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An Exploration of Personality Traits in Older Adult Amateur Musicians

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Abstract

The primary research question for the study was, “Will older adult amateur musicians’ personality profiles reflect the traits found in professional musicians?” Participants (N = 58, ages 52 to 79) recruited from a New Horizons Institute “band camp” for older adult amateur musicians completed a musical background questionnaire and the Cattell (1993) Sixteen Personality Factor Questionnaire, Fifth Edition (16PF) on their own time during the five-day camp. Group scores for all the 16PF primary and global factor scores were within expected ranges for a normal population of adults, although Factor B (Reasoning) was noticeably higher and Factors E (Dominance), F (Liveliness) and L (Vigilance) were noticeably lower, as was the global factor IN (Independence). This suggests that this sample “leans” toward being more accommodating (IN-), deferential (E-), serious (F-), trusting (L-), and thinking more abstractly (B+) than adults in Cattell’s normative population. The 16 primary and five secondary factors were analyzed using a gender by experience (2 x 2) MANOVA, revealing a significant gender by experience interaction, which was the impetus for follow-up univariate analyses. Three primary factors showed significant between-group differences: L (Vigilance), N (Privateness), and Q1 (Open to Change). Male newcomers were more trusting (L-) and disclosing (N-), although the opposite tendencies were found for male returnees (individuals whose instruments were the ones they had played in high school or college). Female returnees were more open to change than male returnees. A 2 x 2 chi-square analysis of gender by experience revealed that older adult females were more likely to begin a new instrument than were men.

Introduction

The “leading edge” of the “baby boomers,” the generation born between 1946 and 1964, began turning 60 in 2006. Much has been written in the popular press about how this generation is redefining the concepts of retirement and old age. “Boomers” are more active than their predecessors and there is considerable interest in “successful aging.” Thirty years ago our society essentially wrote-off senior citizens because they were in the “twilight” of their lives. Now, society is embracing the notion that older adults have much to contribute. One example is the growth of the New Horizons International Music Association (NHIMA) for older adult bands, orchestras, and choirs (Coffman & Levy, 1997; Ernst & Emmons, 1992). What began with one band in the early 1990s has swelled to 120 organizations across the United States, Canada, and Ireland (<http://www.newhorizonsmusic.org>).

Having been involved in leading one of these concert bands for a number of years I have repeatedly been asked, “What kind of person is interested in learning an instrument or re-learning one?” Inquirers typically want to know to whom they should appeal as they establish adult bands in their communities.

Some research (Coffman, 1996; Coffman & Adamek, 1999; Coffman & Adamek, 2001) has shown that the primary motives for joining an amateur music ensemble are social and musical—people want to express themselves musically and with others, not just by themselves. Are these motives based in discernible, stable, personality traits? Anthony Kemp notes, “That a person chooses to be a musician indicates that he probably has both the ability and the temperament to

be so” (Kemp, 1981a, p. 3). This assertion suggests that personality may be involved in an older adult’s decision to join a musical group such as New Horizons.

Kemp has perhaps contributed more to our understanding of musicians’ personalities than any other researcher, and much of his work can be reviewed in his book *The Musical Temperament: Psychology and Personality of Musicians* (1996). Kemp’s approach over the years has been to administer Raymond Cattell’s Sixteen Factor Personality Questionnaire to samples of different groups of musicians and non-musicians. He did not test older adult amateur musicians. This study followed a similar plan to see how the personality traits of older adult amateur musicians compare with professional musicians, traits which have been well documented by Kemp.

The study of personality traditionally has been approached in two ways. One way is by examining personality traits that are viewed by researchers (such as Cattell, 1973) as stable. Cattell’s 16 primary factors have some overlap and he clustered them to create eight second-order factors (Cattell, 1973; Cattell & Kline, 1977) and more recently, five global factors, indicating factor directionality on these polar scales with “+” and “-” symbols (Russell, M. & Karol, D. 1994, see Table 1).

