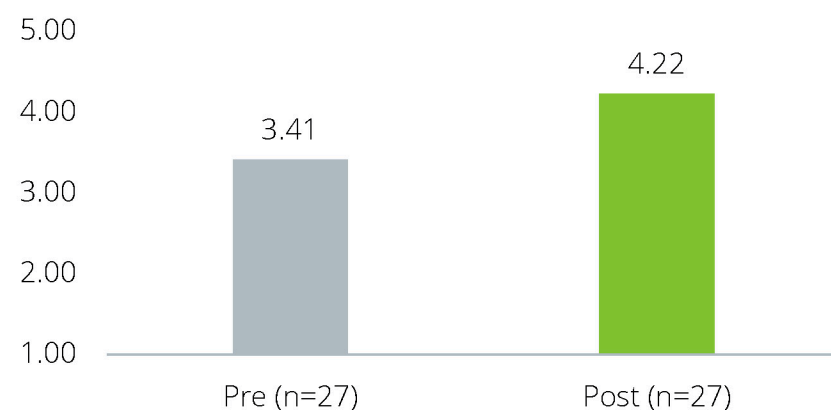
*Wilcoxon Signed Ranks Test, p<.05

Figure 3. Putting job availability aside, how attractive do you personally find each of the following careers? (1=not at all and 5=very attractive)

Career	Pre (n=27)	Post (n=27)
Principal investigator of a lab in a major research-intensive institution	2.67	2.41
Faculty member with an equal emphasis on teaching and research	2.78	2.44
Academic administrative career	2.26	2.08
Other research-intensive careers in academia	2.73	2.37
Research-intensive career paths in biotech/pharma	4.21	4.15
Bench science careers in government*	3.46	3.04
Teaching-intensive careers in academia*	2.48	2.11
Science education for the general public	3.08	2.89
Science education for schools	2.77	2.52
Healthcare-related careers	3.43	3.35
Writing-related careers	2.88	2.74
Policy-related careers	3.09	2.84
Law-related careers	2.41	2.22
Careers related to the business of science	3.38	3.48
Careers related to drug approval and production	3.70	3.54

* Had significant difference, Wilcoxon Signed Ranks Test, p<.05

Career Transition Survey Results: Pre- vs. Post-Program

Career Interests

Figure 4. How true are the following statements (1=not at all, 5=very true). Rating for all items in the post survey were significantly higher than the pre survey (with Bonferroni correction, p=.01). (1=not at all and 5=very true)

Figure 4 bar chart. Scale 1.00 to 5.00. Pre (n=27) gray, Post (n=27) green.

- I have a deep understanding of my career interests based on my professional strengths — Pre 3.00, Post 3.96
- I have a deep understanding of my career interests based on my personal strengths — Pre 3.00, Post 3.96
- I know how to use my strengths to choose a career best suited for me — Pre 2.81, Post 4.04
- I know what career best matches my strengths — Pre 2.67, Post 3.70
- I know what areas I need to improve on professionally — Pre 3.00, Post 4.00

Figure 5. How confident are you with the following. Rating for all items in the post survey were significantly higher than the pre survey (with Bonferroni correction, p=.017). (1=not at all and 5=very confident)

Figure 5 bar chart. Scale 1.00 to 5.00. Pre (n=27) gray, Post (n=27) green.

- Understanding how your personality traits impact your career interests. — Pre 3.07, Post 4.30
- Communicating how your personality traits relate to your career interests — Pre 2.70, Post 3.89
- Using your personality traits to identify a preferred career — Pre 2.59, Post 3.93

Career Transitions

Figure 6. How confident are you in the following... Rating for all items in the post survey were significantly higher than the pre survey ((with Bonferroni correction, p=.01). (1=not at all and 5=very confident)
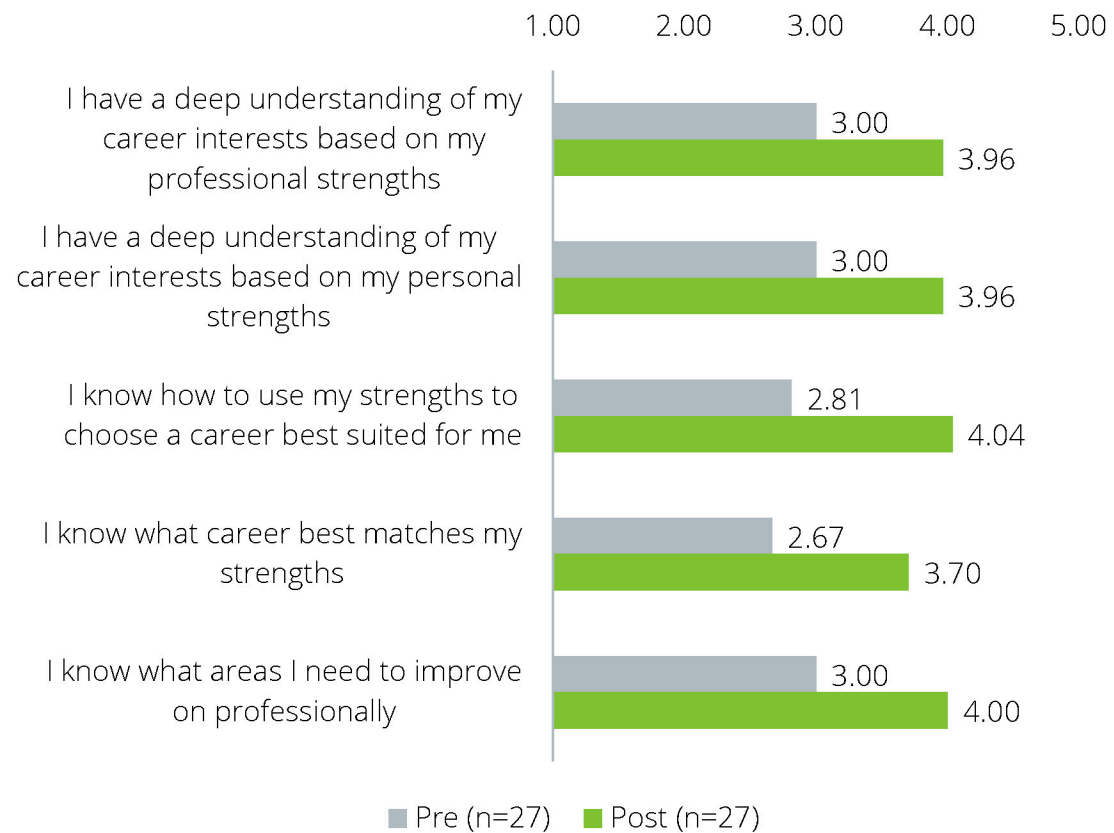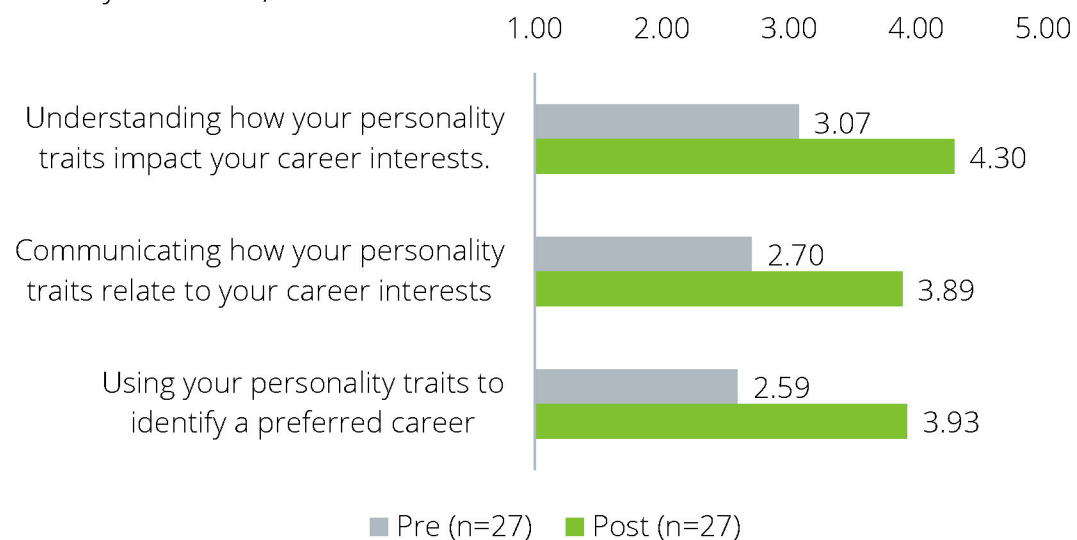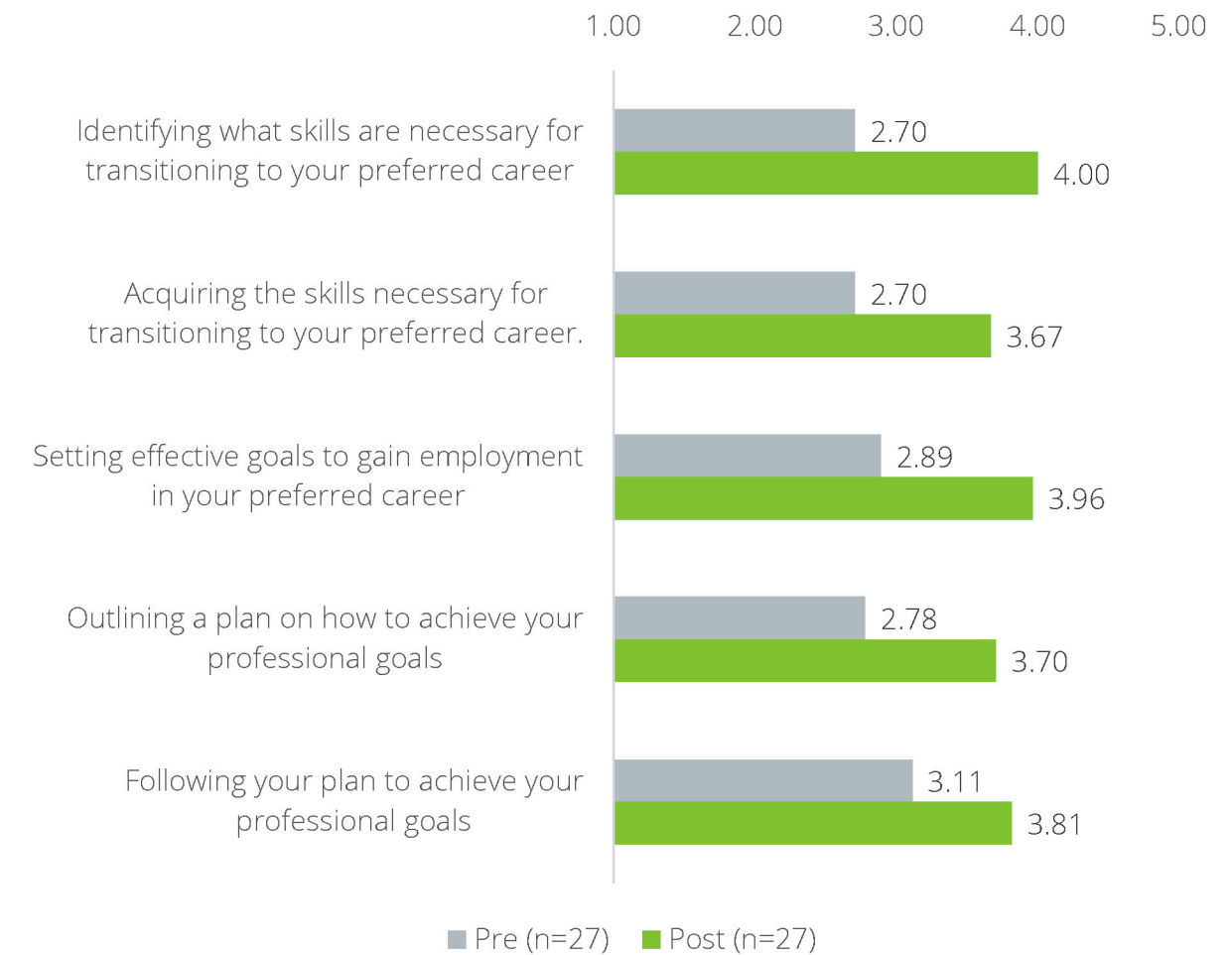

