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The ACT Behavioral Skills Framework: How Does it Compare to Other Behavioral Models?

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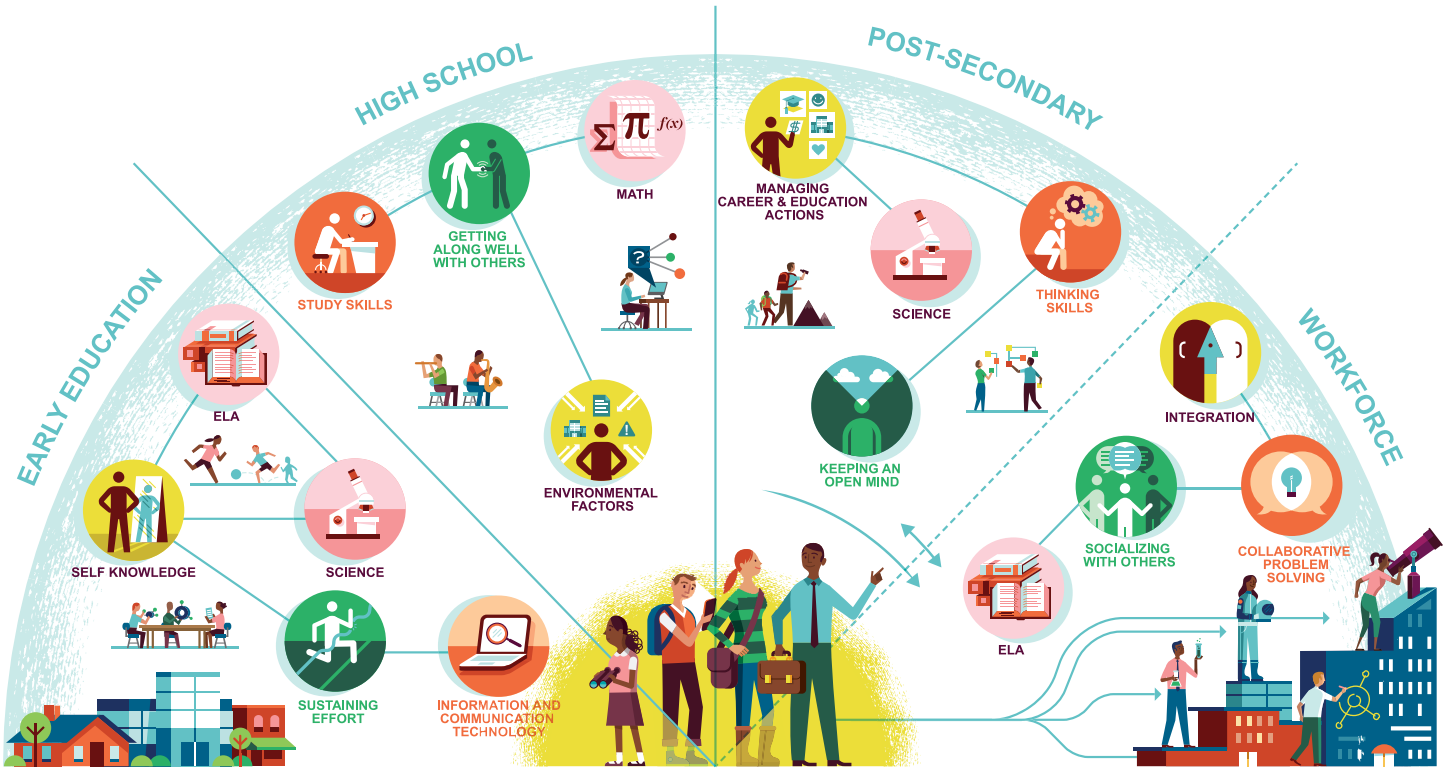

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Abstract

ACT researchers developed a Holistic Framework of educational and workplace readiness, useful to individuals and institutions throughout the education through career continuum. The framework defined critical skills—that individuals need to know and be able to do—which are divided into four broad areas: Core Academic Skills, Cross-Cutting Capabilities, Behavioral Skills, and Education and Career Navigation. Each broad domain is divided into components and each component is divided into subcomponents. The framework also incorporates specific Performance Level Descriptors, which are developmentally pertinent descriptions of what individuals can do to be successful at school and work. The framework was developed with developmental stages in mind so that the components are relevant across the education through career continuum. Herein, the Behavioral Skills domain of ACT's Holistic Framework is described and rationally compared to other existing models of behavior and personality, which are linked to successful performance in education and career. The purpose of this rational comparison is to preliminarily validate that all pertinent aspects of behavior captured in other models of personality are also captured in the Behavioral Skills Framework.

The ACT Behavioral Skills Framework: How Does it Compare to Other Behavioral Models?

Non-cognitive skills (i.e., factors beyond cognitive or academic skills) have been repeatedly identified as useful predictors of lifetime success (Organisation for Economic Co-operation and Development, 2015). In particular, personality and behavior skills are predictive of performance in education and work (e.g., Barrick & Mount, 1991; McAbee, Oswald, & Connelly, 2014; Organisation for Economic Co-operation and Development, 2015; Poropat, 2009; Viswesvaran, Ones, & Schmidt, 1996). Therefore, it is important to have a framework that defines personality and behavior skills that can be used to broadly communicate about these skills, to facilitate research, to assess skill levels of individuals, and to provide targeted training and interventions to improve education and work outcomes based on assessment results. The Behavioral Skills component of ACT's Holistic Framework—which also includes Core Academic Skills, Cross-Cutting Capabilities, and Education and Career Navigation—was created to do this. All areas of the Holistic Framework should be taken into consideration when evaluating the individual and his/her potential for success in school or work. However, this document is solely focused on the Behavioral Skills portion of the Holistic Framework.

Structure of ACT Behavioral Skills Framework

The HEXACO model of personality (Lee & Ashton, 2004) was used as the organizing structure of the Behavioral Skills Framework because of its apparent improvements on the Big Five model of personality (e.g., Costa & McCrae, 1985; Goldberg, 1990; Peabody & Goldberg, 1989). Namely, the HEXACO model was created with greater cultural inclusiveness (Ashton et al., 2004) which resulted in an additional and separate sixth factor of personality: Honesty-Humility. The Honesty-Humility factor, has been demonstrated to be effective in adding unique prediction to both academic (A. de Vries, de Vries, & Born, 2011) and workplace success (Johnson, Rowatt, & Petrini, 2011; Lee, Ashton, & de Vries, 2005), and therefore was valuable to include in the Behavioral Skills Framework. The six personality domains of the HEXACO model were renamed in the Behavioral Skills Framework to capture the behavioral representations of each personality trait, and to enhance the understanding of the constructs for a general audience (see Table 1).

Table 1. Names of HEXACO Domains in Behavioral Skills Framework

HEXACO Domain	Behavioral Skills Framework Domain
Honesty-Humility	Acting Honestly
Emotionality	Maintaining Composure
Extraversion	Socializing with Others
Agreeableness	Getting Along with Others
Conscientiousness	Sustaining Effort
Openness to Experience	Keeping an Open Mind

ACT's Behavioral Skills Framework follows a hierarchical structure. The highest level contains broad domains of personality (e.g., Sustaining Effort).The following and more detailed level contains components, or "facets" (e.g., Cooperation). Next, and even more detailed, are the subcomponents (e.g., Respect for others). The final and most specific level of the Behavioral Skills framework is composed of Performance Level Descriptors (PLDs), which are specific

observable behaviors that can lead to success in applied settings. Figure 1 contains an illustration of the framework's hierarchical organization.

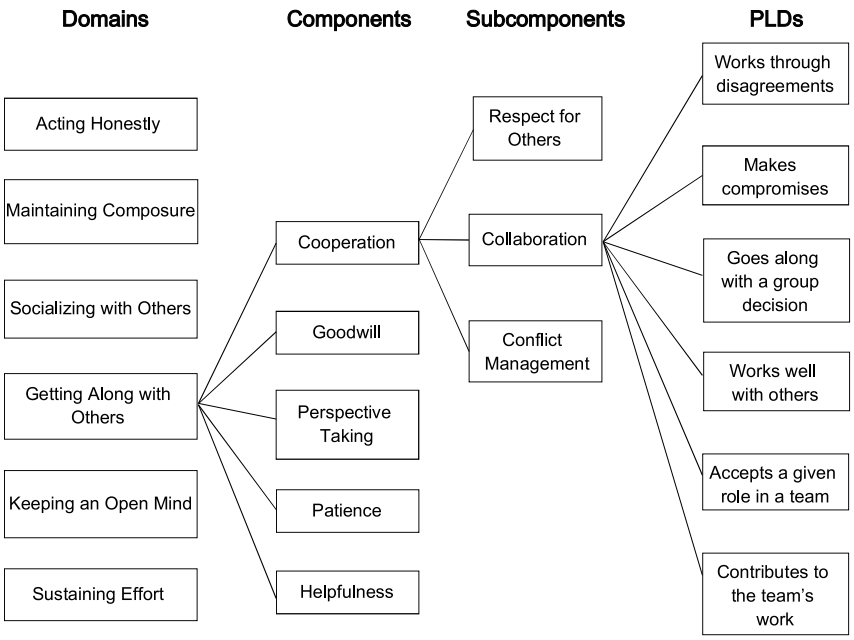

Figure 1. Illustration of the ACT Behavioral Skills Framework Organized from Broad Domains to Performance Level Descriptors

ACT's Behavioral Skills Framework is not the first framework to specify a hierarchical structure of personality constructs. For example, It has been found that higher order personality traits or domains (e.g., Conscientiousness, Agreeableness) are useful in predicting overarching job performance and academic success (Dudley, Orvis, Lebiecki, & Cortina, 2006; Mount & Barrick, 1998). Lower-order facets or components of personality (e.g., Persistence, Self-control) are better predictors of more specific behavioral outcomes (e.g., punctuality, cleanliness) when compared to the higher order personality traits (Dudley et al., 2006; Paunonen & Ashton, 2001; Roberts, Chernyshenko, Stark, & Goldberg, 2005). Currently, the theoretical and empirical research literature does not generally extend past the component/facet level and therefore may be failing to identify additional predictive factors of behavior.

To address this, ACT researchers have expanded beyond the component level to also include subcomponents, which are intended to be closer to the observable behaviors that may be explicitly trained or developed to enhance academic and workplace success. Since research suggests that non-cognitive skills are malleable, particularly during adolescent years (Almlund, Duckworth, Heckman, & Kautz, 2011; Farrington et al., 2012; Jones, Bouffard, & Weissbourd, 2013; Organisation for Economic Co-operation and Development, 2015), individuals can continue to develop in these areas. The specific behaviors (i.e., PLDs) included under each subcomponent were developed by subject matter experts (SMEs), such as researchers, professors, teachers, instructors, academic advisors, and workplace supervisors, to describe what students and employees need to know and be able and willing to do in order to achieve educational and career success. For each subcomponent, there are several developmental groups (i.e., elementary school, middle school, high school, postsecondary, and workforce). Also, within each group, PLDs have been organized by effectiveness level. While the specifics of what effective behavior looks like at the different age levels vary, the broad categories

remain the same. For example, the criteria for Self Control vary across age groups, whether it is related to interacting with others during gym class at school or during a monthly status meeting at work, but all age groups are expected to control their behavior. In general, older groups are held to higher standards of effectiveness. Having the same domains, components, and subcomponents across the age groups should help to promote longitudinal research and hopefully help facilitate success later in life through continuity of terminology and clearly delineated developmental pathways.

Comparison of ACT Behavioral Skills Framework to Other Behavior Models

The primary purpose of this document is to compare ACT's Behavioral Skills Framework to other major personality and behavioral models. This serves as an initial form of validation of the framework's comprehensiveness prior to empirical validation, which will be conducted in the future. The appendix of this document contains a comprehensive list of the Behavioral Skill domain, component, and subcomponent definitions included within the Holistic Framework.

ACT researchers underwent an extensive process to develop the Behavioral Skills Framework (e.g., literature review, consultation with academic experts, gathering input from SMEs). Comparisons between frameworks were completed by a team of four research psychologists at ACT. Initially, a team of three doctoral level researchers developed a descriptive crosswalk comparing the domains, components, and subcomponents of the Behavioral Skills Framework to other models of behavior and personality. This was based on expert input and scholarly literature on the topics. Another doctoral-level researcher then compared and contrasted the degree of alignment between constructs in the Behavioral Skills Framework and other personality frameworks based on rational argument. To do this, the researcher began with a reference point (e.g., a Behavioral Skills subcomponent) and then compared its definition against construct definitions in other models. The metric used for comparison was the degree of congruency between the two construct definitions based on expert judgment. Constructs that were analyzed to have ≥70% congruency were ranked as a 3 (high congruency), those with ≤69% - ≥31% congruency were ranked as a 2 (moderate congruency), and those with ≤30% were ranked as a 1 (low congruency). Constructs with no congruency were not ranked. Once the first researcher completed the rational comparison, it was given to the other three researchers to review for agreement. After all discrepancies between raters were identified, the team of researchers discussed and re-ranked discrepant construct rankings until complete agreement was achieved between the team members.

The following sections of the document cover each of the six Behavioral Skills domains. Each section includes information on the Behavioral Skills domain, the comparison models, and an explanation of their areas of overlap and divergence. First, the model's components are compared to the Behavioral Skills Framework's components. Next, the models' components are compared to the Behavioral Skills Framework's subcomponents. (Though done when possible, few subcomponent to subcomponent comparisons could be made because few models include subcomponents besides the Behavioral Skills Framework.) This was done to ensure comprehensiveness in model comparison. In some instances, components or subcomponents from various models that do not map to a particular domain in the Behavioral Skills Framework are not mentioned in the text of this document, though all components are identified in the tables.

Although ACT researchers incorporated most aspects of the major personality and behavioral models, not all components were included in the final framework. Exceptions include Activity/Energy Level, Materialism, Satisfaction with Life, Stimulus Seeking, Openness to Own Feelings, Self-Perception of Cognitive Abilities, and Appreciation of Aesthetics. These were purposely left out during the development process due to feedback from the SMEs stating that they are less malleable and not as directly relevant to education and work success.

Models Used for Comparison

Within this document, ACT's Behavioral Skills Framework is compared to several different models of behavior. Some of these models are compared to each of the six domains in the Behavioral Skills Framework (i.e., the Big Five: NEO-PI-R, HEXACO, and the Hogan Personality Inventory [HPI]) because they have factors that are directly comparable to every domain. Other models, such as Roberts et al.'s (2005) model, are compared only when appropriate. For example, Roberts et al.'s (2005) specifically deals with Conscientiousness, and therefore is only compared to the Sustaining Effort domain of the Behavioral Skills Framework. Table 2 contains a general description of the behavior models that are repeatedly compared to the Behavioral Skills Framework.

Table 2. Behavior Models that are Repeatedly Compared to the Behavioral Skills Framework

Model	Description
Big Five: NEO-PI-R (Costa & McCrae, 1992)	The Big Five model includes five broad traits that encompass human personality: Conscientiousness, Agreeableness, Emotional Stability, Extraversion, and Openness. It is the most popular model in the personality literature (with over ten thousand citations) and has inspired many other models of personality and behavior (e.g., DeYoung, Quilty, & Peterson, 2007; Kern et al., 2013; Organisation for Economic Co-operation and Development, 2015; Soto & John, 2012). Part of the value of the Big Five model, aside from its parsimony and explanatory power, is that it includes lower-level components of personality within each of the five domains. The NEO-PI-R is the personality inventory that measures the Big Five.
HEXACO (Lee & Ashton, 2004)	The HEXACO model of personality is a recent extension of the Big Five, which adds the domain of Honesty-Humility to the Big Five domains by reapportioning some of the variance from Agreeableness, Conscientiousness, and Emotionality. It also includes lower-level components for each domain.
HPI (Hogan & Hogan, 2007)	The HPI is also based on the Five Factor Model, but incorporates several nuanced aspects of personality, interests, motivation, and values. It includes seven scales: Adjustment, Ambition, Sociability, Interpersonal Sensitivity, Prudence, Inquisitiveness, and Learning Approach.

