Overcoming Energy Barriers to Authorship and Publication: Mentorship and the Knowledge, Skills, and Attitudes Model

Oliver M. Stroeh, MD

I have a specific kind of writer's block that, harkening back to high school chemistry, I call my "energy barrier." This label is not a term of endearment, nor does it refer to an absence of ideas or a lack of inspiration or motivation. Instead, it refers to the entangled emotional and psychological hang-ups (what many might appropriately call neuroses) that block my ability to let flow my thoughts and ideas onto paper (or screen). And I am aware that "it"—the barrier—isn't some external entity. It is me. Which makes it seem all the more frustrating and paralyzing. My typical writing "process" is one that begins with an extended period of apparent inactivity frequently misperceived as procrastination or avoidance. (In actuality, it is consumed by not-so-effective activity: preoccupation and obsession.) This period is then followed by a relative moment of frenzy, often dominated by anxiety and fear as a deadline looms overhead. The cumulative alarm manages transiently to push aside my neuroses enough to allow me to ride the rollercoaster of panic over the hump of my energy barrier, all the while feeling that control could be lost at any moment and that I might careen off the track and plummet towards failure. Once the written piece has been submitted and the deadline has passed, I am left exhausted, but also uncomfortable. I am proud of the piece I created and enjoy a sense of accomplishment, but am embarrassed by the road I travelled to get there. The production of this piece has not been an exception to my rule. To highlight a quote from Dorothy Parker that is featured by Andrés Martin, MD, MPH, in a *JAACAP Connect* article encouraging authorship and publication, "I hate writing, I love having written."[1]

In large part because of this energy barrier of mine, along with a recognition of similar energy barriers in colleagues and trainees, I was drawn to *JAACAP Connect*. Michelle Horner, DO—founder and current editor-in-chief of *JAACAP Connect* and my predecessor as John F. McDermott Assistant Editor-in-Residence at *JAACAP*—established *JAACAP Connect* with the goal of making authorship and publication accessible to more people, including trainees and early career psychiatrists (ECPs). In particular, Michelle recognized the provision of a mentored authorship experience as a means through which to do so. The fact that *JAACAP Connect* has published eight issues to date, featuring articles written by first-time authors (many trainees or ECPs), speaks to the success of this targeted strategy. But, Michelle and I recognize a need to optimize the mentorship experience so as to make authorship and publication even more accessible to a wider array of would-be authors.

Over the course of my first few months as the John F. McDermott Assistant EIR and through working with Michelle on *JAACAP Connect*, we have encountered many trainees and ECPs who express genuine interest in submitting an article for *JAACAP Connect*, but who—after an energized and enthusiastic initial phone call—retreat from contact, sometimes never to be heard from again. These bright and thoughtful individuals had shared terrific ideas that deserve to be heard and read. So, what happened to them? For some, it may have been limited resources (e.g., time) that caused them to turn away from the opportunity. However, I suspect that, for most, the retreat was for a different reason. I venture that the majority of those potential authors we are losing are those who, like me, struggle with energy barriers that have to do with their stances—their personal attitudes—towards authorship and publication. When undertaking a writing project, these stances and attitudes are often overlooked by would-be authors and mentors, alike.

The Knowledge, Skills, and Attitudes Model

With the goals of providing circumspect or reluctant authors-to-be a more structured and comprehensive mentorship experience and of increasing the likelihood of their authorship and publication, I propose the application to mentorship of an educational model with which I have become familiar in my role in residency training and education. In his 1949 book *Basic Principles of Curriculum and Instruction*,[2] Ralph Tyler proposes as one of his principle tenets the value of establishing learning objectives. Building on Tyler's work, Benjamin Bloom and his colleagues[3] posit that any learning objective can be classified as targeting one of three domains of learning: knowledge, skills, or attitudes.

Knowledge-based learning objectives deal with the expansion of knowledge and the development of intellectual ability.[3] Skills-based learning objectives relate to the development of an ability to carry out a task.[4] And the attitude-based learning objectives address the emotional manner with which the learner approaches a particular topic.[5] Educators frequently refer to the aggregate of Bloom's three learning objective classes as the KSA model (Knowledge, Skills, and Attitudes). See Table 1.

Many medical educators have recognized the utility of the KSA model in education and training, including to measure the effectiveness of mentoring that occurs between medical residents and attendings,[6] and to structure and assess the supervision of psychotherapy.[7] Individuals who would like to write and publish can also make use of the KSA model, thinking through the three domains as they pertain to authorship and publication and structuring mentorship to address any identified vulnerabilities and energy barriers.

