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Overcoming Student Nervousness in Graduate School Oral Exams

Tomorrow's Research

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For motorcycle racers, familiarity comes from repetition and habituation to G-forces and learning that tire-sliding sensations don't automatically mean a crash. For exam-takers, calmness comes from familiarity and reducing exam uncertainties.

Folks:

The posting addresses the anxiety most students experience in the oral exam process. It is drawn from chapter 4 of the book, *Oral Exams: Preparing for and passing Candidacy, Qualifying and Graduate Defenses* by Professor Lee Foote.* Academic Press [<http://store.elsevier.com/Academic-Press/>]. Copyright © 2015 Lee Foote. All rights reserved. Reprinted with permission.

Regards,

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UP NEXT: Finding a Dissertation Support Group

Tomorrow's Research

----- 2,066 words -----

Overcoming Student Nervousness in Graduate School Oral Exams

I get nervous when I don't get nervous. If I'm nervous, I know I'm going to have a good show. - Beyoncé Knowles

Nervousness before oral exams is normal and expected but what is behind nerves and how do we control them? Understanding stress physiology is crucial for re-directing nervousness into constructive energy. Knowing that some nervousness is normal and expected by your committee helps in accepting nervousness without shame. When the beam on one defending PhD student's Laser pointer shook violently, he dryly said "I'm not nervous or anything . . ." the understanding laughter from the audience was reassuring that it is normal.

The Physiology of Nervousness

In stressful or shocking situations our adrenal gland releases epinephrine, also called adrenaline, into the blood stream where it temporarily causes dilated pupils, increased muscle strength and elevated oxygen-delivery. It is like the short-term boost of an afterburner on a jet or the “turbo” override setting on your daiquiri blender. We are evolutionarily programmed to respond to threatening or dangerous situations with this involuntary “fight or flight response”. We may as well be injected with a strong, short-acting stimulant because the subsequent physiological changes are similarly predictable. Unfortunately, they also affect our mental state and are more closely associated with negative and fearful sensations, so they are less welcomed for cool, coherent verbal delivery. Examiners are far more interested in the synthesis of complex information than in our vertical leap or bicep strength.

For 15 years I have taught a graduate seminar on presentations, media and professionalism. For the public speaking module, I would stride into class a little late, wave the course roster and initiate a game called “decimation” from Caesar Augustus’ habit of killing every 10th soldier in under-performing battle groups. One out of every 10 grads would be randomly chosen to stand and deliver a three-minute *impromptu* speech on their research. The class would fall sullen and the air would be thick with dread. After about 20 seconds I would recant saying “Let’s skip the speeches and just talk about how that made you feel.” Invariably there would be sighs of relief, fluttering comments and nervous laughter. Every year the reported symptoms were identical: racing pulse, sweaty palms, shallow breathing, sweaty underarms, shaking hands, random thoughts and an inability to concentrate. These are classic symptoms of adrenaline. It was a rotten trick but it introduced students to adrenaline management.

The adrenaline problem is actually two-fold; first, the revving of our metabolic engine, then 20 minutes later our glucose fuel (blood sugar) is exhausted leaving us left depleted, exhausted and shaky. Glucose is the same fuel the brain needs for peak oral exam performance. Our brain is an energy hog representing only 4% of our body weight, yet, consuming 25% of our glucose budget at rest. Apparently primitive humans that outran leopards didn’t need to discuss the finer points of their anti-predator strategy.

Even if you can mask your fear with brute acting effort, it is an un-needed and energy-sapping distraction preceding an important exam. You have better places to invest your energies. California motorcycle racer Keith Code coaches motorcycle racers who race at 190 mph (300 kph) and scream through knee-dragging corners. To be competitive they must manage fear. To paraphrase a Code anecdote “If you possess \$10 worth of rider attention and find that \$6 worth of your attention is wasted on fear-management, you only have \$4 worth of attention remaining for winning races; thus, you are not competitive.”