Other models which are compared to the Behavioral Skills Framework are:

- Roberts et al. (2005)
- MacCann, Duckworth, and Roberts (2009)
- Dudley et al. (2006)
- Kern et al. (2013)
- DeYoung et al. (2007)
- Davies (2012)
- Watson and Clark (1997)
- Naragon-Gainey, Watson, and Markon (2009)
- Mussel, Winter, Gelléri, and Schuler (2011)

They are described in greater detail prior to their comparisons within this document.

Sustaining Effort (Conscientiousness)

This section focuses on ACT's Behavioral Skills domain of Sustaining Effort (Conscientiousness). First, Sustaining Effort and its components are defined. Second, other models of Conscientiousness are reviewed and compared with Sustaining Effort. Finally, a general overview of the overarching differences between Sustaining Effort and other theoretical models is summarized. As listed in Table 3, Behavioral Skills Sustaining Effort includes a person's level of diligence, effort, organization, self-control, and compliance with rules. The domain includes six components: Order, Persistence, Dependability, Self Control, Goal Striving, and Rule Consciousness. In general, these correspond to components found in other models of conscientiousness.

Table 3. Behavioral Skills: Sustaining Effort

Domain	Component	Subcomponent
Sustaining Effort (Conscientiousness): Defined as a person's level of diligence, effort, organization, self-control, and compliance with rules.	Order: Planning and organizing tasks and materials, creating schedules, monitoring progress, and paying close attention to details.	Organization Planning Monitoring
	Persistence: Working hard, making progress on relevant tasks, and maintaining focus despite setbacks or difficulties.	Overcoming Challenges Maintaining Effort Focusing
	Dependability: Reliably fulfilling responsibilities, meeting deadlines, and producing quality work.	Timeliness Follow Through Quality
	Self-Control: Managing impulses and weighing the consequences of one's behavior before acting.	Restraint Thinking Before Acting
	Goal Striving: Setting challenging goals, doing tasks without being told, and working to improve or learn new skills.	Self-Improvement Initiative Goal Setting
	Rule Consciousness: Following rules and procedures and complying with authority.	Compliance Respect for Rules/Authority

Other Models of Conscientiousness

Big Five: NEO-PI-R

Costa and McCrae (1992) identified the Conscientiousness components of the NEO-PI-R as Order, Achievement Striving, Self-Discipline, Deliberation, Dutifulness, and Competence (Table 4).

Table 4. Big Five: NEO-PI-R

Domain	Component
Conscientiousness:	Order: Measures a want or need to keep things in their proper places.
	Achievement striving: Measures diligence, purpose, and sense of direction in life.
	Self-discipline: The ability to begin tasks and carry them through to completion despite boredom and other distractions.
	Deliberation: The tendency to think carefully before acting.
	Dutifulness: Governed by conscience.
	Competence: The sense that one is capable, sensible, prudent, and effective.

At the component level, NEO-PI-R Order has low congruency with Sustaining Effort Order. NEO-PI-R Order only focuses on the organization of physical materials, while Sustaining Effort Order focuses on the organization, planning, and monitoring of tasks, in an addition to the organization of physical materials. NEO-PI-R Achievement Striving has high congruency with Sustaining Effort Goal Striving. NEO-PI-R Self-discipline has low congruency with Sustaining Effort Dependability and high congruency with Sustaining Effort Persistence. NEO-PI-R Deliberation has high congruency with Sustaining Effort Self Control. NEO-PI-R Dutifulness has low congruency with Sustaining Effort Order and high congruency with Sustaining Effort Rule Consciousness. NEO-PI-R Dutifulness appears to also have congruency with the Behavioral Skills Acting Honestly domain. Lastly, NEO-PI-R Competence has high congruency with Sustaining Effort Self Control. NEO-PI-R Competence also appears to be related to the Behavioral Skills Maintaining Composure domain. Table 5 contains a component-level overview of the congruency of the NEO-PI-R model with Sustaining Effort components.

Table 5. Congruency of Big Five: NEO-PI-R with Sustaining Effort Components

Congruency 1=Low 2=Moderate 3=High		Sustaining Effort					
		Dependability	Order	Persistence	Rule Consciousness	Goal Striving	Self Control
NEO-PI-R Conscien-tiousness	Order		1				
	Achievement Striving					3	
	Self-Discipline	1		3			
	Deliberation						3
	Dutifulness		1		3		
	Competence			1			

When comparing the NEO-PI-R components to the subcomponents of the Sustaining Effort domain, NEO-PI-R Order was found to have moderate congruency with Sustaining Effort Organization. Achievement Striving has moderately congruency with Sustaining Effort Self Improvement, Sustaining Effort Initiative, and Sustaining Effort Goal Setting. NEO-PI-R Self-discipline has moderate congruency with Sustaining Effort Follow Through, Sustaining Effort Overcoming Challenge, Sustaining Effort Maintaining Effort, and Sustaining Effort

Focusing. NEO-PI-R Deliberation has moderate congruency with Sustaining Effort Restraint and high congruency with Sustaining Effort Thinking Before Acting. NEO-PI-R Dutifulness has moderate congruency with Sustaining Effort Compliance and Sustaining Effort Respect for Rules/Authority. Lastly, NEO-PI-R Competence was identified as having low congruency with Sustaining Effort Overcoming Challenge.

HEXACO

Lee and Ashton (2004) identify the components of Conscientiousness in the HEXACO framework as Organization, Diligence, Prudence, and Perfectionism (Table 6).

Table 6. HEXACO

Domain	Component
Conscientiousness:	Organization: A tendency to seek order, particularly in one's physical surroundings.
	Diligence: A tendency to work hard.
	Prudence: A tendency to deliberate carefully and to inhibit impulses.
	Perfectionism: A tendency to be thorough and concerned with details.

At the component level, HEXACO Organization has low congruency with Sustaining Effort Order. HEXACO Diligence has high congruency with Sustaining Effort Persistence and low congruency with Sustaining Effort Goal Striving. HEXACO Prudence has high congruency with Sustaining Effort Self Control. HEXACO Perfectionism has low congruency with Sustaining Effort Dependability, Sustaining Effort Order, and Sustaining Effort Persistence. Table 7 contains a component-level overview of the congruency of the HEXACO model with Sustaining Effort components.

Table 7. Congruency of HEXACO with Sustaining Effort Components

Congruency 1=Low 2=Moderate 3=High		Sustaining Effort					
		Dependability	Order	Persistence	Rule Consciousness	Goal Striving	Self Control
HEXACO Conscien-tiousness	Organization		1				
	Diligence			3		1	
	Prudence						3
	Perfectionism	1	1	1			

When comparing the HEXACO components to the subcomponents of the Sustaining Effort domain, HEXACO Organization was found to have moderate congruency with Sustaining Effort Organization and low congruency with Sustaining Effort Planning, as these involve organizing materials and creating schedules. HEXACO Diligence has moderate congruency with Sustaining Effort Overcoming Challenge and Sustaining Effort Maintaining Effort (as both include exerting effort, sustaining effort, and persisting despite difficulty or setbacks), and Sustaining Effort Focusing (as working hard on a task also requires the ability to maintain attention). HEXACO Diligence also has low congruency with Sustaining Effort Self Improvement and Sustaining Effort Initiative. HEXACO Prudence has high congruency with

Sustaining Effort Restraint and Sustaining Effort Thinking Before Acting. Lastly, HEXACO Perfectionism was identified as having moderate congruency with Sustaining Effort Quality and Sustaining Effort Monitoring (as submitting high quality work and checking on progress toward tasks involves attending to details) and low congruency with Sustaining Effort Maintaining Effort and Sustaining Effort Focusing (as these are both prerequisites for being thorough and concerned with details).

Hogan Personality Inventory

The developers of the HPI noted that Prudence is intended to measure the degree to which a person is conscientious, conforming, and dependable (Hogan & Hogan, 2007). Components of Prudence include: Mastery, Not Autonomous, Impulse Control, Not Spontaneous, Virtuous, Avoids Trouble, and Moralistic (Table 8).

Table 8. HPI

Domain	Component
Prudence:	Mastery: Being hardworking.
	Not Autonomous: Concern for others opinions of oneself.
	Impulse Control: Lacking impulsivity.
	Not Spontaneous: A preference for predictability.
	Virtuous: Being perfectionistic.
	Avoids Trouble: Professed probity (i.e., honesty).
	Moralistic: Adhering to conventional values.

At the component level, HPI Mastery was identified as having moderate congruency with Sustaining Effort Persistence. HPI Not Autonomous has low inverse congruency with Sustaining Effort Goal Striving. HPI Not Autonomous appears to also have congruency with the Behavioral Skills Getting Along With Others domain. HPI Impulse control has high congruency with Sustaining Effort Self Control. HPI Impulse Control also appears to have congruency with the Behavioral Skills Acting Honestly domain. HPI Not Spontaneous has high congruency with Sustaining Effort Dependability and low congruency with Sustaining Effort Order, Sustaining Effort Rule Consciousness, and Sustaining Effort Self Control. HPI Virtuous has high congruency with Sustaining Effort Order and low congruency with Sustaining Effort Dependability and Sustaining Effort Persistence. HPI Avoids Trouble has high congruency with Sustaining Effort Rule Consciousness. HPI Moralistic has moderate congruency with Sustaining Effort Rule Consciousness. Table 9 contains a component-level overview of the congruency of the HPI model with Sustaining Effort components.

Table 9. Congruency of HPI with Sustaining Effort Components

Congruency 1=Low 2=Moderate 3=High		Sustaining Effort					
		Dependability	Order	Persistence	Rule Consciousness	Goal Striving	Self Control
HPI Prudence	Mastery			3			
	Not Autonomous					1	
	Impulse Control						3
	Not Spontaneous	3	1		1		1
	Virtuous	1	3	1			
	Avoids Trouble				3		
	Moralistic				2		

When comparing the HPI components to the subcomponents of the Sustaining Effort domain, Mastery has moderate congruency with Overcoming Challenge, Maintaining Effort, and Focusing. Not Autonomous has low congruency with Initiative. Impulse Control has high congruency with both Restraint and Thinking Before Acting. Not Spontaneous has high congruency with Timeliness, moderate congruency with Planning, and low congruency with Compliance, Restraint, and Thinking Before Acting. Virtuous has moderate congruency with Quality, Organization, Planning, and Monitoring, while it has low congruency with Maintaining Effort and Focusing. Avoids Trouble has moderate congruency with Compliance and Respect for Rules/Authority. Lastly, Moralistic has moderate congruency with Respect for Rules/Authority as both involve adhering to rules or tradition.

Roberts et al. (2005)

Roberts et al. (2005) completed a structural analysis of Conscientiousness using items from 36 conscientiousness-related scales (e.g., 16-Personality Factors, HPI, California Personality Inventory, NEO). Their analysis suggests a six-factor solution and provides the most empirically and conceptually sound structure. The components identified are: Order, Industriousness, Self-control, Traditionalism, Virtue, and Responsibility (Table 10).

Table 10. Roberts et al. (2005)

Domain	Component
Conscientiousness:	Order: The ability to plan and organize tasks and activities.
	Industriousness: Being hard working, ambitious, confident, and resourceful.
	Self-control: The tendency to be cautious, levelheaded, able to delay gratification, and patient.
	Traditionalism: A tendency to comply with current rules, customs, norms, expectations; dislike of change, and not challenge authority.
	Virtue: A tendency to act in accordance with accepted rules of good or moral behavior and strive to be a moral exemplar.
	Responsibility: A liking to be of service to others, frequently contribute time and money to community projects, and to be cooperative and dependable.

At the component level, Roberts et al.'s (2005) Order has high congruency with Sustaining Effort Order. Roberts et al.'s (2005) Industriousness has high congruency with Sustaining Effort Persistence and Sustaining Effort Goal Striving. Roberts et al.'s (2005) Self-control has high congruency with Sustaining Effort Self Control. Roberts et al.'s (2005) Traditionalism has high congruency with Sustaining Effort Rule Consciousness. Roberts et al.'s (2005) Virtue has high congruency with Sustaining Effort Rule Consciousness. Roberts et al.'s (2005) Virtue also appears to have congruency with the Behavioral Skills Acting Honestly domain. Roberts et al.'s (2005) Responsibility was identified as having low congruency with Sustaining Effort Dependability. Roberts et al.'s (2005) Responsibility may also have congruency with the Behavioral Skills Getting Along With Others domain. Table 11 contains a component-level overview of the congruency of the Roberts et al. (2005) model with Sustaining Effort components.

Table 11. Congruency of Roberts et al. (2005) with Sustaining Effort Components

Congruency 1=Low 2=Moderate 3=High		Sustaining Effort					
		Dependability	Order	Persistence	Rule Consciousness	Goal Striving	Self Control
Roberts et al. (2005) Conscien-tiousness	Order		3				
	Industriousness			3		3	
	Self-control						3
	Traditionalism				3		
	Virtue				3		
	Responsibility	1					

When comparing Roberts et al.'s (2005) components to the subcomponents of the Sustaining Effort domain, Roberts et al.'s (2005) Order has high congruency with Sustaining Effort Organization and Sustaining Effort Planning. Roberts et al.'s (2005) Industriousness has high congruency with Sustaining Effort Overcoming Challenge and moderate congruency with Sustaining Effort Maintaining Effort, Sustaining Effort Focusing, Sustaining Effort Self Improvement, Sustaining Effort Initiative, and Sustaining Effort Goals Setting. Roberts et al.'s (2005) Self-control was identified as having high congruency with Sustaining Effort Restraint and Sustaining Effort Thinking Before Acting. Roberts et al.'s (2005) Traditionalism has high congruency with Sustaining Effort Compliance and Sustaining Effort Respect for Rules/Authority. Roberts et al.'s (2005) Virtue has moderate congruency with Sustaining Effort Compliance and Sustaining Effort Respect for Rules/Authority. Lastly, Roberts et al.'s (2005) Responsibility has low congruency with Sustaining Effort Follow Through.

MacCann et al. (2009)

MacCann et al. (2009) identified eight subcomponents of Conscientiousness which include: Tidiness, Task Planning, Industriousness, Perseverance, Procrastination Refrainment, Control, Cautiousness, and Perfectionism (Table 12).

Table 12. MacCann et al. (2009)

Domain	Component
Conscientiousness:	Tidiness: Cleaning up one's space.
	Task Planning: Following a schedule or working according to a routine.
	Industriousness: Making an effort and being prepared.
	Perseverance: Not giving up or getting discouraged.
	Procrastination Refrainment: Getting to work at once and not getting distracted.
	Control: Not rushing or doing unexpected things.
	Cautiousness: Thinking before acting or making decisions.
	Perfectionism: Wanting the very best and demanding quality.

At the component level, MacCann et al.'s (2009) Tidiness has low congruency with Sustaining Effort Order. MacCann et al.'s (2009) Task Planning has high congruency with Sustaining Effort Dependability and low congruency with Sustaining Effort Order. MacCann et al.'s (2009) Industriousness has low congruency with Sustaining Effort Dependability, while having moderate congruency with Sustaining Effort Order, Sustaining Effort Persistence, and Sustaining Effort Goal Striving. MacCann et al.'s (2009) Perseverance has high congruency with Sustaining Effort Persistence. MacCann et al.'s (2009) Procrastination Refrainment has high congruency with Sustaining Effort Persistence and Sustaining Effort Goal Striving. MacCann et al.'s (2009) Control has high congruency with Sustaining Effort Self Control. MacCann et al.'s (2009) Cautiousness also has high congruency with Sustaining Effort Self Control. MacCann et al.'s (2009) Perfectionism has high congruency with Sustaining Effort Dependability and Sustaining Effort Goal Striving. Table 13 contains a component-level overview of the congruency of the MacCann et al. (2009) model with Sustaining Effort components.