Where Is Your Biggest Energy Barrier? K, S, or A?

As an aspiring author considers writing a piece for potential publication, he or she—preferably along with his or her mentor—can use the KSA model as an assessment tool to identify domains of both preparedness and vulnerability. Author and mentor can think through each of the domains and ask the following questions:

1. What *knowledge* regarding authorship and publication do I need to possess to write an article and bring it to publication? What knowledge do I have?

2. What *skills* regarding authorship and publication do I need to possess to write an article and bring it to publication? What skills do I have?

3. What *attitudes* regarding authorship and publication do I need to possess to write an article and bring it to publication? What attitudes do I have?

Though by no means exhaustive, some KSAs germane to authorship and publication are outlined in Table 2.

By thinking about the questions outlined above, and others that arise in discussing the project, potential authors (and their mentors) can take inventory of relative strengths and weaknesses in all three domains and identify any gaps that may exist between the authors' current abilities and those identified as necessary to write and publish.

Table 1. The Knowledge, Skills, and Attitudes (KSA) Model: Bloom's Taxonomy of Learning Objectives	
LEARNING DOMAIN	**DESCRIPTION/CHARACTERIZATION**
Knowledge *(a.k.a. Cognitive)*	Pertains to the expansion of knowledge and the development of intellectual ability. Includes the recall or recognition of facts, procedural patterns, and concepts.[3]
Skills *(a.k.a. Psychomotor)*	Relates to the development of an ability to carry out a task, frequently through practice. Often is assessed through such parameters as speed, precision, procedures, or technique.[4]
Attitudes *(a.k.a. Affective)*	Addresses the emotional manner with which the learner approaches a particular topic. Includes the learner's feelings, values, motivations, and attitudes.[5]

Table 2. Some Knowledge, Skills, and Attitudes (KSAs) of Authorship and Publication	
LEARNING DOMAIN	**EXAMPLES PERTINENT TO WRITING AND PUBLISHING**
Knowledge *(a.k.a. Cognitive)*	■ Knowledge regarding the topic about which one is writing *What do I know about this topic? What do I need to know to write about this topic, and where are the gaps in my knowledge? How will I go about obtaining this information?* ■ Understanding of the processes by which to structure and write a cohesive piece *What is the nature of this paper (essay, original article, review, etc.)? How are these papers structured? What is each part of the structure for (framing the relevance and validity of the question in the introduction, etc.)?* ■ Recognition of the steps of the editing process required to bring a piece to publication *Where do I want to publish this? What is the process for publication? What do the author guidelines say?* ■ Familiarity with ethical practices in research and publication *What does it mean to be an ethical author? What are the ethical issues that I know might arise? What other ones might arise? Who is going to be an author on this, and what is the authorship order?*
Skills *(a.k.a. Psychomotor)*	■ Research skills *How do I conduct a comprehensive systematic literature review? What other research skills will I need to develop? Do I have a librarian to work with and, if so, how/when will I have access to him/her?* ■ Writing skills *How will I engage the reader? How will I communicate the importance of the question I am addressing? How will I convey a message clearly and eloquently? How will I develop an argument/point of view over the course of a paper?* ■ Skills receiving feedback *How will I maneuver the complexities of receiving, incorporating, and/or responding to editorial feedback?*
Attitudes *(a.k.a. Affective)*	■ Confidence that one has something of value to share with a reader *How is this an important topic for me? How is it important for others?* ■ A balance of self-assuredness and humility as one presents to editors and public/expert audiences a piece for review and scrutiny *How will I accept criticism and use it to improve this? How can I recognize how the editorial process and the associated feedback (including, potentially, rejection) are means to develop further knowledge, skills, and attitudes regarding authorship and publication?* ■ A commitment to ethical authorship and publication *How do I want to handle the ethical issues that I know might arise?*

Potential benefits for those authors and mentors who do such an assessment exercise together include (1) the early joint acknowledgement of all three domains as important to successful authorship and publication, (2) potential greater comfort and safety within the mentorship relationship (which might become particularly important should further discussion regarding more sensitive topics [e.g., the domain of attitudes] be needed), and (3) the mentor's greater awareness of and sensitivity towards any unique potential energy barriers in the author (particularly if such energy barriers were never part of the mentor's own experience with writing and publishing).