Figure 6 bar chart. Scale 1.00 to 5.00. Pre (n=27) gray, Post (n=27) green.

- Identifying what skills are necessary for transitioning to your preferred career — Pre 2.70, Post 4.00
- Acquiring the skills necessary for transitioning to your preferred career. — Pre 2.70, Post 3.67
- Setting effective goals to gain employment in your preferred career — Pre 2.89, Post 3.96
- Outlining a plan on how to achieve your professional goals — Pre 2.78, Post 3.70
- Following your plan to achieve your professional goals — Pre 3.11, Post 3.81

Two cohorts completed the program; the first cohort finished the program in April 2021, and the second cohort finished in August 2021. There was only one item that had significant difference between those two cohorts in the pre-survey data, which was in the career transitions "*setting effective goals to gain employment in your preferred career.*" (p=.045). The second cohort had higher scores than the first cohort on the pre survey.

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Professional Network

Figure 7. Does your professional network include someone from the following sectors? (*n* reflects those who answered "yes").
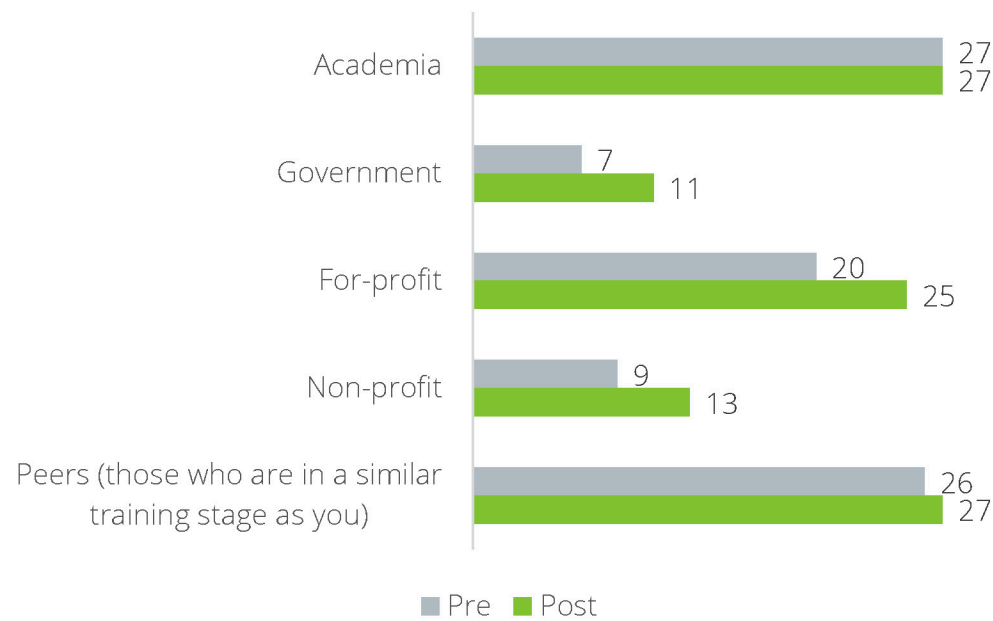
Academia — Pre 27, Post 27
Government — Pre 7, Post 11
For-profit — Pre 20, Post 25
Non-profit — Pre 9, Post 13
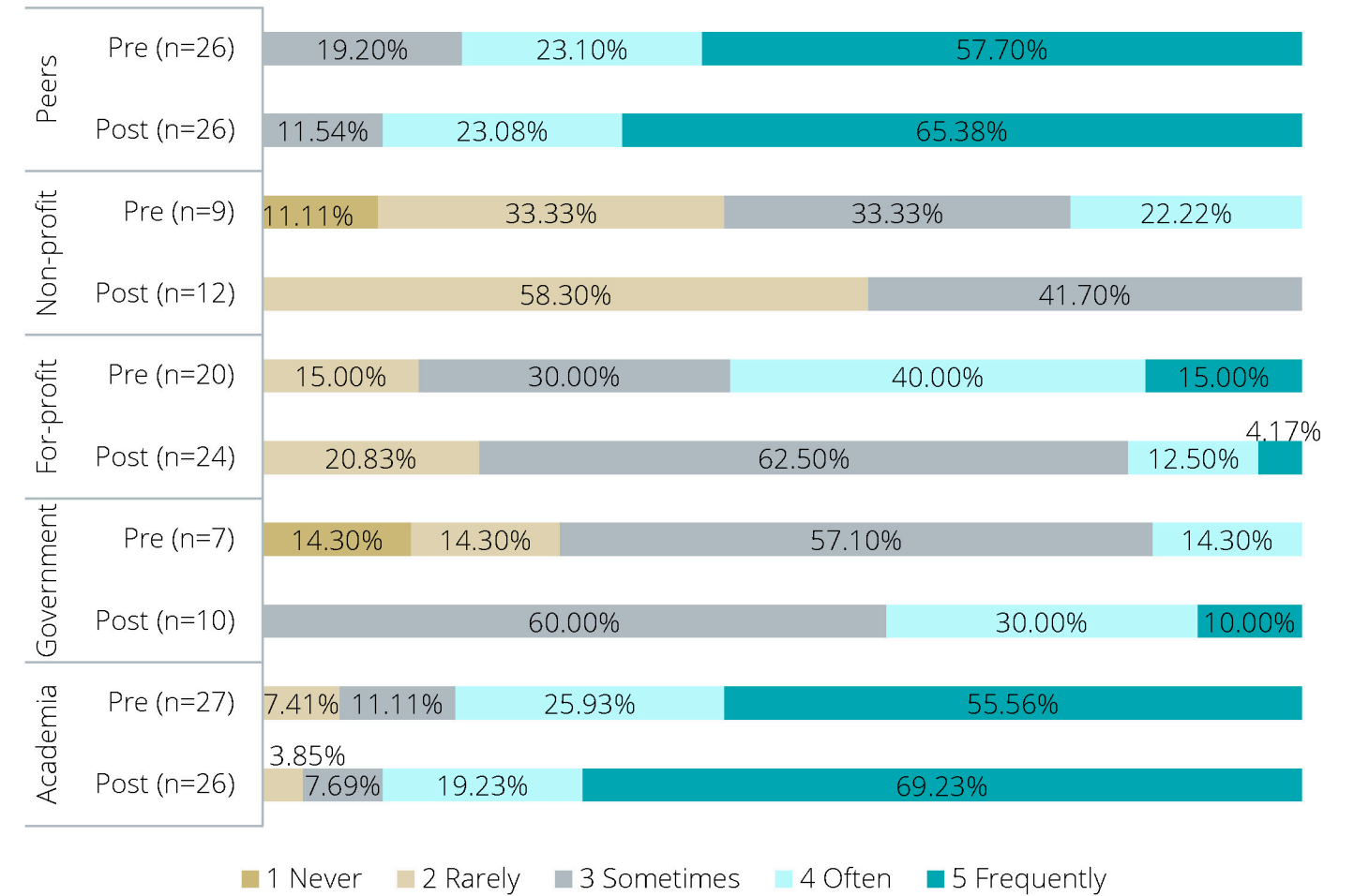Peers (those who are in a similar training stage as you) — Pre 26, Post 27