Table 13. Congruency of MacCann et al. (2009) with Sustaining Effort Components

Congruency		Sustaining Effort					
1=Low 2=Moderate 3=High		Dependability	Order	Persistence	Rule Consciousness	Goal Striving	Self Control
MacCann et al. (2009) Conscientiousness	Tidiness		1				
	Task Planning	3	1				
	Industriousness	1	2	2		2	
	Perseverance			3			
	Procrastination Refrainment			3		3	
	Control						3
	Cautiousness						3
	Perfectionism	3				3	

When comparing MacCann et al.'s (2009) components to the subcomponents of the Sustaining Effort domain, MacCann et al.'s (2009) Tidiness was identified as having moderate congruency with Sustaining Effort Organization as it is a specific piece of systematically organizing materials. MacCann et al.'s (2009) Task Planning has high congruency with Sustaining Effort Timeliness and moderate congruency with Sustaining Effort Planning. MacCann et al.'s (2009) Industriousness has moderate congruency with Sustaining Effort Follow Through, Sustaining Effort Organization, Sustaining Effort Planning, Sustaining Effort Maintaining Effort, Sustaining Effort Initiative, and low congruency with Sustaining Effort Goal Setting. MacCann et al.'s (2009) Perseverance has high congruency with Sustaining Effort Overcoming Challenge. MacCann et al.'s (2009) Procrastination Refrainment has high congruency with Sustaining Effort Focusing and Sustaining Effort Initiative. MacCann et al.'s (2009) Control has high congruency with Sustaining Effort Restraint and moderate congruency with Sustaining Effort Thinking Before Acting. MacCann et al.'s (2009) Cautiousness has low congruency with Sustaining Effort Restraint and high congruency with Sustaining Effort Thinking Before Acting. Lastly, MacCann et al.'s (2009) Perfectionism has high congruency with Sustaining Effort Quality and Sustaining Effort Self Improvement, while having moderate congruency with Sustaining Effort Goal Setting (as being able to set high but achievable goals is likely a necessary prerequisite for submitting high quality work and successful self-improvement).

Dudley et al. (2006)

According to Dudley et al. (2006), Conscientiousness can be broken down into four components: Order, Achievement Striving, Dependability, and Cautiousness (Table 14).

Table 14. Dudley et al. (2006)

Domain	Component
Conscientiousness:	Order: The tendency to apply structure to one's working environment.
	Achievement Striving: The tendency to strive for competency and success in one's work and goals
	Dependability: The tendency to be a reliable worker.
	Cautiousness: The tendency to consider risks before taking a course of action.

At the component level, Dudley et al.'s (2006) Order has low congruency with Sustaining Effort Dependability and high congruency with Sustaining Effort Order. Dudley et al.'s (2006) Achievement Striving has low congruency with Sustaining Effort Dependability and Sustaining Effort Goal Striving. Dudley et al.'s (2006) Dependability has low congruency with Sustaining Effort Dependability and Sustaining Effort Persistence, while having high congruency with Sustaining Effort Rule Consciousness. Dudley et al.'s (2006) Cautiousness was identified as having high congruency with Sustaining Effort Self Control. Table 15 contains a component-level overview of the congruency of the Dudley et al. (2006) model with Sustaining Effort components.

Table 15. Congruency of Dudley et al. (2006) with Sustaining Effort Components

Congruency 1=Low 2=Moderate 3=High		Sustaining Effort					
		Dependability	Order	Persistence	Rule Consciousness	Goal Striving	Self Control
Dudley et al. (2006) Conscien-tiousness	Order	1	3				1
	Achievement Striving	1				1	
	Dependability	1		1	3		
	Cautiousness						3

When comparing Dudley et al.'s (2006) components to the subcomponents of the Sustaining Effort domain, Dudley et al.'s (2006) Order has moderate congruency with Sustaining Effort Organization, Sustaining Effort Planning, and Sustaining Effort Monitoring (as all of these are involved in the process of planning out a task, organizing materials and deadlines to complete a task, and monitoring deadlines to ensure completion). In addition, Dudley et al.'s (2006) Order also has low congruency with Sustaining Effort Thinking Before Acting, Sustaining Effort Timeliness, Sustaining Effort Follow Through, and Sustaining Effort Quality (as these include abilities to meet deadlines and ensure quality outcomes). Dudley et al.'s (2006) Achievement Striving has moderate congruency with Sustaining Effort Quality, Sustaining Effort Self-Improvement, and Sustaining Effort Goal Setting, (as these include aspects of being concerned with quality, improving one's work, and setting high, but achievable goals). Dudley et al.'s (2006) Dependability was identified as having moderate congruency with Sustaining Effort Follow Through, Sustaining Effort Maintaining Effort, Sustaining Effort Compliance, and Sustaining Effort Respect for Rules/Authority. These subcomponents incorporate an individual's ability to put in time and effort to meet deadlines that have been set out by authority figures or are required by particular rules or work expectations. Lastly, Dudley et al.'s (2006) Cautiousness has high congruency with Sustaining Effort Self Control.

Sustaining Effort Summary and Discussion

Table 16 provides an overview of the Sustaining Effort components and how they relate to the components found in the other Conscientiousness models discussed. Overall, Behavioral Skills Sustaining Effort defines the behavioral characteristics and skills that compose the Conscientiousness domain. From this review, we argue that ACT's Behavioral Skills Sustaining Effort domain accounts for most other frameworks of Conscientiousness, as well. However, the Sustaining Effort domain divides some aspects of Conscientiousness and repositions them under Agreeableness, Emotionality, and Honest-Humility. Specifically, the Roberts et al. (2005) Responsibility component appears to be more closely aligned with the Behavioral Skills Framework's Getting Along With Others domain; the Big Five Competence component seems to be more closely related to the Behavioral Skills Maintaining Composure domain; and the Big Five Dutifulness and the Roberts et al. (2005) Virtue components appears to fit better under the Behavioral Skills Acting Honestly domain. Notably, the Sustaining Effort Dependability component appears to be less consistently included in other models of Conscientiousness. However, it is anticipated that this component is useful as all models include some aspects of it, but none incorporate all three subcomponents (i.e., Timeliness, Follow Through, and Quality) included by ACT researchers.

Table 16. Framework Components Organized by ACT's Sustaining Effort Components

	ACT's Holistic Framework	NEO-PI-R	HEXACO	HPI	Roberts et al. (2005)	MacCann et al. (2009)	Dudley et al. (2006)
Component 1	Order	Order	Organization, Perfectionism	Not Spontaneous, Virtuous	Order	Tidiness, Task Planning, Industriousness	Order
Component 2	Persistence	Self-Discipline, Competence	Diligence, Perfectionism	Mastery, Virtuous	Industriousness	Industriousness, Perseverance, Procrastination Refrainment	Dependability
Component 3	Goal striving	Achievement Striving	Diligence	Not Autonomous	Industriousness	Industriousness, Procrastination Refrainment, Perfectionism	Achievement Striving
Component 4	Dependability	Self-Discipline	Perfectionism	Not Spontaneous, Virtuous	Responsibility	Task Planning, Industriousness, Perfectionism	Order, Achievement Striving, Dependability
Component 5	Self-Control	Deliberation	Prudence	Impulse Control, Not spontaneous	Self-Control	Control, Cautiousness	Order, Cautiousness
Component 6	Rule Conscientiousness	Dutifulness		Not Spontaneous, Avoids Trouble, Moralistic	Traditionalism, Virtue		Dependability
Component 7	(Acting Honestly)	Dutifulness		Impulse Control	Virtue		
Component 8	(Maintaining Composure)	Competence					
Component 9	(Getting Along with Others)			Not Autonomous	Responsibility		

Note. The order of the components identified in each cell is not indicative of their relevance. Components in parentheses were organized within another domain of the Behavioral Skills Framework.

Getting Along with Others (Agreeableness)

This section focuses on ACT's Behavioral Skills domain of Getting Along with Others (Agreeableness). First, Getting Along with Others and its components are defined. Second, other models of Agreeableness are reviewed and compared with Getting Along with Others. Finally, a general overview of the overarching differences between Getting Along with Others and other theoretical models is summarized. As listed in Table 17, Behavioral Skills Getting Along with Others includes the extent to which a person interacts positively and cooperates with others, and is generally kind, friendly, and tactful. The domain includes five components: Patience, Helpfulness, Goodwill, Perspective Taking, and Cooperation. In general, these correspond to components found in other models of Agreeableness.

Table 17. Behavioral Skills: Getting Along with Others

Domain	Component	Subcomponent
Getting Along with Others (Agreeableness): Describes the extent to which a person interacts positively and cooperates with others, and is generally kind, friendly, and tactful.	Patience: Tolerating frustrations presented by others or by situations without expressing irritation or hostility.	Tolerating Frustrations with Others Tolerating Situational Frustrations
	Helpfulness: Helping others and being generous with his/her time and/or resources despite personal cost.	Assisting Others Selflessness
	Goodwill: Assuming others have good intentions, trusting others, being able to forgive and not holding grudges.	Forgiveness Trust
	Perspective Taking: Identifying, acknowledging, and understanding the emotions of others, showing concern for others, and considering the audience when providing information.	Interpreting Emotional Reactions Showing Concern Considering the Audience
	Cooperation: Being respectful, polite, collaborative, and skilled at working through conflict with other people.	Respect for others Collaboration Conflict Management

Other models of Agreeableness

Big Five: NEO-PI-R

Costa and McCrae (1992) identified the Agreeableness components of the NEO-PI-R as Compliance, Altruism, Trust, Tender-Mindedness, Modesty, and Straightforwardness (Table 18).

Table 18. Big Five: NEO PI-R

Domain	Component
Agreeableness:	Compliance: Concerns characteristic reactions to interpersonal conflict. The high scorer tends to defer to others, to inhibit aggression, and to forgive and forget. Compliant people are meek and mild. The low scorer is aggressive, prefers to compete rather than cooperate, and has no reluctance to express anger when necessary.
	Altruism: Measures concern for others and willingness to be helpful.
	Trust: Belief in the sincerity and good intentions of others.
	Tender-Mindedness: Measures attitudes of sympathy and concern for others.
	Modesty: Measure of humility and self-effacing nature
	Straightforwardness: Willingness (relative to other individuals) to be frank, honest, and unguarded in feelings.

At the component level, NEO-PI-R Compliance has low congruency with Getting Along with Others Patience, Getting Along with Others Goodwill, and Getting Along with Others Cooperation. NEO-PI-R Altruism has high congruency with Getting Along with Others Helpfulness. NEO-PI-R Trust has low congruency with Getting Along with Others Goodwill. NEO-PI-R Tender-Mindedness has high congruency with Getting Along with Others Perspective Taking. NEO-PI-R Modesty does not have congruency with any Getting Along with Others component. NEO-PI-R Modesty also appears to have congruency with the Behavioral Skills Acting Honestly domain. NEO-PI-R Straightforwardness has low congruency with Getting Along with Others Goodwill. NEO-PI-R Straightforwardness also appears to have congruency with the Behavioral Skills Acting Honestly domain. Honesty-Humility in the HEXACO taxonomy incorporates honesty, fairness, sincerity, modesty, and lack of greed which has been observed as an additional factor in studies of personality, and parses out some variability from the other traditional Big Five personality traits (Ashton et al., 2004). Table 19 contains a component-level overview of the congruency of the NEO-PI-R model with Getting Along with Others components.

Table 19. Congruency of Big Five: NEO PI-R with Getting Along with Others Components

Congruency 1=Low 2=Moderate 3=High		Getting Along with Others				
		Patience	Helpfulness	Goodwill	Perspective Taking	Cooperation
NEO-PI-R Agreeableness	Compliance	1		1		1
	Altruism		3			
	Trust			1		
	Tender-Mindedness				3	
	Modesty					
	Straightforwardness			1		

When comparing NEO PI-R components to the subcomponents of the Getting Along with Others domain, NEO-PI-R Compliance has moderate congruency with Getting Along with

Others Tolerating Frustrations with Others, Getting Along with Others Forgiveness, and Getting Along with Others Conflict Management. NEO-PI-R Compliance also has low congruency with Getting Along with Others Respect for Others and Getting Along with Others Collaboration. NEO-PI-R Altruism has high congruency with Getting Along with Others Assisting Others and Getting Along with Others Selflessness. NEO-PI-R Trust has high congruency with Getting Along with Others Trust and low congruency with Getting Along with Others Forgiveness. NEO-PI-R Tender-Mindedness has moderate congruency with Getting Along with Others Interpreting Emotional Reactions, Getting Along with Others Showing Concern, and Getting Along with Others Considering the Audience. NEO-PI-R Modesty does not appear to have any congruency to any aspect of the Getting Along with Others domain. Lastly, NEO-PI-R Straightforwardness was identified as having low congruency with Getting Along with Others Forgiveness and Getting Along with Others Trust.

HEXACO

According to Lee and Ashton (2004), the components of Agreeableness in the HEXACO framework include Patience, Forgiveness, Gentleness, and Flexibility (Table 20). It should be noted that the HEXACO Model differs from the Five Factor Model in that some agreeableness content is reapportioned into the Honesty-Humility domain. Ashton and Lee (2007) argue that this shift makes their Agreeableness domain more parsimonious. In HEXACO, Agreeableness and Sentimentality is parsed out and Lack of Anger is included (Ashton & Lee, 2007).

Table 20. HEXACO

Domain	Component
Agreeableness:	Patience: Assesses a tendency to remain calm rather than to become angry.
	Forgiveness: Assesses one's willingness to feel trust and liking toward those who may have caused one harm.
	Gentleness: Assesses a tendency to be mild and lenient in dealings with other people.
	Flexibility: Assesses one's willingness to compromise and cooperate with others.

At the component level, HEXACO Patience has high congruency with Getting Along with Others Patience. HEXACO Forgiveness has high congruency with Getting Along with Others Goodwill. HEXACO Gentleness has low congruency with Getting Along with Others Patience and Getting Along with Others Cooperation, and high congruency with Getting Along with Others Perspective Taking. Lastly, HEXACO Flexibility has high congruency with Getting Along with Others Cooperation. Table 21 contains a component-level overview of the congruency of the HEXACO model with Getting Along with Others components.

Table 21. Congruency of HEXACO with Getting Along with Others Components

Congruency 1=Low 2=Moderate 3=High		Getting Along with Others				
		Patience	Helpfulness	Goodwill	Perspective Taking	Cooperation
HEXACO Agreeableness	Patience	3				
	Forgiveness			3		
	Gentleness	1			3	1
	Flexibility					3

When comparing HEXACO components to the subcomponents of the Getting Along with Others domain, the HEXACO Patience component has high congruency with Getting Along with Others Tolerating Frustrations with Others and Getting Along with Others Tolerating Situational Frustrations. HEXACO Forgiveness has high congruency with Getting Along with Others Forgiveness and Getting Along with Others Trust. HEXACO Gentleness was identified as having moderate congruency with several subcomponents, including Getting Along with Others Tolerating Frustrations with Others, Getting Along with Others Interpreting Emotional Reactions, Getting Along with Others Showing Concern, Getting Along with Others Considering the Audience, and Getting Along with Others Respect for Others. Lastly, HEXACO Flexibility has a high congruency with Getting Along with Others Respect for Others, Getting Along with Others Collaboration, and Getting Along with Others Conflict Management.

Hogan Personality Inventory

The developers of the HPI noted that Interpersonal Sensitivity is intended to measure the degree to which a person is seen as perceptive, tactful, and socially sensitive, which are closely related to Agreeableness (Hogan & Hogan, 2007). Components of Interpersonal Sensitivity include: No Hostility, Sensitivity, Caring, Likes People, and Easy to Live With (Table 22).

Table 22. HPI

Domain	Component
Interpersonal Sensitivity	No Hostility: Being tolerant.
	Sensitivity: Being considerate.
	Caring: Having social sensitivity.
	Likes People: Being companionable.
	Easy to Live With: Being easy-going and having interpersonal skill.

At the component level, HPI No Hostility has high congruency with Getting Along with Others Patience. HPI Sensitivity has high congruency with Getting Along with Others Perspective Taking. HPI Caring has high congruency with Getting Along with Others Perspective Taking. HPI Likes People has high congruency with Getting Along with Others Cooperation. HPI Easy to Live With has low congruency with several components, including Getting Along with Others Patience, Getting Along with Others Perspective Taking, and Getting Along with Others

Cooperation. Table 23 contains a component-level overview of the congruency of the HPI model with Getting Along with Others components.