Table 1. 16PF Sten Score Means and Standard Deviations, Sample Profile (N = 49)

| Factor | <i>M</i> | <i>SD</i> |
|-------------------------|-----------------|------------------|
| Global Factors | | |
| Extraversion (EX) | 4.6 | 1.8 |
| Anxiety (AX) | 4.8 | 1.8 |
| Tough-Mindedness (TM) | 5.6 | 2.1 |
| Independence (IN) | 4.3 | 1.6 |
| Self-Control (SC) | 5.9 | 1.5 |
| Primary Factors | | |
| Warmth (A) | 4.6 | 1.9 |
| Reasoning (B) | 7.2 | 1.8 |
| Emotional Stability (C) | 6.3 | 1.4 |
| Dominance (E) | 3.8 | 1.7 |
| Liveliness (F) | 4.2 | 1.7 |
| Rule-Consciousness (G) | 5.8 | 1.8 |
| Social Boldness (H) | 5.5 | 1.9 |
| Sensitivity (I) | 5.9 | 1.7 |
| Vigilance (L) | 4.5 | 1.9 |

| | | |
|-------------------------|-----|-----|
| Abstractedness (M) | 5.0 | 1.8 |
| Privateness (N) | 5.3 | 1.8 |
| Apprehension (O) | 5.3 | 1.9 |
| Openness to Change (Q1) | 5.6 | 2.1 |
| Self-reliance (Q2) | 6.3 | 1.9 |
| Perfectionism (Q3) | 5.5 | 1.7 |
| Tension (Q4) | 5.5 | 1.7 |

Note: 16-PF sten scores mean are 5.5 with a standard deviation of 2.

The other approach has been to examine personality types and is most commonly known from the work of Carl Jung, from which came the Myers-Briggs Type Indicator (MBTI, Myers & McCaulley, 1985), and the Eysenck Personality Inventory (Eysenck & Eysenck, 1964). Jung (1923, 1928) categorized personality on a limited number of dimensions: introversion—extraversion, sensation—intuition, and thinking—feeling. The MBTI identifies two ways of perceiving information (sensing—intuition), two ways of judging that information (thinking—feeling), and combines these modes with a preference for perceiving or judging with a tendency towards introversion or extraversion, resulting in 16 personality types. Eysenck limited his examination to what he believes are the primary dimensions of personality—extraversion, neuroticism and psychoticism (Eysenck & Eysenck, 1976). Types can be viewed as clusters of traits, so the controversy that has ensued concerning these approaches springs from arguments about the consistency of traits, their number, and whether they have been accurately identified.

Kemp (1996) notes that a truce has resulted in this debate and remarks, “Certainly, I wish to take the view here that the musician’s development is a product of the kind of person that he or she is, as well as the prevailing environment in which the development of musical talent is allowed to take place and flourish” (p. 15). Costa and McCrae’s (1985) five-factor (traits) model of neuroticism, extraversion, openness, agreeableness, and conscientiousness is a more recent effort in personality measurement. The model has gained wide acceptance in recent years.

Much of Kemp’s work with musicians appeared prior to the emergence of the Costa and McCrae “big five” model. These projects include studies of musical performers (1981a, 1981c), composers (1981b), music teachers (1982c), gender differences (1982a), psychological androgyny (1985), and aspects of upbringing on musicians (1994). He typically conducted multivariate analyses of variance on the primary and secondary factors to compare different types of musicians. The model that emerged (1982b, 1996) focused primarily on the clusters of traits associated with the second-order factors of Introversion, Independence, Pathemia, and Anxiety. He described the musician as, “a ‘bold introvert’ who possesses the capacity to be comfortable in solitude during long periods of practice but at the same time is able to mobilize sufficient degrees of autonomy in performance” (1996, p. 50). Pathemia, comprised of three primary factors—sensitivity, imagination, and outgoingness—is for Kemp a fundamental aspect of musicians’ personalities, because of their involvement with aesthetic objects. Regarding anxiety he writes, “Musicians’

anxiety appears to manifest itself particularly in emotional instability and a form of frustrated tension, but suspiciousness and low self-sentiment also feature as important components. These traits are revealed as an inherent part of the psychological makeup of most musicians” (1996, p. 106).

Kemp’s focus on musicians led him to study music students, teachers and performers, persons who should portray these identifying traits most clearly. What kind of personality typifies amateur musicians, particularly those who are older adults? Do these individuals exhibit the tendencies of professional musicians, although perhaps to a lesser degree? If personality, as Kemp maintains, is part of the explanation for what draws someone towards music making, then an awareness of personality could be useful to music educators who work with New Horizons musicians.