■ Pre ■ Post

Figure 8. How comfortable do you feel reaching out to someone in your professional network for the following reasons: (1=not at all and 5=very comfortable).
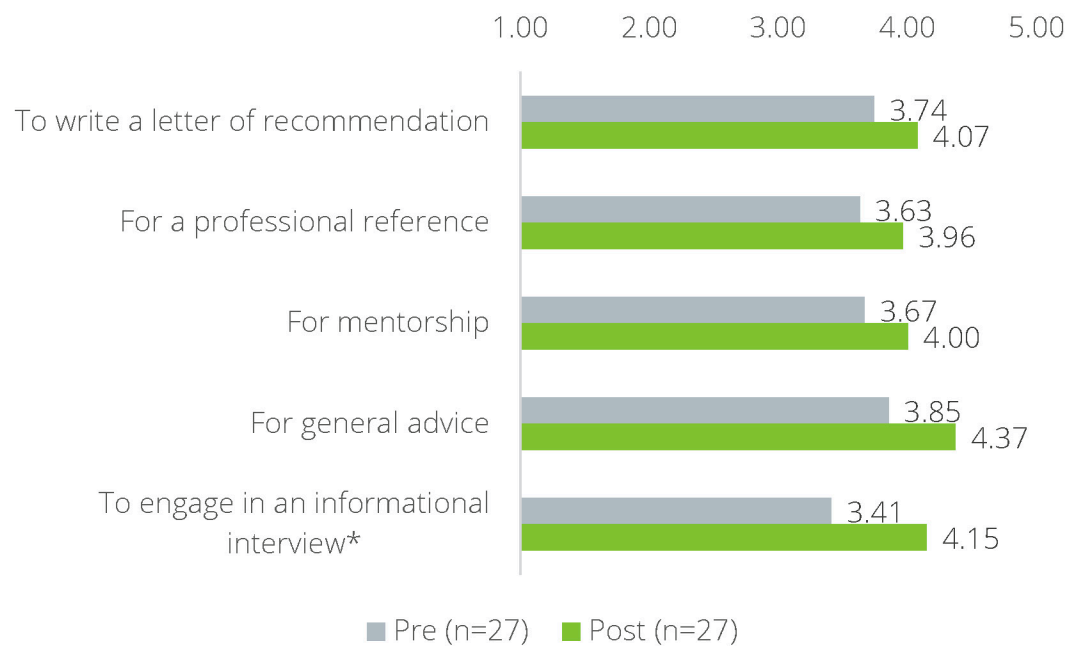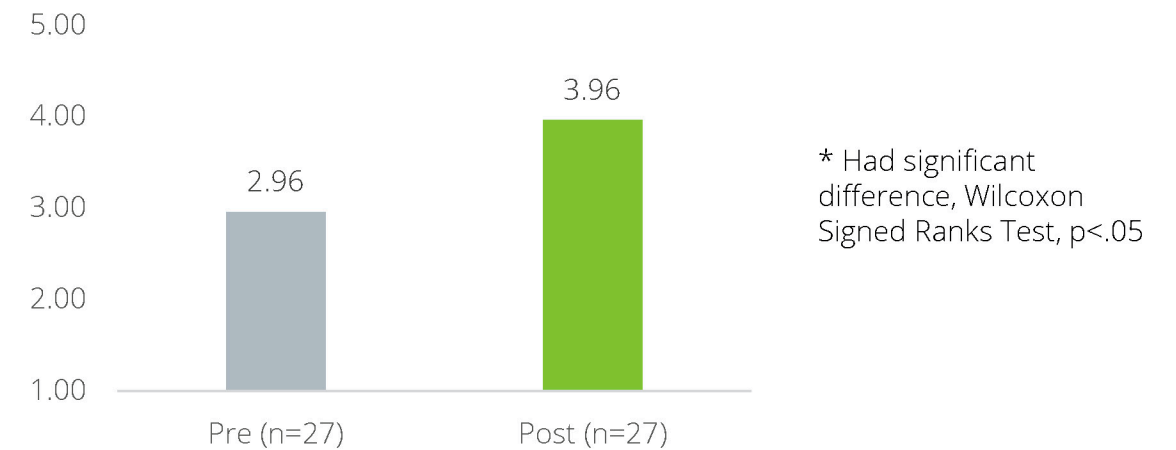
1.00 2.00 3.00 4.00 5.00

To write a letter of recommendation — Pre 3.74, Post 4.07
For a professional reference — Pre 3.63, Post 3.96
For mentorship — Pre 3.67, Post 4.00
For general advice — Pre 3.85, Post 4.37
To engage in an informational interview* — Pre 3.41, Post 4.15

■ Pre (n=27) ■ Post (n=27)

*Wilcoxon Signed Ranks Test, had significant difference after Bonferroni correction, p=.01.

Figure 9. Considering both in-person and online interactions, how often do you interact with people in your professional network?

Peers
Pre (n=26): Sometimes 19.20% | Often 23.10% | Frequently 57.70%
Post (n=26): Sometimes 11.54% | Often 23.08% | Frequently 65.38%

Non-profit
Pre (n=9): Never 11.11% | Rarely 33.33% | Sometimes 33.33% | Often 22.22%
Post (n=12): Rarely 58.30% | Sometimes 41.70%

For-profit
Pre (n=20): Rarely 15.00% | Sometimes 30.00% | Often 40.00% | Frequently 15.00%
Post (n=24): Rarely 20.83% | Sometimes 62.50% | Often 12.50% | Frequently 4.17%

Government
Pre (n=7): Never 14.30% | Rarely 14.30% | Sometimes 57.10% | Often 14.30%
Post (n=10): Sometimes 60.00% | Often 30.00% | Frequently 10.00%

Academia
Pre (n=27): Never 7.41% | Rarely 11.11% | Often 25.93% | Frequently 55.56%
Post (n=26): Never 3.85% | Rarely 7.69% | Often 19.23% | Frequently 69.23%

■ 1 Never ■ 2 Rarely ■ 3 Sometimes ■ 4 Often ■ 5 Frequently

Figure 10. How confident are you in your ability to expand your professional network outside of academia?* (1=not at all and 5=very confident)

5.00
4.00
3.00
2.00
1.00

Pre (n=27): 2.96
Post (n=27): 3.96

* Had significant difference, Wilcoxon Signed Ranks Test, p<.05

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Figure 11. How important were each of the following program components in helping you feel prepared to make a career transition? (1=not at all and 5=very important)
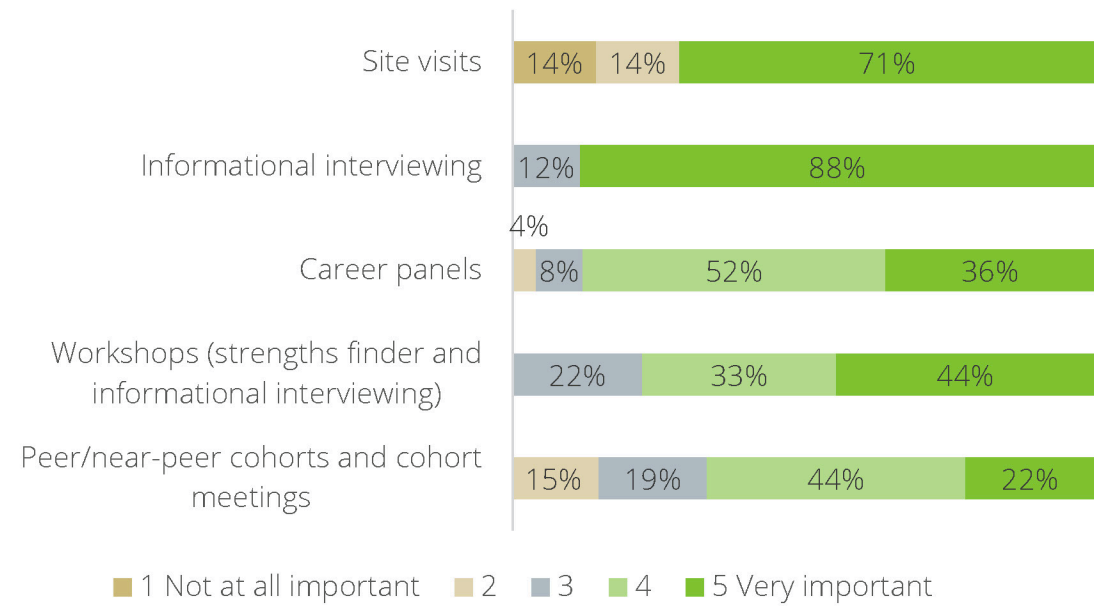