Table 23. Congruency of HPI with Getting Along with Others Components

Congruency 1=Low 2=Moderate 3=High		Getting Along with Others				
		Patience	Helpfulness	Goodwill	Perspective Taking	Cooperation
HPI Interpersonal Sensitivity	No Hostility	3				
	Sensitivity				3	
	Caring				3	
	Likes People					3
	Easy to Live With	1			1	1

When comparing HPI components to the subcomponents of the Getting Along with Others domain, HPI No Hostility has high congruency with Getting Along with Others Tolerating Frustrations with Others and Getting Along with Others Tolerating Situational Frustrations. HPI Sensitivity has high congruency with Getting Along with Others Considering the Audience. HPI Caring has high congruency with Getting Along with Others Interpreting Emotional Reactions and Getting Along with Others Showing Concern. HPI Likes People has moderate congruency with Getting Along with Others Respect for Others, Getting Along with Others Collaboration, and Getting Along with Others Conflict Management. Lastly, HPI Easy to Live With appears to be a broader construct that has low congruency with several different Getting Along with Others subcomponents. These subcomponents are Getting Along with Others Tolerating Frustrations with Others, Getting Along with Others Tolerating Situational Frustrations, Getting Along with Others Interpreting Emotional Reactions, Getting Along with Others Showing Concern, Getting Along with Others Considering the Audience, Getting Along with Others Respect for Others, Getting Along with Others Collaboration, and Getting Along with Others Conflict Management. All of these relate to a more easy-going nature and having good interpersonal skills.

Kern et al. (2013)

Kern et al. (2013) completed a study examining Big Five Agreeableness to determine whether components could be reliably identified using caregiver descriptions of adolescent boys' personalities using the Common California Q-Set. The two components identified in this study were Compassion and Compliance (Table 24). Due to the mid-level categorization of these components it is to be expected that they include more than one component of Getting Along with Others.

Table 24. Kern et al. (2013)

Domain	Component
Agreeableness:	Compassion: Emotional, empathic response to others (being considerate, warm, and kind).
	Compliance: Dominant/antagonistic versus compliant.

At the component level, Kern et al.'s (2003) Compliance has low congruency with Getting Along with Others Patience and high congruency with Getting Along with Others Cooperation. Kern et al.'s (2003) Compliance also appears to have congruency with the Behavioral Skills Sustaining Effort domain. Kern et al.'s (2003) Compassion has high congruency with Getting Along with Others Perspective Taking. Table 25 contains a component-level overview of the congruency of the Kern et al. (2003) model with Getting Along with Others components.

Table 25. Congruency of Kern et al. (2013) with Getting Along with Others Components

Congruency		Getting Along with Others				
1=Low 2=Moderate 3=High		Patience	Helpfulness	Goodwill	Perspective Taking	Cooperation
Kern et al. (2013) Agreeableness	Compliance	1				3
	Compassion				3	

When comparing Kern et al.'s (2003) components to the subcomponents of the Getting Along with Others domain, Kern et al.'s (2003) Compassion has moderate congruency with Getting Along with Others Interpreting Emotional Reactions, Getting Along with Others Showing Concern, and Getting Along with Others Considering the Audience. Lastly, Kern et al.'s (2003) Compliance was identified as having low congruency with Getting Along with Others Tolerating Frustrations with Others and Getting Along with Others Tolerating Situational Frustrations; it was also identified as having moderate congruency with Getting Along with Others Respect for Others, Getting Along with Others Collaboration, and Getting Along with Others Conflict Management.

DeYoung et al. (2007)

DeYoung et al. (2007) factor analyzed component scales from two major Big Five inventories. Their analysis resulted in a two-component solution for Agreeableness which included Compassion and Politeness (Table 26).

Table 26. DeYoung et al. (2007)

Domain	Component
Agreeableness:	Compassion: Compassionate emotional affiliation with others; warmth, sympathy, tenderness.
	Politeness: Cognitively influenced consideration and respect for others needs and desires; cooperation, compliance, straightforwardness.

At the component level, DeYoung et al.'s (2003) Compassion has high congruency with Getting Along with Others Perspective Taking. DeYoung et al.'s (2003) Politeness has high congruency with Getting Along with Others Cooperation. DeYoung et al.'s (2003) Politeness also appears to have congruency with the Behavioral Skills Sustaining Effort and Acting Honestly domains. Table 27 contains a component-level overview of the congruency of the DeYoung et al. (2003) model with Getting Along with Others components.

Table 27. Congruency of DeYoung et al. (2007) with Getting Along with Others Components

Congruency 1=Low 2=Moderate 3=High		Getting Along with Others				
		Patience	Helpfulness	Goodwill	Perspective Taking	Cooperation
DeYoung, et al. (2007) Agreeableness	Compassion				3	
	Politeness					3

When comparing DeYoung et al.'s (2003) components to the subcomponents of the Getting Along with Others domain, DeYoung et al.'s (2003) Compassion has moderate congruency with Getting Along with Others Interpreting Emotional Reactions, Getting Along with Others Showing Concern, and Getting Along with Others Considering the Audience. Lastly, DeYoung et al.'s (2003) Politeness has moderate congruency with Getting Along with Others Respect for Others, Getting Along with Others Collaboration, and Getting Along with Others Conflict Management.

Davies (2012)

Davies (2012) completed a dissertation study on the lower and higher order components of Agreeableness. Davies (2012) completed a qualitative content analysis of scales described as having Agreeableness constructs, and two meta-analytic studies examining the reliability of Agreeableness constructs and the divergent validity of component scales as they relate to a global construct of Agreeableness. This analysis resulted in five components which include (Lack of) Aggression, Nurturance, Non-Manipulativeness, Cooperation, and Modesty (Table 28).

Table 28. Davies (2012)

Domain	Component
Agreeableness:	(Lack of) Aggression: Unwillingness and/or inability to express anger against others.
	Nurturance: The tendency to be helpful to others and responsive to others' needs; caring, kind, and considerate toward others; being supportive; being generous; doing things for others; helping the unfortunate; being selfless and altruistic; engaging in pro-social behavior.
	Non-Manipulativeness: The general tendency to be honest, sincere, forthcoming and straightforward when dealing with others; however, this does not involve assertiveness. Rather, it means not being likely to deceive, use, manipulate, or exploit others.
	Cooperation: The tendency to prefer cooperation to competition, liking to work with others, being a team player, and striving for harmony.
	Modesty: The tendency to be humble; does not talk about personal successes; deference; accepting blame or inferior position to keep harmony.

At the component level, Davies' (2012) (Lack of) Aggression has high congruency with Getting Along with Others Patience. Davies' (2012) Nurturance has high congruency with Getting Along with Others Helpfulness. Davies' (2012) Non-Manipulativeness has low congruency with Getting Along with Others Goodwill. It also seems to be related to the Behavioral Skills Acting Honestly domain. Davies' (2012) Cooperation has high congruency with Getting Along with Others Cooperation and low congruency with Getting Along with Others Patience. Davies' (2012) Modesty has low congruency with Getting Along with Others Perspective Taking. Davies' (2012) Modesty also appears to have congruency with the Behavioral Skills Acting Honestly domain. These component relations to Acting Honestly are to be expected as Davies' (2012) analysis was based on the Big-Five personality traits rather than the HEXACO traits in which the Behavioral Skills framework is grounded. Table 29 contains a component-level overview of the congruency of the Davies (2012) model with Getting Along with Others components.

Table 29. Congruency of Davies (2012) with Getting Along with Others Components

Congruency 1=Low 2=Moderate 3=High		Getting Along with Others				
		Patience	Helpfulness	Goodwill	Perspective Taking	Cooperation
Davies (2012) Agreeableness	(Lack of) Aggression	3				
	Nurturance		3			
	Non-Manipulativeness			1		
	Cooperation	1				3
	Modesty				1	

When comparing Davies' (2012) components to the subcomponents of the Getting Along with Others domain, Davies' (2012) (Lack of) Aggression has moderate congruency with Getting Along with Others Tolerating Frustrations with Others and Getting Along with Others Tolerating Situational Frustrations. Davies' (2012) Nurturance has moderate congruency with Getting Along with Others Assisting Others and Getting Along with Others Selflessness. Davies' (2012) Non-Manipulativeness has low congruency with Getting Along with Others Trust. Davies' (2012) Cooperation has low congruency with Getting Along with Others Tolerating Frustrations with Others and moderate congruency with Getting Along with Others Respect for Others, Getting Along with Others Collaboration, and Getting Along with Others Conflict Management. Lastly, Davies' (2012) Modesty has low congruency with Getting Along with Others Considering the Audience.

Getting Along with Others Summary and Discussion

Table 30 provides an overview of the Getting Along with Others components and how they relate to the components found in the other Agreeableness models discussed. Overall, Behavioral Skills Getting Along with Others is intended to define which behavioral traits and skills make up the components of Agreeableness. From this review, we argue that all Agreeableness frameworks are integrated into and accounted for in Behavioral Skills Getting Along with Others. Some models of Agreeableness noted here tend to incorporate aspects of Honesty-Humility and Conscientiousness (e.g., the NEO-PI-R Modesty or Straightforwardness and DeYoung et al.'s [2007] Politeness) which have been split and integrated into other domains of the Behavioral Skills Framework. For example, the DeYoung et al. (2007) Politeness component appears to be more closely aligned with aspects of the Behavioral Skills Acting Honestly and Sustaining Effort domains. Additionally, the Big Five Modesty and Straightforwardness components and Davies' (2012) Non-Manipulative and Modesty components seem to be more closely related to the Behavioral Skills Acting Honestly domain. HPI Easy to Live With appears to be broadly related to Getting Along with Others, in general, rather than its specific components.

Table 30. Framework Components Organized by ACT'S Getting Along With Others Components

	ACT's Holistic Framework	NEO-PI-R	HEXACO	HPI	Kern at al. (2013)	DeYoung et al. (2007)	Davies (2012)
Component 1	Patience	Compliance	Patience, Gentleness	No Hostility, Easy to Live With	Compliance		(Lack of) Aggression, Cooperation
Component 2	Helpfulness	Altruism					Nurturance
Component 3	Goodwill	Compliance, Trust, Straightforwardness	Forgiveness				Non-Manipulativeness
Component 4	Perspective Taking	Tender-Mindedness	Gentleness	Sensitivity, Caring, Easy to Live With	Compassion	Compassion	Modesty
Component 5	Cooperation	Compliance	Gentleness, Flexibility	Likes People, Easy to Live With	Compliance	Politeness	Cooperation
Component 6	(Acting Honestly)	Modesty, Straightforwardness				Politeness	Non-Manipulativeness, Modesty
Component 7	(Sustaining Effort)				Compliance	Politeness	
Component 8	(Getting Along with Others)						

Note. The order of the components identified in each cell is not indicative of their relevance. Components in parentheses were organized within another domain of the Behavioral Skills Framework.

Socializing with Others (Extraversion)

This section focuses on ACT's Behavioral Skills domain of Socializing with Others (Extraversion). First, Socializing with Others and its components are defined. Second, other models of Extraversion are reviewed and compared with Socializing with Others. Finally, a general overview of the overarching differences between Socializing with Others and other theoretical models is summarized. As listed in Table 31, Behavioral Skills Socializing with Others includes a person's preferred level of social interaction, behavior in interpersonal situations, and optimism. The domain includes three components: Sociability, Optimism, and Assertiveness. In general, these correspond to components found in other models of Extraversion.

Table 31. Behavioral Skills: Socializing with Others

Domain	Component	Subcomponent
Socializing with Others (Extraversion): Describes a person's preferred level of social interaction, behavior in interpersonal situations, and optimism.	Sociability: Seeking out and enjoying situations involving interpersonal interaction and building relationships with others.	Interacting with Others Networking
	Optimism: The degree to which a person expresses a positive mood and a positive outlook.	Cheerful Mood Positive Outlook
	Assertiveness: Influencing others and preferring to be in charge in social interactions and group activities.	Taking Charge Influence

Other Models of Extraversion

Big Five: NEO-PI-R

Costa and McCrae (1992) identified the Extraversion components of the NEO-PI-R as Gregariousness, Positive Emotions, Assertiveness, Activity, Excitement-Seeking, and Warmth (Table 32).

Table 32. Big Five: NEO-PI-R

Domain	Component
Extraversion:	Gregariousness: The preference for other people's company.
	Positive Emotions: The tendency to experience positive emotions such as joy, happiness, love, and excitement.
	Assertiveness: Dominance and forcefulness.
	Activity: Measures a sense of energy, and a need to keep busy.
	Excitement-Seeking: A need for environmental stimulation.
	Warmth: Relevant to issues of interpersonal intimacy.

At the component level, NEO-PI-R Gregariousness has high congruency with Socializing with Others Sociability. NEO-PI-R Positive Emotions has high congruency with Socializing with Others Optimism. NEO-PI-R Assertiveness has high congruency with Socializing with Others Assertiveness. NEO-PI-R Activity, which relates to energy level and keeping busy, is not included in the Socializing with Others domain of the Behavioral Skills Framework. ACT researchers identified that it would be difficult for an individual to make meaningful behavior changes based on this characteristic, and those changes that could be made would likely fall under the Sustaining Effort Self Control component. Further reason for its exclusion was the ambiguity of NEO-PI-R Activity, which can be helpful or harmful to success depending on the context and how Activity is defined. NEO-PI-R Excitement Seeking was identified as having low congruency with Socializing with Others Sociability, and may have congruency with the Behavioral Skills Keeping an Open Mind domain, but was largely removed from the Socializing with Others domain. NEO-PI-R Warmth appears to have greater congruency with the Behavioral Skills Getting Along with Others domain. Table 33 contains a component-level overview of the congruency of the NEO-PI-R model with Socializing with Others components.

Table 33. Congruency of Big Five: NEO-PI-R with Socializing with Others Components

Congruency		Socializing with Others		
1=Low				
2=Moderate				
3=High		Sociability	Optimism	Assertiveness
NEO-PI-R Extraversion	Gregariousness	3		
	Positive Emotions		3	
	Assertiveness			3
	Activity			
	Excitement-Seeking	1		
	Warmth			

When comparing NEO-PI-R components to the subcomponents of the Socializing with Others domain, NEO-PI-R Gregariousness has high congruency with Socializing with Others Interacting with Others and Socializing with Others Networking. NEO-PI-R Positive Emotions has high congruency with Socializing with Others Cheerful Mood and Socializing with Others Positive Outlook. NEO-PI-R Assertiveness has high congruency with Socializing with Others Taking Charge and Socializing with Others Influence. NEO-PI-R Activity does not have congruency with any Socializing with Others subcomponent. NEO-PI-R Excitement-Seeking has low congruency with Socializing with Others Interacting with Others. Lastly, NEO-PI-R Warmth does not have congruency with any Socializing with Others subcomponent.

HEXACO

According to Lee and Ashton (2004), the components of Extraversion in the HEXACO framework include Sociability, Liveliness, Social Boldness, and Expressiveness (Table 34).

Table 34. HEXACO

Domain	Component
Extraversion:	Sociability: Assesses a tendency to enjoy conversation, social interaction, and parties.
	Liveliness: Assesses one's typical enthusiasm and energy.
	Social Boldness: Assesses one's comfort or confidence within a variety of social situations.
	Expressiveness: Assesses a tendency to be excitable and dramatic in one's interpersonal style.

At the component level, HEXACO Sociability has high congruency with Socializing with Others Sociability. HEXACO Liveliness has high congruency with Socializing with Others Optimism. HEXACO Social Boldness has high congruency with Socializing with Others Assertiveness. HEXACO Expressiveness has low congruency with Socializing with Others Optimism, but appears to be more related to energy level, which is not included in the Behavioral Skills definition of Socializing with Others. Table 35 contains a component-level overview of the congruency of the HEXACO model with Socializing with Others components.