In orals you want to relax and spend no more than \$1 on fear-management, leaving a rich \$9 available for your intellectual performance. Even powerful minds who don’t properly engage their intellect in oral exams can be out-shown by very average students who stay focused and present everything they know calmly. Speakers comfortable with their audiences seem to punch above their weight class and actually seem to enjoy the process.

Overcoming Nervousness

How can exam-takers avoid this fear-induced state? Mastery of the subject matter is essential and primary . . . but it is not sufficient alone. You need to understand the oral exam process. Studying graduate education at 10 major universities, Heiss (1970) found most students received little explanation for why comprehensive exams exist and no formal guidance on preparation. Things have not changed much in the intervening five decades. High anxiety compromises performance (Patrick 1934, Mechanic 1962) so all knowledge aside, anxiety levels need management. After gaining a command of the material, an important second step is to de-mystify the oral exam process, and the third step is getting comfortable with the exam through practice. Changing the unfamiliar into the comfortable and familiar helps greatly.

For motorcycle racers, familiarity comes from repetition and habituation to G-forces and learning that tire-sliding sensations don't automatically mean a crash. For exam-takers, calmness comes from familiarity and reducing exam uncertainties. You need to know what is going to happen, the exam order, what it means, your range of options and what is expected of you. You should also know what is *not* important so simple things won't bleed off your attention, allowing focus on your exam. For example, you should know in advance the podium placement, light switch locations, projector connections, seating arrangements and washroom access. Have the computer support phone number in your pocket and locate the spare projector bulb. These are little things on which you won't waste limited "attention money."

Haven't we all seen speakers lose their composure when technology didn't work, a fire alarm went off, a squalling baby threw up or the wrong talk was accidentally projected? Reduce the variables, have contingencies and minimize probabilities for such glitches. Knowing your exam environment is easy and critically important. In many ways, an exam is like a ballroom dance. It is interactive, you are on your toes, and there is a leader and a follower. If well-practiced, it is fun and beautiful; if unpracticed, it is stilted, awkward and embarrassing. Finally, who knows where a night of dancing will lead? But enough of this metaphor; this is not a dating manual.

Become more comfortable in your question-answering role by arranging mock exams using real candidacy questions to gain comfort in handling difficult or seemingly unfair questions. Friends and family members can role-play committee members. Set them up in your dorm room, family dinner table or church basement and go through the entire process with you standing and facing them sitting across the exam table. They will enjoy playing professor (call them Dr. Smith and Dr. Jones) and your expertise will impress them- always a confidence booster. Knowing you have a support group helps.

Next, dial up the rigor and press other graduate students into service for more academic mock exams. Run it all the way through for an hour or so until you feel the nervousness subside and you can enter the comfortable rhythm of question and answer. Be aware though, graduate students can dwell on the negative. Keuler and Safer (1994) examined test anxiety in the pre- and post- comprehensive exam period and found substantial memory bias. Post-exam recollection was of greater nervousness than the same student had actually reported in the run-up to the exam!

My father was a teller of stories with a moral. One of his sawmill workers lost a finger while operating a band saw. When dad asked him what happened he said "I just put my hand right *here* and . . . DARN! There goes ANOTHER one!" You don't want to inadvertently follow your friend's lead into problems. Minimize student "war stories," they are deeply coloured by individual's inflation and may be counterproductive for you. Seek peer feedback on your communication style - what worked and what did not. You and they will both benefit from this practice.

For final polishing practice, ask your major advisor and another experienced faculty member to lead you through the structure of a 15-minute mock exam, even using the same exam room if possible. Ask them to critique your answers and ask if their expectations were met. This shows a diligence of preparation that they will note. You will get a feel for their stance, attitude and questioning style. Later when you walk into that space for the real exam, the area, process, and possibly one or two questioning styles will be familiar and [more] comfortable

Your set up and focus will project confidence and you can fully tap into at least \$9 worth of your focussed attention. Trust me on the mock-exam process. Preparation and realistic practice are your two greatest fear-mastering techniques. Don't be surprised if you find yourself actually enjoying the exam and the challenge. Don't get arrogant, boastful or overconfident, but if you get to a relaxed positive anticipation stage, you are in a great preparedness zone. Images of roaring tigers replace cowering bunnies here.

