

Supplementary File S1

Table S1. Measures and Related Items

Original Item	Final Item
Communication (Communication Competency Scale [81])	
1. This person has a good command of the language.	I have a good command of the language that I dominantly use in my work.
2. This person typically gets right to the point.	I typically get right to the point.
3. This person can deal with others effectively.	I can deal with others effectively.
4. This person's writing is difficult to understand. (R)	My writing is difficult to understand.
5. This person expresses his or her ideas clearly.	I express my ideas clearly.
6. This person is difficult to understand when he or she speaks. (R)	People find it difficult to understand what I am trying to say.
7. This person generally says the right thing at the right time.	I say the right thing at the right time.
8. This person is a good listener.	I am a good listener.
9. This person is easy to talk to.	I am easy to talk to.
10. This person usually responds to messages (memos, phone calls, reports, etc.) quickly.	I respond to messages quickly (emails, memos, phone calls, reports, etc.).
11. This person pays attention to what other people say to him or her	I pay attention to what other people say to me.
12. This person is sensitive to others' needs of the moment.	I am sensitive to others' needs of the moment.
Collaboration (Self-Assessed Collaboration Skills Scale-SACS [82])	
1. I share information with others easily	I can share information with others easily.
2. It is hard for me to share my ideas with others. (R)	It is hard for me to share my ideas with others.
3. I routinely listen to the opinions of my fellow team members.	I am good at listening to the opinions of my fellow colleagues.
4. I regularly acknowledge the efforts of my team members.	I find it easy to acknowledge the efforts of my colleagues.
5. I consistently support the efforts of others.	I am good at supporting the efforts of others.
6. I frequently seek feedback from my team members about the quality of my work.	I am capable of asking for feedback from my colleagues about the quality of my work.
7. I routinely go out and get all the information I can from my teammates.	I find it easy to go out and get all the information I can from my colleagues.
8. I encourage other team members to get involved in the decisions that affect the team.	I am good at encouraging other colleagues to get involved in the decisions that affect the team.

9. I voice my ideas about how the team could work better together.	I am capable of voicing my ideas about how the team could work better together.
10. I consistently participate in team discussions with an open mind.	I am good at participating in team discussions with an open mind.
11. I seek out different views than my own during team discussions.	I have the ability to seek out different views than my own during team discussions.
Creativity^a (Creative Potential Scale [83])	
1. I feel that I am good at generating novel ideas.	I am good at generating novel ideas.
2. I have a knack the ability to further develop the ideas of others.	I have the ability to further develop the ideas of others.
3. I am good at finding creative ways to solve problems.	I am good at finding creative ways to solve problems.
4. I feel comfortable to try out new ideas.	I am able to try out new ideas.
Critical Thinking^b (Critical Thinking Toolkit-CriTT [85])	
I can detect the use of inappropriate emotional language in scientific arguments.	I can detect the use of inappropriate emotional language in arguments.
I have a well-defined goal in mind when I am critical.	I have a well-defined goal in mind when I am critical.
I can identify the structure of arguments without being distracted by their content.	I can identify the structure of arguments without being distracted by their content.
I can express my critical thinking well in my written work.	I can express my critical thinking well in my written work.
I have a focused and systematic way of thinking.	I have a focused and systematic way of thinking.
Generally, I am a good critical thinker.	I am a good critical thinker.
I do well in assessments that ask for critical evaluation.	I do well in assessments that ask for critical evaluation.
I think critically while working on my assignments.	I think critically while working.
I know how to approach complex issues in a variety of ways.	I know how to approach complex issues in a variety of ways.
I have the ability to judge the value of new information or evidence presented to me.	I have the ability to judge the value of new information or evidence presented to me.
I can evaluate the arguments of others well.	I can evaluate the arguments of others well.
I am good at weighing up both sides of an argument.	I am good at weighing up both sides of an argument.
I think critically while reading.	I think critically while reading.
I can rephrase the arguments of others in my own words easily.	I can rephrase the arguments of others in my own words easily.
Problem-Solving (Problem-Solving Inventory [86])	
I am usually able to think up effective and creative alternatives to solve a problem.	I am able to think up effective alternatives to solve a problem.
I have the ability to solve most problems even though initially no solution is immediately apparent.	I have the ability to solve most problems even though initially no solution is immediately apparent.