Component	1	2	3	4	5
Site visits		14%	14%		71%
Informational interviewing			12%		88%
Career panels	4%	8%		52%	36%
Workshops (strengths finder and informational interviewing)			22%	33%	44%
Peer/near-peer cohorts and cohort meetings	15%		19%	44%	22%

■ 1 Not at all important ■ 2 ■ 3 ■ 4 ■ 5 Very important

Figure 12. How prepared do you feel to make a career transition after participating in this program? (1=not at all and 5=very prepared)

1 Not at all	2	3	4	5 Very prepared
0%	0%	26%	63%	11%
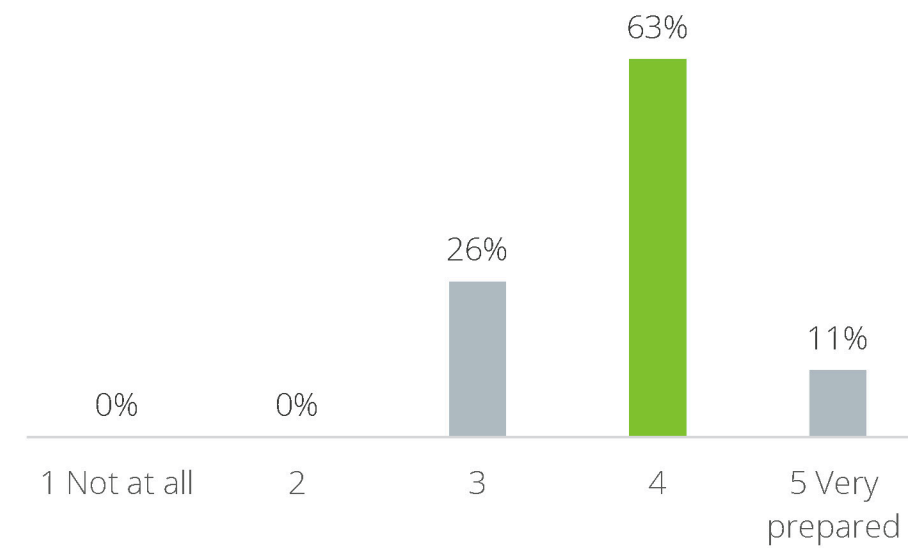
27 respondents completed the post survey, 87 respondents completed the non-participant survey.

Figure 13. Engagement in CDO workshops among program participants.

In which of the Career Development Office (CDO) workshops have you participated in?
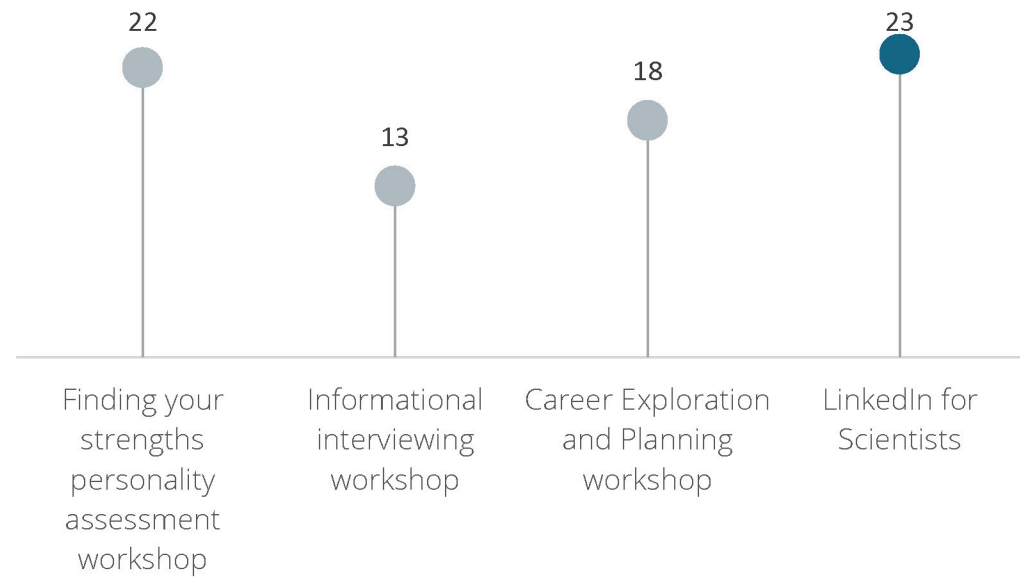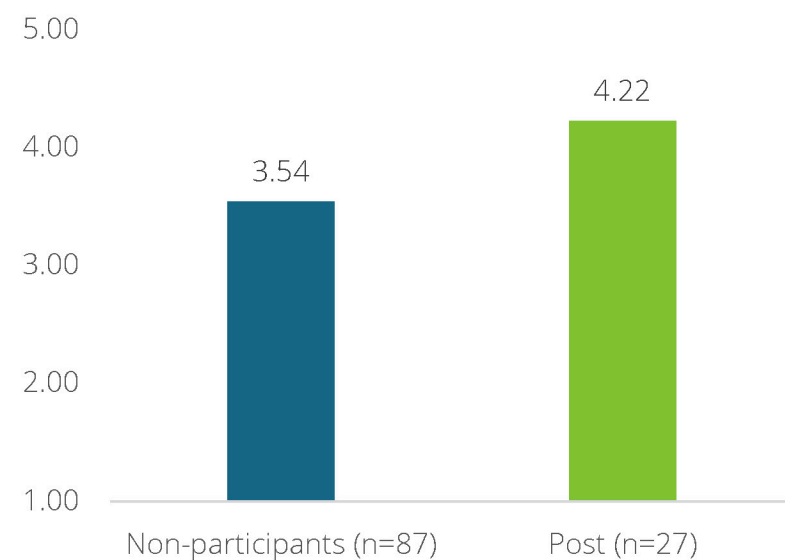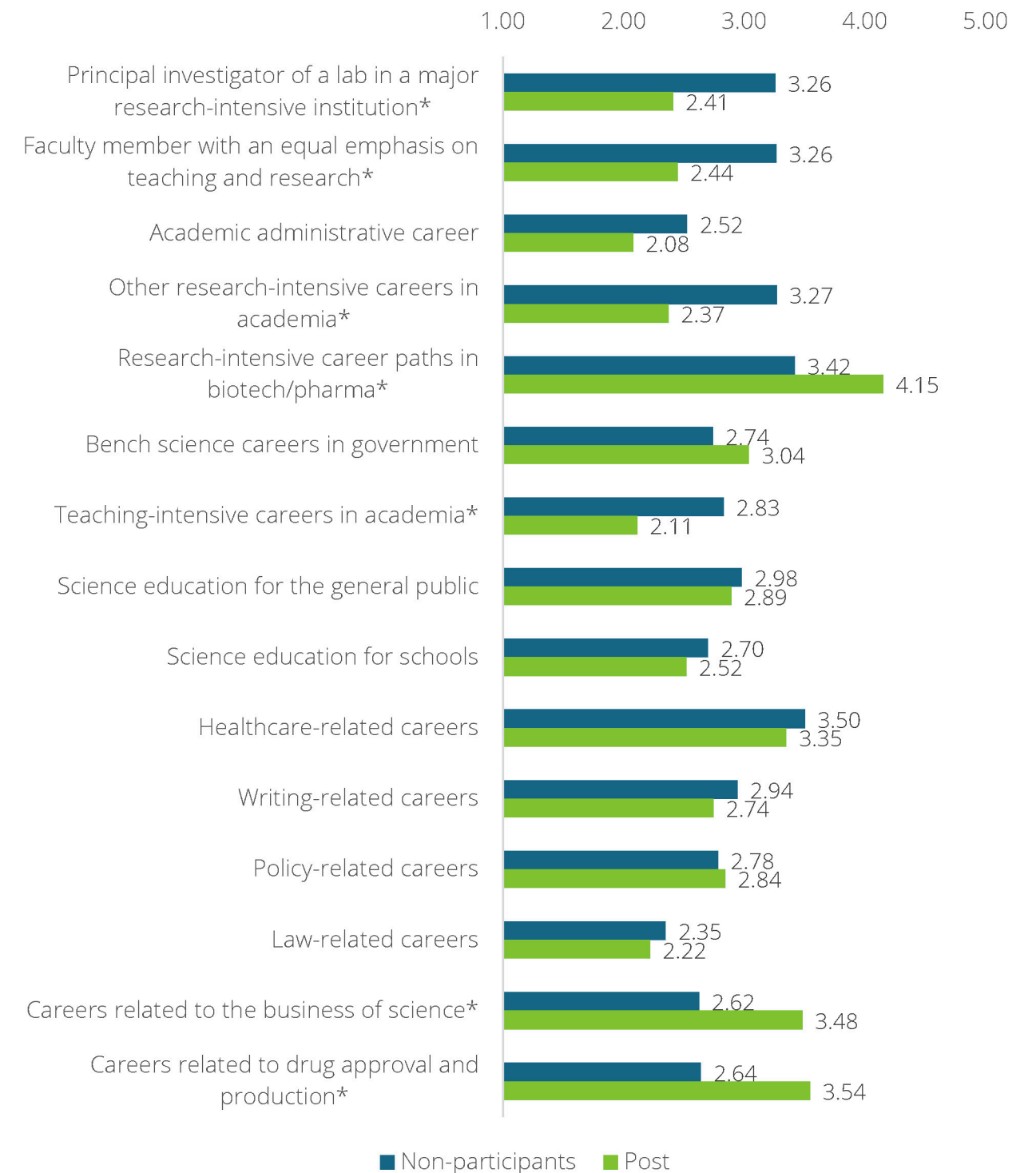

