

The Struggling Resident

Avoiding Pygmalion and Learned Helplessness by Using Nontechnical Performance Assessment Systems

FOR an anesthesiology department, one of the greatest challenges is how to help a new struggling resident improve and succeed. For technical skills and medical knowledge, clinical educators are able to define the deficiencies and come up with a plan. Unfortunately, a few residents each year struggle with nontechnical skills, such as task prioritization, recognition of critical situations, interpersonal skills, and communication. In this arena, clinical educators, including myself, are less adept at helping the resident. Unfortunately, the poor ability to help this type of struggling residents results from three interrelated processes.

Vague Performance Assessment of Nontechnical Skills

In any situation in which performance has some nontechnical portion, the “judge” is challenged to provide specific critique for the poorer performer. Unfortunately, many times, the challenge is not met. In the past, observation of this vague criticism was limited to one-time events, for example, a review of a theatrical performance or a performance or sport competition (like Olympic Ice Skating). However, with the proliferation of multiepisode talent shows on television, contestants are facing nontechnical critiques weekly and publically. For example, *Dancing with the Stars** is a television show in which celebrities are matched with a professional dancer and compete in a ballroom dancing competition. Three professional judges give the celebrity immediate (and public) feedback and then score the dance. When a technical issue is the problem, the judges are specific on the deficiency and what needs to be improved. However, when a nontechnical issue is the problem, the judges’ comments are vague and often puzzling for the dancer (and for viewers at home). The dancer is left with a greater struggle of identifying what to improve and of developing a plan for success.

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* *Dancing with the Stars* Web site. Available at: <http://abc.go.com/shows/dancing-with-the-stars>. Accessed December 20, 2009.

Sometimes, the dancer just gives up trying to please a judge and continues on what he or she feels is right.

Within our clinical departments, the same type of problem occurs. Faculty can tell which residents are performing well and those who are performing poorly. When the problem with the subpar resident is with technical or medical knowledge, the faculty are professional judges and can easily give specific and concrete critiques. However, when it is a nontechnical issue, the faculty give vague critiques and comments, like “can’t see the forest through the trees” or “the resident just doesn’t get it,” or worse “I can’t trust the resident to call me.” Similar to the show, the resident struggles to understand the criticism, is often puzzled, and gives up trying to please the faculty.

Pygmalion in an Anesthesiology Department

Pygmalion phenomenon derives its name from a Greek myth, but its popular usage comes from George Bernard Shaw’s *Pygmalion* and the musical movie *My Fair Lady*. The phenomenon in teaching was described in a series of experiments by Rosenthal and Jacobson in which teachers were told that some classes were exceptional and others were normal even though there was no difference in the students. The final grades reflected the teachers’ expectations. The Pygmalion phenomenon is often referred to as a “self-fulfilling prophecy.” It is seen in many areas, including teaching, parenting, mentoring, and business.¹

Once a resident is labeled as “subpar” (often by comments like “don’t leave him or her alone,” “sorry, you are with that resident”), the label spreads among clinical faculty. The Pygmalion phenomenon occurs. When a faculty works with this struggling resident, the faculty is less patient and more sensitive to any mistakes that the resident makes. In other words, the same mistakes done by a “good” resident is written off as “a bad day” or “not a big deal,” but in a “subpar” resident, the mistakes are reaffirming the faculty expectations.

Learned Helplessness

Learned helplessness has been well described in clinical settings and is used to explain the symptoms and signs of

depression. In addition, the concept has been described in nonclinical settings, including the workplace and understanding why workers who are performing poorly continue to perform poorly.² The phenomenon can be viewed as Pygmalion within oneself. The worker expects to fail and hence gives up trying, that is, self-fulfilling prophecy! It is important to note that not all animals in the laboratory or people in the work setting will develop learned helplessness, and hence, susceptibility exists.

In our departments, a struggling resident, faced with vague critiques and a faculty expectation of failing, is often dealing with negative verbal and nonverbal messages from the faculty and is unable to identify how to succeed. In these situations, the struggling resident can develop learned helplessness. The results often are that the resident struggles with self-doubt for his or her entire career or even leaves the program or specialty.

Once learned helplessness has set in, the resident will have a much more difficult time recovering than if it was avoided from the start. "Immunization strategies" are pre-treatment strategies aimed at helping struggling workers avoid learned helplessness.² The mainstay of the strategies is identifying small attainable performance goals and recognizing these small achievements, that is, celebrating the small successes. In our clinical settings, this would mean clear and identifiable small goals for nontechnical skills. The resident would then be able to see small daily improvement rather than face the apparent insurmountable goal of overall improvement.

