less imaginative than individual-sport athletes. Of course, it’s possible that certain personality types are drawn to a particular sport, rather than that participation in a sport somehow changes one’s personality. The reasons for these differences remain unclear.

**Female Athletes**

As more women compete in sport, we need to understand the personality profiles of female athletes. In 1980, Williams found that successful female athletes differed markedly from the “normative” female in terms of personality profile. Compared with female nonathletes, women athletes were more achievement oriented, independent, aggressive, emotionally stable, and assertive. Most of these traits are desirable for sport. Apparently, outstanding athletes have similar personality characteristics, regardless of whether they are male or female.

Few personality differences are evident between male and female athletes, particularly at the elite level.

**Positive Mental Health and the Iceberg Profile**

After comparing personality traits of more successful with less successful athletes using a measure called the Profile of Mood States (POMS), Morgan developed a mental health model that he reported to be effective in predicting athletic success (Morgan, 1979b, 1980; Morgan, Brown, Raglin, O’Connor, & Ellickson, 1987). Basically, the model suggests that positive mental health as assessed by a certain pattern of POMS scores is directly related to athletic success and high levels of performance.

Morgan’s model predicts that an athlete who scores above the norm on the POMS subscales of neuroticism, depression, fatigue, confusion, and anger and below the norm on vigor will tend to pale in comparison with an athlete who scores below the norm on all of these traits except vigor, instead scoring above the norm on vigor. Successful elite athletes in a variety of sports (e.g., swimmers, wrestlers, oarsmen, and runners) are characterized by what Morgan called the *iceberg profile*, which reflects positive mental health. The iceberg profile of a successful elite athlete shows vigor above the mean of the population but tension, depression, anger, fatigue, and confusion below the mean of the population (see figure 2.3a). The profile looks like an iceberg in that all negative traits are below the surface (population norms) and the one positive trait (vigor) is above the surface. In contrast, less successful elite athletes have a flat profile, scoring at or below the 50th percentile on nearly all psychological factors (see figure 2.3b). According to Morgan, this reflects negative mental health.

Morgan’s mental health model proposes that successful athletes exhibit greater positive mental health than less successful (or unsuccessful) athletes exhibit.

![Figure 2.3](https://www.personalityandsport.com/images/figure2.3.png)

*Figure 2.3* (a) Iceberg profiles for elite wrestlers, distance runners, and rowers. (b) Psychological profiles of more and less successful elite athletes.

Adapted, by permission, from W. Morgan, 1979, *Coach, athlete and the sport psychologist* (Toronto: University of Toronto School of Physical and Health Education), 185. By permission of W. Morgan.