Using the KSA Model to Design the Mentorship Experience and Draft the Publishable Product

After applying the KSA model to assess for potential strengths and vulnerabilities regarding authorship and publication, authors and mentors can use the gaps identified in any KSA domain to define related specific and appropriate learning objectives. For instance, if a timid author-to-be and his mentor determine that he struggles with an attitudinal energy barrier related to his self-consciousness and perfectionism around putting thoughts on paper for others to read, an appropriate objective might be the following: "I will feel more comfortable presenting my written thoughts on paper for others to read, as evidenced by my ability to write more expeditiously with limited self-censorship and less initial attention to editing."

Then, through "backwards design,"[8] the potential author and his mentor can use the identified desired outcome to plan the content and experiences of mentorship. In the example above, the author and mentor might discuss the author's fears in greater detail and identify cognitive strategies that he might use when he begins to question his writing. They might also design exercises in which the author must draft in a limited time period a written piece about a specified topic and then share the piece with his mentor at first, but then with an ever-expanding circle of contacts. In a slightly less behavioral approach, the author and mentor may recognize the utility of multiple step-specific deadlines (breaking the larger task into more manageable pieces) and regular check-ins regarding progress made towards such deadlines (increasing accountability to self and others).

Through a planful approach using the KSA model, the author and mentor together can structure a comprehensive and individualized mentorship experience.

Take Home Summary

- Use the KSA model to systematically take stock of your knowledge, skills, and attitudes as they pertain to authorship and publication. Be honest with yourself.

- Strongly consider doing the KSA-based self-assessment with your mentor. Be honest with your mentor.

- Use the results of your KSA-based self-assessment to design an individualized comprehensive mentorship experience with specific exercises and strategies tailored to target your vulnerabilities and "energy barriers."

- Do not neglect the A of KSA—especially if you are a timid or reluctant author-to-be. Your attitudes regarding writing and publishing warrant the deliberate attentions of both you and your mentor and, if left unchecked, may undermine your efforts.

An Acknowledgement

Although I unfortunately never had the opportunity to meet Jack McDermott in person, I am incredibly grateful to him. The eponymous Assistant Editor-in-Residence position with *JAACAP* that I am so privileged to hold exists because of Jack's dedication both to mentorship and to helping people overcome their own barriers. Furthermore, I recognize that I have the invaluable opportunity to experience Jack and benefit from his warmth and wisdom through my relationships with those whom he mentored, including the John F. McDermott Assistant Editors-in-Residence who preceded me, Andrés Martin, and the larger *JAACAP* family.

References

1. Martin A. Just Do It! Pointers to Get Your Work Published in the Academic Literature (…and why you should, no pressure). *JAACAP Connect*. 2014;1(2):20-23.

2. Tyler RW. Basic Principles of Curriculum and Instruction. Chicago: The University of Chicago Press; 1949.

3. Bloom BS, Engelhart MD, Furst EJ, Hill WH, Krathwohl DR. Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain. New York: David McKay Company, Inc.; 1956.

4. Simpson EJ. The Classification of Educational Objectives in the Psychomotor Domain. Washington, DC: Gryphon House; 1972.

5. Krathwohl DR, Bloom BS, Masia BB. Taxonomy of Educational Objectives, the Classification of Educational Goals. Handbook II: Affective Domain. New York: David McKay Company, Inc.; 1973.

6. Davis OC, Nakamura J. A Proposed Model for an Optimal Mentoring Environment for Medical Residents: A Literature Review. *Academic Medicine*. 2010;85:1060-1066.

7. Cabaniss DL, Arbuckle MR, Moga DE. Using Learning Objectives for Psychotherapy Supervision. *American Journal of Psychotherapy*. 2014;68:163-176.

8. Wiggins G, McTighe J. Understanding by Design. Alexandria, VA: Association for Supervision and Curriculum Design; 1998.

About the Author

Oliver M. Stroeh, MD, is the John F. McDermott Assistant Editor-in-Residence with *JAACA*P and is associate editor of *JAACAP Connect*. He is the Clarice Kestenbaum, MD Assistant Professor of Education and Training in the Division of Child and Adolescent Psychiatry at the Columbia University College of Physicians and Surgeons. He is also associate director of the New York-Presbyterian Hospital Child and Adolescent Psychiatry Residency Training Program of Columbia and Cornell Universities.

Disclosure: Dr. Stroeh reports no biomedical financial interests or potential conflicts of interest.