- Finding your strengths personality assessment workshop: 22
- Informational interviewing workshop: 13
- Career Exploration and Planning workshop: 18
- LinkedIn for Scientists: 23

Figure 14. How confident are you in your ability to gather information about different career options?* (1=not at all and 5=very confident)

Non-participants (n=87): 3.54
Post (n=27): 4.22

* Had significant difference, Mann-Whitney U test, p<.05

Figure 15. Putting job availability aside, how attractive do you personally find each of the following careers? (1=not at all and 5=very attractive)
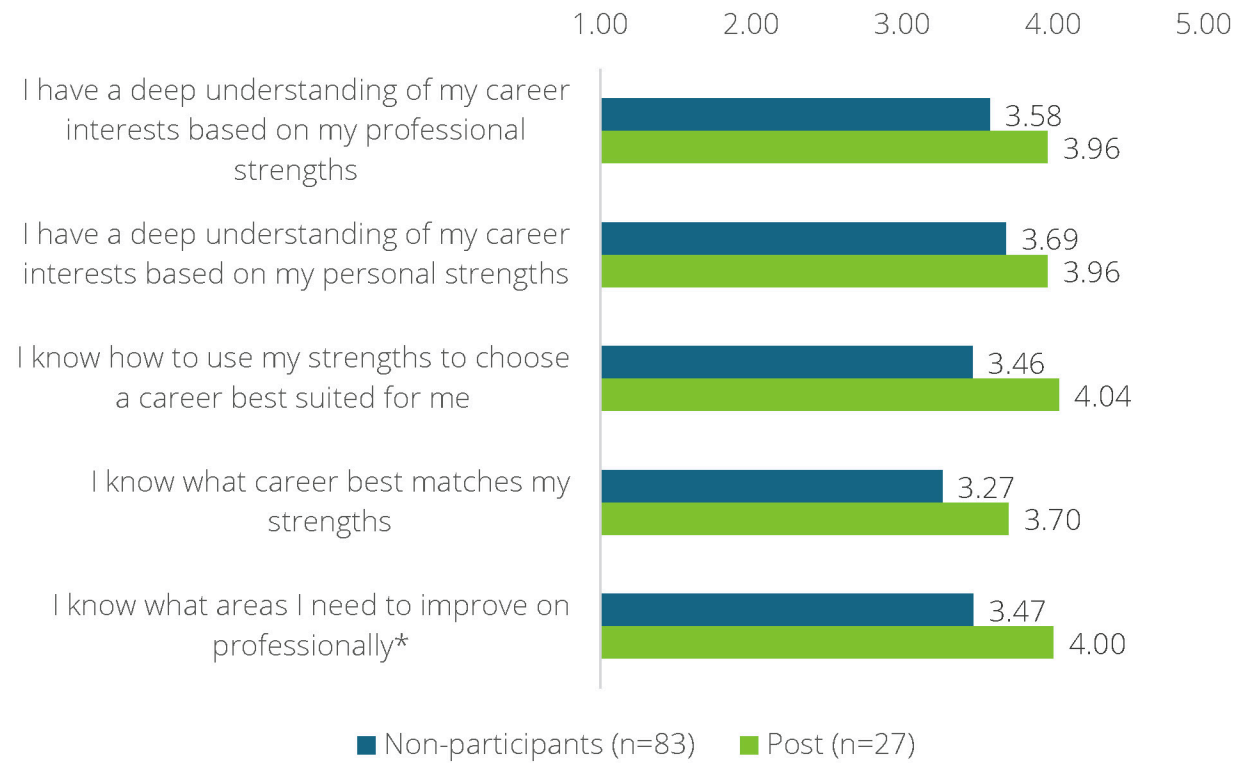
The number of respondents to the following items varied. The range was 82 to 87 for the non-program participants, and ranged from 23 to 27 for the post program respondents.

Career	Non-participants	Post
Principal investigator of a lab in a major research-intensive institution*	3.26	2.41
Faculty member with an equal emphasis on teaching and research*	3.26	2.44
Academic administrative career	2.52	2.08
Other research-intensive careers in academia*	3.27	2.37
Research-intensive career paths in biotech/pharma*	3.42	4.15
Bench science careers in government	2.74	3.04
Teaching-intensive careers in academia*	2.83	2.11
Science education for the general public	2.98	2.89
Science education for schools	2.70	2.52
Healthcare-related careers	3.50	3.35
Writing-related careers	2.94	2.74
Policy-related careers	2.78	2.84
Law-related careers	2.35	2.22
Careers related to the business of science*	2.62	3.48
Careers related to drug approval and production*	2.64	3.54