Table 35. Congruency of HEXACO with Socializing with Others Components

Congruency		Socializing with Others		
1=Low 2=Moderate 3=High		Sociability	Optimism	Assertiveness
HEXACO Extraversion	Sociability	3		
	Liveliness		3	
	Social Boldness			3
	Expressiveness		1	

When comparing HEXACO components to the subcomponents of the Socializing with Others domain, HEXACO Sociability has high congruency with Socializing with Others Interacting with Others and Socializing with Others Networking. HEXACO Liveliness has moderate congruency with both Socializing with Others Cheerful Mood and Socializing with Others Positive Outlook. HEXACO Social Boldness has high congruency with Socializing with Others Taking Charge and Socializing with Others Influence. Lastly, HEXACO Expressiveness has low congruency with Socializing with Others Cheerful Mood and Socializing with Others Positive Outlook.

Hogan Personality Inventory

The developers of the HPI noted that Ambition and Sociability are highly correlated with Big Five Extraversion (Hogan & Hogan, 2007). Components of Ambition include: No Social Anxiety, Leadership, Accomplishment, Self Confident, Identity, and Competitive. Components of Sociability include: Likes Parties, Likes Crowds, Entertaining, Experience Seeking, and Exhibitionistic (Table 36). Few of the HPI domains and components match the Behavioral Skills Socializing with Others components and subcomponents. Therefore, not every component of the HPI will be directly addressed.

Table 36. HPI

Domain	Component
Ambition:	No Social Anxiety: Social self-confidence.
	Leadership: Leadership tendencies.
	Accomplishment: Personal effectiveness.
	Self Confident: Self-assurance.
	Identity: Satisfaction with one's life.
	Competitive: Desire to win.
Sociability:	Likes Parties: Affability.
	Likes Crowds: Affiliativeness.
	Entertaining: Being witty and engaging.
	Experience Seeking: Needs variety.
	Exhibitionistic: Showing-off.

At the component level, HPI No Social Anxiety has low congruency with Socializing with Others Sociability. HPI No Social Anxiety also appears to have congruency with the Behavioral Skills Maintaining Composure domain. HPI Leadership has high congruency with Socializing with Others Assertiveness. HPI Accomplishment appears to have greater congruency with the Behavioral Skills Sustaining Effort domain. HPI Self Confident appears to have greater congruency with the Behavioral Skills Maintaining Composure domain. HPI Identity has low congruency with Socializing with Others Optimism. Other aspects of HPI Identity related to satisfaction with life were not included the Behavioral Skills Framework because of their lack of relevance to academic and occupational outcomes. HPI Competitive appears to have some inverse congruency with the Behavioral Skills Getting Along with Others domain. HPI Likes Parties and HPI Likes Crowds have moderate congruency with Socializing with Others Sociability. HPI Likes Parties also appears to have congruency with the Behavioral Skills Getting Along with Others domain. HPI Entertaining was identified as having moderate congruency with Socializing with Others Assertiveness. HPI Experience Seeking has low congruency with Socializing with Others Sociability. HPI Experience Seeking also appears to have congruency with the Behavioral Skills Keeping an Open Mind domain. HPI Exhibitionistic appears to have inverse congruency with the Behavioral Skills Acting Honestly domain. Table 37 and Table 38 contain a component-level overview of the congruency of HPI Ambition and HPI Sociability with Socializing with Others components.

Table 37. Congruency of HPI Ambition with Socializing with Others Components

Congruency 1=Low 2=Moderate 3=High		Socializing with Others		
		Sociability	Optimism	Assertiveness
HPI Ambition	No Social Anxiety	1		
	Leadership			3
	Accomplishment			
	Self Confident			
	Identity		1	
	Competitive			

Table 38. Congruency of HPI Sociability with Socializing with Others Components

Congruency 1=Low 2=Moderate 3=High		Socializing with Others		
		Sociability	Optimism	Assertiveness
HPI Sociability	Likes Parties	2		
	Likes Crowds	2		
	Entertaining			2
	Experience Seeking	1		
	Exhibitionistic			

When comparing HPI components to the subcomponents of the Socializing with Others domain, HPI No Social Anxiety was identified as having low congruency with Socializing with Others Interacting with Others and Socializing with Others Networking. HPI Leadership has high congruency with Socializing with Others Taking Charge. HPI Identity has low congruency with Socializing with Others Positive Outlook. HPI Likes Parties and HPI Likes Crowds both have moderate congruency with Socializing with Others Interacting with Others. HPI Entertaining has moderate congruency with Socializing with Others Influence. Lastly, HPI Experience Seeking has low congruency with Interacting with Others.

DeYoung et al. (2007)

DeYoung et al. (2007) factor analyzed component scales from two major Big Five inventories. Their analysis resulted in a two-component solution for Extraversion which included Enthusiasm and Assertiveness (Table 39). Due to the mid-level categorization of these components it is to be expected that they include more than one component of the Socializing with Others domain.

Table 39. DeYoung et al. (2007)

Domain	Component
Extraversion:	Enthusiasm: Tendency to experience positive emotions associated with anticipation or enjoyment of reward. Outgoing, friendliness, or sociability.
	Assertiveness: Agency or dominance.

At the component level, DeYoung et al.'s (2007) Enthusiasm has low congruency with Socializing with Others Sociability and high congruency with Socializing with Others Optimism. DeYoung et al.'s (2007) Assertiveness has high congruency with Socializing with Others Assertiveness. Table 40 contains a component-level overview of the congruency of the DeYoung et al. (2007) model with Socializing with Others components.

Table 40. Congruency of DeYoung et al. (2007) with Socializing with Others Components

Congruency		Socializing with Others		
1=Low				
2=Moderate				
3=High		Sociability	Optimism	Assertiveness
DeYoung, et al., 2007 Extraversion	Enthusiasm	1	3	
	Assertiveness			3

When comparing DeYoung et al.'s (2007) components to the subcomponents of the Socializing with Others domain, DeYoung et al.'s (2007) Enthusiasm was identified as having low congruency with Socializing with Others Interacting with Others and Socializing with Others Networking, and as having moderate congruency with Socializing with Others Cheerful Mood and Socializing with Others Positive Outlook. Lastly, DeYoung et al.'s (2007) Assertiveness was identified as having moderate congruency with Socializing with Others Taking Charge and Socializing with Others Influence.

Watson and Clark (1997)

Watson and Clark (1997) offered a review of the Extraversion literature which integrated aspects of Extraversion into a unified framework. Their examination suggested that Extraversion is comprised of six components (i.e., Affiliation, Positive Affectivity, Ascendance, Energy, Venturesome, and Ambition) and twelve subcomponents (Table 41).

Table 41. Watson and Clark (1997)

Domain	Component	Subcomponent
Extraversion:	Affiliation:	Warmth: Warm and friendly feelings towards others, and place a high value on close interpersonal relationships.
		Gregariousness: Enjoyment of the company of others, strongly motivate toward frequent social interactions.
	Positive Affectivity:	Joy: Frequently feeling happy, cheerful, and optimistic about their future.
		Enthusiasm: Find it easy to become excited and enthusiastic about events or activities in their lives.
	Ascendance:	Exhibitionism: Dramatic and entertaining, and like to be the center of attention in social situations.
		Dominance: Forceful and decisive; are good, strong leaders, and enjoy controlling and/or influencing others.
	Energy:	Liveliness: Having a great deal of energy, and moving at a quick, rapid pace.
		Activity: Having many interests and hobbies, and feeling they lead full, busy, and interesting lives.
	Venturesome:	Excitement Seeking: Enjoy exciting activities and seek out intense, stimulating environments.
		Change: Desire change and variety in their lives and become bored or dissatisfied when it is absent.
	Ambition:	Achievement: Enjoyment of meeting challenges and mastering difficult tasks; prize excellence and maintain high standards for their own behavior.
		Endurance: Willing to work long hours in pursuit of their goals, and persevere even when they are tired of frustrated.

At the component level, Watson and Clark's (1997) Affiliation has high congruency with Socializing with Others Sociability. Watson and Clark's (1997) Positive Affectivity has high congruency with Socializing with Others Optimism. Watson and Clark's (1997) Ascendance has high congruency with Socializing with Others Assertiveness. Watson and Clark's (1997) Energy, which has a subcomponent (i.e., Liveliness) that deals with energy level and moving at a rapid pace, was not included in the Socializing with Others domain. However, Watson and Clark's (1997) Energy does have a subcomponent (i.e., Activity) that is related to hobbies, and therefore appears to have congruency with the Behavioral Skills Keeping an Open Mind domain. Watson and Clark's (1997) Venturesome, which is related to stimulus seeking, was not included in the Socializing with Others domain. However, Watson and Clark's (1997) Venturesome does have a subcomponent (i.e., Change) that is related to change and variety in life, and therefore appears to have congruency with the Behavioral Skills Keeping an Open Mind domain. Watson and Clark's (1997) Ambition appears to have congruency with the Behavioral Skills Sustaining Effort domain as it is related to mastering skills and level of effort. Table 42 contains a component-level overview of the congruency of the Watson and Clark (1997) model with Socializing with Others components.

Table 42. Congruency of Watson and Clark (1997) with Socializing with Others Components

Congruency 1=Low 2=Moderate 3=High		Socializing with Others Sociability	Optimism	Assertiveness
Watson and Clark (1997) Extraversion	Affiliation	3		
	Positive Affectivity		3	
	Ascendance			3
	Energy			
	Venturesome			
	Ambition			

When comparing Watson and Clark's (1997) subcomponents to the subcomponents of the Socializing with Others domain, many of the subcomponents did not directly map as having congruency. In the cases of the subcomponents that did map, Watson and Clark's (1997) Warmth has moderate congruency with Socializing with Others Interacting with Others and Socializing with Others Networking. Watson and Clark's (1997) Gregariousness has high congruency with Socializing with Others Interaction with Others and Socializing with Others Networking. Watson and Clark's (1997) Joy was identified as having high congruency with Socializing with Others Cheerful Mood, while Watson and Clark's (1997) Enthusiasm was identified as having high congruency with Socializing with Others Positive Outlook. Watson and Clark's (1997) Exhibitionism has moderate congruency with Socializing with Others Influence and Watson and Clark's (1997) Dominance has high congruency with Socializing with Others Taking Charge. In looking at other domains within the Behavioral Skills Framework, Watson and Clark's (1997) Activity appears to have congruency with Keeping an Open Mind, as it relates to having many interests and being curious about a wide range of topics. Lastly, Watson and Clark's (1997) Change may have congruency with Keeping an Open Mind, as it relates to being able to adapt to new environments.

Davies (2012)

Davies (2012) completed a dissertation study on the lower and higher order components of Extraversion. She completed a qualitative content analysis of scales described as having Extraversion constructs, and two meta-analytic studies examining the reliability of Extraversion constructs and the divergent validity of component scales as they relate to a global construct of Extraversion. This analysis resulted in five components which include Sociability, Positive Emotions, Dominance, Activity, and Sensation Seeking (Table 43).

Table 43. Davies (2012)

Domain	Component
Extraversion:	Sociability: Seeks the company of others; is talkative, outgoing, affiliative, and gregariousness.
	Positive Emotions: Likes and feels comfortable amidst larger groups; is outgoing, active, and assertive; may be cheerful and interpersonally warm.
	Dominance: Assertiveness and prefers to be in the forefront of the group; prefers to lead than to follow.
	Activity: Active and fast-paced; prefers to stay busy and moves rapidly.
	Sensation Seeking: Tendency to seek out excitement, to be adventurous.

At the component level, Davies' (2012) Sociability has high congruency with Socializing with Others Sociability. Davies' (2012) Positive Emotions has high congruency with Socializing with Others Optimism. Davies' (2012) Dominance has high congruency with Socializing with Others Assertiveness. Davies' (2012) Activity and Davies' (2012) Sensation Seeking are not incorporated into the Behavioral Skills Socializing with Others domain as they were determined to be less relevant for predicting education and workplace success and likely to produce mixed results related to success (due to their definitions and context dependency). Table 44 contains a component-level overview of the congruency of the Davies (2012) model with Socializing with Others components.

Table 44. Congruency of Davies (2012) with Socializing with Others Components

Congruency 1=Low 2=Moderate 3=High		Socializing with Others		
		Sociability	Optimism	Assertiveness
Davies (2012) Extraversion	Sociability	3		
	Positive Emotions		3	
	Dominance			3
	Activity			
	Sensation Seeking			

When comparing Davies' (2012) components to the subcomponents of the Socializing with Others domain, Davies' (2012) Sociability has high congruency with Socializing with Others Interacting with Others and moderate congruency with Socializing with Others Networking. Davies' (2012) Positive Emotions has moderate congruency with Socializing with Others Cheerful Mood and Socializing with Others Positive Outlook. Lastly, Davies' (2012) Dominance has high congruency with Socializing with Others Taking Charge and moderate congruency with Socializing with Others Influence.

Naragon-Gainey et al. (2009)

Naragon-Gainey et al. (2009) conducted a study comparing Extraversion and Positive Emotionality measures with depression and social anxiety. In this study, they factor analyzed items from the Big Five Inventory, the Faceted Inventory of the Five-Factor Model,

the International Personality Item Pool, the Multidimensional Personality Questionnaire, the Positive and Negative Affect Schedule, the Schedule for Nonadaptive and Adaptive Personality, and the NEO PI-R Extraversion related scales. Their analysis resulted in a four component model of Extraversion which includes Sociability, Positive Emotionality, Ascendance, and Fun-Seeking (Table 45).

Table 45. Naragon-Gainey et al. (2009)

Domain	Component
Extraversion	Sociability: Warmth, gregariousness, and enjoying social interactions.
	Positive Emotionality: Positive affectivity and energy.
	Ascendance: Assertiveness and dominance.
	Fun-Seeking: Venturesome, excitement seeking, behavioral activation.

At the component level, Naragon-Gainey et al.'s (2009) Sociability has high congruency with Socializing with Others Sociability. Naragon-Gainey et al.'s (2009) Positive Emotionality has moderate congruency with Socializing with Others Optimism. Naragon-Gainey et al.'s (2009) Ascendance has high congruency with Socializing with Others Assertiveness. Fun-Seeking is not included in the Socializing with Others domain of the Behavioral Skills Framework as it relates to energy level and sensation seeking. Table 46 contains a component-level overview of the congruency of the Naragon-Gainey et al. (2009) model with Socializing with Others components.

Table 46. Congruency of Naragon-Gainey et al. (2009) with Socializing with Others Components

Congruency 1=Low 2=Moderate 3=High		Socializing with Others		
		Sociability	Optimism	Assertiveness
Naragon-Gainey et al. (2009) Extraversion	Sociability	3		
	Positive Emotionality		2	
	Ascendance			3
	Fun-Seeking			

When comparing Naragon-Gainey et al.'s (2009) components to the subcomponents of the Socializing with Others domain, Naragon-Gainey et al.'s (2009) Sociability has high congruency with Socializing with Others Interacting with Others and moderate congruency with Socializing with Others Networking. Naragon-Gainey et al.'s (2009) Positive Emotionality has moderate congruency with Socializing with Others Cheerful Mood and low congruency with Socializing with Others Positive Outlook. Lastly, Naragon-Gainey et al.'s (2009) Ascendance has moderate congruency with both Socializing with Others Taking Charge and Socializing with Others Influence.

Socializing with Others Summary and Discussion

Table 47 provides an overview of the Socializing with Others components and how they relate to the components found in the other Extraversion models discussed. Overall, Behavioral Skills Socializing with Others is intended to define which behavioral characteristics and skills make up the components of Extraversion. From this review, we argue that all Extraversion frameworks are accounted for within the Behavioral Skills Socializing with Others domain. It should be noted that the Behavioral Skills Socializing with Others domain does not include components of sensation seeking or energy/activity level which are found in other models of Extraversion. These were not included due to the expected uses of this framework. Experts identified that these characteristics would be less relevant in academic and work settings as well as less malleable than other components, and were dropped for these reasons. Additionally, Socializing with Others re-organizes some components under different domains. For example, Warmth (Costa & McCrae, 1992) was put under Getting Along with Others and Ambition (Watson & Clark, 1997) was placed under Sustaining Effort.