In considering the personality of the older adult, some theorists (Erickson, 1978; Loevinger, 1976; Levinson, 1986) have proposed that personality undergoes changes through the life span. For instance, Erikson (1978) advocates eight stages of development (four in adulthood) and asserts that successful resolution of the unique tension of each stage is needed before moving to the next stage. Other theorists (Costa & McCrae, 1985) have focused on traits that have been shown to remain stable throughout adulthood. There is evidence of generational differences in personality, because during the past century adults have become more flexible and open-minded (Hoyer & Roodin, 2003). Given the age of New Horizons participants, one might assume that they are perhaps less flexible than younger adults.

This study examined the personality of older adult amateur musicians, employing the Cattell 16PF with a view that personality is comprised of stable traits. Because a newer model (Costa & McCrae, 1985) is gaining acceptance, one might question, “Why continue using a personality structure about which there appear to be some elements of doubt?” (Kemp, 1996, p. 52). Kemp’s rationale is not merely based upon having used the tool for years, but also on the belief that “it appears that musicians may well split the big five notion of extraversion into two parts...[performing] at the positive end on independence, and at the negative end on extraversion” (p. 52). The primary research question for the study was, “Will older adult amateur musicians’ personality profiles reflect the traits found in professional musicians?”

Method

Participants were recruited from a New Horizons Institute “band camp” for older adult amateur musicians, held for five days at the Chautauqua Institution in western New York State. Players (N = 100, 49 females and 51 males) in this no-audition band came from 17 states and the District of Columbia, and they varied widely in playing experience. Volunteers (N = 58) for the study completed a background questionnaire and the Sixteen Personality Factor Questionnaire, Fifth Edition (16PF, Cattell, Cattell, & Cattell, 1993). An author-designed background questionnaire asked for the name of the instrument that they were playing at the camp, age, education level, and prior musical experience. Musical experience was operationally defined as novice (no previous playing or reading of music notation), new (previous instrumental experience, but on a

different instrument), returning (currently playing an instrument they learned years ago), and vocalist (experienced singer with music notation).

The 16PF contains 173 items that comprise 16 primary factors (10-15 items per factor) and three response style indices. The Impression Management (IM) index is an additional 12 items and measures social desirability. High scores can suggest that an examinee wishes to present himself in a favorable light, while low scores indicate a willingness to admit a less desirable profile. Examinee self-deception can also be a cause for high scores. The Infrequency Index (INF) emerges from the pattern of responses to 32 items. Cattell selected these 32 items because respondents in his normative sample had infrequently chosen the “?” response (undecided, can not decide) for them. High INF scores suggest that an examinee is behaving differently than most other people; high scores can result from random guessing, indecision, reading comprehension difficulty, and so forth. The Acquiescence Index (ACQ) emerges from 103 true-or-false items and measures the tendency to respond “true.”

Participants were given packets at the first rehearsal of camp containing the 16PF test book and response sheet plus the background questionnaire and instructed to complete the surveys at their own pace and return them before the end of the camp. The 16PF manual states that the test takes between 35 to 50 minutes to complete (Russell & Karol, 1994).

Results

The volunteer sample approximated the gender balance of the camp band, although proportionally fewer males completed the surveys. Education levels were high (high school = 4, bachelor's = 16, master's = 20, doctorate = 4)—over 50% held a Masters degree or higher—and the sample instrumentation (woodwinds = 29, brass = 19) reflected the camp's band instrumentation (40% brass, 60% woodwinds), although none of the four camp percussionists completed the surveys. Musical experience varied (new = 4, novice = 18, returning = 21, vocalist = 2), but a majority had prior instrumental music experience. Collapsing four levels of experience into two (novice, new, and vocalist recoded as “newcomer” and maintaining the “returning” category) permitted a 2 x 2 chi-square analysis of gender by experience; females (newcomer = 17, returning = 8) were more likely to try out a new instrument than were men (newcomer = 7, returning = 13), $\chi^2 = 4.86$, $p = .027$. Ages ranged from 52 to 79 ($N = 50$, $M = 66.46$, $SD = 6.54$). Not all of the participants indicated their gender, but for those who did, the average male age was higher than the average female age (males, $n = 22$, $M = 68.50$, $SD = 6.39$; females, $n = 28$, $M = 64.86$, $SD = 6.30$, $t = 3.64$, $std. error = 1.81$, $p = .05$).

