

Selecting the MMPI-2 versus the MMPI-3

Office of Aerospace Medicine
Federal Aviation Administration, Washington, DC
November 18, 2020

The Minnesota Multiphasic Personality Inventory and its revision (MMPI/MMPI-2) have a rich history in the evaluation of aerospace personnel, beginning with military pilots in WWII and extending to use with airline pilots, FAA Air Traffic Control Specialists (ATCSs), Federal Air Marshals, and NASA astronauts. Its use in the pre-employment evaluation of FAA ATCS applicants is mandated by FAA Order 8500.4(series). The Minnesota Multiphasic Personality Inventory-2 Restructured Form (MMPI-2-RF) was developed by Tellegen and Ben-Porath (2008/2011) as a variant of the MMPI-2 using a subset of MMPI-2 items and entirely new scales. When the MMPI-2-RF was released, there was consensus among MMPI experts that the MMPI-2-RF was a completely new test and not a revision of the MMPI/MMPI-2. Indeed, Ben-Porath (2017, p. 277) asserted that, “the MMPI-2-RF was introduced as an alternative to rather than a replacement for the MMPI-2.”

Research conducted by the FAA found the MMPI-2-RF to be less sensitive than the MMPI-2 in identifying confirmed aeromedically disqualifying psychopathology among ATCS applicants (Retzlaff, Front, & King, 2011). The same study established normative scores for ATCS applicants on the MMPI-2 that were found to be essentially identical to the MMPI-2 airline pilot applicant norms published by Butcher (1994). For those reasons, the FAA has required the use of the MMPI-2 rather than the MMPI-2-RF when assessing pilots and ATCSs. Further FAA research with over 21,000 ATCS applicants confirmed the stability of the MMPI-2 ATCS norms and the utility of the MMPI-2 in the evaluation of ATCS applicants (Greene, Nichols, Front, & King, 2020).

Ben-Porath’s training webinar on the newly-released “MMPI-3” confirmed the concerns noted by Friedman and Nichols (2017). Specifically, the development team did not attempt to utilize the best aspects of both the MMPI-2 and the MMPI-2-RF when developing the newest test, which has been designated the “MMPI-3.” Rather than being the latest in a potential line of MMPI revisions, such as the MMPI-2, the “MMPI-3” is, instead, simply a revision of the MMPI-2-RF. The more accurate designation for this revision of the MMPI-2-RF would be “MMPI-2-RF-R” or “MMPI-2-RF-2.” The more accurate designation would not have benefited from the marketing advantages of a test with the name “MMPI-3.” The name “MMPI-3” creates the impression that the test is the newest version of the MMPI/MMPI-2 line of tests and thus capitalizes on the trust placed in the MMPI/MMPI-2 based on decades of accumulated MMPI research. Unfortunately, the marketing in this case does not reflect the science.

In summary: The MMPI and MMPI-2 have accumulated seven decades of validation with pilots and other aerospace personnel. Unlike the MMPI-2, the “MMPI-3” is simply a revision of the MMPI-2-RF. Valid pilot and ATCS norms are available for the MMPI-2 but not for the MMPI-2-RF or the “MMPI-3.” **For these reasons, the FAA will continue to require the use of the MMPI-2 for pilot and ATCS assessments. The MMPI-2-RF and “MMPI-3” are not acceptable substitutes for FAA assessments.** This policy is in accordance with Guideline #8 of the *Professional Practice Guidelines for Occupationally-Mandated Psychological Evaluations* published by APA (2018, p. 193), which notes: “Psychologists seek to select and rely on assessment tools validated for use with a population appropriate to the evaluation.”

References

- American Psychological Association (2018). Professional guidelines for occupationally-mandated psychological evaluations. *American Psychologist*, 73(2), 186-197. <http://dx.doi.org/10.1037/amp0000170>
- Ben-Porath, Y. S. (2017). An update to Williams and Lally’s (2017) analysis of MMPI-2-RF acceptance. *Professional Psychology: Research and Practice*, 48(4), 275-278. <http://dx.doi.org/10.1037/pro0000115>
- Butcher, J. N. (1994). Psychological assessment of airline pilot applicants with the MMPI-2. *Journal of Personality Assessment*, 62(1), 31–44. https://doi.org/10.1207/s15327752jpa6201_4
- Friedman, A.F. and Nichols, D.S. (2017). MMPI-3: Revision of the MMPI-2 or Marketing Hype? *The National Psychologist*, Vol. 26(6), p.1.
- Greene, R. L., Nichols, D. S., Front, C. M., & King, R. E. (2020). Screening Air Traffic Control Specialists with the MMPI-2: Two new scales to increase predictive utility. Technical report, Office of Aerospace Medicine, Federal Aviation Administration, Washington, DC.
- Retzlaff, P., Front, C. M., & King, R.E. (2011). Air Traffic Control Specialist norms for the MMPI-2. Unpublished study, Office of Aerospace Medicine, Federal Aviation Administration, Washington, DC.
- Tellegen, A. & Ben-Porath, Y. S. (2008/2011). *MMPI-2-RF (Minnesota Multiphasic Personality Inventory-2 Restructured Form) technical manual*. Minneapolis, MN: University of Minnesota Press.