<p>Many problems I face are too complex for me to solve. (R)</p> <p>I make decisions and am happy with them later</p> <p>When I make plans to solve a problem, I am almost certain that I can make them work.</p> <p>Given enough time and effort, I believe I can solve most problems that I confront me.</p> <p>When faced with a novel situation, I have confidence that I can handle problems that may arise.</p> <p>I trust my ability to solve new and difficult problems.</p> <p>After making a decision, the outcome I expected usually matches the actual outcome.</p> <p>When confronted with a problem, I am unsure of whether I can handle the situation. (R)</p> <p>When I become aware of a problem, one of the first things I do is to try to find out exactly what the problem is</p>	<p>Many problems I face are too complex for me to solve.</p> <p>I am happy with the outcomes of the decisions I made.</p> <p>When I make plans to solve a problem, I can make them work.</p> <p>Given enough time and effort, I can solve most problems that I face.</p> <p>When faced with a novel situation, I can handle problems that may arise.</p> <p>I am able to solve new and difficult problems.</p> <p>After making a decision, the outcome I expected matches the actual outcome.</p> <p>When confronted with a problem, I cannot handle the situation.</p> <p>When I become aware of a problem, one of the first things I do is to try to find out exactly what the problem is.</p>
<p>Career Satisfaction (Career Satisfaction Scale [89])</p> <p>I am satisfied with the success I have achieved in my career.</p> <p>I am satisfied with the progress I have made toward meeting my overall career goals.</p> <p>I am satisfied with the progress I have made toward meeting my goals for income.</p> <p>I am satisfied with the progress I have made toward meeting my goals for advancement.</p> <p>I am satisfied with the progress I have made toward meeting my goals for the development of new skills.</p>	<p>I am satisfied with the success I have achieved in my career.</p> <p>I am satisfied with the progress I have made toward meeting my overall career goals.</p> <p>I am satisfied with the progress I have made toward meeting my goals for income.</p> <p>I am satisfied with the progress I have made toward meeting my goals for advancement.</p> <p>I am satisfied with the progress I have made toward meeting my goals for the development of new skills.</p>
<p>Work Engagement (Ultra-Short Work Engagement Scale [91])</p> <p>At my work, I feel bursting with energy.</p> <p>I am enthusiastic about my job.</p> <p>I am absorbed in my work.</p>	<p>At my work, I feel bursting with energy.</p> <p>I am enthusiastic about my job.</p> <p>I am absorbed in my work.</p>
<p>Burnout (Burnout Assessment Tool-BAT [94])</p> <p>At work, I feel mentally exhausted.</p> <p>After a day at work, I find it hard to recover my energy.</p> <p>At work, I feel physically exhausted.</p> <p>I feel a strong aversion towards my job.</p> <p>I'm cynical about what my work means to others.</p>	<p>At work, I feel mentally exhausted.</p> <p>After a day at work, I find it hard to recover my energy.</p> <p>At work, I feel physically exhausted.</p> <p>I feel a strong aversion towards my job.</p> <p>I'm cynical about what my work means to others.</p>

