



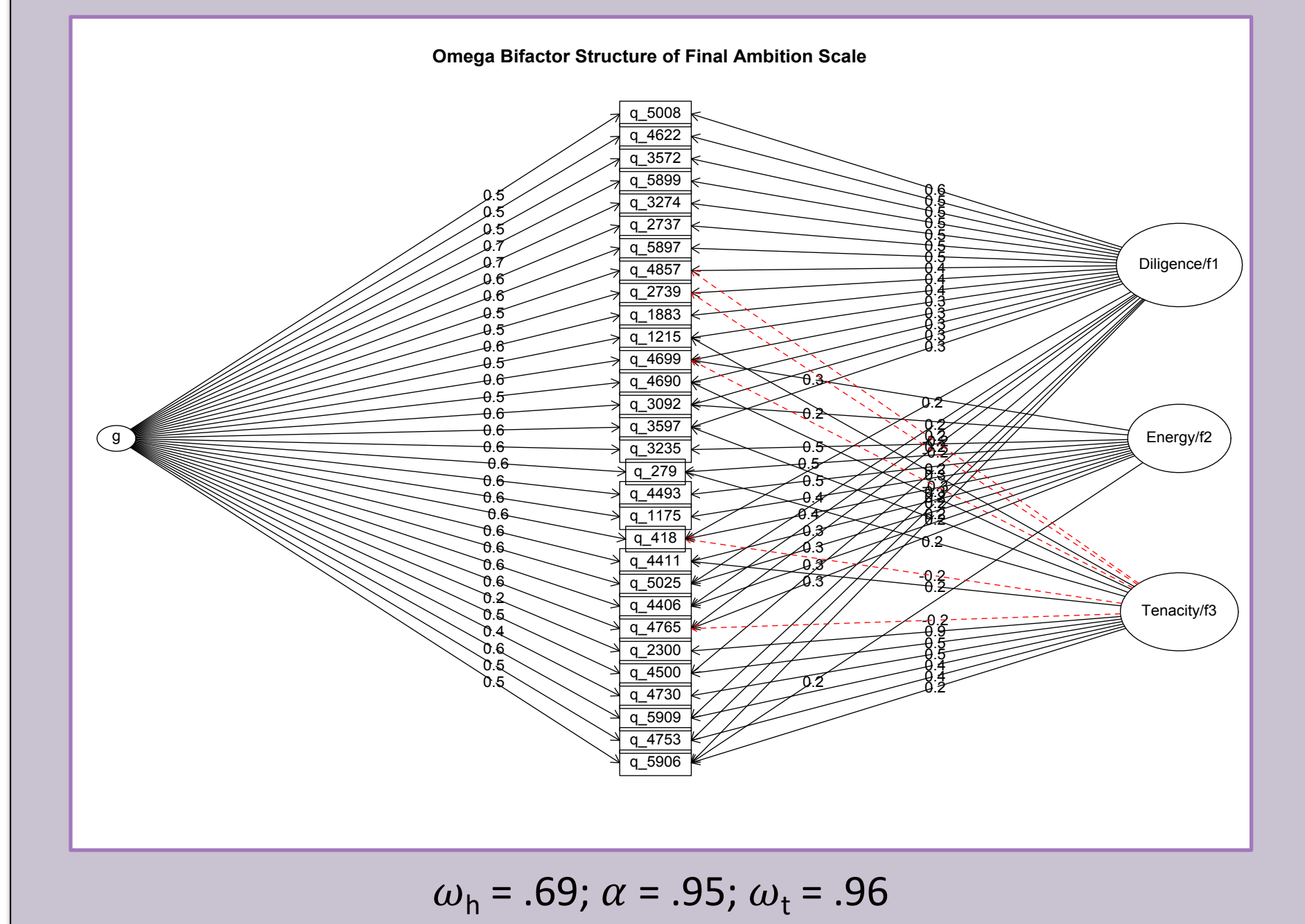
Introduction

- ❖ Ambition and leadership are broad personality constructs that have significant implications for how individuals interact with the physical and social world
- ❖ Ambition and leadership are likely related (Jones et al. 2017) but distinct constructs of individual differences (Marques, 2017)
- ❖ Ambition is an ambiguous personality construct not defined by the American Psychological Association (APA)
- ❖ Previous ambition measures relate positively to competitiveness, leadership, and confidence as well as extraversion and conscientiousness, negatively to neuroticism and agreeableness, and are typically unrelated to openness to experience (Jones et al. 2017).
- ❖ Leadership involves “the processes involved in leading others, including organizing, directing, coordinating, and motivating their efforts toward achieving certain group or organizational goals” (APA Dictionary of Psychology, 2022)
- ❖ A meta-analytic review of leadership literature reveals leadership is negatively associated with neuroticism, positively associated with extraversion, openness, and conscientiousness, and has a non-significant association with agreeableness (Judge et al., 2002)

