

*This is an Accepted Manuscript of an article published by Taylor & Francis Group in **International Journal of Listening** on 14/06/2016, available online: <http://dx.doi.org/10.1080/10904018.2016.1202770>*

Running head: BIG-5 TRAITS, ASSERTIVENESS AND LISTENING

Do the Big-Five Personality Traits Predict  
Empathic Listening and Assertive Communication?

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The author wishes to thank Prof. Gloria Moss who assisted in proof-reading a draft of the manuscript.

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### Abstract

As personality traits can influence important social outcomes, the current research investigated whether the Big-Five had predictive influences on communication competences of active-empathic listening (AEL) and assertiveness. A sample of 245 adults of various ages completed the self-report scales. Both Agreeableness and Openness uniquely predicted AEL. Extraversion had the biggest influence on assertiveness but did not uniquely explain AEL variance. Conscientiousness and Neuroticism had small predictive influences on assertiveness. Further investigation into the pathways linking Big-Five facets to the different components of these communication competences is proposed and practical implications including understanding personality traits for successful leadership is discussed.

*Keywords:* Big-Five, active-empathic listening, assertiveness

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**Introduction**

Being skilled in interpersonal communication brings innumerable benefits across a range of social spheres including the enjoyment of high quality personal relationships, rich educational experiences, career advancements, successful participation in the complex communicative environments of the 21<sup>st</sup> century (Burlison, 2007; Morreale & Pearson, 2008) and positive leadership outcomes such as knowledge sharing and team commitment (de Vries, Bakker-Pieper, & Oostenveld, 2009). Clearly, a scholarly endeavour to increase understanding of the characteristics of people who are proficient in social communication is a worthwhile enterprise. Yet there is still a paucity of research looking at how certain personality traits might be important for adaptive behaviors of social communication. For this reason, the question addressed in the current research is whether personality profiles measuring broad trait dimensions can inform us about people's propensities towards or away from two major areas of communication competence, namely, assertive communication and empathic listening.

The Big-Five personality traits are investigated in this research. These five dimensions are Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. This model has become the 'golden standard', as shown by the fact that a *google scholar* search of the five-factor model of personality returns over two million results. Its recognition originated from the discovery of over 4,500 trait words in language (Allport & Odbert, 1936; Cattell, 1943). Then, through reducing this number down using factor analytic techniques, the same five orthogonal dimensions were identified by different researchers, albeit using

slightly different names for the five traits (Costa & McCrae, 1992; Fiske, 1949; Goldberg, 1990; McCrae & Costa, 1987; Norman, 1967; Tupes & Christal, 1962).

There is strong support for the Big-Five representing the basic dimensions of human personality as they are shown to account for variations between people across many languages and cultures (McCrae, 2002; McCrae & Costa, 1997; Pulver, Allik, Pulkkinen, & Härmäläinen, 1995; Schmitt, Allik, McCrae, & Benet-Martínez, 2007). Moreover, a biological basis for the Big-Five has been demonstrated within different fields of inquiry, including neuropsychology, (DeYoung et al. 2010), developmental psychology (McCrae et al., 2000; Rothbart, Ahadi, & Evans, 2000), behavior genetics (Hershberger, Plomin, & Pedersen, 1995; Jang, Livesley, & Vernon, 1996; Pedersen, Plomin, McClearn, & Friberg, 1988; Riemann, Angleitner, & Strelau, 1997; Tellegen et al., 1988), genetic epidemiology (De Moor et al., 2012) and evolutionary psychology (Buss, 1996; Gosling & John, 1999; King & Figueredo, 1997; Nettle, 2006).

There is a growing body of research focusing on how traits of the Big-Five influence social relationships (DeYoung, 2014; Jensen-Campbell et al., 2002; Malouff, Thorsteinsson, Schutte, Bhullar, & Rooke, 2010; McCrae & Sutin, 2009; Ozer & Benet-Martinez, 2000). The Big-Five have also been related to a range of interpersonal behaviors during initial encounters (Berry & Hansen, 2000; Cuperman & Ickes, 2009, Funder & Sneed, 1993). What is needed, is further investigation of relationships between Big-Five traits and relatively stable interpersonal competencies that are known to have consequential social outcomes.

The current research stems from interest in two areas of interpersonal communication claimed to be central for positive relational outcomes, these being assertiveness and empathic responsiveness (Anderson & Martin, 1995; McCroskey & Richmond, 1996; Richmond & McCroskey, 1990). McCroskey and Richmond (1996) developed concepts and measures of

socio-communicative orientation and socio-communicative style to reflect individual differences in what they claimed were genetically based cognitive components of general communication competence. An assertive orientation is identified through characteristics such as independence, dominance, forcefulness and aggressiveness whereas a responsive orientation or style represents characteristics such as warmth, helpfulness, showing compassion and friendliness towards others. This area of research has been useful for investigating the influence that these different styles have in professional contexts such as teaching and medical practice, where effective communication with students and patients is of paramount importance (Myers, Martin & Mottet, 2002; Richmond, Smith, Heisel & McCroskey, 2002). Moreover, there is also some evidence that the Big-Five model does predict these two tendencies or preferences in communication style (Cole & McCroskey, 2000).

Rather than looking at general characteristics such as being sensitive or forceful that are indices of communicative style, the aim of the present study was to concentrate on the skills and behaviors of communication that reflect these key communication competencies. For assertiveness, this involves behaviors that exemplify acts of assertive communication, whereas for responsiveness, this is represented by communication behaviors that demonstrate listening in a responsive manner.

As well as being a sign of communicative competence (Norton & Warnick, 1976; Singhal & Nagao, 1993) assertiveness is more likely to be expressed by people who are self-confident about their own views and opinions (Alberti & Emmons, 1970; Jakubowski-Spector, 1973) and about their ability to interact socially (Masters, Burish, Hollon, & Rimm, 1987). Having competence in assertive communication involves speaking up for and defending oneself in the interest of one's own values, preferences and/or goals without violating the rights of other people. In this way, it is a different construct to aggressiveness,

which involves expressing one's needs without consideration of others. Being assertive can take many forms including making requests, expressing feelings and refusing unreasonable requests. Poor assertiveness is associated with communication apprehension (Beatty, Plax, & Kearney, 1984; Pearson, 1979) and non-assertive people are seen to be apologetic, timid and self-deprecating.

Socialization plays a role in assertive behavior. Research indicates that across cultures, men are more likely to be assertive compared with women (Costa, Terracciano & McCrae, 2001) with women being reticent to show self-advocating assertive negotiation when they anticipate a backlash (Amanatullah & Morris, 2010). Also, women who are less assertive are liked more than those who are more assertive (Amanatullah & Tinsely, 2013).

Despite these socio-cultural influences, there is good evidence pointing to the role of stable personality traits in accounting for variability in assertive behaviors. Firstly, assertiveness is one of the sub-factors (or facets) of extraversion (Costa & McCrae, 1992; Eysenck, Barrett, Wilson, & Jackson, 1992) and twin studies have shown this facet to have much higher concordance between monozygotic twins compared with dizygotic twins, pointing to its heritability (Jang et al., 1996). Moreover, self-consciousness is a facet subsumed under the broad trait of neuroticism and this probably accounts in part for why a high level of neuroticism has been associated with a low level of assertiveness (Bratko, Vukosav, Zarevski, & Vranić, 2002; Kirst, 2011; Ramanaiah & Deniston, 1993).

Being a responsive communicator involves having person-centered listening skills and active listening has long been recognized as integral for successful responsive communication (Rogers, 1951; Floyd, 2006, Miller, Berg, & Archer, 1983), an ability that involves developing an attitude of sincere interest in the speaker (Rogers & Farson, 1957). The model of active-empathic listening (AEL) developed originally by Drollinger, Comer and Warrington (2006) to apply to the occupational context of selling products, but which has

been expanded and developed for application to conversational settings more broadly by Bodie (2011) is currently considered to be the hallmark of effective relational listening. It involves two central features: Firstly, there is the deliberate involvement through focused participation such that the speaker perceives and recognizes that the listener is being actively involved in listening to them. Secondly, the listeners put themselves emotionally and conceptually in the speakers' shoes. In other words, they show empathy for the speaker whilst they are listening.

The AEL model treats the listening processes as multifaceted and breaks it down into three stages of sensing, processing and responding. The sensing stage involves not only indicating to the speaker that she is actively involved in the perception of the message, but it also involves being aware of and paying close attention to accompanying non-verbal cues to the interlocutor's intentions and beliefs, a step where close proximity is important; the processing stage involves cognitive processes of organization and memory, synthesizing the information, consolidating it for retrieval, comprehending it, evaluating various cues for their importance and constructing a coherent narrative from the fragments; finally, the responding stage involves the deliberate use of visual and verbal cues to indicate that attention is being paid, that processing of the message is taking place and to encourage the speaker to continue communicating (e.g., head nods, back-channel responding, question asking). Each stage, whether occurring in sequence or in parallel, can be more or less active or empathic. Although competence in AEL involves all three stages, individuals may be more proficient at one or two of the stages. For example, self-reported social sensitivity is strongly related to the sensing and responding stages but not the processing stage (Gearhart & Bodie, 2011). However, there is still only scant research on differences between people in AEL at the stage level.

AEL is related to conversational effectiveness and with being regarded as conversationally competent across various social situations (Bodie, 2011). It has also been associated with a variety of social skills (Gearhart & Bodie, 2011). AEL is shown to be most beneficial for supportive conversations and contexts that have empathic potential, where there are purposeful conversational goals and where processing the details of the message is important (Bodie, Gearhart, Denham, & Vickery, 2013). Recent research in the occupational field shows that employees with managers who have good AEL skills are more satisfied with their work and report higher overall wellbeing (Snorrason, 2014).

