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1. Case Study

a. About Career Catalyst

Career Catalyst is Harvard Catalyst's strategic, one-year mentoring program for early-career researchers (mainly post-doctoral fellows and instructors). It empowers mentees by giving them strategies and tools to effectively manage their mentoring relationships, grow their networks, and take a proactive role in their own professional development. The program has run since 2017 and currently accepts about 60 participants per year.

Each mentee is placed within a small group of three-to-four peer participants. Every small group is matched with a senior faculty member who serves as a developmental mentor for the duration of the program. Each mentee group meets together twice per month, once with their assigned senior mentor, and once as a peer group without their senior mentor. In order to build a sense of community, three program-wide meetings for all mentees and mentors are hosted throughout the year. The program content is structured around monthly themes that are the focus of exercises and assignments. These assignments are organized into a comprehensive curriculum that includes learning objectives, interactive activities, and additional resources.

b. Development of the Mentor Assessment

Background

Faculty mentors are core to the success of the Career Catalyst program. We ask our mentees to assess their mentors annually. This assessment provides the mentors with feedback and insight and ensures that they are meeting program expectations and goals.

When first developing our Mentor Assessment, we reviewed the mentoring literature and explored many published survey instruments. These instruments were a useful starting point, but they did not align perfectly with our audience and program goals. We decided that we needed to develop our own assessment strategy.

Development of the Survey

To create our assessment, we began by reviewing our program-specific goals and outcomes. We then reviewed our *Characteristics and Actions that Foster Effective Mentee-Mentor Relationships* document, as well as five of the most commonly cited, published mentoring survey instruments. (For more information about these resources, visit our website.) We highlighted the statements throughout each of these resources that aligned most closely with our expectations for Career Catalyst mentors. Then, we grouped these statements thematically and wrote a short line that summarized each of the themes. See the table below, "Documentation of the Survey Development Process," for the specifics of this process.

We consolidated our list into a series of statements to use in our assessment. We built the survey in Qualtrics, incorporating a Likert scale with 7 options. At the end of each annual program, we administer this survey to our mentees. Survey results are reviewed by the program committee, and each mentor receives a summary of the results and feedback shared by their mentees.

c. Statements Displayed in the Assessment

This evaluation survey is made up of 16 statements. It evaluates mentees' perception of how well they think their mentors demonstrate the listed characteristics and actions in practice. Mentees are asked to choose how strongly they agree or disagree with each statement on a 7-point scale: Strongly disagree (0), Disagree (1), Somewhat disagree (2), Neither agree nor disagree (3), Somewhat agree (4), Agree (5), Strongly agree (6).

Each statement completes the sentence: My mentor _____.
1. had the expertise that I needed.
2. established clear expectations and boundaries up front.
3. met with me regularly.
4. was accessible, approachable and professional.
5. practiced strategies to engage effectively with those whose personal background is different from their own (e.g., age, race, gender, class, region, culture, religion, family composition, etc.).
6. took the time to learn my personal strengths, challenges, and values.
7. assisted me in developing short and long term goals.
8. helped me to understand my institutional culture and landscape.
9. helped me to understand promotion metrics.
10. provided the type of feedback that I needed.
11. periodically reassessed the expectations of our relationship.
12. fostered my network by introducing me to colleagues with similar interests or encouraging me to make new connections.
13. respected my contributions and celebrated my success.
14. coached me on how to manage my time and align my priorities based on my values.
15. aided in my career planning.
16. challenged me to extend my abilities (e.g., risk taking, trying new things).

2. Documentation of the Survey Development Process

The table below lists each statement found in the Career Catalyst Mentor Assessment, and where applicable, maps it to our *Characteristics and Actions that Foster Effective Mentee-Mentor Relationships* document as well as similar statements found in commonly-cited, published mentoring surveys.

Career Catalyst Mentor Assessment Each statement completes the sentence: My mentor _____.	Statements that Inspired the Assessment Key: **Blue Text**/**Square Bullets:** statement found in our *Characteristics and Actions that Foster Effective Mentee-Mentor Relationships* document **Black Text**/**Circular Bullets:** statements found in published mentoring surveys
1. had the expertise that I needed.	Strong Mentors: ■ Define what type of expertise their mentee needs (e.g., scientific/ technical, grant or manuscript writing, navigating institutional culture, career advancement, etc.). ■ Recognize the value that they can bring to a mentoring relationship. ■ Tailor their mentoring strategy to meet the needs of their mentee(s). ● "My mentor demonstrated content expertise in my area of need."[1] ● "My mentor demonstrates professional expertise."[2]
2. established clear expectations and boundaries up front.	Strong Mentors: ■ Establish ground rules for communication (e.g., professionalism, vulnerability, transparency regarding confidentiality). ■ Have a formal discussion about expectations at the beginning of the relationship. ■ Use tools to document the agreement. ■ Set clear expectations regarding research-related matters (e.g., space, time, access to resources, authorship). ● "Working with mentees to set clear expectations of the mentoring relationship."[3] ● "Aligning his/her expectations with your own"[3]