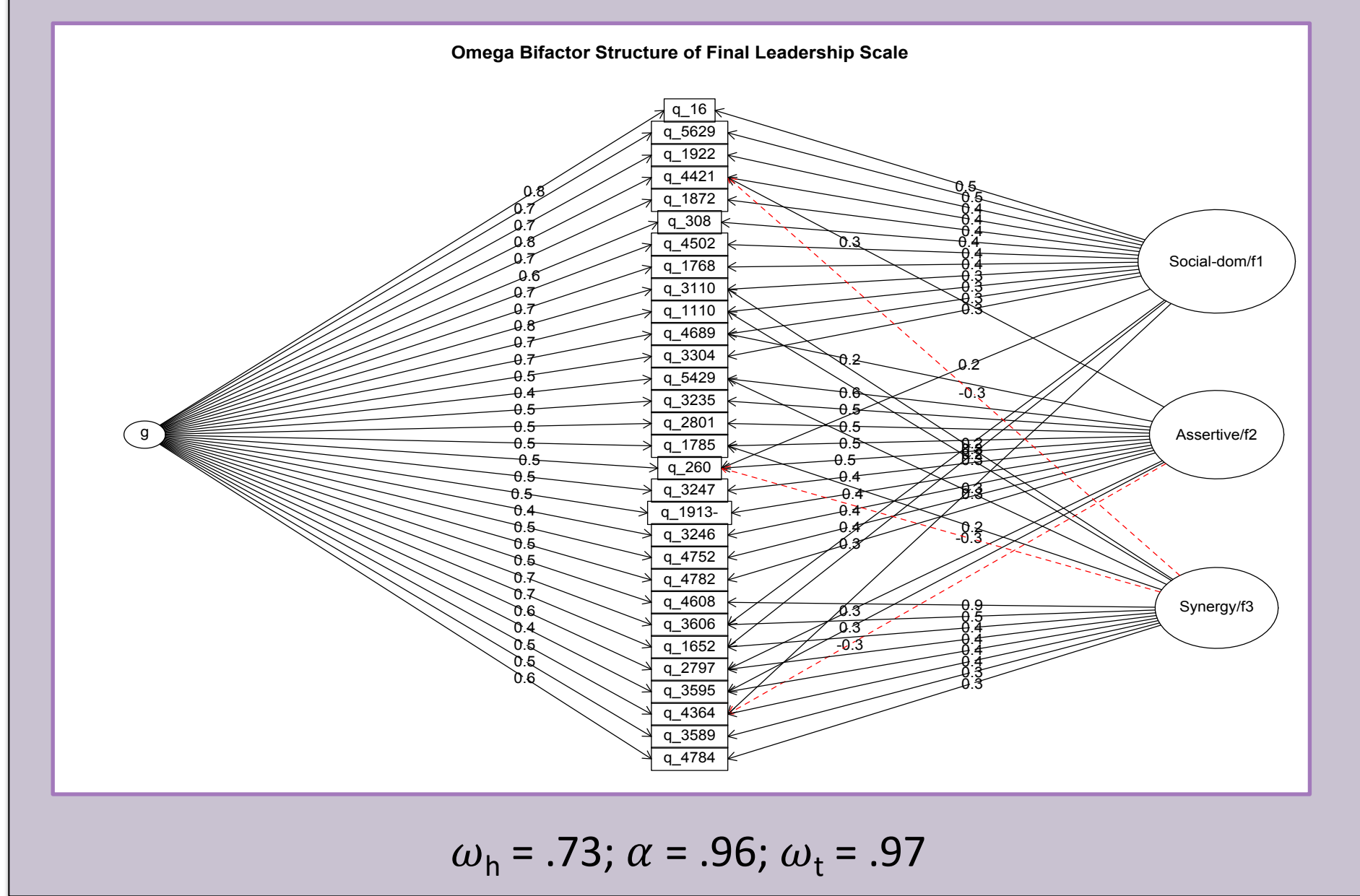
Methods

- ❖ Participant data from the Synthetic Aperture Personality Assessment (SAPA) project (Condon, 2018), which collects personality data on over 6600 items were utilized to empirically construct ambition and leadership scales
- ❖ SAPA uses a Massively Missing at Completely Random (MMCAR) sampling procedure, meaning participants are randomly administered only a small subset of the available SAPA project items (Revelle et al., 2017).
- ❖ SAPA project data from February 7, 2017, to November 18, 2019, were utilized for scale construction resulting in a participant sample of $N = 644,495$.
- ❖ Arbitrary target scales were created for Ambition and Leadership through a key word search for relevant SAPA items.
- ❖ The items most correlated with each of the target scales were subsequently factor analyzed
- ❖ The emergent factors with the highest face validity for ambition and leadership were extracted and became the new target scales
- ❖ A second iteration of the aforementioned scale construction technique was performed on the new Ambition and Leadership targets
- ❖ This process resulted in two comprehensive 30-item measures for Leadership (Table 1) and Ambition (Table 2), each with three group factors that were arbitrarily labeled
- ❖ Validity analysis was done on participants who received at least one of the final leadership or ambition items resulting in a participant sample of $N = 186,451$.

Final Ambition Scale Structure



Final Leadership Scale Structure



Omega Analysis of the Final Leadership Scale with 3 Factors, Showing Loadings on the General and Group Factors (e.g., Leadership-like Social-Dominance, Leadership-like Assertiveness, and Leadership-like Synergy)

Table 1: Omega Analysis of the Final Leadership Scale with 3 Factors, Showing Loadings on the General and Group Factors (e.g., Leadership-like Social-Dominance, Leadership-like Assertiveness, and Leadership-like Synergy)