There is evidence that AEL competence reflects enduring attributes within individuals that are consistent over time and across situations (Bodie et al., 2013). This trait-like aspect of AEL indicates that it could have some connection with dispositional personality traits. There have been two studies looking at whether broad personality traits measured using Eysenck's Personality Questionnaire (Eysenck & Eysenck, 1975) are related to AEL (Pence & James, 2015; Pence & Vickery, 2012). This measure is based on Eysenck's three factor model of supertraits, namely extraversion, neuroticism and psychoticism. Research looking at AEL and the Big-Five is absent from the literature. Therefore, the present study sets out to fill this gap by investigating whether AEL is associated with each of the traits of the Big-Five.

A major field that could be informed by understanding the relationship between Big-Five dimensions and the communication skills of both assertiveness and AEL is Leadership. Since the 1980s there have been a number of leadership theories emphasizing the visionary influence and relational elements of effective leadership. One study has shown that Transformational Leadership (Bass & Avolio, 1994), where a leader is regarded as charismatic through communicating a vision and attending to followers' needs and views is related to being assured, supportive, argumentative, precise and verbally non-aggressive, but

is not related to being expressive (de Vries et al., 2009). There is also evidence that leadership involving consideration of others rather than leadership that is task-oriented is related to people-oriented listening behavior (Kluger & Zaidel, 2013). Another study has shown that AEL partly accounts for the relationship between Transformational Leadership and positive outcomes of innovative work and well being in employees (Sharifirad, 2013). Moreover, the Servant Leadership theory specifically identifies ‘listening’ and ‘empathy’ as two of the core attributes of good leadership (Barbuto & Wheeler, 2002; Greenleaf, 1970; Spears, 1996). Understanding whether personality predisposes individuals towards important receptive as well as expressive communication attributes could help to uncover whether there are Big-Five personality traits to look for in emergent leaders. This research could also be useful in informing the communication training requirements for leaders whose personalities might signal poor assertiveness or inadequate empathic listening skills.

The following presents a summary of existing literature that informs how both assertiveness and AEL are, or might be, related to traits of the Big-Five, leading to the research hypotheses and research questions for the present study.

### **Assertiveness and the Big-Five Factors of Personality**

**Extraversion.** Being sociable, fun loving, friendly, talkative and happy are characteristics that represent high extraversion (McCrae & Costa, 1987). Therefore, it is not surprising that extraverts are often touted as successful communicators. Assertiveness is recognized as a lower-level trait subsumed under the extraversion dimension (Costa & McCrae, 1992; Eysenck, Barrett, Wilson, & Jackson, 1992). In fact, there is good evidence of moderate to high correlations between extraversion and self-reported assertive behavior (Bouchard, Lalonde, & Gagnon, 1988; Bratko et al., 2002; Cole & McCroskey, 2000; Eysenck et al., 1992; Kirst, 2011; McCroskey, Heisel, & Richmond, 2001; Ramanaiah &

Deniston, 1993; Vestewig & Moss, 1976). This robust set of findings means that extraversion is predicted to explain some of the variation in assertiveness scores in the present study.

**Neuroticism.** Neuroticism is the dimension that measures the degree of emotional stability and personal adjustment and it includes lower level traits of anxiety, shyness or self-consciousness and low self-esteem (Eysenck et al., 1992; McCrae & Costa, 1987). High neuroticism can lead to social inhibition at both affective levels (anxiety) and cognitive levels (believing that one's views and needs are not worthy of being expressed). Given that non-assertive people are more socially sensitive, approval seeking and defensive than assertive people (Ramanaiah, Heerboth, & Jinkerson, 1985), it is not surprising that neuroticism has shown a negative association with the willingness to communicate (McCroskey, Richmond, Heisel & Hayhurst, 2004). Also, an inverse relationship between neuroticism and assertiveness has been revealed in various studies using either Eysenck's three factor personality inventory: EPI (McCroskey et al., 2001; Vestewig & Moss, 1976) or a measure of the Big-Five (Bratko et al., 2002; Kirst, 2011; Ramanaiah & Deniston, 1993), although a nil association has also been found (Bouchard, et al., 1988). As previous findings mostly indicate that there is an inverse relationship, neuroticism is predicted here to negatively account for the variation in assertiveness scores.

**Agreeableness.** The agreeableness dimension reflects helpfulness, modesty and compassion at one end and competitive and conceited behaviors at the other. Research on the relationship between agreeableness and assertiveness has shown inconsistent findings. Bouchard et al. (1988) found positive associations between agreeableness and positive assertion (expressing agreement, affection or admiration) and negative associations between agreeableness and refusal behavior in undergraduate students. However, for Ramanaiah and Deniston (1993) and Kirst (2011), agreeableness did not relate to assertiveness. One might expect some negative relationship between agreeableness and assertive socio-communicative

style as it includes the characteristic of aggressive behavior (Cole & McCroskey, 2000). However, there is not any obvious basis for linking aggressiveness to assertive behaviors of speaking up to express or defend one's own views without violating others' rights. Therefore, there is no expectation in this study that the dimension of agreeableness would have any relationship with a scale that assesses a wide range of typically assertive rather than aggressive behaviors.

**Openness.** Openness measures the breadth, depth, originality, and complexity of thoughts and experiences (John & Srivastava, 1999) and it is the trait that correlates with IQ, especially verbal intelligence (De Young, Peterson, & Higgins, 2005) as well as artistic and scientific creativity (Carson, Peterson, & Higgins, 2005; De Young et al., 2007, Feist, 1998; McCrae, 1987). However, there is also evidence linking this trait to social outcomes, including taking the lead and being influential in work teams (McCrae & Sutin, 2009), being seen as verbally fluent, expressive and funny (Sneed, McCrae & Funder, 1998), and experiencing good relationship satisfaction (McCrae & Sutin, 2009; DeYoung, 2014).

Being the trait that propels individuals to explore and challenge, there is good reason to expect that high scores on this dimension will be related to assertive communication. In fact, openness has been associated with a 'questioningness' communication style (de Vries, Bakker-Pieper, Konings & Schouten, 2013), initiating conversation sequences (Cuperman & Ickes, 2009), positive assertion (Bouchard et al., 1988) and general assertiveness (Kirst, 2011). Therefore, it is expected that openness would account for some of the variation in assertiveness scores.

**Conscientiousness.** Conscientiousness measures the tendency to organization and dependability as against carelessness and spontaneity (Costa & McCrae, 2008).

Conscientious people are likely to be achievement-oriented with high self-efficacy for

reaching goals successfully. Of the Big-Five traits conscientiousness has been shown to have the largest impact on job performance (Barrick & Mount, 1991). It seems likely that conscientious people, by their very nature, will use assertive communication to achieve their goals and there is research supporting this (Bouchard et al., 1988; Kirst, 2011). Therefore, it is predicted that high conscientiousness will indicate higher levels of assertiveness.

Based on the research evidence and theoretical reasoning discussed, four hypotheses are proposed concerning the relationship between four of the Big-Five personality traits and assertiveness scores.

H1. There will be a positive predictive relationship between extraversion and assertiveness.

H2. There will be a negative predictive relationship between neuroticism and assertiveness.

H3. There will be a positive predictive relationship between openness and assertiveness.

H4. There will be a positive predictive relationship between conscientiousness and assertiveness.

### **Active-Empathic Listening and the Big-Five Factors of Personality**

**Extraversion.** Whilst a body of research using the three factor EPI measure has shown extraversion to be associated with a people-oriented or relational-oriented listening style (McCroskey et al., 2001; Villaume & Bodie, 2007), a style that involves finding common ground with other communicators in a non-judgmental fashion (Weaver, Watson, & Barker 1996), other research indicates that, when not combined with other traits, extraversion on its own is not associated with AEL competence (Pence & Vickery, 2012). Also, in research using the Big-Five, Ames, Maissen and Brockner (2012) found extraversion to be the only trait for which being influential on others at work could not be accounted for by

good listening. Furthermore, there is some evidence to indicate that extraversion has links with negative social characteristics. For example, the combination of high extraversion with low agreeableness has been linked to narcissistic behaviors (Lee & Ashton, 2005). There is also a study indicating that talkative and attention-seeking behaviors of extraverts could be interfering with their listening ability and may explain why the ambivert (middle of the scale) was found to be the better salesperson (Grant, 2013). In fact, research on initial dyadic interactions indicates that conversational partners of extraverts are likely to adopt a passive role, saying very little (as well as smiling less often) whilst the extravert takes the lead in talking (Cuperman & Ickes, 2009). Therefore, the speculation that high extraversion may be a hindrance to listening ability compared with mid-range scorers is also explored in the current study. Given the conflicting findings, no specific hypotheses are proposed concerning the relationship between the Big-Five extraversion dimension and AEL.

**Neuroticism.** High neuroticism is associated with avoiding or minimising time spent listening to others (Weaver et al., 1996) and Villaume and Bodie (2007) found that this communication style reflected a desire to control the situation by avoiding anticipated negative reactions from others. Using an EPI measure, whilst one piece of research showed neuroticism to be positively related to empathic responsiveness (Richendoller & Weaver, 1994), Pence and Vickery (2012) found no unique relationship between neuroticism and AEL. Given that the small literature on neuroticism and relational listening is conflicting, no predictions are made regarding an association between the Big-Five measure of neuroticism and AEL.

**Agreeableness.** A predisposition to attend to the mental states of others (social-cognitive mindreading) is central to agreeableness (Nettle & Liddle, 2008). This trait has been found to relate to the ability to show empathic concern (Magalhães, Costa, & Costa, 2012), the propensity to demonstrate helping behaviors (Graziano, Habashi, Sheese, & Tobin,

2007) and a predilection for jobs where empathic listening is important. For example, high agreeableness was the most common trait in a sample of people choosing voluntary telephone helpline work (Paterson, Reniers, & Völlm, 2009). Agreeable conversational partners show interpersonal warmth and respond to interlocutors with verbal acknowledgement and head nods (Cuperman & Ickes, 2009; Funder & Sneed, 1993). Although agreeableness has not been examined previously in relation to AEL, given that empathic perspective-taking skills and active verbal and visual cues of listening responsiveness are key ingredients of AEL it is hypothesized that agreeableness will be positively predictive of AEL.