Table 47. Framework Components Organized by ACT's Socializing with Others Components.

	ACT's Holistic Framework	NEO-PI-R	HEXACO	HPI	DeYoung et al. (2007)	Watson and Clark (1997)	Davies (2012)	Naragon-Gainey et al. (2009)
Component 1	Sociability	Gregariousness, Excitement Seeking	Sociability	No Social Anxiety, Likes Parties, Likes Crowds, Experience Seeking	Enthusiasm	Affiliation	Sociability	Sociability
Component 2	Optimism	Positive Emotions	Liveliness, Expressiveness	Identity	Enthusiasm	Positive Affectivity	Positive Emotions	Positive Emotionality
Component 3	Assertiveness	Assertiveness	Social Boldness	Leadership, Entertaining	Assertiveness	Ascendance	Dominance	Ascendance
Component 4	[Energy Level/ Stimulus Seeking]	Activity	Expressiveness			Energy, Venturesome	Activity, Sensation Seeking	Fun-Seeking
Component 5	[Satisfaction with Life]			Identity				
Component 6	(Keeping an Open Mind)	Excitement Seeking		Experience Seeking		Energy, Venturesome		
Component 7	(Sustaining Effort)			Accomplishment		Ambition		
Component 8	(Maintaining Composure)			Self Confident, No Social Anxiety				
Component 9	(Getting Along with Others)	Warmth		Competitive, Likes Parties				
Component 10	(Acting Honestly)			Exhibitionistic				

Note. The order of the components identified in each cell is not indicative of their relevance. Components in parentheses were organized within another domain of the Behavioral Skills Framework. Components in brackets were not included in the Behavioral Skills Framework for lack of malleability or relevance to education and work (see p. 4).

Maintaining Composure (Emotionality)

This section focuses on ACT's Behavioral Skills domain of Maintaining Composure (Emotionality). First, Maintaining Composure and its components are defined. Second, other models of Emotionality are reviewed and compared with Maintaining Composure. Finally, a general overview of the overarching differences between Maintaining Composure and other theoretical models is summarized. As listed in Table 48, Behavioral Skills Maintaining Composure is the extent to which a person is relatively calm, serene, and able to manage emotions effectively. The domain includes two components: Stress Tolerance and Self Confidence. In general, these correspond to components found in other models of Emotionality, Emotional Regulation, and Neuroticism.

Table 48. Behavioral Skills: Maintaining Composure

Domain	Component	Subcomponent
Maintaining Composure (Emotionality): Describes the extent to which a person is relatively calm, serene, and able to manage emotions effectively.	Stress Tolerance: The degree to which a person can control feelings of anxiety and other negative emotions in order to function effectively in a range of situations.	Worry Management Negative Feeling Management
	Self Confidence: A tendency to be self-assured and to make decisions without needing a lot of input from others.	Decisiveness Independence

Other Models of Emotionality

Big Five: NEO-PI-R

Costa and McCrae (1992) identified the Neuroticism components of the NEO-PI-R as Anxiety, Depression, Self-Consciousness, Vulnerability, Impulsivity, and Angry Hostility (Table 49).

Table 49. Big Five: NEO-PI-R

Domain	Component
Neuroticism:	Anxiety: A tendency to be apprehensive, fearful, prone to worry, nervous, tense, and jittery.
	Depression: Normal individual differences in the tendency to experience depressive affect.
	Self-Consciousness: The emotions of shame and embarrassment form the core of this component.
	Vulnerability: Vulnerability to stress.
	Impulsivity: Refers to the inability to control cravings and urges.
	Angry Hostility: Tendency to experience anger and related states such as frustration and bitterness.

At the component level, NEO-PI-R Anxiety (high congruency), NEO-PI-R Depression (moderate congruency), NEO-PI-R Self-Consciousness (moderate congruency), and NEO-PI-R Vulnerability (low congruency) all have varying degrees of congruency with Maintaining Composure Stress Tolerance. NEO-PI-R Self-Consciousness appears to have congruency with the Behavioral Skills Acting Honestly domain, as it relates to important feelings around

moral and ethical conduct. NEO-PI-R Impulsivity appears to have greater congruency with the Sustaining Effort domain of the Behavioral Skills Framework, as this domain includes a component addressing Self Control. NEO-PI-R Angry Hostility appears to have greater congruency with the Getting Along with Others domain of the Behavioral Skills Framework, as this domain includes a component concerning patience with others and situations. Table 50 contains a component-level overview of the congruency of the NEO-PI-R model with Maintaining Composure components.

Table 50. Congruency of Big Five: NEO-PI-R with Maintaining Composure Components

Congruency		Maintaining Composure	
1=Low 2=Moderate 3=High		Self Confidence	Stress Tolerance
NEO-PI-R Neuroticism	Anxiety		3
	Depression		2
	Self-Consciousness		2
	Vulnerability		1
	Impulsivity		
	Angry Hostility		

When comparing NEO-PI-R components to the subcomponents of the Maintaining Composure domain, NEO-PI-R Anxiety has high congruency with Maintaining Composure Worry Management. NEO-PI-R Depression has moderate congruency with Maintaining Composure Negative Feeling Management. NEO-PI-R Self-Consciousness has moderate congruency with Maintaining Composure Negative Feeling Management, as well. Lastly, NEO-PI-R Vulnerability has low congruency with Maintaining Composure Worry Management and Maintaining Composure Negative Feeling Management.

HEXACO

According to Lee and Ashton (2004), the components of Emotionality in the HEXACO framework include Dependence, Anxiety, Fearfulness, and Sentimentality (Table 51).

Table 51. HEXACO

Domain	Component
Emotionality:	Dependence: Assesses one's need for emotional support from others.
	Anxiety: Assesses a tendency to worry in a variety of contexts.
	Fearfulness: Assesses a tendency to experience fear.
	Sentimentality: Assesses a tendency to feel strong emotional bonds with others.

At the component level, HEXACO Dependence has moderate congruency with Maintaining Composure Self Confidence. HEXACO Anxiety and HEXACO Fearfulness both have high congruency with Maintaining Composure Stress Tolerance. HEXACO Sentimentality does not appear to relate to the Behavioral Skills Maintaining Composure domain and appears to

have greater congruency with the Behavioral Skills Socializing with Others and Behavioral Skills Getting Along with Others domains. Table 52 contains a component-level overview of the congruency of the HEXACO model with Maintaining Composure components.

Table 52. Congruency of HEXACO with Maintaining Composure Components

Congruency 1=Low 2=Moderate 3=High		Maintaining Composure	
		Self Confidence	Stress Tolerance
HEXACO Emotionality	Dependence	3	
	Anxiety		3
	Fearfulness		3
	Sentimentality		

When comparing HEXACO components to the subcomponents of the Maintaining Composure domain, HEXACO Dependence has moderate congruency with Maintaining Composure Decisiveness and Maintaining Composure Independence. HEXACO Anxiety has high congruency with Maintaining Composure Worry Management and low congruency with Maintaining Composure Negative Feeling Management. Lastly, HEXACO Fearfulness has high congruency with Maintaining Composure Worry Management and low congruency with Maintaining Composure Negative Feeling Management.

Hogan Personality Inventory

The developers of the HPI noted that Adjustment is highly correlated with Big Five Neuroticism (Hogan & Hogan, 2007). Components of Adjustment include: Calmness, Trusting, Good Attachment, Not Anxious, No Guilt, Even Tempered, No Complaints, and Empathy (Table 53).

Table 53. HPI

Domain	Component
Adjustment:	Calmness: Not Volatile.
	Trusting: Belief in others.
	Good Attachment: Good relations with authority.
	Not Anxious: Absence of worry.
	No Guilt: Absence of regret.
	Even Tempered: Patience.
	No Complaints: Complacence.
	Empathy: Concern for others

At the component level, HPI Calmness appears to have greater congruency with the Behavioral Skills Sustaining Effort domain. HPI Trusting was identified as having low

congruency with Maintaining Composure Self Confidence and appears to have greater congruency with the Behavioral Skills Getting Along with Others domain. HPI Good Attachment has low congruency with Maintaining Composure Self Confidence and appears to have greater congruency with the Behavioral Skills Sustaining Effort domain. HPI Not Anxious (moderate congruency), HPI No Guilt (moderate congruency), and HPI Even Tempered (low congruency) all have varying degrees of congruency with Maintain Composure Stress Tolerance. HPI Even Tempered also appears to have congruency with the Behavioral Skills Getting Along with Others domain as this domain includes a patience component. HPI No Complaints appears to have congruency with the Behavioral Skills Socializing with Others domain. HPI Empathy has low congruency with Maintaining Composure Self Confidence and appears to have congruency with the Behavioral Skills Getting Along with Others domain. Table 54 contains a component-level overview of the congruency of the HPI model with Maintaining Composure components.

Table 54. Congruency of the HPI with Maintaining Composure Components

Congruency 1=Low 2=Moderate 3=High		Maintaining Composure	
		Self Confidence	Stress Tolerance
HPI Adjustment	Calmness		
	Trusting	1	
	Good Attachment	1	
	Not Anxious		2
	No Guilt		2
	Even Tempered		1
	No Complaints		
	Empathy	1	

When comparing HPI components to the subcomponents of the Maintaining Composure domain, HPI Trusting has low congruency with Maintaining Composure Independence. HPI Good Attachment has low congruency with Maintaining Composure Independence. HPI Not Anxious has low congruency with Maintaining Composure Worry Management and moderate congruency with Maintaining Composure Negative Feeling Management. HPI No Guilt has moderate congruency with Maintaining Composure Negative Worry Management. HPI Even Tempered has low congruency with Maintaining Composure Negative Feeling Management. Lastly, HPI Empathy has low congruency with Maintaining Composure Independence.

DeYoung et al. (2007)

DeYoung et al. (2007) factor analyzed component scales from two major Big Five inventories. Their analysis resulted in a two-component solution for Emotionality which included Withdrawal and Volatility (Table 55).

Table 55. DeYoung et al. (2007)

Domain	Component
Neuroticism:	Withdrawal Negative affect.
	Volatility Emotional lability, irritability, or anger, and difficulty controlling emotional impulses.

At the component level, DeYoung et al.'s (2007) Withdrawal and DeYoung et al.'s (2007) Volatility have high congruency with Maintaining Composure Stress Tolerance. DeYoung et al.'s (2007) Volatility appears to also have congruency with the Behavioral Skills Sustaining Effort domain as it includes a self-control component. Table 56 contains a component-level overview of the congruency of the DeYoung et al. (2007) model with Maintaining Composure components.

Table 56. Congruency of DeYoung et al. (2007) with Maintaining Composure Components

Congruency 1=Low 2=Moderate 3=High		Maintaining Composure	
		Self Confidence	Stress Tolerance
DeYoung et al. (2007) Neuroticism	Withdrawal		3
	Volatility		3

When comparing DeYoung et al.'s (2007) components to the subcomponents of the Maintaining Composure domain, DeYoung et al.'s (2007) Withdrawal has low congruency with Maintaining Composure Worry Management and high congruency with Maintaining Composure Negative Feeling Management. Lastly, DeYoung et al.'s (2007) Volatility has moderate congruency with Maintaining Composure Worry Management and Maintaining Composure Negative Feeling Management.

Maintaining Composure Summary and Discussion

Table 57 provides an overview of the Maintaining Composure components and how they relate to the components found in the other Emotionality models discussed. Overall, Behavioral Skills Maintaining Composure is intended to define the behavioral characteristics and skills that make up the domain of Emotionality. From this review, we argue that all Emotionality related frameworks are accounted for within Behavioral Skills Maintaining Composure. Generally, the Behavioral Skills Maintaining Composure domain does not include aspects of impulse control, calmness, emotional bonds with others, or not complaining, as these are incorporated into other domains within the Behavioral Skills Framework, such as Sustaining Effort, Socializing with Others, or Getting Along with Others. Additionally, the Self-Confidence component of Maintaining Composure is included less frequently in other Emotionality related models (e.g., it is not part of the NEO-PI-R or DeYoung et al.'s [2007] model). This component was included as ACT has reliable data which suggests that it is an important aspect of academic and career performance success. Specifically, Self-Confidence is strongly associated with standardized achievement test scores (ACT, 2016) as well as college GPA, college retention, and success in math and English language arts courses (Robbins, Allen, Casillas, Peterson, & Le, 2006).

Table 57. Framework Components Organized by ACT's Maintaining Composure Components

	ACT's Holistic Framework	NEO-PI-R	HEXACO	HPI	DeYoung et al. (2007)
Component 1	Self Confidence		Dependence	Trusting, Good Attachment	
Component 2	Stress Tolerance	Anxiety, Depression, Self-Consciousness, Vulnerability	Anxiety, Fearfulness	Not Anxious, No Guilt, Even Tempered	Volatility, Withdrawal
Component 3	(Socializing with Others)		Sentimentality	No Complaints	
Component 4	(Sustaining Effort)	Impulsivity		Calmness, Good Attachment	Volatility
Component 5	(Getting Along with Others)	Angry Hostility	Sentimentality	Empathy, Trusting, Even Tempered	
Component 6	(Acting Honestly)	Self-Consciousness			

Note. The order of the components identified in each cell is not indicative of their relevance. Components in parentheses were organized within another domain of the Behavioral Skills Framework.

Keeping an Open Mind (Openness to Experience)

This section focuses on ACT's Behavioral Skills domain of Keeping an Open Mind (Openness to Experience). First, Keeping an Open Mind and its components are defined. Second, other models of Openness to Experience are reviewed and compared with Keeping an Open Mind. Finally, a general overview of the overarching differences between Keeping an Open Mind and other theoretical models is summarized. As listed in Table 58, Behavioral Skills Keeping an Open Mind refers to a person's level of open-mindedness and curiosity about a variety of ideas, beliefs, people, and experiences. The domain includes four components: Creativity, Curiosity, Flexibility, and Accepting Differences. In general, these correspond to components found in other models of Openness to Experience.

Table 58. Behavioral Skills: Keeping an Open Mind

Domain	Component	Subcomponent
Keeping an Open Mind (Openness to Experience): Describes a person's level of open-mindedness and curiosity about a variety of ideas, beliefs, people, and experiences.	Creativity: Generating original ideas, using existing ideas or things in new ways, and having an active imagination.	Originality Active Imagination
	Curiosity: Seeking out information to better understand a wide range of topic areas and/or obtaining a depth of understanding in one topic area that goes beyond what is required.	Information Seeking Depth of Knowledge
	Flexibility: Adapting to new environments and making adjustments to accommodate changes.	Environmental Adaptability Accommodation
	Accepting Differences: Being open-minded and accepting of ideas, cultures, and ways of doing things that are different from his/her own.	Open-mindedness Embracing Diversity

Other Models of Openness to Experience

Big Five: NEO-PI-R

Costa and McCrae (1992) identified that the Openness components of the NEO-PI-R are Ideas, Values, Actions, Fantasy, Aesthetics, and Feelings (Table 59).

Table 59. Big Five: NEO-PI-R

Domain	Component
Openness:	Ideas: Not only in an active pursuit of intellectual interests for their own sake, but also open-mindedness and a willingness to consider new, perhaps unconventional ideas.
	Values: The readiness to re-examine social, political, and religious values.
	Actions: Willingness to try different activities, go new places, or eat unusual foods.
	Fantasy: Having a vivid imagination and an active fantasy life.
	Aesthetics: An appreciation for art and beauty.
	Feelings: Receptivity to one's own inner feelings and emotions and the evaluation of emotion as an important part of life.

