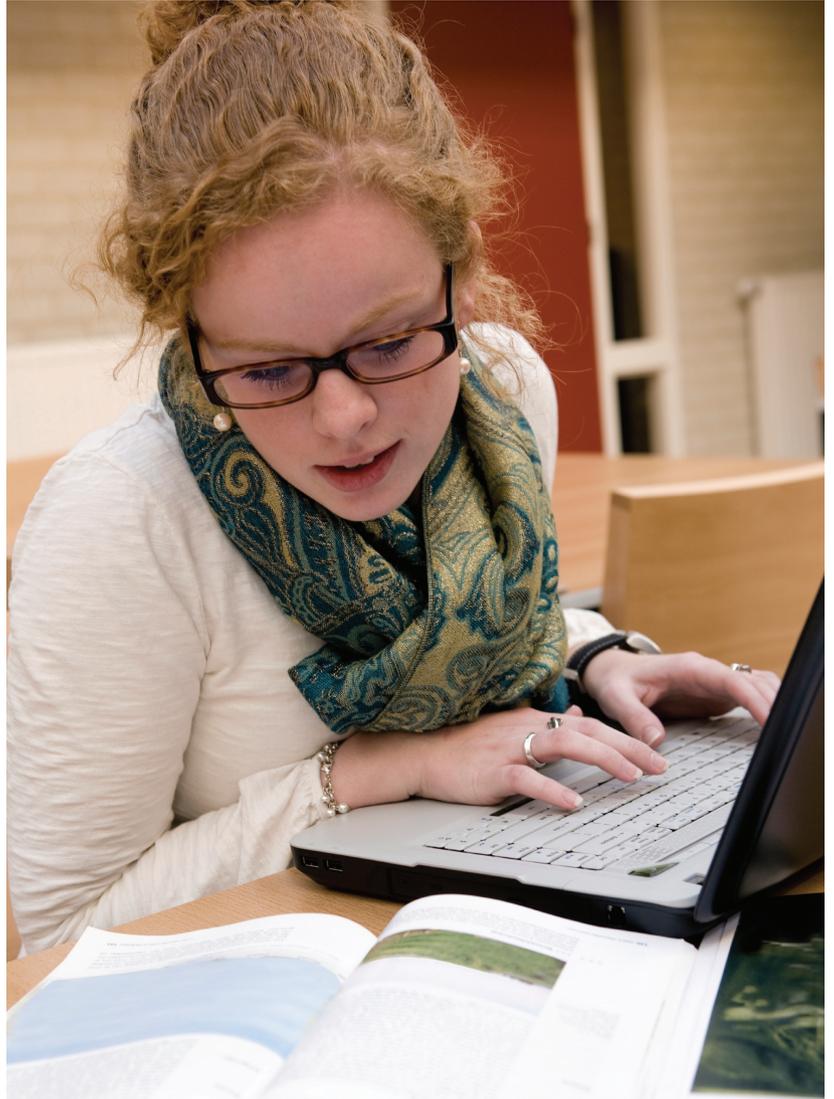


Perhaps we need to create a new way of thinking about and defining the profession in a way that is more functionally relevant and important to our needs ... we need to look critically at the criteria that make learning and knowing a muscle's action important.



what muscle actions should we learn and know?

THE QUESTION

Here is an important question for massage therapy students and practitioners alike: What muscle actions should we learn and know? Certainly, learning every action of every muscle would be wonderful. However, being this comprehensive isn't practical for most massage therapy curricula and newly graduated practicing therapists. There is a limited amount of time and effort that can be dedicated to this subject.

So, to be realistic, we need to prioritize and choose. But how do we prioritize when choosing what muscle actions to learn? Let's think about an answer together.

ONE ANSWER

Following are three important criteria that can be used in making this decision. All are based on increasing the massage therapist's ability to properly assess, treat and counsel our clients.

The first criterion is deciding whether knowing the specific action of a muscle helps us locate and palpate the muscle. The second criterion is whether knowledge of this action helps us to better figure out how to stretch the muscle. And the third criterion is whether this knowledge helps us counsel our clients about how to change their postures and habits so they do not continue to overuse and misuse the muscle.

criterion one: palpation

Muscle palpation is likely the most important assessment tool available to massage therapists. But if we cannot locate and identify the muscle, how can we accurately assess and determine if it is tight and therefore needs to be worked? For this reason, the first goal of palpation assessment is locating the muscle. If learning a certain muscle action assists us in doing this, then this action is important to know. An example is downward rotation of the scapula at the scapulocostal joint by the pectoralis minor, an action that is usually not taught.