**Openness.** ‘Open’ individuals can free themselves from practical concerns to appreciate a strong passion for aesthetic experiences (Glisky, Tataryn, Tobias, Kihlstrom, & McConkey, 1991) including art (Feist & Brady, 2004) and listening to sad music (Vuoskoski, Thompson, McIlwain, & Eerola, 2012). There is also evidence that this trait predicts emotion recognition and perspective-taking abilities, such as reciprocating emotional support in friendships (McCrae & Sutin, 2009), and entering professions that involve showing empathy (Claxton-Oldfield & Banzen, 2010; Magalhães et al., 2012).

Leung and Bond (2001) found that openness was the only Big-Five trait associated with both verbal engagement and showing attentiveness during communication. Openness was also observed to be associated with paying visual attention to interlocutors during initial interactions (Berry & Hansen, 2000). It has also been shown to influence empathic communication (Barrio, Aluja, & Garcia, 2004; Lesh, 1970). Whilst Ames et al. (2012) found that listening partly accounted for the relationship between openness and workplace influence, the researchers claimed that openness is most likely to influence informational listening rather than relational listening. Although there is not any previous research correlating openness with AEL, given the evidence that openness is associated with

emotionally supportive communication, the current study hypothesizes that the Big-Five trait of openness will significantly account for variation in AEL.

**Conscientiousness.** Conscientiousness correlates negatively with Eysenck's dimension of psychoticism (Aluja, García, & García, 2002; McCrae & Costa, 1985) and so one hypothesis could be that this trait would relate to empathizing ability. However, apart from a study showing that people will use conscientiousness as a criterion for deciding on whether others are likely to be supportive or not (Lakey, Ross, Butler & Bentley, 1996), there is not any clear evidence for this. Some personality scales have indicated that dependability or responsibility are important facets of conscientiousness, reflecting behaviors such as service to others and commitment to community projects. (Costa & McCrae, 1998; Mount & Barrick, 1995). However, a large-scale investigation by Roberts, Chernyshenko, Stark and Goldberg (2005) showed that traits of responsibility and virtue are lower level facets that overlap with other core traits such as agreeableness and neuroticism. Therefore, there is not expected to be a relationship between AEL and the Big-Five trait of conscientiousness.

Based on the discussion of the theoretical and empirical literature above, the following two hypotheses predict the influence of two of the Big-Five personality traits on AEL scores:

H5. There will be a positive predictive relationship between agreeableness and AEL.

H6. There will be a positive predictive relationship between openness and AEL.

There are also two research questions in addition to the main hypotheses concerning areas of interest about more nuanced aspects of potential relationships between personality and AEL.

These further research questions are:

RQ1. Is there a curvilinear relationship between extraversion and AEL?

This first question stems from research that posits that ambiverts have communicative advantages over both introverts and extraverts.

RQ2. Do the Big-Five traits show different relationship patterns for the three stages of AEL?

This second question involves examining associations between personality traits and the three AEL stages of sensing, processing and responding, to provide a more precise level of understanding of how certain traits may influence particular elements or phases of the listening process.

Where the literature has not enabled clear cut predictions to be made about associations between a Big-Five trait and a communication competency (agreeableness with assertiveness; extraversion, conscientiousness and neuroticism with AEL), the data here allow some additional findings that could help towards further investigation in these areas.

## **Method**

### **Participants**

Previous research on personality and communication has been largely restricted to student samples. However, rank-order changes in the Big-Five occur during adolescence suggesting that these traits may still be unstable in younger samples (McCrae et al., 2002). Moreover, openness is associated with academic success, which could mean that the full range of this scale might not be measured in a sample that is exclusively made up of students (Komarraju, Karau, Schmeck, & Avdic, 2011).

In order to include a wider spectrum of respondents in this study, the survey was advertised to a range of potential volunteers. This included the researcher's broad range of contacts on social media sites and online interest groups (*linkedin; twitter, facebook*), in addition to students and staff from a University in Southern England. Altogether there were 245 adults (59 men; 186 women) spread across five age groups ('ages 25 or below':  $n=59$ ; 'ages 26-35':  $n = 42$ ; 'ages 36-45':  $n = 50$ ; 'ages 46-55':  $n = 64$ ; 'ages 56+':  $n = 28$ '; 'not stated':  $n = 2$ ).

Of the sample, 107 participants indicated that they either studied or worked at the University, 88 indicated that they neither studied nor worked at the University and 50 participants did not give an indication of their location/background.

All participants remained anonymous. This was an important condition for minimizing potential response biases, such as social desirability biases, that could compromise the validity of the scores obtained using self-report scales.

### **Measures**

**Big-Five personality scales.** The Big-Five factor markers from the International Personality Item Pool (IPIP), developed by Goldberg (1999) were administered to participants. This self-report scale consists of fifty statements with 10 items for each of the Big-Five factors of extraversion (Am the life of the party), agreeableness (Sympathize with others' feelings), conscientiousness (Am always prepared), openness (Am full of ideas) and neuroticism/emotional stability (Get stressed very easily). Participants were required to read each statement and rate it on how well they believed it described them on a five-point scale (1: very inaccurate to 5: very accurate). The 50-item scale was chosen because shorter scales are likely to produce lower attrition compared with longer scales (Knapp & Heidingsfelder, 2001), and high dropout rates can limit the generalization of findings to the full spectrum of personality traits. The scales of the IPIP correlate highly with the corresponding NEO-PI-R scales (Costa & McCrae, 1992), ranging from .85-.92. However, the IPIP scales have the advantage of being freely available in the public domain.

The Cronbach's alphas for each dimension for the current sample showed good internal reliabilities for the sub-scales of extraversion (.89), agreeableness (.83), openness (.81), neuroticism (.89) and conscientiousness (.85). Principal component analysis using varimax rotation and a five-factor solution confirmed the construct validity of the Big-Five factors, with all scale items showing either distinctive or highest loadings onto its

corresponding factor. The only deviation from expectation was that the openness item of 'spend time reflecting on things' loaded slightly higher on agreeableness (.43) than on openness (.34). The factor loadings ranged from moderate to high for each of the five factors (extraversion: .52 to .78; neuroticism: .40 to .76; agreeableness: .39 to .79; conscientiousness: .58 to .71; openness: .34 to .68).

**Active-empathic listening scale (AELS).** The AELS (Bodie, 2011) was developed to assess active and empathic listening behaviors that are important in close relationships and associated contexts like supportive episodes. It was developed from an earlier scale used to measure AEL skills in salespeople (Drollinger et al., 2006). The 11-item scale presents statements and asks participants to indicate how they perceive each statement to be true of them. A five-point Likert response scale was used for the ratings (1: Strongly disagree to 5: Strongly Agree).

Items load onto one of three latent listening constructs indicating different stages of AEL (Drollinger et al., 2006). These are Sensing (S: 4 items), Processing (P: 3 items) and Responding (R: 4 items). Examples of statements from each construct are S: I am sensitive to what others are saying, P: I keep track of points others make, R: I ask questions that show my understanding of others' points. The AELS has been developed to show good factorial validity of the scale and the underlying constructs (Bodie, 2011). It also has good convergent validity with self-reported empathy, general levels of conversational activity and several measures of social skills (Gearhart & Bodie, 2011). The Cronbach's Alpha of the scale for this sample of participants was .83 for the overall scale, and .81, .57 and .75 for the sub-scales. Whilst the processing sub-scale alpha is lower, this need not mean poor reliability given the small number of items included. Moreover, a principal component analysis using all 11 items revealed a distinct three factor solution, with appropriate scale items clearly

loading onto each of the three factors. The factor loadings were sensing (.64 to .82), processing (.51 to .80) and responding (.49 to .79).

**Rathus assertiveness schedule (RAS).** The simplified version of the Rathus Assertiveness Schedule (Rathus, 1973) developed by McCormick (1985) was chosen, as it is a widely accepted measure of global assertiveness that has been used for various research as well as diagnostic and educational purposes.

This self-report measure involves rating 30-items on a six-point Likert scale (1: Very unlike me to 6: Very much like me). Examples of statements are, 'Most people stand up for themselves more than I do' (reverse scoring) and 'I enjoy meeting and talking with people for the first time'. The Rathus and Simplified version (simplified wording) correlate highly with each other (.94) and the scale has moderate to strong test-retest and split half reliability (McCormick, 1985). The RAS is predictive of the impression respondents make on others regarding their assertive behavior as well as assertive behaviors generated in relevant situations. Each participant receives a total score (after reversal of some items) out of 180. The Cronbach's Alpha of the scale for this sample of participants was .87, showing good internal consistency of items. A principal component analysis indicated multiple factors. The highest factor accounted for 22.8% of the variance and the lowest accounted for 3.4% of the variance. These factors could not be readily classified into different types or kinds of assertiveness, a finding consistent with previous research indicating that there are several aspects of assertive behavior measured by the RAS (Henderson & Furnham, 1983; Nevid & Rathus, 1979; Pearson, 1979).

## Results

Means, standard deviations and Cronbach's Alphas for each of the Big-Five personality traits, the RAS, the AELS and the AELS sub-scales are shown in table 1. There is good internal reliability for each of the personality traits (.81 to .89) and for overall scales for

both the RAS (.88) and the AELS (.83). As discussed in the method section, principal component analyses yielded a clear five-factor model for the Big-Five measure (IPIP-50 item scale), and a distinct three-factor model for the AELS scale that corresponds to the three AEL stages of sensing, perceiving and responding.