3. met with me regularly.	**Strong Mentors:** ■ Agree and adhere to a regular meeting schedule.
4. was accessible, approachable, and professional.	**Strong Mentors:** ■ Are accessible, approachable, and clear on boundaries (e.g., discuss communication styles and preferences and have expectations for communication outside of meeting times). ■ Are supportive and encouraging. ■ Practice active listening. ● "My mentor was accessible."[1,2,4] ● "My mentor was approachable."[1] ● "My mentor was approachable (personality, manner)."[4]
5. practiced strategies to engage effectively with those whose personal background is different from their own.	**Strong Mentors:** ■ Practice strategies to engage effectively with mentees whose personal background is different from their own (e.g., age, race, gender, class, region, culture, religion, family composition, etc.). ■ Recognize/address unconscious biases and prejudices they bring to the mentor/mentee relationship. ■ Foster a sense of belonging by using inclusive language that respects differences. ■ Practice anti-racism and allyship. ■ Recognize and address issues of equity and inclusion in the mentoring relationship, and if challenges arise, know how and where to leverage resources for support. ■ Acknowledge the challenges faced by historically underrepresented groups in the workforce and advocate to increase inclusion and equity. ● "Considering how personal and professional differences may impact expectations."[3] ● "Taking into account the biases and prejudices s/he brings to your mentor/mentee relationship"[3] ● "Working effectively with mentees whose personal background is different from his/her own (age, race, gender, class, region, culture, religion, family composition etc.)"[3]

6. took the time to learn my personal strengths, challenges, and values.	Strong Mentors:
	■ Through discussions and/or exercises, challenge their mentees to consider:
	    ■ their personal definition of success.
	    ■ their personal strengths and weaknesses.
	    ■ how they work best.
	    ■ their professional interests.
	    ■ their core values.

7. assisted me in developing short and long term goals.	Strong Mentors: ■ Coach mentees in developing short and long-term goals. ■ Challenge mentees to envision possibilities and consider stretch- goals. ● "My mentor helps me to formulate clear goals."[2] ● "Working with you to set research goals"[3] ● "Helping you develop strategies to meet goals"[3] ● "Helping you set career goals"[3]
8. helped me to understand my institutional culture and landscape.	Strong Mentors: ■ Help their mentees get to know the institutional culture and landscape. ■ Connect their mentees to individuals, groups, and offices that can support their development. ● "Helps me learn about other parts of the organization"[5]
9. helped me to understand promotion metrics.	Strong Mentors: ■ Support mentees in understanding metrics of success. ■ Help their mentees understand promotion metrics.
10. provided the type of feedback that I needed.	Strong Mentors: ■ Determine what type of feedback their mentees need and how to best deliver it (e.g., types: formal, informal, encouragement, coaching, evaluation, etc. Format for delivery: written, oral). ■ Provide timely feedback. ● "Providing you constructive feedback"[3]

11. periodically reassessed the expectations of our relationship.	Strong Mentors: ■ Periodically review the expectations to ensure that they are being met. ■ Periodically discuss if established expectations are being met.
12. fostered my network by introducing me to colleagues with similar interests or encouraging me to make new connections.	■ Foster their mentees' networks by introducing them to colleagues with similar interests. ■ Encourage their mentees to seek out new connections. ■ Coach their mentees in how to have conversations with new connections. ● "My mentor facilitates building my professional network."[2] ● "Helping you network effectively"[3] ● "Helps me be more visible"[5] ● "Creates opportunities for me to impress important people"[5] ● "Brings my accomplishments to the attention of important people"[5]
13. respected my contributions and celebrated my success.	Strong Mentors: ■ Respect their mentees' contributions and celebrate their successes. ● "My mentor acknowledged my contributions appropriately (e.g. committee contributions, awards)."[1] ● "My mentor acknowledges my contributions appropriately."[2] ● "Acknowledging your professional contributions"[3] ● "Accepts me as a competent professional"[5] ● "Thinks highly of me"[5] ● "Sees me as being competent"[5]
14. coached me on how to manage my time and align my priorities based on my values.	Strong Mentors: ■ Discuss work-life integration and how to align priorities based on values. ● "My mentor is supportive of work-life balance."[2] ● "Helping you balance work with your personal life"[3]

15. aided in my career planning.	**Strong Mentors:** ■ Guide discussions on career planning and support mentees through career transitions. ■ Provide guidance and support as mentees begin to serve as mentors for others. ● "My mentor is helpful in providing direction and guidance on professional issues."[2] ● "My mentor provides direction and guidance regarding my course of study, doctoral thesis or career management."[4] ● "Suggests strategies for achieving career aspirations"[5]
16. challenged me to extend my abilities (e.g., risk taking, trying new things).	**Strong Mentors:** ■ Suggest that their mentees attend and present at important conferences. ■ Guide their mentees through the publication process (e.g., choosing a journal, strategies for writing and submitting). ■ Role model responsible conduct of research. ■ Suggest courses, books, articles, technology, and other resources for mentee development. ■ As opportunities arise, advocate for their mentees to participate or lead. ■ Coach their mentees on how to increase personal resilience in the face of professional challenges. ● "My mentor challenged me to extend my abilities (e.g. risk taking, try a new professional activity, draft a section of an article)."[1] ● "Assigns me tasks that push me"[5] ● "Gives me tasks that require me to learn new skills"[5]

3. References

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