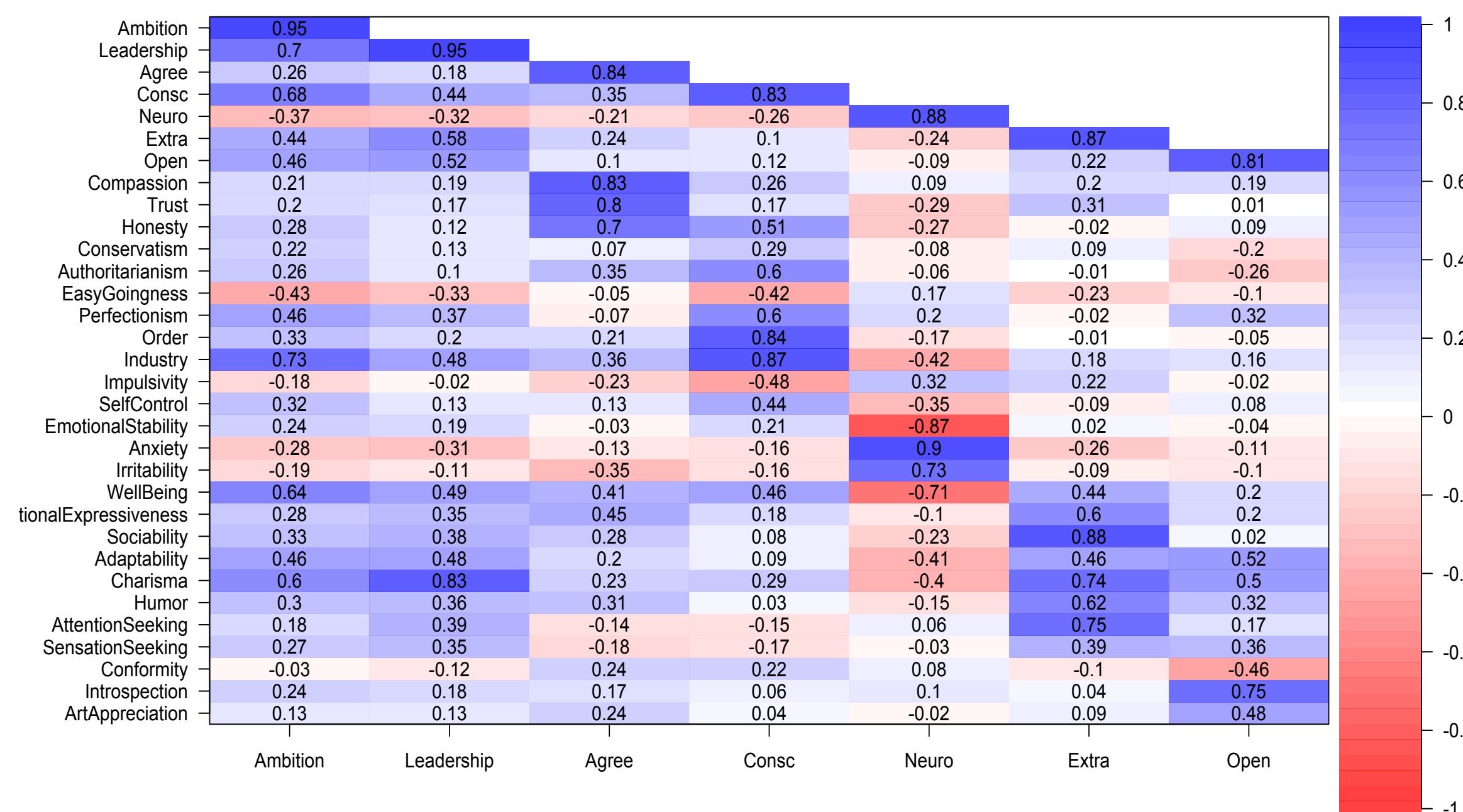
Variable	g	Social-Dominance(F1)	Assertiveness(F2)	Synergy(F3)	h2	u2	p2	Item
q.16	0.81	0.46	0.03	0.03	0.87	0.13	0.76	Act as a leader.
q.5629	0.66	0.46	-0.12	0.08	0.66	0.34	0.65	In a group, I like to take charge of things.
q.1922	0.68	0.41	-0.16	0.17	0.69	0.31	0.68	Wait for others to lead the way.
q.4421	0.76	0.40	0.32	-0.26	0.90	0.10	0.64	I am someone who is dominant, acts as a leader.
q.1872	0.74	0.40	0.12	-0.03	0.72	0.28	0.76	Try to lead others.
q.308	0.62	0.39	0.05	-0.14	0.56	0.44	0.69	Automatically take charge.
q.4592	0.72	0.36	0.05	0.14	0.67	0.33	0.77	Wait for others to lead the way.
q.1768	0.73	0.35	0.18	0.04	0.70	0.30	0.77	Take charge.
q.3110	0.76	0.33	0.09	0.28	0.77	0.23	0.75	Like to lead other people.
q.1110	0.68	0.32	0.01	0.27	0.64	0.36	0.73	Have leadership abilities.
q.4689	0.72	0.28	0.22	0.19	0.68	0.32	0.76	Am a leader.
q.3994	0.52	0.28	0.00	0.19	0.60	0.40	0.70	I can get others to do what I want.
q.5429	0.39	-0.09	0.64	0.29	0.66	0.34	0.24	I am confident that I could deal efficiently with unexpected events.
q.3235	0.51	0.09	0.48	0.08	0.50	0.50	0.51	I would describe myself as confident.
q.2801	0.46	0.09	0.48	0.00	0.45	0.55	0.47	Am uniquely qualified to make important contributions.