### **Effects of Gender and Age**

Gender and age effects on all personality and communication variables were first examined. Independent t-tests were conducted with gender as an independent variable. For personality traits, agreeableness scores were higher for females ( $t(236) = -4.58, p < .001$ ). No other gender differences in personality traits scores were found. For the communication scales, women were better active-empathic listeners than men at the ‘sensing’ stage, but not at any other stage of AEL (AELS) ( $t(220) = -4.19, p < .001$ ). There were no significant effects of gender on assertiveness (RAS).

For the age effects, analyses-of-variance with Tukey post-hoc multiple comparisons tests revealed increases in agreeableness, conscientiousness and emotional stability with age. (agreeableness:  $F(4,231) = 4.85, p = .001, \eta_p^2 = 0.08$ ; conscientiousness:  $F(4,231) = 4.77, p = .001, \eta_p^2 = 0.08$ ; neuroticism:  $F(4,227) = 10.84, p < .001, \eta_p^2 = 0.16$ ). There were no age group effects on either of the communication measures. All subsequent analyses combined male and female scores and all age groups.

### **Zero-order Correlations and Stepwise Regressions**

An examination of relationships between personality traits and communication measures were conducted using Pearson product-moment correlation coefficients. Table 2 shows all correlations between personality traits and communication measures.

As there was no evidence of multicollinearity between personality traits in the regression models (Tolerance  $< 1$ ), forward stepwise regression analyses were conducted with personality traits as predictive variables and with RAS, AEL and each of the three AEL

stages as outcome variables. Mahalanobis distances were calculated. However, there were not any outliers influencing the results of the regressions. The results of the multiple regression analyses are shown in tables 3 to 5.

**Big-Five and assertiveness.** Significant linear relationships were found between personality trait and RAS for four of the five personality traits, with agreeableness being the only exception. Neuroticism, openness and conscientiousness showed low to moderate correlations with RAS, whilst extraversion was highly correlated with RAS scores (Table 2).

Assertiveness was then regressed on the Big-Five traits. Entering the five personality traits into the stepwise regression model as predictors and with RAS as the criterion variable showed that the traits of extraversion, conscientiousness, agreeableness and neuroticism had unique influences on assertiveness. All four variables in the model accounted for 37 percent of the variance in RAS scores. Extraversion had the biggest influence, accounting for 27 percent of the variance in RAS scores on its own. With conscientiousness added, this made a difference of a further six percent of the variance. Despite the openness-RAS correlation, openness did not contribute uniquely to the predictive relationship of personality on RAS scores and so this trait was excluded from the stepwise regression models. Agreeableness was not correlated with RAS in the zero-order correlation and added only two percent to the predictive variance when included in the regression model with extraversion and conscientiousness. Although there was a moderate zero-order correlation between neuroticism and RAS, in the regression model its additional influence was also only two percent (Table 3).

**Big-Five and active-empathic listening.** Pearson correlations yielded moderate correlations between traits of agreeableness and openness with AELS total scores. A weak correlation was also shown between extraversion and AELS (Table 2). Neither conscientiousness nor neuroticism showed significant correlations with AELS scores.

AELS was regressed on the five traits. Entering extraversion, agreeableness, openness, neuroticism and conscientiousness as predictors and with AELS total scores as the criterion variable showed agreeableness to be the biggest predictor, accounting for 22 percent of the variance in AELS scores. With both agreeableness and openness together the model accounted for 30 percent of the variance in AELS. Neuroticism added only three percent and conscientiousness added an even smaller one percent of explained variance in scores. Despite the small correlation between extraversion and AELS, when all traits were included in a stepwise regression analysis, extraversion failed to predict any of the variance in the AELS scores (Table 4).

One of the research questions was to investigate whether there was any evidence of an ambivert advantage for extraversion (Grant, 2013), which would mean a curvilinear relationship between this trait and AELS (RQ1). Clearly, all correlating variables showed linear relationships. When extraversion was divided into three sub-groups (High, Medium and Low) and a oneway analysis-of-variance was conducted, extraverts (top 30%) showed small but significantly higher means than both ambiverts (middle 40%) and introverts (bottom 30%) ( $F(2, 206) = 7.36, p < .001, \eta_p^2 = 0.07$ ). Next, agreeableness and openness were entered into the analysis as covariates (ANCOVA) and there was no significant effect of extraversion sub-group on AELS ( $F(2, 194) = 0.72, p = .49, \eta_p^2 = 0.007$ ). Thus, there was no evidence of a curvilinear relationship between extraversion and AEL and when controlling for traits of agreeableness and openness, the effect of extraversion on AEL disappeared completely.

To investigate whether there were particular relationships between the Big-Five traits and the different stages of AELS (RQ2), the three stages of sensing, processing and responding were examined as outcome measures separately.

Entering the Big-Five traits as predictors into the regressions and with the different stages of AELS as criterion measures for each stepwise regression analysis produced the following results, with traits presented in order from highest to lowest according to the percentage of variance in AELS that they accounted for: agreeableness, openness and neuroticism were predictors of 'sensing', openness, conscientiousness and neuroticism were significant predictors of 'processing' and finally, agreeableness and openness were significant unique predictors of 'responding'. Openness was the only trait that was a unique predictor for all three AELS stages, whilst extraversion failed to have any predictive value on the outcome for any of the AELS stages (Table 5).

### **Discussion**

This investigation set out to examine whether core personality traits, using the Big-Five model, are important in accounting for individual differences in communication competencies. It specifically looked at assertiveness and AEL as they are shown to involve skills that are highly beneficial in a wide range of interpersonal situations. Evidence from the literature contributed to an understanding of how the core traits of the Big-Five might be related to each of these communication competencies, leading to six hypotheses being proposed, as well as two further research questions about more nuanced aspects of the relationship between traits and AEL.

The following discussion summarizes the results as well as examining the three traits of agreeableness, openness and extraversion in more depth and discussing the implications of these findings.

#### **Relationships Between the Big-Five and Communication Competences**

**Personality traits and assertiveness.** It was predicted that four of the five traits, namely extraversion, neuroticism, openness and conscientiousness would be associated with assertiveness. As expected, extraversion was the strongest predictor, supporting H1. Also,

neuroticism had a negative relationship with and a predictive influence on assertiveness, supporting H2. These findings corroborate those from previous research studies that have used the Eysenck three-factor measure of personality (McCroskey et al., 2001; Vestewig & Moss, 1975), substantiating the view that the EPI and Big-Five scales are measuring similar attributes for the core personality dimensions of extraversion and neuroticism.

There was a zero-order correlation between openness and assertiveness that initially appeared to support H3. However, when all five personality factors were considered in predicting assertiveness, openness had nothing to add on top of the other traits and so the null hypothesis that there is not a predictive relationship between openness and assertiveness cannot be rejected. This finding is discussed further in the Key Findings and Implications section.

The variation in assertiveness explained by conscientiousness was also significant, confirming H4. Some evidence indicates that being conscientious leads to assertive behavior in contexts where goal progress is being threatened (Bouchard et al., 1988). Further research is needed to delineate more precisely the kinds of assertive behaviors that are likely to be associated with this trait.

As expected, there was not a relationship found between agreeableness and assertiveness, although it was included as a small predictor in the stepwise regression model. The findings seem to correspond with those of Ramanaiah and Deniston (1993), as well as Kirst (2011). It seems that the propensity towards agreeableness or disagreeableness bears little relation to the competencies required to communicate in an assertive manner or not.

Bem's gender schema orientation theory predicts that a masculine orientation prefers assertive expression whereas a feminine one is shown in more relational and affectionate forms of communication. (Bem, 1981). The current sample represented men and women living in contemporary western society where self-advocacy by women is regarded as

acceptable, removing any cultural barrier to assertiveness in females (Amanatullah & Morris, 2010). The failure to find gender differences here suggests that the male-female differences in assertive behavior shown in many studies may have more to do with socialization than to any biological predispositions for sex differences in assertive communication.

**Personality traits and active-empathic listening.** Turning now to the predicted relationships between personality traits and AEL, the results show support for both H5 and H6. Firstly, agreeableness was found to be an important predictor of AEL (H5). Also, not only did openness predict AEL generally, supporting the final hypothesis (H6), it was also the only trait that accounted for all three of the listening stages (RQ2). These results are discussed further in the Key Findings and Implications section.

Neuroticism was not related to AEL although it was included in the regression model. Conscientiousness had a very small predictive influence at the processing stage only (RQ2).

Females scored higher than males at the sensing stage of AEL, a finding that replicates an earlier study examining sex differences in AEL (Pence & James, 2015). Research has indicated that, from a young age, girls develop empathy earlier and express more empathic behaviors compared with boys (Mehrabian, Young, & Sato, 1988). Therefore, it is not surprising that there are also stable AEL differences between men and women, especially at the sensing stage, where empathic ability is particularly essential.

### **Key Findings and Implications: Agreeableness, Openness, Extraversion**

The current results add to the literature in demonstrating that certain Big-Five traits have a predictive influence on particular forms of communicative competence. In this regard, the traits that seem to warrant further discussion based on the current findings are those of agreeableness, openness and extraversion.

Firstly, agreeableness, whilst not shown to be a trait important for assertive communication, does carry weight in accounting for AEL competence. Also of interest is the

finding that agreeableness predicted the sensing and responding phases of AEL but not the processing stage (RQ2). This result is compatible with the characterization of this trait as involving a concern for the feelings of others, an ability that seems to be fundamental for the sensing and responding stages, but may not be central to the processing stage where cognitive skills (organizing and memorizing information) are more important. In fact, the processing stage on its own seems to be more important for the content dimension of messages.

Gearhart and Bodie (2011) found that whilst AEL related strongly overall to the social skill of emotional sensitivity, it was the sensing and responding stages that were predominantly concerned with a vigilance for emotional cues underlying the messages of conversational partners.