Table 1 presents the group means of standardized scores on the 16PF for the 49 participants used in the analyses. The 16PF uses “standardized ten” or “sten” scores that have a 10-point range with a mean of 5.5 and a standard deviation of 2. Sten scores in the 4-7 range are considered normal. The sample's group primary and global factor scores are within expected ranges, although Factor B (Reasoning) is noticeably higher and Factors E (Dominance), F (Liveliness) and L (Vigilance) are noticeably lower, as is the global factor IN (Independence). Cattell views the Reasoning factor as a brief measure of intelligence. This factor is not a

personality trait, but he measures reasoning because he feels that cognitive style (he measures verbal, numerical, and logical reasoning) influences the expression of many personality traits (Russell & Karol, 1994, p. 43). The Dominance factor refers to the tendency to exert control versus accommodating other's desires. Cattell defines Liveliness as "the natural self-exuberance and spontaneity exhibited by children before the learn self-control" (Russell & Karol, 1994, p. 46). Vigilance refers to the tendency to trust versus being wary of others' motives.

Even though the group profile was within expected ranges, I discarded 9 of the 58 participants completing the 16P-PF because either: (a) participants scored outside of expected ranges on the response style scales—they scored too high or too low on the Impression Management (IM) scale or too high on the Infrequency (INF) scale, or (b) they failed to report their musical experience on the background questionnaire.

The 16 primary and five secondary factors were analyzed using a gender by experience (2 x 2) MANOVA yielding a significant main effect for gender (Wilks lambda, $F = 2.61$, $p = .015$) and a significant gender by experience interaction (Wilks lambda, $F = 4.62$, $p < .001$), which was the impetus for follow-up univariate analyses. Three primary factors showed significant between-group differences: Vigilance (L), $F = 5.40$, $p = .025$; Privatness (N), $F = 4.78$, $p = .035$; and Openness to Change (Q1), $F = 4.06$, $p = .050$. Cattell defines Privatness (private vs. forthright) as ranging from personally open to non-disclosing (Russell & Karol, 1994, p. 52). He describes Openness to Change (open to change vs. traditional) as the tendency to embrace change or maintain the status quo (Russell & Karol, 1994, p. 46). Means for these comparisons appear in Table 2 and plots of the interactions in Figures 1, 2, and 3.