q.1785	0.55	0.09	0.46	0.20	0.56	0.44	0.54	Take the initiative.
q.260	0.52	0.22	0.45	-0.28	0.60	0.40	0.46	Am the first to act.
q.3247	0.53	0.15	0.39	0.05	0.47	0.53	0.61	I would describe myself as self-confident.
q.1915	0.53	0.14	0.37	0.19	0.45	0.55	0.63	Wait for others to lead the way.
q.3246	0.43	0.06	0.36	0.19	0.36	0.64	0.53	I would describe myself as resourceful.
q.4752	0.45	0.08	0.32	0.20	0.38	0.62	0.55	Seek responsibility.
q.4782	0.52	0.16	0.30	0.11	0.39	0.61	0.68	Am an initiator.
q.4608	0.52	0.01	0.12	0.86	1.03	-0.03	0.26	Am good at managing teams with very different members.
q.3606	0.65	0.20	0.06	0.54	0.76	0.24	0.56	Would succeed in a job that requires leadership.
q.1052	0.69	0.23	0.14	0.41	0.72	0.28	0.66	See myself as a good leader.
q.2797	0.57	0.11	0.30	0.37	0.56	0.44	0.57	Am told that I am a strong but fair leader.
q.3595	0.44	0.04	0.29	0.36	0.41	0.59	0.46	Am good at identifying opportunities.
q.4984	0.54	0.32	0.28	0.36	0.60	0.40	0.48	Would like a job where I am responsible for managing the work of others.
q.3589	0.50	0.17	0.08	0.32	0.39	0.61	0.65	Wherever I have been, I have been a powerful force for constructive change.
q.4784	0.56	0.18	0.15	0.31	0.46	0.54	0.67	Am good at recruiting others for a project.