Visualization Exercises

Mental rehearsal and visualizing exercises can pay big dividends in your competency and exam performance. Studies of basketball players showed spending 20-minutes standing at the free throw line visualizing shooting baskets yielded a similar degree of improvement as 20-minutes of actually free-throw shooting practice. Likewise, benefits accumulate

from visualizing exam success. Like an athlete warming up muscles to move gracefully from anaerobic to aerobic exercise without cramping up (glucose is at play here too) oral exams need to be eased into lest we get shocked into an adrenaline dump, leading to a shaky voice and fuzzy headedness.

Energy Management

Energy management is essential for a 2-4 hour exam. Be sure to have something nutritious and energy-rich in your system. During tournaments chess masters showed elevated heart rates, higher core temperatures, tripled breathing rates and systolic blood pressures soaring to over 200. Their mental furnaces were blasting. Fueling an active mind in real time is important and a non-sugary sports snack will taste good and provide a slow-release energy boost. Even low-tech fuel like a banana and handful of smoked almonds washed down with tap water will achieve the stabilizing and durable effect of keeping that glucose-hog of a brain churning out answers. During exam studying, practice the discipline of multiple hours in intense concentration with stable energy management to get the feel of fuel metering.

The time to start managing fears, nervousness and energy regulation is months before the exam and well before the concerns grow irrational. If allowed to grow unchecked, fears can assume such monolithic proportions that they trigger a denial system that makes even studying distasteful. If the whole exam topic is unsettling and unpleasant enough, even otherwise conscientious and organized students may procrastinate on preparations. Being rushed snowballs into greater nervousness, insecurity and ineffective exam-cramming at the last minute. Don't ask me how I know this.

By using practice, familiarization, visualization, and organized preparation for the many styles of actual exam questions, students can carry a deep and justified confidence knowing that large parts of the oral exam are now in their control. No, you won't have all the answers. Yes, you will likely miss a few, but your recovery will be quick and efficient. Having an anchor of comfort and familiarity with certain exam aspects is very grounding, and while there will be some unexpected questions, the interspersed comfortable questions that you can slam-dunk provides a brief but critical respite. Those wins can reduce the fight or flight responses and help make exams rewarding and dare I say *fun*.

The Perfection Problem

Practice this mantra – *I don't have to be perfect*. To pass you only need to do as well as other students your committee has passed. Knowing that all of your advance preparation gives you an advantage over less-prepared students is comforting because ultimately, that is the reference group professors will use to assess you. Don't shoot for less than excellence here, but understand the inevitable failure that comes from setting a goal of "Perfect or nothing!" Moderation is your friend. Musicians understand that instantaneous recovery and immediate "self-forgiveness" for small errors is essential to complete their performance. You too will be pushed beyond your limits. Expect it and plan for it. Indeed, if you are not pushed, you may feel the exam was *pro forma* and not a real test. Say it out loud to yourself each day "I MUST BE GOOD BUT NOT PERFECT." With study, visualization, familiarity and practice, you will be calmer and undoubtedly, very very good!

Other chapters detail arranging supervisory committees; seminar delivery; mental preparation; question types; structuring answers; what is really being examined and much more. As a bonus, the Appendix I contains 540 actual PhD exam questions sorted by a range of disciplines. **Oral Exams** is expected on shelves by November 2015 with early direct delivery and pre-orders being accepted now via:

<http://store.elsevier.com/product.jsp?isbn=9780128025789&pagename=search>

*Dr. Foote will spend his 2015-16 sabbatical presenting invited workshops and seminars on this topic. He can be reached directly at lee.foote@ualberta.ca

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