The finding that openness was a predictor of AEL is also worthy of further discussion (RQ2), especially as this Big-Five trait has largely been investigated for its cognitive rather than social strengths and these are new findings highlighting the significance of openness as a trait conducive to positive relations with others based on interpersonal listening competence. Moreover, whilst previous research has suggested that being ‘open’ fosters listening to obtain information (Ames et al., 2012) or as an expression of interest in intellectual topics (Funder & Sneed, 1993), this is the first study showing that openness is related to AEL.

Although the amounts of variance explained by openness were small, being ‘open’ was shown to influence AEL across the board. The question is, what is it about openness that makes it important for responsive listening across all three stages of sensing, processing and responding? The answer possibly lies in the fact that this dimension encompasses two correlated but also relatively independent sub-systems. These sub-systems are ‘intellect’ (referred to here as openness-intellect), that is responsible for engaging with abstract information and intellectual exploration, and ‘openness’ (referred to here as openness-sensory), that is responsible for engaging with sensory and perceptual information, aesthetic

appreciation and showing empathy (DeYoung, 2014). One possible explanation for why openness might be related to all three AEL stages is that these two sub-systems exert their influence on AEL for different purposes, with openness-sensory being important for the sensing and responding stages and openness-intellect being responsible for message processing. This is a speculative proposition for future research to explore, as the findings here require replication if we are to establish that this pattern is a robust one. Also, evidence of correlations between traits at the facet level and the three listening stages are needed to corroborate the conjecture that these openness sub-systems exert their influence at particular stages of AEL.

One hypothesis that was not upheld was a unique predictive relationship between openness and assertiveness. Whilst openness was a correlate of assertiveness, other traits explained the variance such that openness did not add anything to the predictive model. This is interesting given that it has been shown that the openness-intellect sub-system is involved in assertive behavior (Weisberg, DeYoung, & Hirsh, 2011). One possible explanation is that, although openness shares with extraversion a propensity towards exploratory behavior (DeYoung, Peterson & Higgins, 2002; Digman, 1997; Olsen, 2005), openness is associated with more cognitive than behavioral exploration. The RAS used in this study measures a range of assertive situations that involve speaking up. Yet only one statement loosely relates to assertive encounters for the goal of information gathering (I have sometimes not asked questions for fear of sounding stupid). Perhaps further investigation into potential nuanced elements of assertiveness that are more likely to be a reflection of cognitive exploration could help unravel differences between general assertive behaviors and a form of inquisitive assertiveness that might be linked to facets of openness.

Another notable finding is that extraversion, the trait associated with socializing behaviors and the trait that outshines others in accounting for variability in assertiveness

scores, served no function in uniquely predicting AEL when traits of agreeableness and openness were considered. Pence and Vickery (2012) also failed to find any unique influence of extraversion on AEL. Another study found that extraversion did not have any effects when controlling for gender (Pence and James, 2015). The current sample was heavily female biased and yet extraversion still failed to provide any additional predictive value over other traits. There was also no evidence of an ambivert advantage (RQ1), raising the possibility that Grant's (2013) finding of ambiverts as successful salespeople was due to the potentially intrusive implications of being an over-talkative extravert, rather than due to any improved empathic listening ability associated with moderate extraversion.

These findings seem at odds with evidence showing that the combined EPI traits of high extraversion, low neuroticism and low psychoticism together are associated with a person-centered listening style, a style shown to involve higher attentiveness, perceptiveness and responsiveness during communication as well as a desire to communicate for the goal of creating warm ties with others (Villaume & Bodie, 2007). It is interesting that extraversion correlated with both agreeableness and openness at a moderately high level, a finding that is not uncommon (John & Srivastava, 1999). It may be that being extraverted as well as 'open' and agreeable provides a personality blend that confers an advantage for person-centered communication over any of these traits at a high level on their own. Yet the findings of this study reveal that, when it comes to listening empathically, these other two traits of the Big-Five outweigh extraversion, suggesting that extraversion has its influence on person-centeredness in ways other than empathic listening. It is noteworthy that psychoticism (an EPI trait) has been found to relate inversely to AEL (Pence & James, 2015; Pence & Vickery, 2012) and that by using a Big-Five measure in the present study, it is now possible to consider that low agreeableness might have been responsible for that association.

The finding of no age differences on the communication measures implies that both assertiveness and AEL are competencies that do not necessarily improve or deteriorate at different ages. The results also support the claim that AEL represents a trait-like competency (Bodie, 2011, Bodie et al., 2013, Pence & Vickery, 2012), as mean AEL levels that remain constant across age indicate relatively stable population patterns.

Further research using longitudinal data could examine whether there are long lasting individual differences through investigating rank-order stability across time during different phases of the lifespan. The implication is that some people may be at risk of developing deficiencies in communication competencies that are resistant to change. There can be important gains in identifying personality traits that predispose shortcomings in assertiveness and relational listening skills so that intervention methods can be suitably targeted to those at risk. Another implication is that traits that predispose good communication competencies could be identified so that communication strengths can be developed and maximized to their full potential.

Identifying how stable personality traits relate to important communication skills can also inform our understanding of how personality influences individual differences in leadership behaviors. The significance of communication skills especially for considering the needs and views of others have been emphasized in Transformational (deVries et al., 2009; Sharifirad, 2013) and Servant Leadership models (Barbuto & Wheeler, 2002; Greenleaf, 1970; Spears, 1996) and recent research has indicated that Inclusive Leadership, a model strongly predictive of satisfaction, engagement and productivity within a diverse and inclusive organisational environment incorporates a range of both Transformational and Servant Leadership competencies (Moss, 2016). However, whilst one study involving over 200 organisations showed that agreeableness, extraversion and openness were the three global traits most associated with Transformational Leadership (Judge & Bono, 2000), the

various studies comparing leadership style constructs with broad personality traits yield equivocal findings. This is where research on relationships between personality traits, interpersonal skills and leadership can provide a more precise portrayal of how personality traits exert their interpersonal influence in organisational settings (Ames et al., 2002).

What is interesting is that people in more senior levels of management are found to have higher levels of conscientiousness and extraversion. Also, males still outnumber females in those senior positions (Moutafi, Furnham, & Crump, 2007). Therefore, raising awareness of the important roles of openness and agreeableness for active-empathic listening might change people's implicit views, such that in addition to managerial planning and persistence skills (conscientiousness) and interpersonal skills of sociability and assertiveness (extraversion), receptive communication attributes are encouraged in emerging leaders. In fact, recognizing relational communication skills such as listening in potential leaders could be fundamental in promoting those people whose stable personality traits are conducive to bringing about trust, commitment and satisfaction from followers. Furthermore, identifying where senior managers with strong attributes of assertiveness and dominance might get derailed if they are less 'open' and disagreeable could help to promote recommendations for leadership training and development in the skills of empathy building and listening.

### **Limitations**

One strong point about the participants of this study compared with samples from previous research is that they varied in ages and included non-student respondents. This helps to generalize the findings, particularly as the factorial validity of the measures were supported. However, a sample limitation was that there were three times as many females as there were males participating in the study. This may have obscured important differences between the genders on the relationships between personality and communication that might have impacted on the findings.

Although internal reliability and factorial validity of the self-report measures were upheld, these findings would benefit from corroboration using a broader set of communication measures. Comparing self-reports with the views of customers, clients, and friends could provide stronger evidence that these communicative competencies are manifesting themselves as real behaviors in personal and professional settings and would add to the validity of the current findings.

Moreover, whilst personality accounted for 37 percent of the variance in assertiveness and 34 percent of the variance in AEL, this means that there is still a lot of the variance unaccounted for. Thus, recognizing the importance of personality traits in predicting communication behaviors should not lead us to devalue the significance of additional factors or mediators in the relationship between personality traits and communication behaviors. Emotional intelligence has been shown to be important for AEL (Pence & Vickery, 2012) and there is evidence that more specific processes such as sensory-processing sensitivity (Gearhart & Bodie, 2012) can influence communication apprehension. It would also be interesting to examine whether stable personality traits have varying influences on communication behaviors in different communicative contexts. For example, given the explosive increase in interacting with others using technology such as emailing, texting, instant messaging and blogging, together with recent interest in researching the relationship between personality traits and computer-mediated communication (Amichai-Hamburger & Vinitzky, 2010; Guadagno, Okdie, & Eno, 2008; Ross et al., 2009; Ryan & Xenos, 2011), it would be worthwhile making comparisons between real and virtual communication environments to see whether the Big-Five traits exert their influences in similar or different ways across these different interpersonal domains.

This study has revealed that broad personality traits play a role in accounting for assertiveness and AEL. Looking at the Big-Five has produced findings that not only

challenge popular views, but also provide valuable insights into possibilities for further investigation. Extraverts might be great socializers but their strength seems to involve having an ability to put themselves forward in social settings and in feeling motivated to ask questions and seek social encounters. However, they may not be the best people to offer others support when an empathic listener is required. Instead, it looks as if people who show high levels of agreeableness and openness might be better conversational partners during supportive episodes and where people-oriented or inclusive leadership matter. These findings can only be substantiated with further research looking into the relationships between the facets of the Big-Five traits and the multifaceted relational skills of both ‘speaking out’ and ‘listening to others’ that are so vital for communicating effectively across many interpersonal contexts.