Omega Analysis of the Final Ambition Scale with 3 Factors, Showing Loadings on the General and Group Factors (e.g., Ambitious-like Diligence, Ambitious-like Energy & Motivation, and Ambitious-like Tenacity)

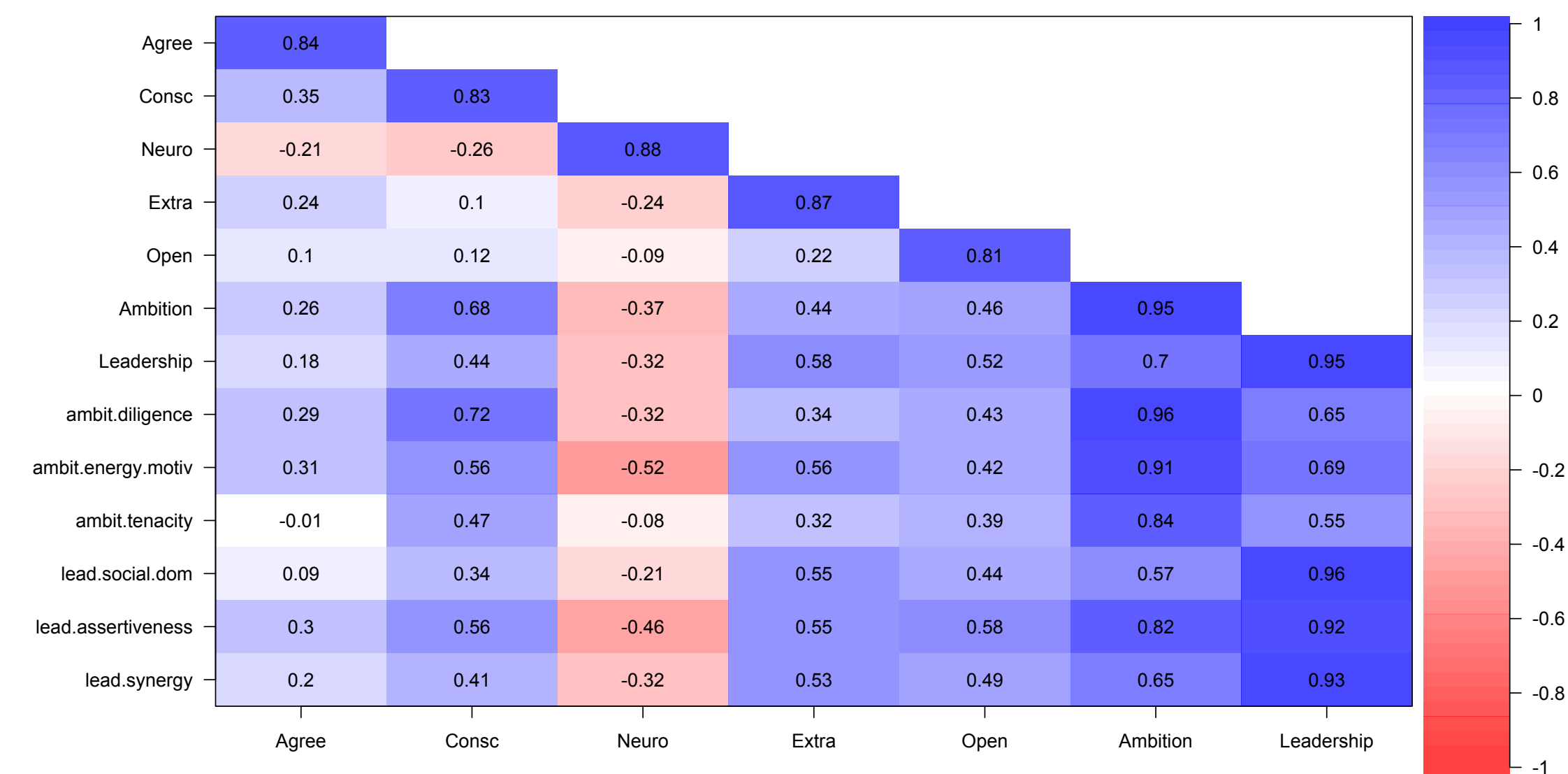
Table 2: Omega Analysis of the Final Ambition Scale with 3 Factors, Showing Loadings on the General and Group Factors (e.g., Ambitious-like Diligence, Ambitious-like Energy & Motivation, and Ambitious-like Tenacity)