■ Non-participants ■ Post

* Had significant difference, Mann-Whitney U test, p<.05

Career Transition Survey Results: Non-participants vs. Post-Program

The Evaluation Center

CU UNIVERSITY OF COLORADO
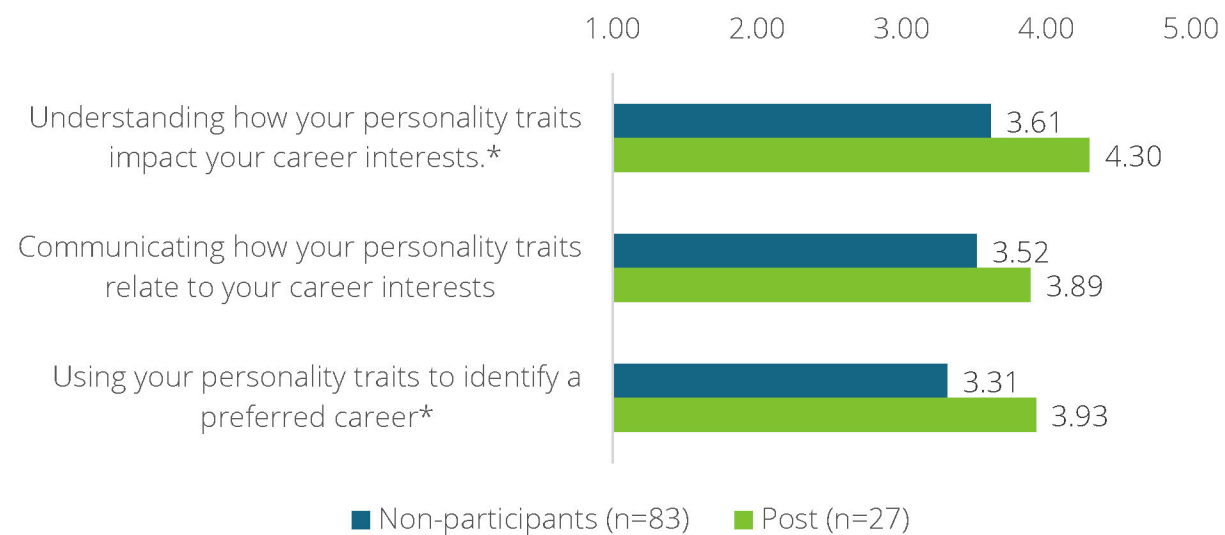DENVER | ANSCHUTZ MEDICAL CAMPUS

Career Interests

Figure 16. How true are the following statements (1=not at all, 5=very true)…

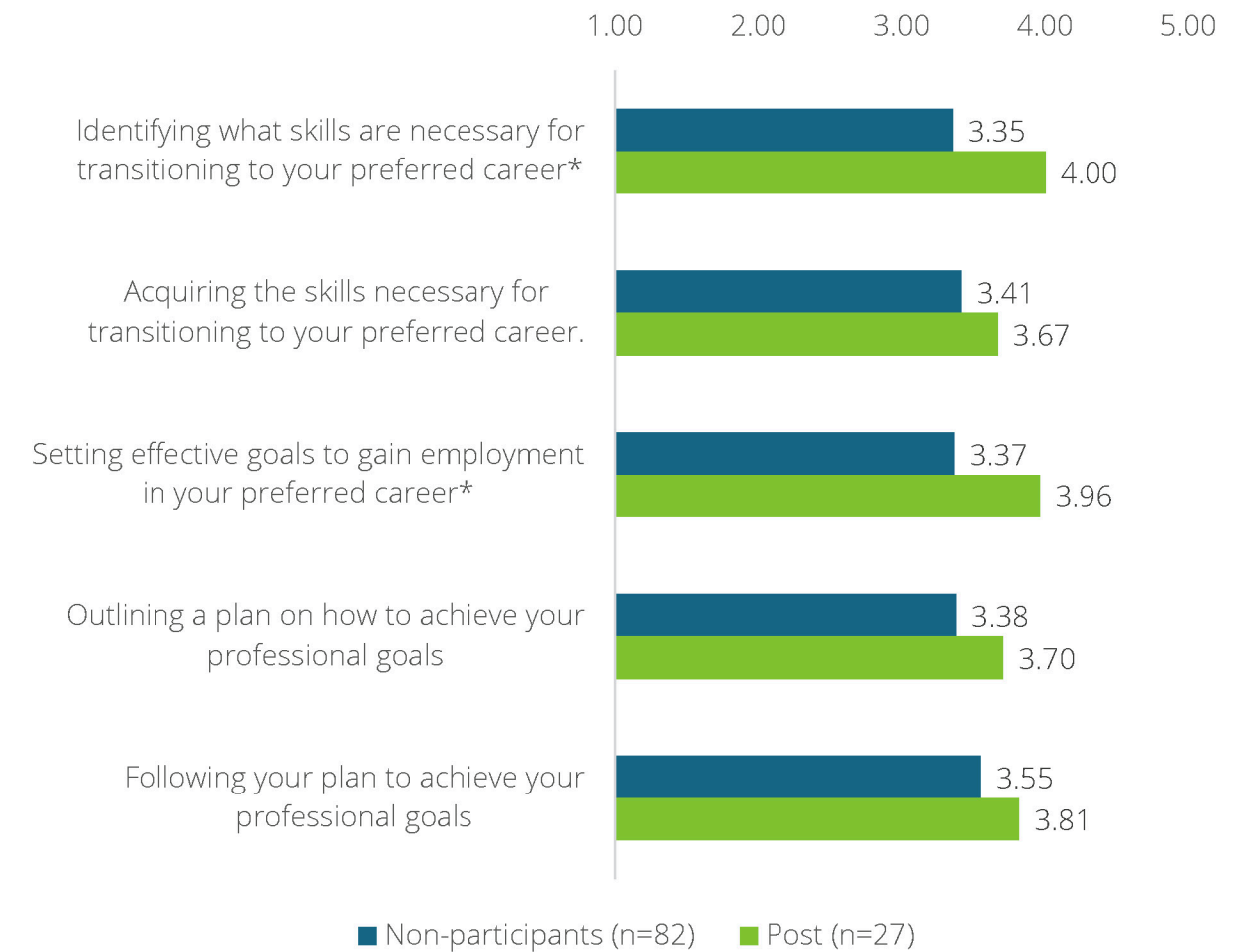* Mann-Whitney U test, had significant difference after Bonferroni correction, p=.01.

Figure 17. How confident are you with the following.. (1=not at all, 5=very confident)

* Mann-Whitney U test, had significant difference after Bonferroni correction, p=.017.

Career Transitions

Figure 18. How confident are you in the following areas…(1=not at all and 5=very confident)

* Mann-Whitney U test, had significant difference after Bonferroni correction, p=.01.

Career Transition Survey Results: Non-participants vs. Post-Program

The Evaluation Center
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Professional Network

Figure 19. Does your professional network include someone from the following sectors?

Sector	Non-participants	Post
Academia	82	27
Government	25	7
For-profit	48	20
Non-profit	30	9
Peers (those who are in a similar training stage as you)	72	27

- Non-participants
- Post
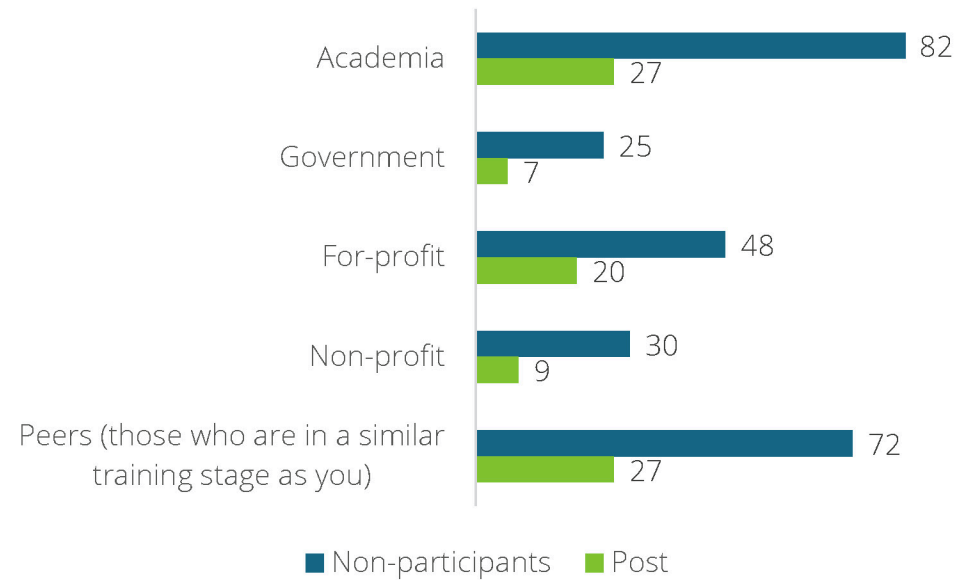
Figure 20. How comfortable do you feel reaching out to someone in your professional network for the following reasons. (1=not at all and 5=very comfortable).

Reason	Non-participants (n=82)	Post (n=27)
To write a letter of recommendation	4.00	4.07
For a professional reference	4.20	3.96
For mentorship	3.71	4
For general advice	4.10	4.37
To engage in an informational interview*	3.52	4.15

- Non-participants (n=82)
- Post (n=27)
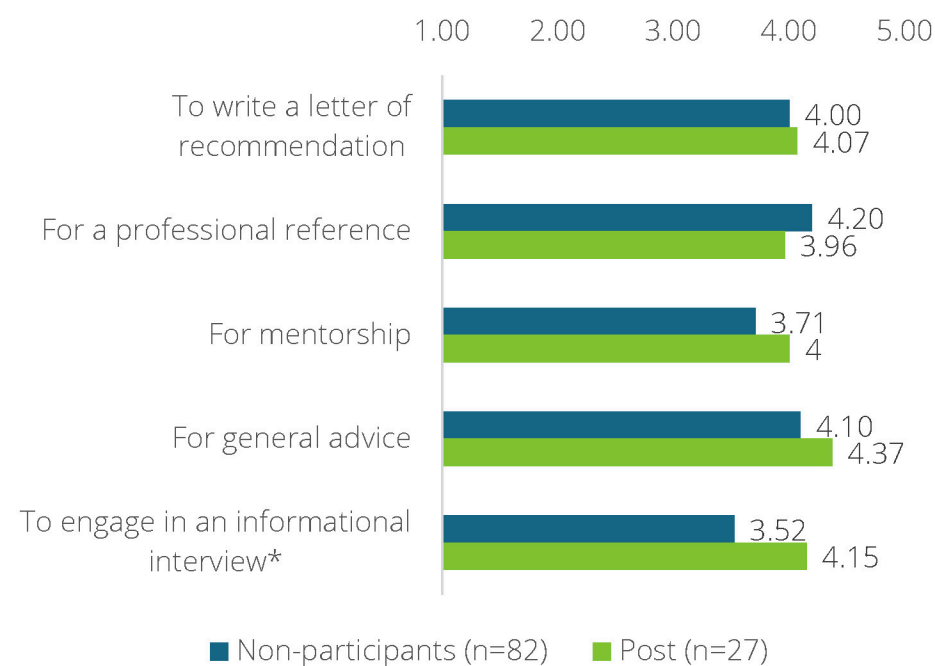
* Mann-Whitney U test, had significant difference after Bonferroni correction, p=.01.