Figure 1

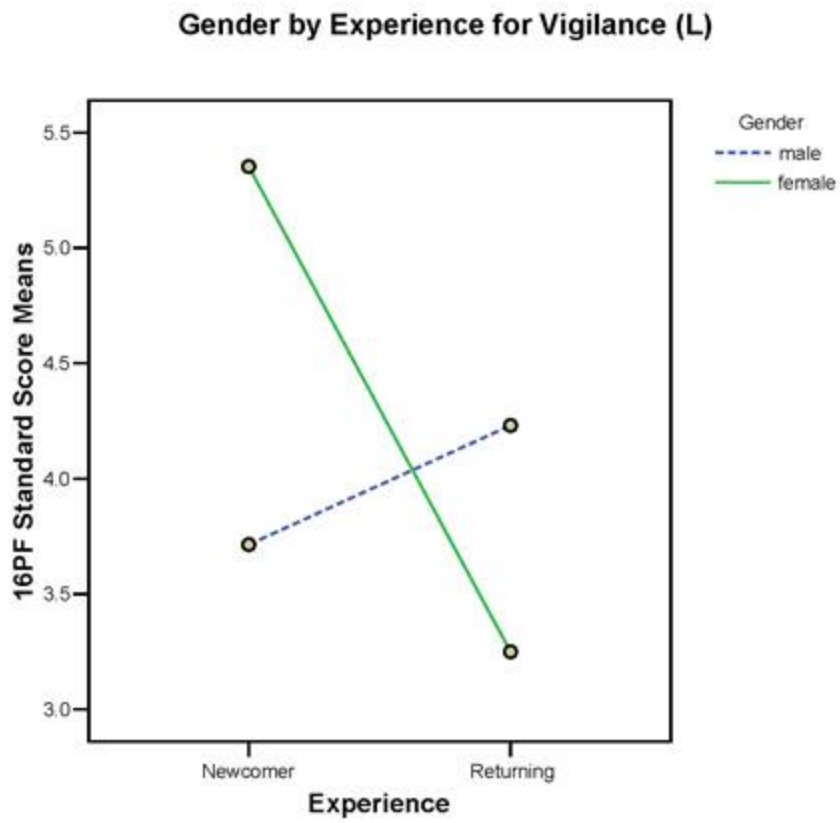


Figure 2

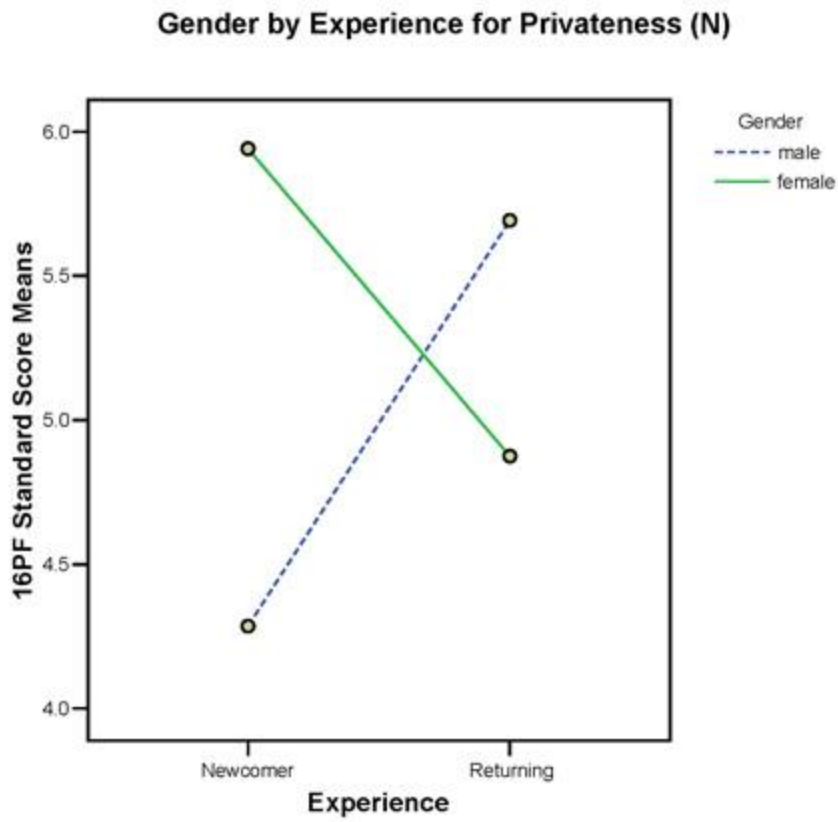
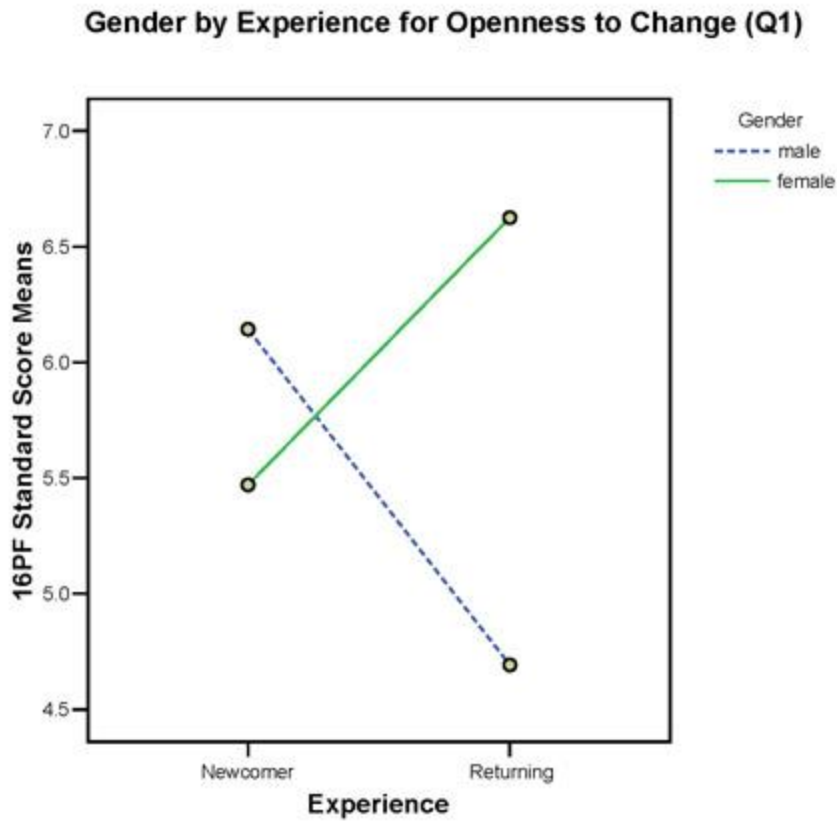


