

## Chung-M9SFMA

The Selective Functional Movement Assessment (SFMA) is a clinical assessment tool that establishes a baseline, a rank (functional-non-painful, FN; functional-painful, FP; dysfunctional-non-painful, DN; and dysfunctional-painful, DP) and documents posture/fundamental movement patterns (MP); identifies, tracks, and maps (regional interdependence/RI) the status of MP-related pain; and establishes a starting point for further investigation (Cook, 2010).

The Functional Movement Screen (FMS) is a screen for non-painful fundamental movement competency; the SFMA addresses dysfunctional painful movement with 7 top-tier assessments (TTA) plus refinement "breakouts" (BO) per TTA (Cook, 2010; Cook 2011). The SFMA brings together 3 levels of information for developing an effective intervention: practical level--disability; functional level--dysfunction; clinical level--impairments (Cook, 2010). Due to the scope of this synopsis, the author recommends Cook (2010) for FMS/SFMA details.

Overall, the SFMA is based on the same sound foundational concepts as the FMS including: the biotensegrity model, developmental kinesiology, Janda's neuromuscular approach in the assessment and development of MP, and RI as a cornerstone of SFMA (Cook, 2010; Glaws, Juneau, Becker, Di STasi, & Hewett, 2014).

The 4-rank system (FN, FP, DN, DP) in the evaluation of the TTA plus BO assessments is derived from Dr. James Cyriax's Selective Muscle Tension Testing categorization of muscle contractile problems (Strong-Painless, Strong-Painful, Weak-Painful, Weak-Painless) (Cook, 2010). In FMS/SFMA, problems are addressed in a hierarchy from mobility, to stability, then dynamic patterning from the top-3 functional tests in the screen and 4 supporting fundamental tests (Cook, 2011). The BO assessments after the TTA incorporate more "traditional" methods (i.e. biomechanical range of motion, muscle strength, neurological testing, tissue-tension size, ligamentous integrity test, etc.) in order to pinpoint the exact problem(s) (Cook, 2011).

In the FMS, the foundational mobility work breaks a bad pattern, like a "reset"; resetting allows the client to start loading a good pattern (Cook, 2011). In the SFMA, clinicians must perform a "reset" which may be some form of manual therapy (i.e. manipulation, mobilization, dry needling, active release, Graston, etc.) prior to CE (Cook, 2011). After "reset" comes "reinforcement" which may include methods of orthotics, bracing, taping, etc. to restrict their "bad-normal" MP habits and reinforce the client's new MP--"strategically limit the behavior of motion in one area after creating the opportunity for motion in a new area; reinforcement complements the reset" (Cook, 2011). "Reloading", the last step, allows re-patterning to occur (Cook, 2011). The SFMA seems to be based on logical, foundational concepts integrating accepted methodology into a new framework for systematically developing an intervention.

Hulteen et al. (2015) described components of validity (content, construct, criterion) and reliability (inter-rater, intra-rater, test-retest) as the author introduced in module 8. The author's opinion is that more formal research is needed to quantitatively/statistically analyze the FMS/SFMA. All new discoveries must endure the nascent period. In terms of formal studies of both validity and reliability, there just is not enough overwhelming "evidence" (or articles that

the author could find). The author believes that much of the "evidence" of the nascent period is "trial by fire" and "field-evidence". That is not to say the FMS/SFMA are invalid or without merit; it simply means the FMS/SFMA are "too young".

For information on the FMS/SFMA proper usage, the author recommends going directly to the source--studying Gray Cook's literature and listening to audio/video lectures. There is a great amount of misunderstanding, and hence, misuse of the FMS (perhaps less so of the SFMA). Due to scope of practice, the author cannot use the SFMA. The SFMA is one framework/guideline--not an exhaustive tool nor "magic bullet". The SFMA is a procedural hierarchy of assessments to streamline the overall diagnostic process.

## References

- Cook, G. (2010). *Movement: Functional movement systems : screening, assessment, and corrective strategies*. Aptos, CA: On Target Publications.
- Cook, G. (2011). Gray Cook Movement. Retrieved from <http://graycookmovement.com/>
- Glaws, K. R., Juneau, C. M., Becker, L. C., Di Stasi, S. L., & Hewett, T. E. (2014). Intra- and inter-rater reliability of Selective Functional Movement Assessment (SFMA). *The International Journal of Sports Physical Therapy*, 9(2), 195- 207.
- Hulteen, R., Lander, N. J., Morgan, P. J., Barnett, L. M., Robertson, S. J., Lubans, D. R. (2015). Validity and reliability of field-based measures for assessing movement skill competency in lifelong physical activities: A systematic review. *Sports Medicine*, 45(10), 1443-1454.