Figure 21. Considering both in-person and online interactions, how often do you interact with people in your professional network? (more than one categories can be selected)
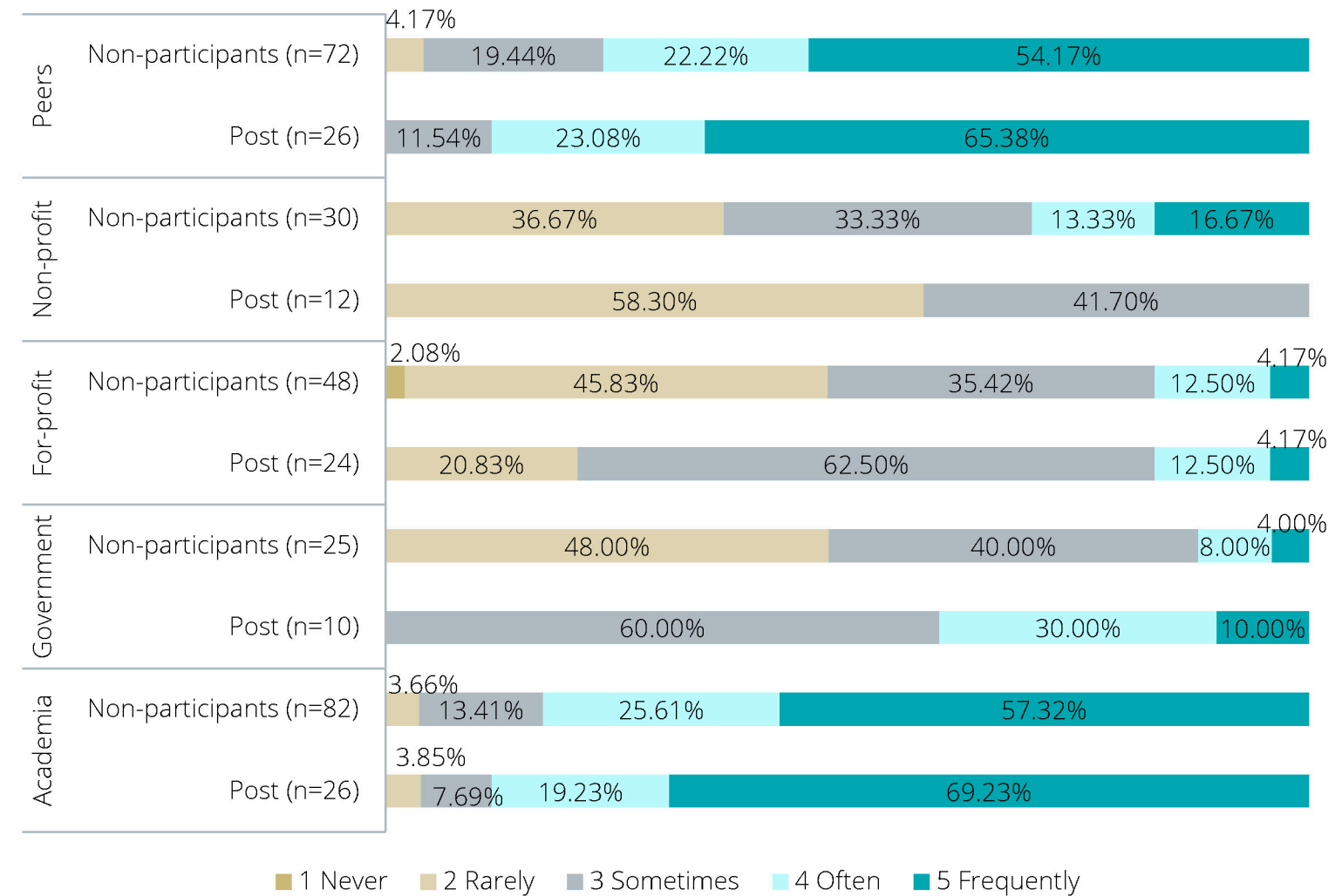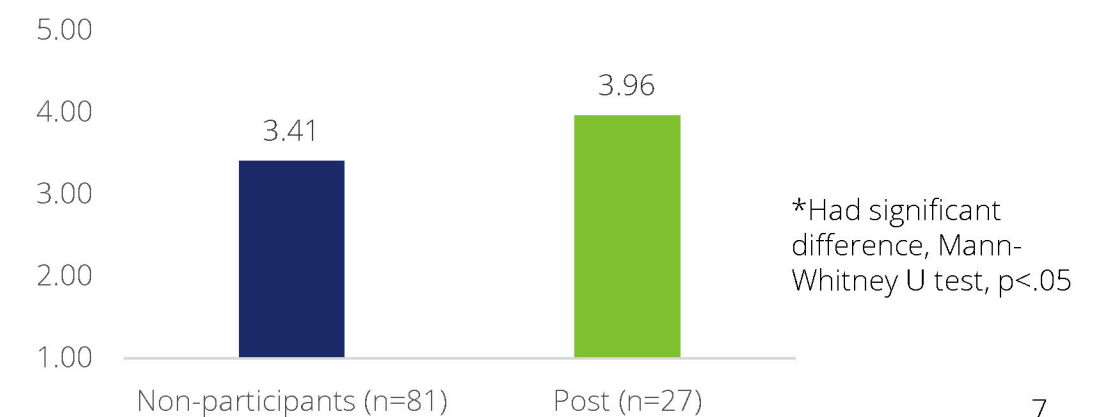
Peers
- Non-participants (n=72): 4.17%, 19.44%, 22.22%, 54.17%
- Post (n=26): 11.54%, 23.08%, 65.38%

Non-profit
- Non-participants (n=30): 36.67%, 33.33%, 13.33%, 16.67%
- Post (n=12): 58.30%, 41.70%

For-profit
- Non-participants (n=48): 2.08%, 45.83%, 35.42%, 12.50%, 4.17%
- Post (n=24): 20.83%, 62.50%, 12.50%, 4.17%

Government
- Non-participants (n=25): 48.00%, 40.00%, 8.00%, 4.00%
- Post (n=10): 60.00%, 30.00%, 10.00%

Academia
- Non-participants (n=82): 3.66%, 13.41%, 25.61%, 57.32%
- Post (n=26): 3.85%, 7.69%, 19.23%, 69.23%

- 1 Never
- 2 Rarely
- 3 Sometimes
- 4 Often
- 5 Frequently

Figure 22. How confident are you in your ability to expand your professional network outside of academia?* (1=not at all and 5=very confident)

	Non-participants (n=81)	Post (n=27)
	3.41	3.96

*Had significant difference, Mann-Whitney U test, p<.05

Program participants (_n_=27)

Figure 23. Racial Identity (select all that apply)-

Asian or Asian American	Black, African, or African American	Hispanic and/or Latinx	Pacific Islander or Native Hawaiian	White
6	1	4	1	17
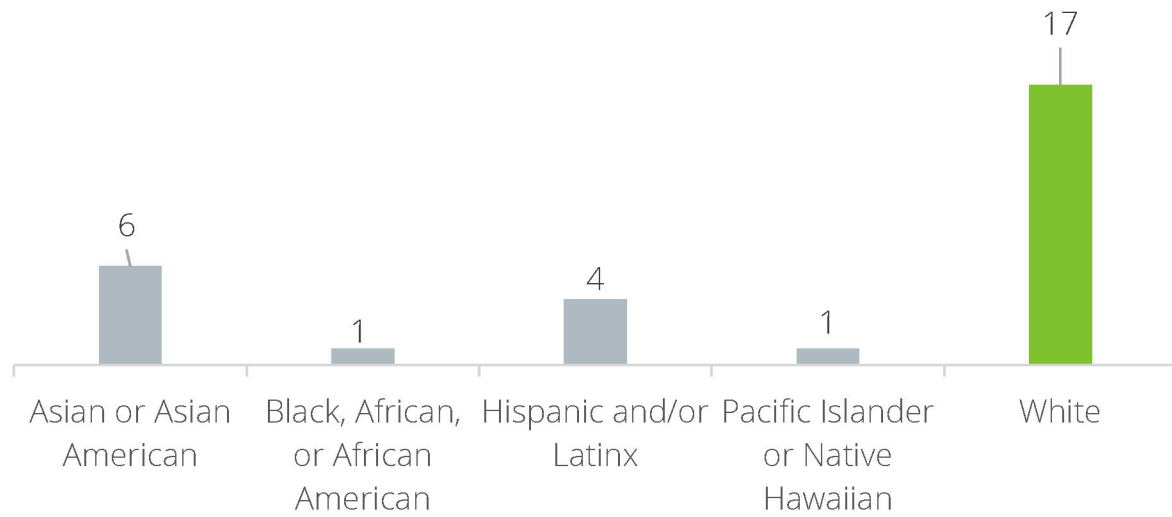
Figure 25 .U.S. citizenship

6
21

■ Yes ■ No
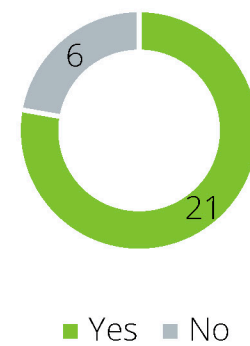
Figure 27. Academic position

14
13

■ PhD student ■ Postdoc-fellow/traine
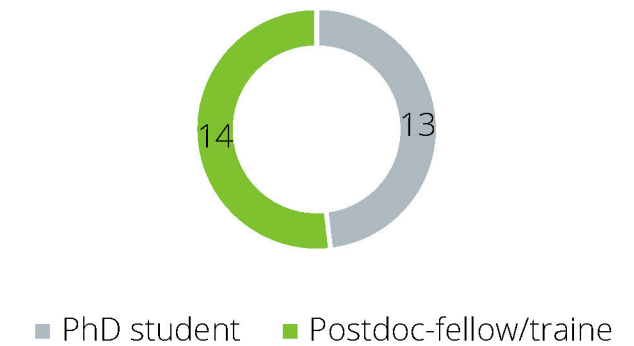
Figure 24. Gender (select all that apply)-

- They/Them/Theirs: 1
- He/Him/His: 8
- She/Her/Hers: 19

■ She/Her/Hers ■ He/Him/His ■ They/Them/Theirs
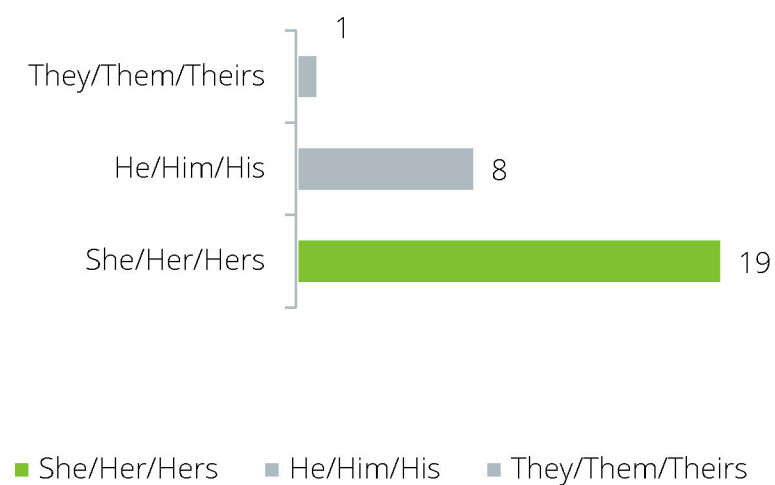
Figure 26. Age Categories