Downward rotation best isolates a contraction of the pectoralis minor, allowing the adjacent musculature to remain relaxed. With the client seated and his hand resting in the small of his back, ask the client to move his hand posteriorly (Figure 1). This causes extension of the arm at the glenohumeral joint, which requires downward rotation of the scapula. When the pectoralis minor contracts to create this scapular downward rotation, it can be easily palpated and discerned through the overlying pectoralis major.

criterion two: stretching

Stretching is an extremely valuable treatment tool. Figuring out how to stretch a muscle is fairly simple and straightforward: make the muscle longer by doing the *opposite* of the actions of the muscle that were learned. Medial rotation of the thigh by the piriformis is a good example.

An excellent stretch for the piriformis is performed by flexing and laterally rotating the client's thigh at the hip joint (Figure 2). Asking the client to laterally rotate the thigh stretches medial rotators. Yet how often are we taught that the piriformis is a medial rotator when the thigh is flexed approximately 60 degrees or more? Given the value of stretching the piriformis, learning this action is important.

criterion three: counsel our clients

A tight muscle is usually tight because of overuse, which causes fatigue, pain and tightness. Beyond physically treating the tight muscle in our office, a crucially important role for the therapist is to educate the client about what postures and activities can result in overuse and create a problem.

To help counsel our clients, we need to understand what muscle actions are functionally more important and, therefore, most often engage the muscle. Depression of the pelvis by the gluteus medius is one example.



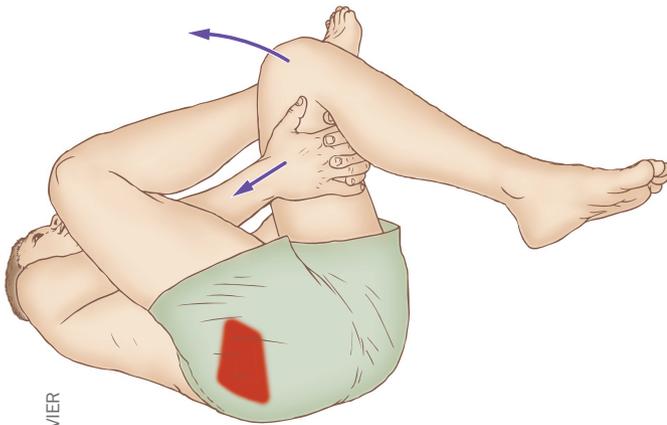
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Figure 1 Asking the client to extend the arm at the glenohumeral joint causes the pectoralis minor to contract to downwardly rotate the scapula. Knowing that the pectoralis minor is a downward rotator of the scapula is an important action to know.

The most commonly taught action of this muscle is abduction of the thigh at the hip joint. But how often during the activities of daily life do we move our thigh into abduction?

Other than certain sports that require lateral movements, thigh abduction is simply not that functionally important. The more important function of the gluteus medius is its action of depression (lateral tilt) of the pelvis at the hip joint. With every step we take, or even when we stand with more weight on one limb, the gluteus medius on the support-limb-side isometrically contracts with a force of depression on that side of the pelvis, stabilizing it from falling to the other, unsupported side.

Palpate the gluteus medius as you stand, walk in place, or simply shift your weight from one side to the other, and this can be clearly felt (Figure 3). So perhaps



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Figure 2 The piriformis is stretched with flexion and lateral rotation of the thigh at the hip joint. Knowing that the piriformis becomes a medial rotator of the thigh when the thigh is first flexed helps us to figure out and apply this useful stretch.



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Figure 3 The gluteus medius contracts with a force of pelvic depression to stabilize the pelvis on the weight bearing limb when walking or standing. Pelvic depression is the most important action of the gluteus medius and important to know when counseling the client about her postures and activities.

a client with a tight gluteus medius can be told that walking, or even standing with more weight on one leg, can perpetuate the tightness in their gluteus medius. The pelvic action must be learned, however, if massage therapists are going to be able to effectively talk to their clients about this issue. For this reason, learning the gluteus medius' action of depression of the pelvis is more important than learning its action of abduction of the thigh.

NEW WAYS OF THINKING

So why is it that we so often do not learn some of these more important muscle actions? Perhaps it is a problem of inertia. For decades, muscle actions that were taught were those created if the muscle contracted and the distal attachment moved. Let's call this the *standard way of thinking*. Then, inertia is created as most instructors go on to teach what they themselves have learned. The result is that our curricula come to reflect this standard way of thinking.

The same holds true for textbook writers. The material included in textbooks is driven by what is being taught. Given that most licensing and certification exams focus on the material being taught in the schools and in texts, the exams also reflect this way of thinking. Of course, most school owners and curriculum directors want their graduates to perform well on these licensing and certification exams, so they gear their curriculum toward meeting this need. The result is that we keep circling each other, following the same path, even if it is not what is functionally most important and treatment oriented.

How do we break out of this pattern? Perhaps what we need to do is to create a *new way of thinking about and defining* the profession in a way that is more functionally relevant and important to our needs. To start, we need to begin to look critically at the criteria that make learning and knowing a muscle's action important. Adopting a new and functionally important understanding of the body will be vitally important as the massage therapy profession continues to define itself in the coming years!



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