At the component level, NEO-PI-R Ideas has high congruency with Keeping an Open Mind Accepting Differences and Keeping an Open Mind Curiosity. NEO-PI-R Values has high congruency with Keeping an Open Mind Accepting Differences and low congruency with Keeping an Open Mind Curiosity. NEO-PI-R Actions has low congruency with Keeping an Open Mind Accepting Differences and moderate congruency with Keeping an Open Mind Flexibility. NEO-PI-R Fantasy has high congruency with Keeping an Open Mind Creativity. NEO-PI-R Aesthetics, which relates to appreciation for art and beauty, was not included in the Keeping an Open Mind domain of the Behavioral Skills Framework as it was determined by experts and ACT researchers to be less relevant to education and workplace success. NEO-PI-R Feelings, defined as receptiveness to one's own feelings, is also not included in the Keeping an Open Mind domain for the Behavioral Skills Framework as this is less trainable in academic and work settings and may provide less predictive utility. Table 60 contains a component-level overview of the congruency of the NEO-PI-R model with Keeping an Open Mind components.

Table 60. Congruency of Big Five: NEO-PI-R with Keeping an Open Mind Components

Congruency 1=Low 2=Moderate 3=High		Keeping an Open Mind			
		Accepting Differences	Flexibility	Curiosity	Creativity
NEO-PI-R Openness	Ideas	3		3	
	Values	3		1	
	Actions	1	2		
	Fantasy				3
	Aesthetics				
	Feelings				

When comparing NEO-PI-R components to the subcomponents of the Keeping an Open Mind domain, NEO-PI-R Ideas has high congruency with Keeping an Open Mind Open-mindedness and Keeping an Open Mind Information Seeking, and low congruency with Keeping an Open Mind Embracing Diversity. NEO-PI-R Values has moderate congruency with both Keeping an Open Mind Open-mindedness and Keeping an Open Mind Embracing Diversity, while having low congruency with Keeping an Open Mind Information Seeking. NEO-PI-R Actions has low congruency with Keeping an Open Mind Embracing Diversity and moderate congruency with Keeping an Open Mind Environmental Adaptability. Lastly, NEO-PI-R Fantasy has moderate congruency with both Keeping an Open Mind Creativity and Keeping an Open Mind Active Imagination.

HEXACO

According to Lee and Ashton (2004), the components of Openness to Experience in the HEXACO framework include Unconventionality, Inquisitiveness, Creativity, and Aesthetic Appreciation (Table 61).

Table 61. HEXACO

Domain	Component
Openness to Experience:	Unconventionality: Assesses a tendency to accept the unusual.
	Inquisitiveness: Assesses a tendency to seek information about, and experience with, the natural and human world.
	Creativity: Assesses one's preference for innovation and experiment.
	Aesthetic Appreciation: Assesses one's enjoyment of beauty in art and in nature.

At the component level, HEXACO Unconventionality has high congruency with Keeping an Open Mind Accepting Differences and low congruency with Keeping an Open Mind Creativity. HEXACO Inquisitiveness has high congruency with Keeping an Open Mind Curiosity. HEXACO Creativity has high congruency with Keeping an Open Mind Creativity. HEXACO Aesthetic Appreciation, which is one's enjoyment of beauty in art and nature, was not included in the Keeping an Open Mind domain. Table 62 contains a component-level overview of the congruency of the HEXACO model with Keeping an Open Mind components.

Table 62. Congruency of HEXACO with Keeping an Open Mind Components

Congruency 1=Low 2=Moderate 3=High		Keeping an Open Mind			
		Accepting Differences	Flexibility	Curiosity	Creativity
HEXACO Openness to Experience	Unconventionality	3			1
	Inquisitiveness			3	
	Creativity				3
	Aesthetic Appreciation				

When comparing HEXACO components to the subcomponents of the Keeping an Open Mind domain, HEXACO Unconventionality was identified as having moderate congruency with Keeping an Open Mind Open-mindedness and Keeping an Open Mind Embracing Diversity while having low congruency with Keeping an Open Mind Active Imagination. HEXACO Inquisitiveness has high congruency with Keeping an Open Mind Information Seeking. Lastly, HEXACO Creativity has high congruency with Keeping an Open Mind Originality and Keeping an Open Mind Active Imagination.

Hogan Personality Inventory

The developers of the HPI noted that Inquisitiveness and Learning Approach are highly correlated with Big Five Openness (Hogan & Hogan, 2007). Components of Inquisitiveness include: Culture, Curiosity, Science, Intellectual Games, Generates Ideas, and Thrill Seeking (Table 63). Components of Learning Approach include: Good Memory, Education, Math Ability, and Reading (Table 63).

Table 63. HPI

Domain	Component
Inquisitiveness:	Culture: Cultural interests.
	Curiosity: Investigative.
	Science: Analytical.
	Intellectual Games: Playful cognition—enjoys solving riddles.
	Generates Ideas: Ideation fluency.
	Thrill Seeking: Stimulus Seeking.
Learning Approach:	Good Memory: Powers of recall.
	Education: Academic talent.
	Math Ability: Numerical talent.
	Reading: Verbal talent.

At the component level, HPI Culture has high congruency with Keeping an Open Mind Accepting Differences. HPI Curiosity (moderate congruency) and HPI Science (low congruency) have congruency with Keeping an Open Mind Curiosity. HPI Intellectual Games has low congruency with Keeping an Open Mind Curiosity. HPI Generates Ideas has moderate congruency with Keeping an Open Mind Creativity. HPI Thrill Seeking was determined to be redundant with aspects of the Behavioral Skills Sustaining Effort Self Control component and is not included the Keeping an Open Mind domain. The Learning Approach component of the HPI does not appear to relate to the components or subcomponents of the Behavioral Skills Keeping an Open Mind domain as they seem to be related to a person's perceptions of their own cognitive abilities. Table 64 contains a component-level overview of the congruency of the HPI model with Keeping an Open Mind components.

Table 64. Congruency of the HPI with Keeping an Open Mind Components

Congruency 1=Low 2=Moderate 3=High		Keeping an Open Mind			
		Accepting Differences	Flexibility	Curiosity	Creativity
HPI Inquisitiveness	Culture	3			
	Curiosity			2	
	Science			1	
	Intellectual Games			1	
	Generates Ideas				2
	Thrill Seeking				

When comparing HPI Inquisitiveness components to the subcomponents of the Keeping an Open Mind domain, HPI Culture has moderate congruency with Keeping an Open Mind Open-mindedness and Keeping an Open Mind Embracing Diversity. HPI Curiosity has moderate congruency with Keeping an Open Mind Information Seeking. HPI Science has low congruency with Keeping an Open Mind Depth of Knowledge. HPI Intellectual Games has low congruency with Keeping an Open Mind Information Seeking and Keeping an Open Mind Depth of Knowledge. Lastly, HPI Generates Ideas has moderate congruency with Keeping an Open Mind Originality.

DeYoung et al. (2007)

DeYoung et al. (2007) factor analyzed component scales from two major Big Five inventories. Their analysis resulted in a two-component solution for Openness to Experience which included Intellect and Openness (Table 65). Due to the mid-level categorization of these components it is to be expected that they include more than one component of Keeping an Open Mind.

Table 65. DeYoung et al. (2007)

Domain	Component
Openness/Intellect:	Intellect: Quickness, ingenuity, and ideas.
	Openness: Aesthetics, imagination, and fantasy.

At the component level, DeYoung et al.'s (2007) Intellect has low congruency with Keeping an Open Mind Flexibility and moderate congruency with Keeping an Open Mind Creativity. DeYoung et al.'s (2007) Openness has moderate congruency with Keeping an Open Mind Creativity, but also relates to a person's appreciation of aesthetic beauty which is not included in the Keeping an Open Mind domain of the Behavioral Skills Framework. Table 66 contains a component-level overview of the congruency of DeYoung et al.'s (2007) model with Keeping an Open Mind components.

Table 66. Congruency of DeYoung et al. (2007) with Keeping an Open Mind Components

Congruency 1=Low 2=Moderate 3=High		Keeping an Open Mind			
		Accepting Differences	Flexibility	Curiosity	Creativity
DeYoung et al. (2007) Openness/ Intellect	Intellect		1		2
	Openness				2

When comparing DeYoung et al.'s (2007) components to the subcomponents of the Keeping an Open Mind domain, DeYoung et al.'s (2007) Intellect was identified as having low congruency with Keeping an Open Mind Environmental Adaptability and Keeping an Open Mind Accommodation, and moderate congruency with Keeping an Open Mind Originality. Lastly, DeYoung et al.'s (2007) Openness was identified as having moderate congruency with Keeping an Open Mind Active Imagination.

Mussel et al. (2011)

Mussel et al. (2011) conducted a study examining the relationship between Openness to Experience and job performance. In their study, they used the NEO-PI-R to parse out components and subcomponents of Openness to Experience (Table 67). Their analysis resulted in a two component model of Openness to Experience which includes Epistemic and Perceptual components. These two components include six subcomponents (three each).

Table 67. Mussel et al. (2011)

Domain	Component	Subcomponent
Openness to Experience:	Epistemic:	Actions: The willingness to try different activities, go new places, or eat unusual foods.
		Ideas: An active pursuit of intellectual interests for their own sake, as well as open-mindedness and a willingness to consider new, perhaps unconventional ideas.
		Values: The readiness to re-examine social, political, and religious values.
	Perceptual:	Fantasy: Vivid imagination and an active fantasy life.
		Aesthetics: An appreciation for art and beauty.
		Feelings: Receptivity to one's own inner feelings and emotions and the evaluation of emotion as an important part of life.

At the component level, Mussel et al.'s (2011) Epistemic has moderate congruency with Keeping an Open Mind Accepting Differences and Keeping an Open Mind Curiosity. It also has low congruency with Keeping an Open Mind Flexibility. Mussel et al.'s (2011) Perceptual component has moderate congruency with Keeping an Open Mind Creativity. Other aspects of Mussel et al.'s (2011) Perceptual component related to the appreciation of aesthetics and openness to one's own feelings are not included in the Behavioral Skills Keeping an Open Mind domain. SMEs identified these items as not being as relevant to academic and workplace

outcomes. Table 68 contains a component-level overview of the congruency of the Mussel et al. (2011) model with Keeping an Open Mind components.

Table 68. Congruency of Mussel et al. (2011) with Keeping an Open Mind Components

Congruency 1=Low 2=Moderate 3=High		Keeping an Open Mind			
		Accepting Differences	Flexibility	Curiosity	Creativity
Mussel et al. (2011) Openness to Experience	Epistemic	2	1	2	
	Perceptual				2

When comparing Mussel et al.'s (2011) subcomponents to the subcomponents of the Keeping an Open Mind domain, Mussel et al.'s (2011) Actions has moderate congruency with Keeping an Open Mind Open-mindedness and Keeping an Open Mind Embracing Diversity. Mussel et al.'s (2011) Ideas has moderate congruency with Keeping an Open Mind Information Seeking and Keeping an Open Mind Depth of Knowledge. Mussel et al.'s (2011) Values has moderate congruency with Keeping an Open Mind Open-mindedness and Keeping an Open Mind Embracing Diversity while also having low congruency with Keeping an Open Mind Environmental Adaptability. Lastly, Mussel et al.'s (2011) Fantasy has moderate congruency with Keeping an Open Mind Active Imagination. Lastly, Mussel et al.'s (2011) Aesthetics and Mussel et al.'s (2011) Feelings are not included in the Behavioral Skills Keeping an Open Mind domain as they focus on aesthetic appreciation and openness to feelings.

Keeping an Open Mind Summary and Discussion

Table 69 provides an overview of the Keeping an Open Mind components and how they relate to the components found in the other Openness to Experience models discussed. Overall, Behavioral Skills Keeping an Open Mind is intended to define which behavioral characteristics and skills make up the components of Openness to Experience. From this review, we argue that most Openness to Experience frameworks are accounted for within Behavioral Skills Keeping an Open Mind. It should be noted that the HPI Learning Approach is the only domain associated with Openness to Experience that is not included in the Behavioral Skills Keeping an Open Mind. This domain appears to be more related to individuals' perceptions of their own cognitive abilities and was deemed to be less relevant to our model of Openness to Experience. Also, the Behavioral Skills Keeping an Open Mind domain does not include components such as appreciation of aesthetic beauty or receptiveness to one's own feelings that are found in other models of Openness to Experience. These components were determined to be less relevant to academic and career success and were not included in the Behavioral Skills model. Additionally, the Keeping an Open Mind Flexibility component is not usually included in other models of Openness to Experience and could be a valuable addition to the Openness to Experience literature.

Table 69. Framework Components Organized by ACT's Keeping an Open Mind Components

	ACT's Holistic Framework	NEO-PI-R	HEXACO	HPI	DeYoung et al. (2007)	Mussel et al. (2011)
Component 1	Accepting Differences	Ideas, Values, Actions	Unconventionality	Culture		Epistemic
Component 2	Flexibility	Actions			Intellect	Epistemic
Component 3	Curiosity	Ideas, Values	Inquisitiveness	Curiosity, Science, Intellectual Games		Epistemic
Component 4	Creativity	Fantasy	Unconventionality, Creativity	Generates Ideas	Intellect, Openness	Perceptual
Component 5	[Appreciation of Aesthetics]	Aesthetics	Aesthetic Appreciation		Openness	Perceptual
Component 6	[Openness to Own feelings]	Feelings				Perceptual
Component 7	[Stimulus Seeking]			Thrill Seeking		
Component 8	[Self-Perception of Cognitive Abilities]			[Learning Approach components]		

Note. The order of the components identified in each cell is not indicative of their relevance. Components in brackets were not included in the Behavioral Skills Framework for lack of malleability or relevance to education and work (see p. 4).

Acting Honestly (Honesty-Humility)

This section focuses on ACT's Behavioral Skills domain of Acting Honestly (Honesty-Humility). First, Acting Honestly and its components are defined. Second, other models of Honesty-Humility are reviewed and compared with Acting Honestly. Finally, a general overview of the overarching differences between Acting Honestly and other theoretical models is summarized. As listed in Table 70, Behavioral Skills Acting Honestly is the extent to which a person values and adheres to ethical and moral standards of behavior, as well as personal level of humility. The domain includes three components: Genuineness, Fairness, and Modesty. In general, these correspond to components found in other models of Honesty-Humility.

Table 70. Behavioral Skills: Acting Honestly

Domain	Component	Subcomponent
Acting Honestly (Honesty-Humility): The extent to which a person values and adheres to ethical and moral standards of behavior, as well as personal level of humility.	Genuineness: Being sincere and truthful in interactions, appropriately giving others credit, and acknowledging his/her mistakes.	Truthfulness Acceptance of Responsibility
	Fairness: Acts in ways that are intended to be unbiased and fair to everyone.	Fairness
	Modesty: Avoids boasting or acting superior to others and is humble about achievements.	Modesty

Other Models of Honesty-Humility

Big Five: NEO-PR-R

Since Costa and McCrae's (1992) NEO-PI-R is based on the Big Five personality traits it does not include a Honesty-Humility factor. Nevertheless, some of the variability related to the Honesty-Humility factor is incorporated into the other Big Five traits (primarily Conscientiousness, Agreeableness, and Neuroticism) (Brocklebank, Pauls, Rockmore, & Bates, 2015). Thus, several components of Costa and McCrae's (1992) NEO-PI-R have been linked to Honesty-Humility (Brocklebank et al., 2015). These include Dutifulness, Straightforwardness, Modesty, and Self-Consciousness (Table 71).

Table 71. Big Five: NEO-PI-R

Domain	Component
Conscientiousness:	Dutifulness: Governed by conscience.
Agreeableness:	Straightforwardness: Willingness (relative to other individuals) to be frank, honest, and unguarded in feelings.
	Modesty: Measure of humility and self-effacing nature.
Neuroticism	Self-Consciousness: The emotions of shame and embarrassment form the core of this facet.

At the component level, NEO-PI-R Dutifulness has moderate congruency with Acting Honestly Fairness and low congruency with Acting Honestly Genuineness. NEO-PI-R Straightforwardness has moderate congruency with Acting Honestly Genuineness. NEO-PI-R Modesty has moderate congruency with Acting Honestly Modesty. NEO-PI-R Self-

Consciousness was identified as having low congruency with Acting Honestly Genuineness because people who are comfortable being sincere, truthful, and acknowledge mistakes are likely to experience lower levels of self-consciousness. Table 72 contains a component-level overview of the congruency of the NEO-PI-R model with Acting Honestly components.