### References

- Alberti, R. E., & Emmons, M. L. (1970). *Your perfect right: A guide to assertive behavior*. Oxford, England: Impact.
- Allport, G. W., & Odbert, H. S. (1936). Trait-names: A psycho-lexical study. *Psychological monographs*, 47, i-171. doi: 10.1037/h0093360
- Aluja, A., García, Ó., & García, L. F. (2002). A comparative study of Zuckerman's three structural models for personality through the NEO-PI-R, ZKPQ-III-R, EPQ-RS and Goldberg's 50-bipolar adjectives. *Personality and individual differences*, 33, 713-725.  
doi:10.1016/S0191-8869(01)00186-6
- Amanatullah, E. T., & Morris, M. W. (2010). Negotiating gender roles: Gender differences in assertive negotiating are mediated by women's fear of backlash and attenuated when negotiating on behalf of others. *Journal of Personality and Social Psychology*, 98, 256-267.  
doi:10.1037/a0017094.
- Amanatullah, E. T., & Tinsley, C. H. (2013). Punishing female negotiators for asserting too much... or not enough: Exploring why advocacy moderates backlash against assertive female negotiators. *Organizational Behavior and Human Decision Processes*, 120, 110-122.  
doi:10.1016/j.obhdp.2012.03.006
- Ames, D., Maissen, L. B., & Brockner, J. (2012). The role of listening in interpersonal influence. *Journal of Research in Personality*, 46, 345-349. doi:10.1016/j.jrp.2012.01.010
- Amichai-Hamburger, Y., & Vinitzky, G. (2010). Social network use and personality. *Computers in Human Behavior*, 26, 1289-1295. doi:10.1016/j.chb.2010.03.018

- Anderson, C. M., & Martin, M. M. (1995). Communication motives of assertive and responsive communicators. *Communication Research Reports, 12*, 186-191. doi: 10.1080/0882409950936205
- Barbuto, J. E., & Wheeler, D. W. (2002). Becoming a servant leader: Do you have what it takes? *Group and Organization Management, 31*, 300–326. doi: 10.1177/1059601106287091
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology, 44*, 1-26. doi: 10.1111/j.1744-6570.1991.tb00688.x
- Barrio, V. D., Aluja, A., & García, L. F. (2004). Relationship between empathy and the Big Five personality traits in a sample of Spanish adolescents. *Social Behavior and Personality: An International Journal, 32*, 677-681. doi: 10.2224/sbp.2004.32.7.677
- Bass, B. M., & Avolio, B. J. (1994). Transformational leadership and organizational culture. *The International Journal of Public Administration, 17*, 541-554. doi: 10.1080/01900699408524907
- Beatty, M. J., Plax, T. G., & Kearney, P. (1984). Communication apprehension and the Rathus Assertiveness Schedule. *Communication Research Reports, 1*, 130-133.
- Bem, S.L. (1981). *Bem sex-role inventory: Professional manual*. Palo Alto, CA: Consulting Psychologists Press.
- Berry, D. S., & Hansen, J. S. (2000). Personality, nonverbal behavior, and interaction quality in female dyads. *Personality and Social Psychology Bulletin, 26*, 278-292. doi: 10.1177/0146167200265002

- Bodie, G. D. (2011). The Active-Empathic Listening Scale (AELS): Conceptualization and evidence of validity within the interpersonal domain. *Communication Quarterly, 59*, 277-295.  
doi:10.1080/01463373.2011.583495
- Bodie, G. D., Gearhart, C. C., Denham, J. P., & Vickery, A. J. (2013). The temporal stability and situational contingency of active-empathic listening. *Western Journal of Communication, 77*, 113-138. doi: 10.1080/10570314.2012.656216
- Bouchard, M. A., Lalonde, F., & Gagnon, M. (1988). The construct validity of assertion: Contributions of four assessment procedures and Norman's personality factors. *Journal of Personality, 56*, 763-783. doi: 10.1111/j.1467-6494.1988.tb00476.x
- Bratko, D., Vukosav, Ž., Zarevski, P., & Vranić, A. (2002). The relations of shyness and assertiveness traits with the dimensions of the five-factor model in adolescence. *Review of Psychology, 9*, 17-24.
- Burleson, B. R. (2007). Constructivism: A general theory of communication skill. In B. B. Whaley & W. Samter (Eds.), *Explaining Communication: Contemporary Theories and Exemplars*, (pp.105-128). New York: Routledge.
- Buss, D. M. (1996). Social adaptation and five major factors of personality. In J. S. Wiggins (Ed.). *The five-factor model of personality: Theoretical perspectives*, (pp.180-207). New York: Guilford.
- Carson, S. H., Peterson, J. B., & Higgins, D. M. (2005). Reliability, validity, and factor structure of the creative achievement questionnaire. *Creativity Research Journal, 17*, 37-50. doi: 10.1207/s15326934crj1701\_4

- Cattell, R. B. (1943). The description of personality: basic traits resolved into clusters. *The Journal of Abnormal and Social Psychology*, 38, 476-506. doi:10.1037/h0054116
- Claxton-Oldfield, S., & Banzen, Y. (2010). Personality characteristics of hospice palliative care volunteers: the “big five” and empathy. *American Journal of Hospice and Palliative Medicine*, 27, 407-412. doi:10.1177/1049909110364017
- Cole, J. G., & McCroskey, J. C. (2000). Temperament and socio-communicative orientation. *Communication Research Reports*, 17, 105-114. doi: 10.1080/08824090009388757
- Costa, P. T., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, 4, 5-13. doi:10.1037/1040-3590.4.1.5
- Costa, P. T., & McCrae, R. R. (1998). Six approaches to the explication of facet-level traits: examples from conscientiousness. *European Journal of Personality*, 12, 117-134. doi: 10.1002/(SICI)1099-0984(199803/04)12:2<117::AID-PER295>3.0.CO;2-C
- Costa, P. T., & McCrae, R. R. (2008). The revised neo personality inventory (neo-pi-r). In G. J. Boyle, G. Matthews & D. H. Saklofske (Eds.), *The SAGE handbook of personality, theory and assessment*, 2, (pp. 179-198). London, England: Sage.
- Costa Jr, P., Terracciano, A., & McCrae, R. R. (2001). Gender differences in personality traits across cultures: robust and surprising findings. *Journal of Personality and Social Psychology*, 81, 322-331. doi:10.1037/0022-3514.81.2.322
- Cuperman, R., & Ickes, W. (2009). Big Five predictors of behavior and perceptions in initial dyadic interactions: Personality similarity helps extraverts and introverts, but hurts “disagreeables”. *Journal of Personality and Social Psychology*, 97, 667-684 doi: 10.1037/a0015741

- De Moor, M. H., Costa, P. T., Terracciano, A., Krueger, R. F., De Geus, E. J., Toshiko., Penninx, B.W., Esko, T., Madden, P.A., Derringer, J. and Amin, N. (2012). Meta-analysis of genome-wide association studies for personality. *Molecular Psychiatry*, *17*, 337-349. doi:10.1038/mp.2010.128
- de Vries, R. E., Bakker-Pieper, A., Konings, F. E., & Schouten, B. (2013). The Communication Styles Inventory (CSI): A six-dimensional behavioral model of communication styles and its relation with personality. *Communication Research*, *40*, 506-532. doi: 10.1177/0093650211413571
- de Vries, R. E., Bakker-Pieper, A., & Oostenveld, W. (2010). Leadership= communication? The relations of leaders' communication styles with leadership styles, knowledge sharing and leadership outcomes. *Journal of Business and Psychology*, *25*, 367-380. doi: 10.1007/s10869-009-9140-2
- DeYoung, C. G. (2010). Personality neuroscience and the biology of traits. *Social and Personality Psychology Compass*, *4*, 1165-1180. doi: 10.1111/j.1751-9004.2010.00327.x
- DeYoung, C. G. (2014). Openness/Intellect: a dimension of personality reflecting cognitive exploration. In Mikulincer, M, Shaver, P. R, Cooper, M. L & Larsen, R. J (Eds.), *APA handbook of personality and social psychology: Personality processes and individual differences*, *4*, (pp. 369-399). Washington DC: American Psychological Association. doi:10.1037/14343-017
- DeYoung, C. G., Peterson, J. B., & Higgins, D. M. (2002). Higher-order factors of the Big Five predict conformity: Are there neuroses of health? *Personality and Individual Differences*, *33*, 533-552. doi:10.1016/S0191-8869(01)00171-4

- DeYoung, C. G., Peterson, J. B., & Higgins, D. M. (2005). Sources of openness/intellect: Cognitive and neuropsychological correlates of the fifth factor of personality. *Journal of Personality*, 73, 825-858. doi: 10.1111/j.1467-6494.2005.00330.x
- Digman, J. M. (1997). Higher-order factors of the Big Five. *Journal of Personality and Social Psychology*, 73, 1246-1256. doi:10.1037/0022-3514.73.6.1246
- Drollinger, T., Comer, L. B., & Warrington, P. T. (2006). Development and validation of the active empathetic listening scale. *Psychology & Marketing*, 23, 161-180. doi:10.1002/mar.20105
- Eysenck, H. J., Barrett, P., Wilson, G., & Jackson, C. (1992). Primary trait measurement of the 21 components of the PEN system. *European Journal of Psychological Assessment*, 8, 109-117.
- Eysenck, H. J., & Eysenck, M. W. (1985). *Personality and individual differences: A natural science approach*. New York, Plenum.
- Feist, G. J. (1998). A meta-analysis of personality in scientific and artistic creativity. *Personality and Social Psychology Review*, 2, 290-309. doi: 10.1207/s15327957pspr0204\_5
- Feist, G. J., & Brady, T. R. (2004). Openness to experience, non-conformity, and the preference for abstract art. *Empirical Studies of the Arts*, 22, 77-89. doi:10.2190/Y7CA-TBY6-V7LR-76GK
- Fiske, D. W. (1949). Consistency of the factorial structures of personality ratings from different sources. *Journal of Abnormal and Social Psychology*, 44, 329-344.
- Floyd, K. (2006). *Communicating affection: Interpersonal behavior and social context*. Cambridge, England: Cambridge University Press.
- Funder, D. C., & Sneed, C. D. (1993). Behavioral manifestations of personality: An ecological approach to judgmental accuracy. *Journal of Personality and Social Psychology*, 64, 479-490. doi: 10.1037/0022-3514.64.3.479

