

Independence- Do I have the skills and knowledge to do the task?

<p><u>Strategies for mentees:</u></p> <ul style="list-style-type: none">• Discuss skill and knowledge development over time with mentor• Use an IDP or similar structure to set goals for development that are realistic to starting experience and knowledge• Practice, Practice, Practice• Seek out constructive feedback• Create a safe environment to fail, receive feedback, try again, succeed <p><u>Reflection Questions for mentees:</u></p> <ul style="list-style-type: none">• What stage of learning am I in? What knowledge and skills do I know? Where is my learning edge?• What progression is expected of me as a learner over time?• What resources can I use to increase my skills and knowledge?• How will I know when I have achieved competency in this skill?	<p><u>Strategies for mentors:</u></p> <ul style="list-style-type: none">• Reaffirm skills & knowledge mentee has and normalize current progression/stage of learning ("During the first few months, many of my students feel a bit overwhelmed with this work, but I'm confident that you have what it takes to learn these skills and be successful").• Outline expectations for progression over the course of the project (e.g., at 3 months, 6 months, 1 year, etc.)• Identify and support mentees' opportunities to increase skills and knowledge (e.g., "There is a training in R happening next month that I think will help you with your data analysis for this project and provide useful skills for your career".)• Identify and recognize mentee progression and competency in key skills and knowledge areas (e.g., "I've noticed you've shown consistent improvement in [skill], I think you're ready to move on to a more challenging task").
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Motivation- Am I willing to do the task?

<p><u>Strategies for mentees:</u></p> <ul style="list-style-type: none">• Be curious• Have autonomy over research decisions• Do research that matters to you• Align research with career goals• Engage in collaborative opportunities <p><u>Reflection Questions for mentees:</u></p> <ul style="list-style-type: none">• How motivated am I to do the task? What would help me to be more motivated?• Does the purpose or objective of the task matter? Is it worth my time and energy?• Am I moving towards my goals and accomplishing something worthwhile?• Do I have a choice in the activities and tasks I complete?• Do I feel skillful? Am I improving my skills?	<p><u>Strategies for mentors:</u></p> <ul style="list-style-type: none">• Be clear about research projects available when recruiting new students• Create opportunities and environments that are safe to take on challenges and make mistakes• Provide recognition of (small & large) successes• Give autonomy around decision-making when appropriate• Reduce competition and increase collaboration among research group members• Give positive and constructive feedback throughout the research process• Ask: What can I do to support your success in this project?• Ask: Are there any barriers that are contributing to you feeling stuck?
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Self-Efficacy¹- Am I confident I can do the task?

Strategies for mentees:

- Seek out individuals who provide encouragement and support to you in your research. Social persuasions relating to a specific effort or ability can be particularly influential.
- Ask for specific, constructive feedback
- Practice, Practice, Practice
- Reflect on past times you learned something difficult and recall the strategies that helped you to succeed.
- Talk to others who have been successful in similar research. Ask for strategies and learn about their struggles and successes.
- Be aware of positive or negative moods related to research and attend to negative, anxiety-related feelings (e.g. negative self-talk)
- Cultivate a beginner's mindset and remember: "It's supposed to be hard, new things usually are."

Reflection Questions for mentees:

- Think about your past success in research or academics in general. What contributed to that success? How can that be applied to your future research endeavors?
- What skills and behaviors do you observe about how you cope with research challenges and setbacks; do they make you feel more or less confident about the work that you do?
- Who can I talk to about feeling stuck? Who will help me to boost my confidence?

Strategies for Mentors

- Reaffirm skills & knowledge mentee has and normalize current progression/stage of learning ("During the first few months, many of my students feel a bit overwhelmed with this work, but I'm confident that you have what it takes to learn these skills and be successful").
- Identify and support mentees' opportunities to increase skills and knowledge (e.g., "There is a training in R happening next month that I think will help you with your data analysis for this project and provide useful skills for your career".)
- Identify and recognize mentee progression and competency in key skills and knowledge areas (e.g., "I've noticed you've shown consistent improvement in [skill], I think you're ready to move on to a more challenging task").
- Share about your own learning journey- what strategies did you use when you were challenged?
- Share strategies with your mentees for what you do to cope with challenges/ setbacks in research.
- Give timely, specific, actionable feedback
- Ask: I noticed you seem a little down, is there anything you would like to talk about?

¹ Adapted from A. R. Butz with information from Promoting Mentee Research Self-Efficacy (Byars-Winston, Leveritt, Branchaw, and Pfund, 2013, 2016).

Problem-Focused Coping Strategies Tool Kit

Case Study: Feeling Stuck² ([click here for Google Form](#))

Jordan, a second-year graduate student, is in the Simonson lab. He recently finished his coursework, passed his preliminary exam, and now must write a thesis proposal. Up to this point, everything Jordan has been required to do as a graduate student has been familiar: taking classes, passing exams, and carrying out experiments. These are all things that Jordan did as an undergraduate student and he's been able to handle it. Writing a thesis proposal, on the other hand, is brand-new territory. Jordan is worried about being independent and his mind freezes whenever he tries to come up with a research project. Jordan is very stressed about not knowing where to begin and is worried about looking stupid in front of his advisor, Dr. Simonson.

Dr. Simonson has noticed that Jordan seems to be a bit withdrawn, but figures he is just decompressing after passing his preliminary exam. She wonders if she should check in at their upcoming meeting but isn't quite sure how to start as she has no complaints about his work thus far. Dr. Simonson knows it's normal to have ups and downs in graduate school and she doesn't want to suggest there is a problem.

Discussion Questions

- What problem(s) is Jordan facing?
- Is this a changeable or unchangeable situation?
- Would you recommend Jordan use problem-focused, emotion-focused, or both kinds of strategies?
- Why do you think Jordan should use that type of strategy?
- What specific strategies would you recommend for Jordan? How will these strategies help Jordan to write his thesis proposal?
- How might Dr. Simonson support Jordan to carry out the strategies?
- Imagine you are Dr. Simonson and you decided to check-in with Jorgan during your upcoming meeting? How would you start the conversation? Brainstorm a list of conversation starters you might use.

² Adapted from A. Kaatz. (2018). Coping Efficacy. In Branchaw, J. L., Butz, A. R., & Smith A. R. (2019). Entering Research (2nd edition). New York: Macmillan