26-30	31-35	36+
18	7	2
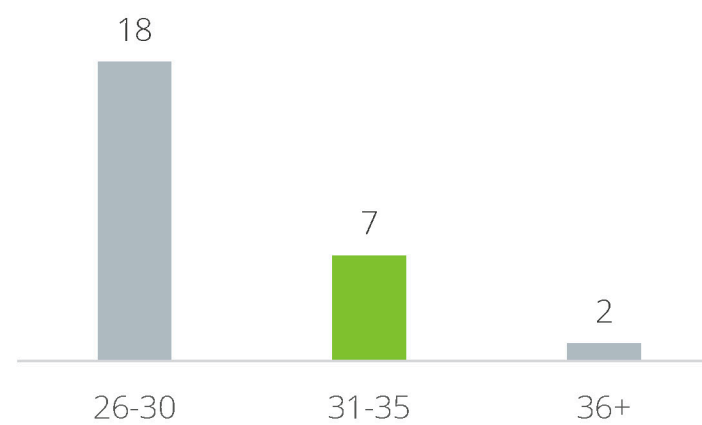
Figure 28. Stage in the training

1st year	2nd year	3rd year	4th year	5th year
5	2	5	7	8
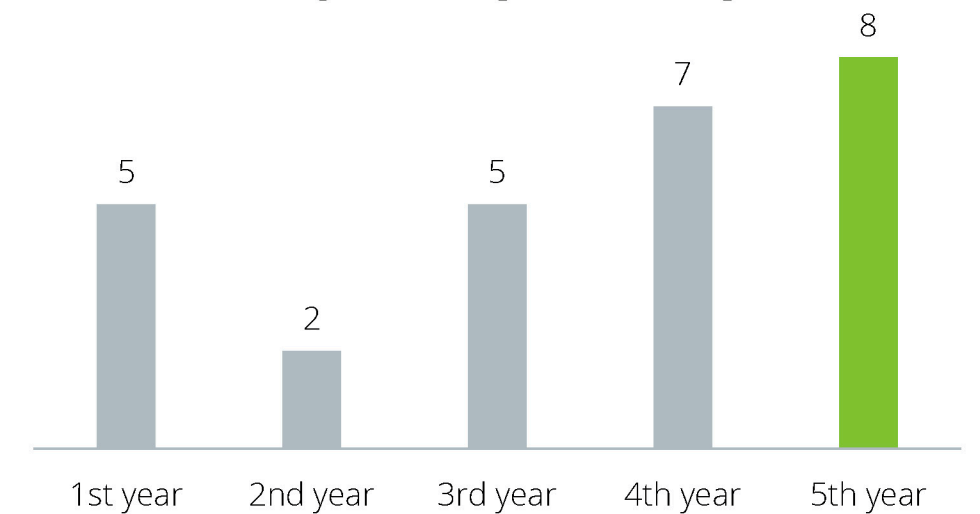
Non-Program participants (*n*=82)

Figure 29. Racial Identity (select all that apply)-
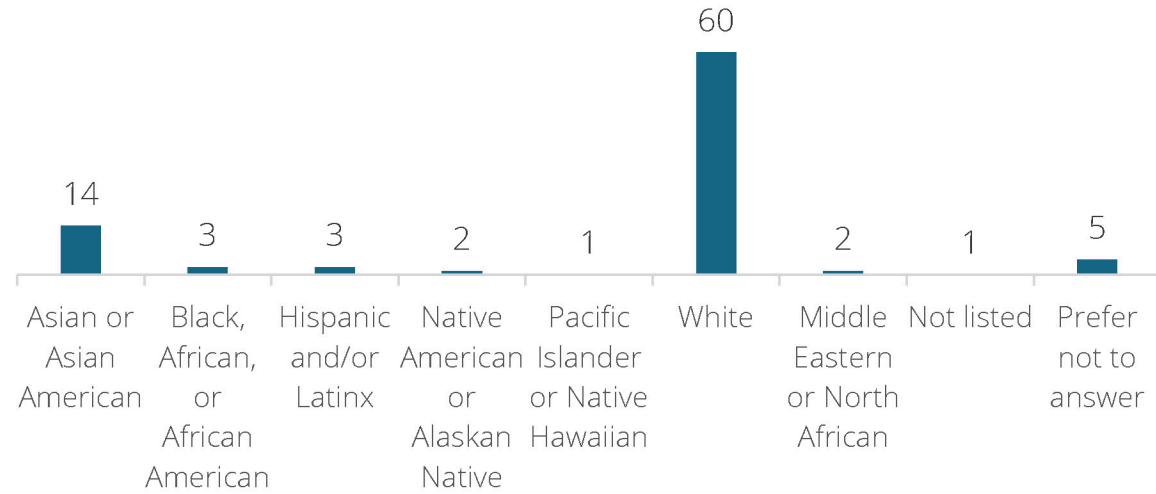
Figure 31. U.S. citizenship

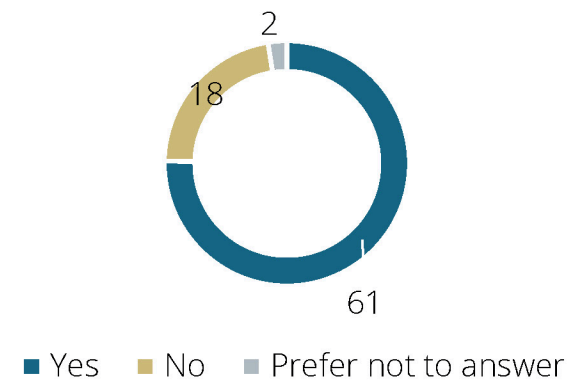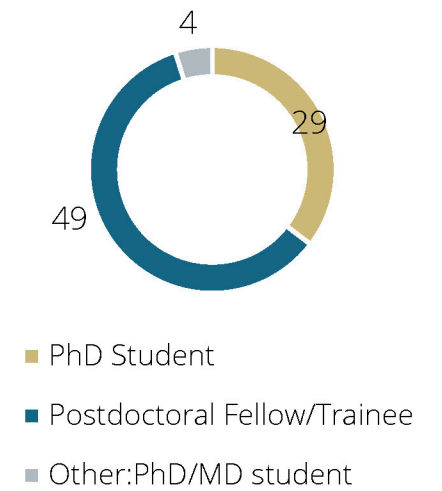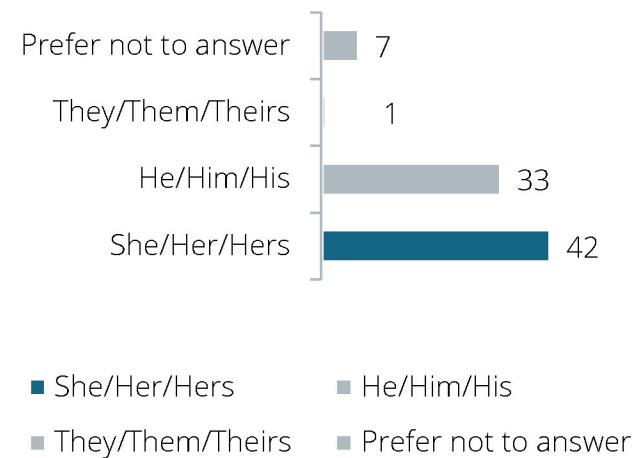**Figure 33.** Academic position

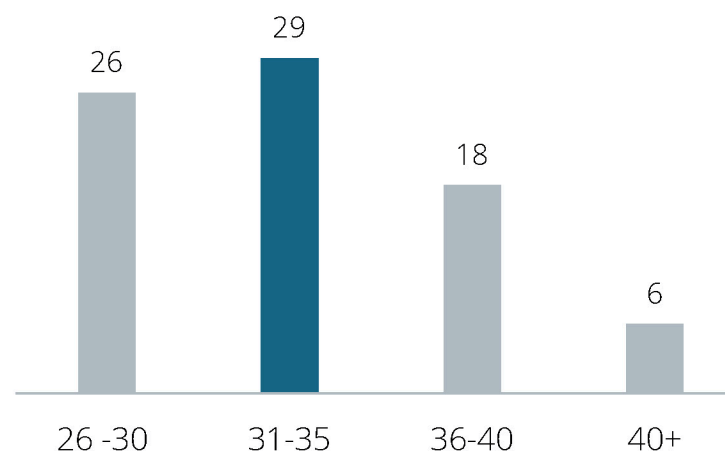**Figure 30.** Gender (select all that apply)-

Figure 32. Age Categories

Figure 34. Stage in training