- Gearhart, C. C., & Bodie, G. D. (2011). Active-empathic listening as a general social skill: Evidence from bivariate and canonical correlations. *Communication Reports, 24*, 86-98. doi: 10.1080/08934215.2011.610731
- Gearhart, C. C., & Bodie, G. D. (2012). Sensory-processing sensitivity and communication apprehension: Dual influences on self-reported stress in a college student sample. *Communication Reports, 25*, 27-39. doi: 10.1080/08934215.2012.672216
- Glisky, M. L., Tataryn, D. J., Tobias, B. A., Kihlstrom, J. F., & McConkey, K. M. (1991). Absorption, openness to experience, and hypnotizability. *Journal of Personality and Social Psychology, 60*, 263-272. doi: 10.1037/0022-3514.60.2.263
- Goldberg, L. R. (1990). An alternative" description of personality": The big-five factor structure. *Journal of Personality and Social Psychology, 59*, 1216-1229. doi:10.1037/0022-3514.59.6.1216
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I.J. Mervielde, F. Deary, De Fruyt & F. Ostendorf (Eds.), *Personality psychology in Europe* (pp 7-28). Tilburg: Tilburg University Press.
- Gosling, S. D., & John, O. P. (1999). Personality dimensions in nonhuman animals a cross-species review. *Current Directions in Psychological Science, 8*, 69-75. doi: 10.1111/1467-8721.00017
- Grant, A. M. (2013). Rethinking the Extraverted Sales Ideal The Ambivert Advantage. *Psychological Science, 24*, 1024-1030. doi:10.1177/0956797612463706

- Graziano, W. G., Habashi, M. M., Sheese, B. E., & Tobin, R. M. (2007). Agreeableness, empathy, and helping: A person $\times$  situation perspective. *Journal of Personality and Social Psychology*, *93*, 583-599. doi: 10.1037/0022-3514.93.4.583
- Greenleaf, R. K. (1970). *The Servant as Leader*. Indianapolis, IN: The Robert K. Greenleaf Center.
- Guadagno, R. E., Okdie, B. M., & Eno, C. A. (2008). Who blogs? Personality predictors of blogging. *Computers in Human Behavior*, *24*, 1993-2004. doi:10.1016/j.chb.2007.09.001
- Henderson, M., & Furnham, A. (1983). Dimensions of assertiveness: factor analysis of five assertion inventories. *Journal of Behavior Therapy and Experimental Psychiatry*, *14*, 223-231. doi: 10.1016/0005-7916(83)90053-8
- Hershberger, S. L., Plomin, R., & Pedersen, N. L. (1995). Traits and metatraits: their reliability, stability, and shared genetic influence. *Journal of Personality and Social Psychology*, *69*, 673-685. doi:10.1037/0022-3514.69.4.673
- Jakubowski-Spector, P. (1973). Facilitating the growth of women through assertive training. *The Counseling Psychologist*, *4*, 75-86. doi:10.1177/001100007300400107
- Jang, K. L., Livesley, W. J., & Vemon, P. A. (1996). Heritability of the big five personality dimensions and their facets: a twin study. *Journal of Personality*, *64*, 577-592. doi:10.1111/j.1467-6494.1996.tb00522.x
- Jensen-Campbell, L. A., Adams, R., Perry, D. G., Workman, K. A., Furdella, J. Q., & Egan, S. K. (2002). Agreeableness, extraversion, and peer relations in early adolescence: Winning friends and deflecting aggression. *Journal of Research in Personality*, *36*, 224-251. doi:10.1006/jrpe.2002.2348

- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research*, (2nd ed.) (pp.102-138). New York: Guilford.
- Judge, T. A., & Bono, J. E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology*, 85, 751-765. doi: 10.1037//0021-9010.85.5.751
- King, J. E., & Figueredo, A. J. (1997). The five-factor model plus dominance in chimpanzee personality. *Journal of Research in Personality*, 31, 257-271. doi:10.1006/jrpe.1997.2179
- Kirst, I. K. (2011). *Investigating the relationship between assertiveness and personality characteristics* (Doctoral dissertation, University of Central Florida Orlando, Florida).
- Kluger, A. N., & Zaidel, K. (2013). Are listeners perceived as leaders? *International Journal of Listening*, 27, 73-84. doi:10.1080/10904018.2013.754283
- Knapp, F., & Heidingsfelder, M. (2001). Drop-out analysis: Effects of the survey design. In U. D. Reips & M. Bosnjak (Eds.), *Dimensions of internet science* (pp. 221–230). Lengerich, Germany: Pabst Science Publishers.
- Komarraju, M., Karau, S. J., Schmeck, R. R., & Avdic, A. (2011). The Big Five personality traits, learning styles, and academic achievement. *Personality and Individual Differences*, 51, 472-477. doi:10.1016/j.paid.2011.04.019
- Lakey, B., Ross, L. T., Butler, C., & Bentley, K. (1996). Making social support judgments: The role of similarity and conscientiousness. *Journal of Social and Clinical Psychology*, 15, 283-304. doi: 10.1521/jscp.1996.15.3.283

- Lee, K., & Ashton, M. C. (2005). Psychopathy, Machiavellianism, and narcissism in the Five-Factor Model and the HEXACO model of personality structure. *Personality and Individual Differences, 38*, 1571-1582. doi:10.1016/j.paid.2004.09.016
- Lesh, T. V. (1970). Zen meditation and the development of empathy in counselors. *Journal of Humanistic Psychology, 10*, 39-74.
- Leung, S. K., & Bond, M. H. (2001). Interpersonal communication and personality: Self and other perspectives. *Asian Journal of Social Psychology, 4*, 69-86. doi: 10.1111/1467-839X.00076
- Magalhães, E., Costa, P., & Costa, M. J. (2012). Empathy of medical students and personality: evidence from the Five-Factor Model. *Medical Teacher, 34*, 807-812. doi: 10.3109/0142159X.2012.702248
- Malouff, J. M., Thorsteinsson, E. B., Schutte, N. S., Bhullar, N., & Rooke, S. E. (2010). The five-factor model of personality and relationship satisfaction of intimate partners: A meta-analysis. *Journal of Research in Personality, 44*, 124-127. doi:10.1016/j.jrp.2009.09.004
- Masters, J. C., Burish, T. G., Hollon, S. D., & Rimm, D. C. (1987). *Behavior therapy: Techniques and empirical findings (3)*. New York: Harcourt Brace Jovanovich.
- McCormick, I. A. (1985). A simple version of the Rathus Assertiveness Schedule. *Behavioral Assessment, 7*, 95-99.
- McCrae, R. R. (1987). Creativity, divergent thinking, and openness to experience. *Journal of Personality and Social Psychology, 52*, 1258-1265. doi: 10.1037/0022-3514.52.6.1258
- McCrae, R. R. (2002). NEO-PI-R data from 36 cultures. In R.R. McCrae & J. Allik (Eds.), *The five-factor model of personality across cultures. International and Cultural Psychology Series*, (pp. 105-125). New York, US: Kluwer Academic/Plenum.

- McCrae, R. R., & Costa, P. T. (1985). Comparison of EPI and psychoticism scales with measures of the five-factor model of personality. *Personality and Individual Differences*, 6, 587-597.  
doi:10.1016/0191-8869(85)90008-X
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52, 81-90.  
doi:10.1037/0022-3514.52.1.81
- McCrae, R. R., & Costa Jr., P. T. (1997). Personality trait structure as a human universal. *American Psychologist*, 52, 509-516. doi: 10.1037/0003-066X.52.5.509
- McCrae, R. R., Costa Jr., P. T., Ostendorf, F., Angleitner, A., Hřebíčková, M., Avia, M. D., & Smith, P. B. (2000). Nature over nurture: temperament, personality, and life span development. *Journal of Personality and Social Psychology*, 78, 173-186. doi: 10.1037/0022-3514.78.1.173
- McCrae, R. R., Costa Jr., P. T., Terracciano, A., Parker, W. D., Mills, C. J., De Fruyt, F., & Mervielde, I. (2002). Personality trait development from age 12 to 18: Longitudinal, cross-sectional, and cross-cultural analyses. *Journal of Personality and Social Psychology*, 83, 1456–1468. doi:10.1037/0022-3514.83.6.1456
- McCrae, R. R., & Sutin, A. R. (2009). Openness to Experience and its social consequences. In M.R. Leary & R. H. Hoyle ,(Eds.), *Handbook of individual differences in social behavior*. New York: Guilford.
- McCroskey, J., Heisel, A., & Richmond, V. (2001). Eysenck's BIG THREE and communication traits: Three correlational studies. *Communication Monographs*, 68, 360-366.  
doi:10.1080/03637750128068

- McCroskey, J. C., & Richmond, V. P. (1996). *Fundamentals of human communication: An interpersonal perspective*. Prospect Heights, IL: Waveland Press.
- McCroskey, J. C., Richmond, V. P., Heisel, A. D., & Hayhurst, J. L. (2004). Eysenck's BIG THREE and communication traits: Communication traits as manifestations of temperament. *Communication Research Reports*, 21, 404-410. doi:10.1080/08824090409360004
- Mehrabian, A., Young, A. L., & Sato, S. (1988). Emotional empathy and associated individual differences. *Current Psychology*, 7, 221-240. doi: 10.1007/BF02686670
- Miller, L. C., Berg, J. H., & Archer, R. L. (1983). Openers: Individuals who elicit intimate self-disclosure. *Journal of Personality and Social Psychology*, 44, 1234-1244. doi: 10.1037/0022-3514.44.6.1234
- Morreale, S. P., & Pearson, J. C. (2008). Why communication education is important: The centrality of the discipline in the 21st century. *Communication Education*, 57, 224-240. doi:10.1080/03634520701861713
- Moss, G. (2016, June 8). Inclusive leadership: a miracle cure. Retrieved from <http://www.changeboard.com/content/5963/inclusive-leadership-a-miracle-cure/>
- Mount, M. K., & Barrick, M. R. (1995). The Big Five personality dimensions: Implications for research and practice in human resources management. *Research in Personnel and Human Resources Management*, 13, 153-200.
- Moutafi, J., Furnham, A., & Crump, J. (2007). Is managerial level related to personality? *British Journal of Management*, 18, 272-280. doi:10.1111/j.1467-8551.2007.00511.x
- Myers, S., Martin, M., & Mottet, T. (2002). Students' motives for communicating with their instructors: Considering instructor socio-communicative style, student socio-communicative

orientation, and student gender. *Communication Education*, 51, 121-133.

doi:10.1080/03634520216511

Nettle, D. (2006). The evolution of personality variation in humans and other animals. *American Psychologist*, 61, 622-631. doi:10.1037/0003-066X.61.6.622.