Variable	g	Diligence(F1)	Energy&Motivation(F2)	Tenacity(F3)	h2	u2	p2	Item
q.5008	0.46	0.56	-0.14	0.04	0.54	0.46	0.38	I enjoy making plans for the future and working to make them a reality.
q.4622	0.52	0.53	-0.07	0.11	0.57	0.43	0.48	Am driven to reach my goals.
q.3572	0.52	0.51	-0.04	0.04	0.54	0.46	0.51	I am keenly aware of the goals I have for myself.
q.5899	0.69	0.50	0.11	0.06	0.74	0.26	0.65	I have a good sense of how I can work towards my long-term goals in the present.
q.3274	0.65	0.48	0.11	-0.09	0.68	0.32	0.63	On the whole, I'm a highly motivated person.
q.2737	0.59	0.48	0.02	0.17	0.61	0.39	0.58	Am a goal-oriented person.
q.5897	0.56	0.47	0.02	0.08	0.54	0.46	0.58	When I want to achieve something, I set goals.
q.4857	0.50	0.45	0.04	-0.22	0.50	0.50	0.50	Am hardworking.
q.2739	0.49	0.43	0.05	-0.21	0.48	0.52	0.51	Am a hard worker.
q.1883	0.57	0.37	0.15	-0.14	0.50	0.50	0.64	Turn plans into actions.
q.1215	0.47	0.34	0.01	0.32	0.44	0.56	0.50	Know how to get things done.
q.4699	0.58	0.29	0.25	-0.28	0.56	0.44	0.60	Live a purposeful life.
q.4690	0.47	0.29	0.09	0.21	0.36	0.64	0.62	Am a high achiever.
q.3092	0.59	0.27	0.23	0.00	0.47	0.53	0.73	Will succeed with the goals I set for myself.
q.3597	0.57	0.26	0.18	0.24	0.48	0.52	0.67	If I believe in an idea, no obstacle will prevent me from making it happen.
q.3235	0.60	-0.06	0.53	0.08	0.64	0.36	0.55	I would describe myself as confident.
q.279	0.62	-0.04	0.49	0.21	0.67	0.33	0.57	Am usually active and full of energy.
q.4493	0.55	-0.02	0.48	-0.08	0.54	0.46	0.57	Feel great about life.
q.1175	0.55	-0.02	0.44	0.13	0.52	0.48	0.59	Just know that I will be a success.
q.418	0.60	0.19	0.35	-0.21	0.57	0.43	0.64	Can easily push myself forward.
q.4411	0.57	0.11	0.32	0.20	0.48	0.52	0.67	I feel I have a great deal of energy.
q.5025	0.60	0.23	0.31	-0.16	0.54	0.46	0.67	I lead a purposeful and meaningful life.
q.4406	0.62	0.21	0.31	0.01	0.52	0.48	0.73	I feel able to take anything on.
q.4765	0.59	0.23	0.31	-0.22	0.54	0.46	0.63	Start new tasks easily.
q.2300	0.22	-0.01	0.03	0.86	0.78	0.22	0.06	Want to win at everything I do.
q.4500	0.49	0.24	0.08	0.54	0.60	0.40	0.40	Am guided by ambition.
q.4730	0.36	0.05	0.15	0.50	0.40	0.60	0.32	Others sometimes view me as too ambitious.
q.5909	0.56	0.31	0.11	0.39	0.57	0.43	0.55	I think about specific ways that I can achieve my goals.
q.4753	0.50	0.19	0.16	0.38	0.45	0.55	0.55	Strive to succeed.
q.5906	0.49	0.20	0.18	0.20	0.35	0.65	0.68	I regularly spend time and energy now to get what I want in the future.

Correlations for Ambition and Leadership with the Big 5 and SPI-27 (Condon, 2018) Corrected for Reliability and Item Overlap with Reliabilities on the Super Diagonal



Correlations for Ambition and Leadership Facets with the Big 5 Corrected for Reliability and Item Overlap with Reliabilities on the Super Diagonal



Correlations for Ambition, Leadership, and the Big 5 with External Criteria



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