Figure 3



| <u>L (Vigilance)</u> | | | | |
|-------------------------------|-------------------|----------|----------|-----------|
| | Experience | | | |
| Gender | | N | M | SD |
| Male | Newcomer | 7 | 3.71 | 1.38 |
| | Returning | 13 | 4.23 | 1.64 |
| Female | Newcomer | 17 | 5.35 | 1.94 |
| | Returning | 8 | 3.25 | 1.91 |
| <u>N (Privateness)</u> | | | | |
| | Experience | | | |
| Gender | | N | M | SD |
| Male | Newcomer | 7 | 4.28 | 1.70 |
| | Returning | 13 | 5.69 | 1.55 |
| Female | Newcomer | 17 | 5.94 | 1.85 |

| | | | | |
|----------------------------|-------------------|----|------|------|
| | Returning | 8 | 4.88 | 2.03 |
| Q1 (Open to Change) | | | | |
| | Experience | | | |
| Gender | | N | M | SD |
| Male | Newcomer | 7 | 6.14 | 2.61 |
| | Returning | 13 | 4.69 | 2.46 |
| Female | Newcomer | 17 | 5.47 | 1.51 |
| | Returning | 8 | 6.63 | 1.69 |

Discussion

What kinds of persons are drawn to a New Horizons Band? The quick answer is “normal” persons. Most people are expected to score within the middle 68% of the 16PF standard score ranges and this sample’s profile is within expected ranges on all primary and global factors. Yet, a closer examination of group profile scores shows some movement away from the mid-point for one global factor (Independence) and four primary factors: Reasoning (B), Dominance (E), Liveliness (F), and Vigilance (L). Specifically, this sample “leans” toward being more accommodating (IN-), deferential (E-), serious (F-), trusting (L-), and thinking more abstractly (B+). It could be that the indications of accommodation and deference result from self-selection, because only half of the camp participants were willing to volunteer the time to complete the survey.

Most of these leanings are away from the tendencies Kemp (1996) observed, because the musicians he measured were more likely to be dominant (E+), lively (F+), socially bold (H+), and private (L+). Kemp’s description of a musician as an independent ‘bold introvert’ who is receptive (c.f. pathemia) and somewhat anxious does not appear in this sample’s profile. These older amateur musicians display traits in the opposite direction from professional musicians in Dominance [deferential (E-) vs. dominant (E+)], Liveliness [serious (F-) vs. lively (F+)], and Vigilance [trusting (L-) vs. private (L+)].

There are some response differences as a function of gender and experience. Previous research (Coffman & Schilf, 1998) suggests that females are more likely to be novice players in New Horizons Bands. This study’s sample displayed similar characteristics; although the gender balance was statistically equivalent in the sample, more women than men were newcomers to their instruments.

Univariate analyses of significant interactions in three primary factors revealed that male newcomers were more trusting (L-) more disclosing (N-) than were the male returnees and the female newcomers. Female returnees were more open to change than male returnees. It is tantalizing to speculate about these admittedly slight differences. Female newcomers, with average levels of Vigilance and Privatness, appeared with greater frequency, while female

returnees displayed more trusting, disclosing, and openness to change tendencies. Male newcomer scores indicate greater trust and more of a willingness to disclose. These levels may suggest that perhaps older men with sufficient trust and openness are more inclined to explore new endeavors such as New Horizons bands, while only “average” levels of trust and openness are needed for women.

It should not be too surprising to see that the group profile is essentially normal. These individuals, for the most part, did not devote their lives to music performance. Rather, they had either put aside personal music making for many years or they had little prior experience. Kemp (1996) suggests that musicians display a definable temperament. Assuming that these older adults maintained stable personality traits from their youth, one might speculate that they made the “right decision” early on not to become professional musicians, because they do not display the musician’s temperament, so to speak.

I prefer to view the results in a different way. Music educators and amateur musicians can be encouraged that successful and satisfying music making, such as is found in New Horizons bands and orchestras, is possible in retirement, even without the professional musician’s temperament. The personality traits most noticeable in this sample (deference, seriousness, trust, and willingness to take a chance) are perhaps more relevant to their successes.

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