Nettle, D., & Liddle, B. (2008). Agreeableness is related to social-cognitive, but not social-perceptual, theory of mind. *European Journal of Personality*, 22, 323-335. doi: 10.1002/per.672

Nevid, J. S., & Rathus, S. A. (1979). Factor analysis of the Rathus Assertiveness Schedule with a college population. *Journal of Behavior Therapy and Experimental Psychiatry*, 10, 21-24. doi:10.1016/0005-7916(79)90031-4

Norman, W. T. (1967). *2800 personality trait descriptors: Normative operating characteristics for a university population*. Ann Arbor: Department of Psychology, University of Michigan.

Norton, R., & Warnick, B. (1976). Assertiveness as a communication construct. *Human Communication Research*, 3, 62-66. doi: 10.1111/j.1468-2958.1976.tb00504.x

Olson, K. R. (2005). Engagement and self-control: Superordinate dimensions of Big Five traits. *Personality and Individual Differences*, 38, 1689-1700. doi:10.1016/j.paid.2004.11.003

Ozer, D. J., & Benet-Martinez, V. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology*, 57, 401-421. doi: 10.1146/annurev.psych.57.102904.190127

Paterson, H., Reniers, R., & Völlm, B. (2009). Personality types and mental health experiences of those who volunteer for helplines. *British Journal of Guidance & Counselling*, 37, 459-471. doi: 10.1080/03069880903161419

- Pearson, J. C. (1979). A factor analytic study of the items in the Rathus Assertiveness Schedule and the Personal Report of Communication Apprehension. *Psychological Reports, 45*, 491-497. doi: 10.2466/pr0.1979.45.2.491
- Pedersen, N. L., Plomin, R., McClearn, G. E., & Friberg, L. (1988). Neuroticism, extraversion, and related traits in adult twins reared apart and reared together. *Journal of Personality and Social Psychology, 55*, 950-957. doi:10.1037/0022-3514.55.6.950
- Pence, M. E., & James, T. A. (2015). The Role of Sex Differences in the Examination of Personality and Active-Empathic Listening: An Initial Exploration. *International Journal of Listening, 29*, 85-94. doi: 10.1080/10904018.2014.965390
- Pence, M. E., & Vickery, A. J. (2012). The roles of personality and trait emotional intelligence in the active-empathic listening process: Evidence from correlational and regression analyses. *International Journal of Listening, 26*, 159-174. doi: 10.1080/10904018.2012.712810
- Pulver, A., Allik, J., Pulkkinen, L., & Hämäläinen, M. (1995). A Big Five personality inventory in two non-Indo-European languages. *European Journal of Personality, 9*, 109-124. doi: 10.1002/per.2410090205
- Ramanaiah, N. V., & Deniston, W. M. (1993). NEO personality inventory profiles of assertive and nonassertive persons. *Psychological Reports, 73*, 336-338. doi: 10.2466/pr0.1993.73.1.336
- Ramanaiah, N. V., Heerboth, J. R., & Jinkerson, D. L. (1985). Personality and self-actualizing profiles of assertive people. *Journal of Personality Assessment, 49*, 440-443. doi: 10.1207/s15327752jpa4904\_14
- Rathus, S. A. (1973). A 30-item schedule for assessing assertive behavior. *Behavior Therapy, 4*, 398-406.

- Richmond, V. P., Smith Jr, R. S., Heisel, A. D., & McCroskey, J. C. (2002). The association of physician socio- communicative style with physician credibility and patient satisfaction. *Communication research Reports, 19*, 207-215.
- Richendoller, N. R., & Weaver, J. B. (1994). Exploring the links between personality and empathic response style. *Personality and Individual Differences, 17*, 303-311. doi:10.1016/0191-8869(94)90278-X
- Richmond, V. P., & McCroskey, J. C. (1990). Reliability and separation of factors on the assertiveness-responsiveness measure. *Psychological Reports, 67*, 449-450. doi: 10.2466/pr0.1990.67.2.449
- Riemann, R., Angleitner, A., & Strelau, J. (1997). Genetic and Environmental Influences on Personality: A Study of Twins Reared Together Using the Self- and Peer Report NEO-FFI Scales. *Journal of Personality, 65*, 449-475. doi:10.1111/j.1467-6494.1997.tb00324.x
- Roberts, B. W., Chernyshenko, O. S., Stark, S., & Goldberg, L. R. (2005). The structure of conscientiousness: An empirical investigation based on seven major personality questionnaires. *Personnel Psychology, 58*, 103-139. doi: 10.1111/j.1744-6570.2005.00301.x
- Rogers, C. R. (1951). *Client-centered therapy: Its current practice, implications and theory* (p. 491). Boston: Houghton Mifflin.
- Rogers, C. R., & Farson, R. E. (1957). Active listening. Industrial Relations Center of The University of Chicago. In R. G. Newman, M. A. Danzinger & M. Cohen (Eds.), *Communicating in Business Today*. Washington, D.C.: Heath & Company.

- Ross, C., Orr, E. S., Susic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior, 25*, 578-586. doi:10.1016/j.chb.2008.12.024
- Rothbart, M. K., Ahadi, S. A., & Evans, D. E. (2000). Temperament and personality: origins and outcomes. *Journal of Personality and Social Psychology, 78*, 122-135. doi:10.1037/0022-3514.78.1.122
- Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in Human Behavior, 27*, 1658-1664. doi:10.1016/j.chb.2011.02.004
- Schmitt, D. P., Allik, J., McCrae, R. R., & Benet-Martínez, V. (2007). The geographic distribution of Big Five personality traits patterns and profiles of human self-description across 56 nations. *Journal of Cross-Cultural Psychology, 38*, 173-212. doi: 10.1177/0022022106297299
- Sharifirad, M. S. (2013). Transformational leadership, innovative work behavior, and employee well-being. *Global Business Perspectives, 1*, 198-225. doi: 10.1007/s40196-013-0019-2
- Singhal, A., & Nagao, M. (1993). Assertiveness as communication competence a comparison of the communication styles of American and Japanese students. *Asian Journal of Communication, 3*, 1-18. doi: 10.1080/01292989309359570
- Sneed, C. D., McCrae, R. R., & Funder, D. C. (1998). Lay conceptions of the five-factor model and its indicators. *Personality and Social Psychology Bulletin, 24*, 115-126. doi: 10.1177/0146167298242001

- Snorrason, S. K. (2014). *Exalted Road of Silence: How active-empathetic listening for supervisors is associated to subjective well-being and engagement among employees*. University of Iceland. Thesis for MS in Strategic Management, 2014.
- Spears, L. C. (1996) Reflections on Robert K. Greenleaf and servant-leadership. *Leadership and Organization Development Journal*, 17, 33-35. doi: 10.1108/01437739610148367
- Tellegen, A., Lykken, D. T., Bouchard, T. J., Wilcox, K. J., Segal, N. L., & Rich, S. (1988). Personality similarity in twins reared apart and together. *Journal of Personality and Social Psychology*, 54, 1031-1039. doi:10.1037/0022-3514.54.6.1031
- Tupes, E. C., & Christal, R. E. (1961). *Recurrent personality factors based on trait ratings* (No. ASD-TR-61-97). Armed services technical report. Personnel research lab Lackland AFB TX.
- Vestewig, R. E., & Moss, M. K. (1976). The relationship of extraversion and neuroticism to two measures of assertive behavior. *Journal of Psychology*, 93, 141-146. doi:10.1080/00223980.1976.9921385
- Villaume, W. A., & Bodie, G. D. (2007). Discovering the listener within us: The impact of trait-like personality variables and communicator styles on preferences for listening style. *International Journal of Listening*, 21, 102-123. doi: 10.1080/10904010701302006
- Vuoskoski, J. K., Thompson, W. F., McIlwain, D., & Eerola, T. (2012). Who enjoys listening to sad music and why? *Music Perception*, 29, 311-317. doi:10.1525/mp.2012.29.3.311
- Washington, R. R., Sutton, C. D., & Feild, H. S. (2006). Individual differences in servant leadership: The roles of values and personality. *Leadership and Organization Development Journal*, 27, 700-716. doi: 10.1108/01437730610709309

Weaver, J. B., Watson, K. W., & Barker, L. L. (1996). Individual differences in listening styles: Do you hear what I hear? *Personality and Individual Differences, 20*, 381-387.

doi:10.1016/0191-8869(95)00194-8

Weisberg, Y. J., DeYoung, C. G., & Hirsh, J. B. (2011). Gender differences in personality across the ten aspects of the Big Five. *Frontiers in Psychology, 2*:178, 1-11.

doi: 10.3389/fpsyg.2011.00178

**Footnote**

<sup>1</sup> It was decided that where a participant had not rated an item, the total score for that scale or sub-scale would not be calculated. Therefore, the total number of participants varied slightly between scales and subscales (extraversion = 233; agreeableness = 238; conscientiousness = 238; openness = 234; neuroticism = 234; Rathus Assertiveness scale = 205; AELS total = 218; AELS sensing = 222; AELS processing = 239; AELS responding = 237