Table 72. Congruency of Big Five: NEO-PI-R with Acting Honestly Components

Congruency 1=Low 2=Moderate 3=High		Acting Honestly		
		Modesty	Fairness	Genuineness
NEO-PI-R Conscientiousness	Dutifulness		2	1
NEO-PI-R Agreeableness	Straightforwardness			2
	Modesty	2		
NEO-PI-R Neuroticism	Self-Consciousness			1

When comparing NEO-PI-R components to the subcomponents of the Acting Honestly domain, NEO-PI-R Dutifulness was identified as having moderate congruency with Acting Honestly Fairness and low congruency with Acting Honestly Acceptance of Responsibility. NEO-PI-R Straightforwardness has high congruency with Acting Honestly Truthfulness. NEO-PI-R Modesty has high congruency with Acting Honestly Modesty. Lastly, NEO-PI-R Self-Consciousness has low congruency with Acting Honestly Truthfulness and Acting Honestly Acceptance of Responsibility.

HEXACO

According to Lee and Ashton (2004), the components of Honesty-Humility in the HEXACO framework include Sincerity, Fairness, Greed Avoidance, and Modesty (Table 73).

Table 73. HEXACO

Domain	Component
Honesty-Humility:	Sincerity A tendency to be genuine in interpersonal relations.
	Fairness A tendency to avoid fraud and corruption.
	Greed Avoidance A tendency to be uninterested in possessing lavish wealth, luxury goods, and signs of high social status.
	Modesty A tendency to be modest and unassuming.

At the component level, HEXACO Fairness was identified as having moderate congruency with Acting Honestly Fairness and Acting Honestly Genuineness. HEXACO Sincerity has high congruency with Acting Honestly Genuineness. HEXACO Greed Avoidance has moderate congruency with Acting Honestly Modesty. Aspects of HEXACO Greed Avoidance related to materialism were dropped during model development as experts suggested people may respond negatively to receiving information about their level of materialism. Also, they suggested that there may be fewer skills an individual could develop to change this attribute and that it was not clear what the relationship of materialism would be to education and workplace success. Lastly, HEXACO Modesty was identified as having high congruency with

Acting Honestly Modesty. Table 74 contains a component-level overview of the congruency of the HEXACO model with Acting Honestly components.

Table 74. Congruency of HEXACO with Acting Honestly Components

Congruency 1=Low 2=Moderate 3=High		Acting Honestly		
		Modesty	Fairness	Genuineness
HEXACO Honesty-Humility	Fairness		2	2
	Sincerity			3
	Greed Avoidance	2		
	Modesty	3		

When comparing HEXACO components to the subcomponents of the Acting Honestly domain, HEXACO Fairness has moderate congruency with Acting Honestly Fairness and Acting Honestly Truthfulness. HEXACO Sincerity has high congruency with Acting Honestly Truthfulness. HEXACO Greed Avoidance has moderate congruency with Acting Honestly Modesty. HEXACO Modesty was identified as having high congruency with Acting Honestly Modesty. The Acting Honestly Acceptance of Responsibility subcomponent is not explicitly covered in the HEXACO framework. This subcomponent was included within the Behavioral Skills model as it was identified as an important and useful subcomponent of Genuineness in the prediction of academic and career success.

Hogan Personality Inventory

Only one component of the HPI appears to have a direct relationship to the Behavioral Skills Acting Honestly domain. Similar to the NEO-PI-R, the HPI is a based on a five factor model of personality and was not explicitly designed to assess for aspects of Honesty-Humility. Although the HPI is based on the Big Five model, there are some Big Five personality domains which incorporate components of Honesty-Humility (Table 75).

Table 75. HPI

Domain	Component
Sociability:	Exhibitionistic: Showing-off.

At the component level, HPI Exhibitionistic of the HPI Sociability domain was identified as having moderate congruency with the Acting Honestly Modesty. Table 76 contains a component-level overview of the congruency of the HPI model with Acting Honestly components.

Table 76. Congruency of HPI with Acting Honestly Components

Congruency 1=Low 2=Moderate 3=High		Acting Honestly		
		Modesty	Fairness	Genuineness
HPI Sociability	Exhibitionistic	2		

When comparing HPI components to the subcomponents of the Acting Honestly domain, HPI Exhibitionistic has moderate congruency with Acting Honestly Modesty.

Acting Honestly Summary and Discussion

Table 77 provides an overview of the Acting Honestly components and how they relate to the components found in the other Honesty-Humility models discussed. Overall, the Behavioral Skills Acting Honestly domain is intended to define which behavioral characteristics and skills make up the components of Honesty-Humility. From this review, we argue that the HEXACO Honesty-Humility taxonomy as well as related components from other personality domains (e.g., Agreeableness, Conscientiousness, and Emotionality) are accounted for within the Behavioral Skills Acting Honestly domain. Generally, the Honesty-Humility domain does not have the lengthy history of empirical literature compared to the Big Five domains. However, aspects of the Honesty-Humility traits are included in other models of personality (i.e., NEO-PI-R, HEXACO, HPI) and more recent research suggests that Honesty-Humility is valid and useful to include in personality research (Allgaier, Zettler, Wagner, Püttmann, & Trautwein, 2015; Ashton et al., 2004; Book, Volk, & Hosker, 2012; Brocklebank et al., 2015; R. E. de Vries & van Gelder, 2015; Johnson et al., 2011).

Table 77. Framework Components Organized by ACT's Acting Honestly Components

	ACT's Holistic Framework	NEO-PI-R	HEXACO	HPI
Component 1	Modesty	Modesty	Modesty, Greed Avoidance	Exhibitionistic
Component 2	Fairness	Dutifulness	Fairness	
Component 3	Genuineness	Straightforwardness, Dutifulness, Self-Consciousness	Sincerity, Fairness	
Component 4	[Materialism]		Greed Avoidance	

Note. The order of the components identified in each cell is not indicative of their relevance. Components in brackets were not included in the Behavioral Skills Framework for lack of malleability or relevance to education and work (see p. 4).

General Discussion

The broadest level (i.e., the domain level) of the ACT Behavioral Skills Framework is organized into six domains of behavior based on the HEXACO model of personality. Based on empirical findings, models and theories of human behavior and personality, and input from SMEs, these domains were further divided into more specific components and subcomponents rationally generated by ACT. The domains include Sustaining Effort (Conscientiousness), Getting Along with Others (Agreeableness), Socializing with Others (Extraversion), Maintaining Composure (Emotionality), Keeping an Open Mind (Openness to Experience), and Acting Honestly (Honesty-Humility). In the majority of cases, the components and subcomponents in other models of personality are included in the Behavioral Skills Framework. Exceptions include Activity/Energy level, Materialism, Satisfaction with Life, Stimulus Seeking, Openness to Own Feelings, Self-Perception of Cognitive Abilities, and Appreciation of Aesthetics. These were purposely left out during the development process due to feedback from SMEs about their lack of direct applicability to academic and work success. Additionally, there are cases where the Behavioral Skills Framework's organizational structure does not match other models. For example, various components of other models have been placed in different domains within the Behavioral Skills Framework due to a better theoretical fit.

In addition to its unique organization, the Behavioral Skills Framework provides several new contributions to the field of personality psychology and assessment. First, the Behavioral Skills Framework is the first structure of personality to include subcomponents and PLDs (i.e., explicit observable descriptions of what students and employees need to know, and be able and willing to do in order to achieve education and career success), as most other structures stop at the component/facet level of specificity. Second, the Behavioral Skills Framework's focus on behavior (as identified by SMEs in these areas), rather than personality traits, permits for the tangible identification of strengths and less developed behaviors that can be enhanced to contribute to academic or workplace success. This improved clarity on strengths and areas for improvement should help facilitate targeted skills training. Lastly, the Behavioral Skills Framework measures developmentally appropriate behavior from kindergarten to career (i.e., Elementary School, Middle School, High School, Postsecondary, and Workforce). This allows the Behavioral Skills Framework to be used throughout one's life to identify relevant behaviors that will be necessary for successful transitions to higher developmental stages.

The next step in the process of the development of the Behavioral Skills Framework is to empirically test the model, for which work is currently underway. Specifically, future steps for this framework include empirically exploring the relations between the Behavioral Skills Framework and other models of personality and behavior, especially the Five Factor and HEXACO models. Work is also currently underway to develop measures of specified behavioral skills that predict academic and workplace outcomes. As empirical research and assessment development unfolds, we expect to iteratively modify the model as theory and research inform one another.

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Appendix A: ACT's Behavioral Skills Framework: Domains, Components, and Subcomponents

Domain	Component	Subcomponent
Sustaining Effort (Conscientiousness): Describes a person's level of diligence, effort, organization, self-control, and compliance with rules.	Dependability: Reliably fulfilling responsibilities, meeting deadlines, and producing quality work.	Timeliness: Follows a predetermined schedule for appointments/classes and tasks.
		Follow Through: Meets commitments and works on tasks until they are complete.
		Quality: Submits high quality work.
	Order: Planning and organizing tasks and materials, creating schedules, monitoring progress, and paying close attention to details.	Organization: Uses a systematic approach to organize tasks and materials.
		Planning: Creates and follows appropriate schedules or timelines for tasks.
		Monitoring: Checking to make sure progress is being made toward the completion of tasks.
	Persistence: Working hard, making progress on relevant tasks, and maintaining focus despite setbacks or difficulties.	Overcoming Challenges: Continuing to work on a task despite the difficulty level of the task, the presence of significant obstacles, or previous setbacks.
		Maintaining Effort: Putting in the time and sustained energy needed in order to successfully complete a task.
		Focusing: Maintaining attention on the current activity despite the nature of the task or distractions.
	Rule Consciousness: Following rules and procedures and complying with authority.	Compliance: Follows instructions, procedures, and rules.
		Respect for Rules/Authority: Shows respect and appreciation for authority figures and rules
	Goal Striving: Setting challenging goals, doing tasks without being told, and working to improve or learn new skills.	Self Improvement: Works hard to become more effective by learning new skills/ knowledge or improving existing skills.
		Initiative: Takes action without being asked to do so.
		Goal Setting: Sets high but achievable goals for self-improvement and advancement.
	Self Control: Managing impulses and weighing the consequences of one's behavior before acting.	Restraint: Resisting the impulse to act on a desire.
		Thinking Before Acting: Taking the time to consider his/her options, potential consequences, and steps that need to be taken before taking action.

Appendix A: ACT's Behavioral Skills Framework: Domains, Components, and Subcomponents *(continued)*

Domain	Component	Subcomponent
Getting Along Well with Others (Agreeableness): Describes the extent to which a person interacts positively and cooperates with others, and is generally kind, friendly, and tactful.	Cooperation: Being respectful, polite, collaborative, and skilled at working through conflict with other people.	Respect for others: Interacts with others in a way that is polite and shows consideration. Collaboration: Interacts with others in order to complete tasks and achieve group goals. Conflict Management: Takes action to productively work through conflicts and disagreements when they occur.
	Perspective Taking: Identifying, acknowledging, and understanding the emotions of others, showing concern for others, and considering the audience when providing information.	Interpreting Emotional Reactions: Recognizes and generally understands potential causes of emotional reactions from others in order to respond appropriately. Showing Concern: Shows an interest in and compassion for the feelings and well-being of others. Considering the Audience: Takes others' perspectives and feelings into consideration when communicating information. *(n/a: 3-8)*
	Goodwill: Assuming others have good intentions, trusting others, being able to forgive and not holding grudges.	Forgiveness: Continuing to work/interact with others even after they have wronged (e.g., deceived, hurt) him/her. Trust: When interacting with others, his/her actions are influenced by a belief that others have good intentions (e.g., generally honest, will do what they say they will do).
	Helpfulness: Helping others and being generous with his/her time and/or resources despite personal cost.	Assisting Others (Also Helps Beyond Requirements): Helps others as needed. Selflessness: Being generous in sharing time and resources with others despite the impact it may have on him/herself.
	Patience: Tolerating frustrations presented by others or by situations without expressing irritation or hostility.	Tolerating Frustrations with Others: Effectively dealing with disappointment, annoyances, and setbacks based on people's actions without showing irritation or anger. Tolerating Situational Frustrations: Effectively dealing with disappointment, annoyances, and setbacks based on situational factors without showing irritation or anger.

Appendix A: ACT's Behavioral Skills Framework: Domains, Components, and Subcomponents *(continued)*

Domain	Component	Subcomponent
Socializing with Others (Extraversion): Describes a person's preferred level of social interaction, behavior in interpersonal situations, and optimism.	Assertiveness: Influencing others and preferring to be in charge in social interactions and group activities.	Taking Charge: Seeks out positions of leadership and asserts control in group situations. Influence: Persuades others to agree with his/her ideas and/or perform certain behaviors. *(n/a: 3-8)*
	Optimism: The degree to which a person expresses a positive mood and a positive outlook.	Cheerful Mood: Generally presents an upbeat and hopeful mood when interacting with others. Positive Outlook: Generally presents a positive view of situations.
	Sociability: Seeking out and enjoying situations involving interpersonal interaction and building relationships with others.	Interacting with Others: Seeks out and actively participates in social activities when appropriate. Networking Maintains and expands his/her social group.
Maintaining Composure (Emotionality): Describes the extent to which a person is relatively calm, serene, and able to manage emotions effectively.	Stress Tolerance: The degree to which a person can control feelings of anxiety and other negative emotions in order to function effectively in a range of situations.	Worry Management: Anxiety and fear do not impact the completion of daily activities or tasks. Negative Feeling Management: Negative feelings (e.g., sadness, guilt, shame) do not impact the completion of daily activities or tasks.
	Self Confidence: A tendency to be self-assured and to make decisions without needing a lot of input from others.	Decisiveness: Able to make his/her own decisions. Independence: Works on tasks without needing a lot of support or guidance from others.

Appendix A: ACT's Behavioral Skills Framework: Domains, Components, and Subcomponents *(continued)*

Domain	Component	Subcomponent
Keeping an Open Mind (Openness to Experience): Describes a person's level of open-mindedness and curiosity about a variety of ideas, beliefs, people, and experiences.	Creativity: Generating original ideas, using existing ideas or things in new ways, and having an active imagination.	Originality: Generates new ideas related to tasks, processes, theories, etc. Active Imagination: Mentally pictures and is able to create things that do not currently exist in the real world.
	Curiosity: Seeking out information to better understand a wide range of topic areas and/or obtaining a depth of understanding in one topic area that goes beyond what is required.	Information Seeking: Asks questions and searches for information on a wide variety of topic areas. Depth of Knowledge: Obtains a level of knowledge that goes beyond the minimum requirements related to performing required tasks.
	Flexibility: Adapting to new environments and making adjustments to accommodate changes.	Environmental Adaptability: Adjusts his/her behavior to meet the requirements of different or unfamiliar situations/environments. Accommodation: Adjusts existing schedules/plans in order to accommodate changes to tasks and facilitate their completion.
	Accepting Differences: Being open-minded and accepting of ideas, cultures, and ways of doing things that are different from his/her own.	Open-mindedness: Keeps an open mind when encountering ideas, opinions, and thoughts that are different from his/her own. Embracing Diversity: Shows an interest in and respect for people from different backgrounds and cultures.
Acting Honestly: (Honesty-Humility) Describes the extent to which a person values and adheres to ethical and moral standards of behavior, as well as personal level of humility.	Genuineness: Being sincere and truthful in interactions, appropriately giving others credit, and acknowledging his/her mistakes.	Truthfulness: Is straightforward, open, and truthful when interacting with others. Acceptance of Responsibility: Accepts responsibility for his/her actions, including giving others credit when appropriate.
	Fairness: Acting in ways that are intended to be unbiased and fair to everyone.	Fairness: Acting in ways that are intended to be unbiased and fair to everyone.
	Modesty: Being humble about achievements, presenting a realistic view of oneself, and avoiding boasting or acting superior to others.	Modesty: Being humble about achievements, presenting a realistic view of oneself, and avoiding boasting or acting superior to others.

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