<p>At work, I have trouble staying focused.</p> <p>I struggle to find any enthusiasm for my work.</p> <p>When I'm working, I have trouble concentrating.</p> <p>I make mistakes in my work because I have my mind on other things.</p> <p>Most of the time when I'm at work, I don't feel that I have much to worry about.</p> <p>I do not recognize myself in the way I react emotionally at work.</p> <p>At work, I may overreact unintentionally.</p>	<p>At work, I have trouble staying focused.</p> <p>I struggle to find any enthusiasm for my work.</p> <p>When I'm working, I have trouble concentrating.</p> <p>I make mistakes in my work because I have my mind on other things.</p> <p>Most of the time when I'm at work, I don't feel that I have much to worry about.</p> <p>I do not recognize myself in the way I react emotionally at work.</p> <p>At work, I may overreact unintentionally.</p>
<p>Work-related Stress (Work Stress Scale [92])</p> <p>A lot of time, my job makes me very frustrated or angry.</p> <p>I am usually calm and at ease when I'm working. (R)</p> <p>I am usually under a lot of pressure when I am at work.</p> <p>Most of the time when I'm at work, I don't feel that I have much to worry about. (R)</p> <p>When I am at work, I often feel tense or uptight.</p> <p>There are a lot of aspects of my job that make me upset.</p>	<p>A lot of time, my job makes me very frustrated or angry.</p> <p>I am usually calm and at ease when I'm working.</p> <p>I am usually under a lot of pressure when I am at work.</p> <p>Most of the time when I'm at work, I don't feel that I have much to worry about.</p> <p>When I am at work, I often feel tense or uptight.</p> <p>There are a lot of aspects of my job that make me upset.</p>
<p>Task Performance [95]</p> <p>achieves the objectives of the job.</p> <p>meets criteria for performance.</p> <p>fulfills all the requirements of the job.</p>	<p>I achieve the objectives of the job.</p> <p>I meet the criteria for performance.</p> <p>I fulfill all the requirements of the job.</p>
<p>Contextual Performance [95]</p> <p>helps other employees with their work when they have been absent.</p> <p>helps others when their workload increases (assists others until they get over the hurdles).</p> <p>volunteers to do things not formally required by the job.</p>	<p>I help colleagues with their work, for example when they have been absent or new to the organization.</p> <p>I help colleagues when their workload increases (I assist colleagues until they get over the hurdles).</p> <p>I am willing to volunteer to do things that are not so much part of my job but are in the best interest of my organization as a whole.</p>
<p>Innovative Output^c (Innovative Output Scale [37])</p> <p>make suggestions to improve current products or services.</p> <p>Produce ideas to improve work practices.</p> <p>actively contribute to the development of new products or services.</p>	<p>I make suggestions to improve current products or services.</p> <p>I produce ideas to improve work practices.</p> <p>I actively contribute to the development of new products or services.</p>

acquire new groups of customers.	I acquire new groups of customers. / I reach to new target groups of citizens.
optimize the organization of work.	I optimize the organization of work.

Note. “(R)” denotes reverse scoring. The blue color indicates the changes made to the original items.

^a Creativity scale originally included six items, but we removed two items namely “*I have the talent and skills to do my work well*” and “*I have confidence in my ability to solve problems creatively*”. The former was excluded as it was a very general statement and also omitted in a prior study due to low factor loading [84]. The latter was excluded because of its similarity with problem-solving items.

^b Critical thinking scale originally included seventeen items, but we removed three items namely “*I can identify analogies between theories*”, “*When designing experiments, I can readily eliminate extraneous variables*”, and “*I think critically in lectures*” as these items were found to be more relevant to students rather than the intended target group (i.e., early-career social sciences graduates).

^c Innovative output scale originally had six items, but we excluded the item “*I acquire new knowledge in my job*”. The rationale was that since our target group is in the early stages of their careers and new to their organizations, they would need to acquire a substantial amount of new knowledge in their work.

Supplementary File S2. Additional Exploratory Regression Analyses

Table S2. Coefficients of the Regression Models without Problem-Solving.

Model No	Dependent Variable	Step	Independent Variables	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
1	Burnout	Step 1	Constant	2.70	.33		8.11	<.001
			Age	-.02	.01	-.18	-2.03	.045
			Sector	1.44	.37	.35	3.90	<.001
		$R^2 = .16$ ($p < .001$)						
		Step 2	Constant	2.29	.52		4.37	<.001
			Age	-.03	.01	-.20	-2.14	.035
			Sector	1.43	.37	.35	3.87	<.001
			Creativity	.12	.11	.09	1.02	.311
		$\Delta R^2 = .01$ ($p = .311$)						
2	Work-related Stress	Step 1	Constant	2.42	.07		32.67	<.001
			Sector	1.08	.44	.24	2.46	.016
		$R^2 = .06$ ($p = .016$)						
		Step 2	Constant	1.94	.53		3.66	<.001
			Sector	1.07	.44	.23	2.43	.017
			Creativity	.12	.13	.09	.92	.360
		$\Delta R^2 = .01$ ($p = .360$)						

Table S3. Coefficients of the Regression Models with Problem-Solving.