However, the difficulty in identifying small daily goals and successes is the major problem. If the issue is lack of technical or medical knowledge, the clinical faculty can develop a straightforward plan with small goals built in. Unfortunately, historically, for nontechnical issues, clinical faculty have not had the tools needed to develop an effective plan.

The good news is that clinical faculty now have the tools needed to evaluate nontechnical skills and develop clear and succinct goals for the struggling resident early in his or her career. With the work being done in performance assessment using simulation, nontechnical assessment tools are essential and have been developed.³⁻⁵ Several nontechnical performance scales that have been described are used in the simulator. One of these scales is the Anesthetists' Non-Technical Skills (ANTS) system† and even the subject of an editorial in this journal last year.^{4,5} The ANTS system breaks nontechnical skills into four major categories—task management, team working, situation awareness, and decision making. At this point,

Table 1. The Anesthetists' Non-Technical Skills System Categories and Elements

Category	Elements
Task management	Planning and preparing Prioritizing Providing and maintaining standards Identifying and using resources
Team work	Coordinating activities with team members Exchanging information Using authority and assertiveness Assessing capabilities Supporting others
Situation awareness	Gathering information Recognizing and understanding Anticipating
Decision making	Identifying options Balancing risks and selecting options Reevaluating

Adapted with permission from Anesthetists' Non-Technical Skills (ANTS) System Handbook, Industrial Psychology Research Centre, School of Psychology, University Aberdeen, Scotland. Available at: http://www.abdn.ac.uk/iprc/documents/ants/ants_handbook_v1.0_electronic_access_version.pdf. Accessed December 20, 2009.

the ANTS system is similar to the Accreditation Council for Graduate Medical Education general competencies that are used by American residency programs in all specialties to evaluate resident performance but are not specific for anesthesiology.‡ The strength of ANTS is that it is expanded beyond these four categories to include an additional three to four elements in each category that are specific for anesthesia care (table 1). Furthermore, the system provides specific behaviors for each element that differentiate good practice and poor practice (example of one element is seen in table 2).

These sets of behavior markers are the real strength of ANTS. With these markers, the ANTS developers have provided clinical faculty with specific language to use when assessing a struggling resident, which gives a resident clear and succinct issues that can be targeted for improvement. Furthermore, one or two underlying behaviors can lead to multiple nontechnical weaknesses (see example in editorial⁵), but without ANTS, the evaluation would be vague and overwhelming. With ANTS and its markers, the issues can be broken down to small attainable goals. This focus is important for minimizing learned helplessness. It is also important for avoiding the bias associated with the Pygmalion phenomenon in the anesthesiology resident.

The work in performance evaluation and development of assessment skills, especially for nontechnical skills, done for the simulator is applicable to every day clinical work. Furthermore, this system should provide clinical educators a way

† Available at: http://www.abdn.ac.uk/iprc/documents/ants/ants_handbook_v1.0_electronic_access_version.pdf. Accessed December 20, 2009.

‡ ACGME Outcome Project, <http://www.acgme.org/outcome/comp/compfull.asp>. Accessed December 20, 2009.

Table 2. Example of Behavior Markers for Two Elements in the Anesthetists' Non-Technical Skills System

Element	Good Practice	Bad Practice
Recognizing and understanding: defined as interpreting information collected from the environment (with respect to existing knowledge) to identify the match or mismatch between the situation and the expected state, and to update one's current mental picture	Increases frequency of monitoring in response to patient condition Informs others of seriousness of situation Describes pattern of cues and their meaning to other team members	Does not respond to changes in patient state Carries out inappropriate course of action Silences alarm without investigation
Prioritizing: defined as scheduling tasks, activities, issues, information channels, and others, according to importance (e.g., due to time, seriousness, and plans); being able to identify key issues and allocate attention to them accordingly, and avoiding being distracted by less important or irrelevant matters	Discusses priority issues in case Negotiates sequence of cases on list with surgeon Conveys order of actions in critical situations	Becomes distracted by teaching trainees Fails to allocate attention to critical areas Fails to adapt list to changing clinical conditions

Adapted with permission from Anesthetists' Non-Technical Skills (ANTS) System Handbook, Industrial Psychology Research Centre, School of Psychology, University Aberdeen, Scotland. Available at: http://www.abdn.ac.uk/iprc/documents/ants/ants_handbook_v1.0_electronic_access_version.pdf. Accessed December 20, 2009.

to identify and communicate the specific tasks and areas that need improvement in a struggling resident.

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