Model No	Dependent Variable	Step	Independent Variables	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
1	Burnout	Step 1	Constant	2.70	.33		8.11	<.001
			Age	-.02	.01	-.18	-2.03	.045
			Sector	1.44	.37	.35	3.90	<.001

Model No	Dependent Variable	Step	Independent Variables	B	SE B	β	t	p
2	Work-related Stress	$R^2 = .16$ ($p < .001$)						
		Step 2	Constant	4.42	.61		7.19	<.001
			Age	-.03	.01	-.22	-2.68	.009
			Sector	1.44	.33	.35	4.39	<.001
			Problem-Solving	-.90	.17	-.52	-5.30	<.001
			Creativity	.49	.12	.40	3.98	<.001
		$\Delta R^2 = .19$ ($p < .001$)						
		Step 1	Constant	2.42	.07		32.67	<.001
			Sector	1.08	.44	.24	2.46	.016
		$R^2 = .06$ ($p = .016$)						
		Step 2	Constant	4.11	.68		6.06	<.001
			Sector	1.08	.40	.24	2.69	.008
			Problem-Solving	-.95	.21	-.49	-4.58	<.001
			Creativity	.52	.15	.37	3.45	<.001
		$\Delta R^2 = .17$ ($p < .001$)						

Supplementary File S3

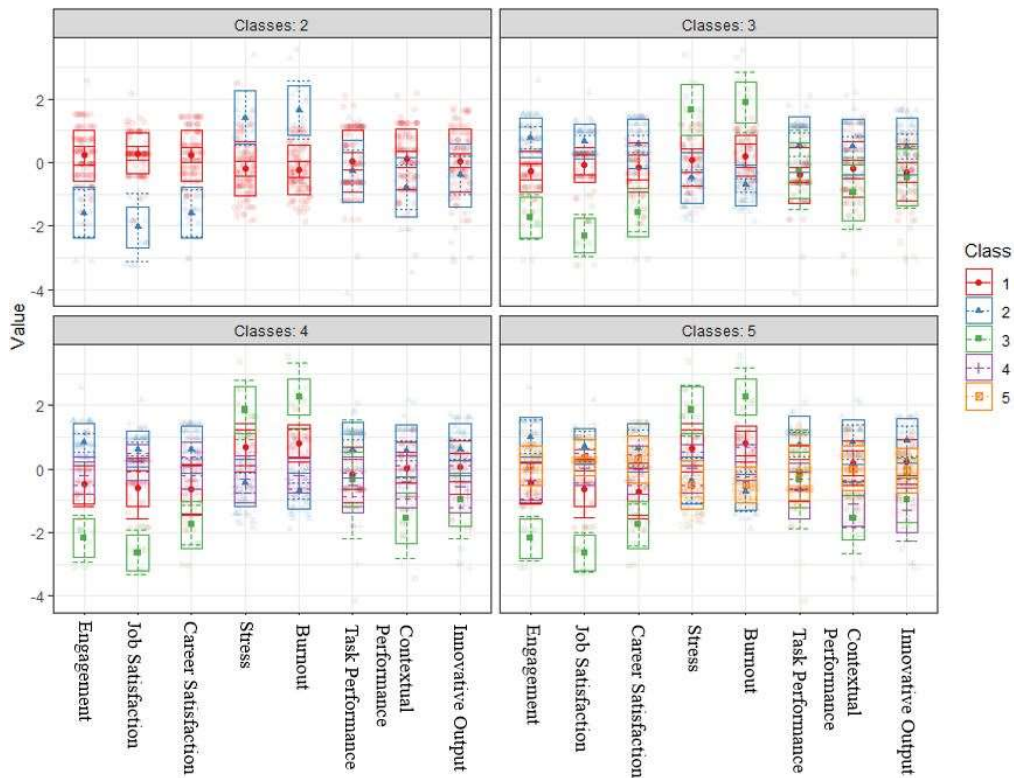


Figure S1. Indicator Patterns in Two, Three, Four and Five-Profile Models.