

Definition of Creative Risk-Taking Propensity: The general likelihood of an individual/team behaving in more or less risky ways, where 'risk' in the creative context refers to the extent to which there is uncertainty about whether potentially significant or disappointing outcomes will be realized given creative effort.

The main causes or determinants of creative risk-taking propensity Provide a brief description of what the factor captures and why it is important for measuring risk-taking propensity

All items measured on a Likert-type scale of 1 through 5. 1 = Very Inaccurate, 2 = Moderately Inaccurate, 3 = Neither accurate nor inaccurate, 4 = Moderately Accurate, 5 = Very Accurate

R = strong response relates negatively to risk-taking

APA/ MLA style reference for where you obtained the justification/ support for this factor

Dimension	Factor #	Factor	Description	Item #	Items	Reverse Coding	Related Literature	
Personal biases and cognitive style (34 items)	1	Bias against creativity	The extent to which an individual has an inherent bias against creativity. Research has shown that people have this inherent bias against creativity because of the uncertainty regarding a novel concept.	1	I prefer creative designs over conventional designs	P	Rietzschel, E., et al. (2010). "The selection of creative ideas after individual idea generation: choosing between creativity and impact." British Journal of Psychology 101(1): 47-68.	
				2	I believe that creative designs will lead to positive design outcomes	P		
				3	I prefer conventional designs over creative designs	R		
				4	I am skeptical that creative designs will lead to positive design outcomes	R		
	2	Negativity Bias	The extent to which flaws in potential design concepts are emphasized and given more weight than design strengths. Negative feedback or criticism is considered more valuable and is overemphasized in the decision makers' mind.	5	I focus on the strengths of a design concept more than the flaws of the design when making decisions	P		Amabile, T., & Glazebrook, A. H. (1982). A negativity bias in interpersonal evaluation. Journal of Experimental Social Psychology, 18(1), 1-22. Amabile, T. (1983). Brilliant but cruel: perceptions of negative evaluators. Journal of Experimental Psychology, 19(2), 146-156.
				6	I believe that someone who gives negative feedback is more intelligent and knowledgeable than someone who gives positive feedback.	P		
				7	I pay more attention to design flaws than design strengths in my decision-making.	R		
				8	I believe that someone who gives positive feedback is more intelligent and knowledgeable than someone who gives negative	R		
	3	Optimism	An individual's belief that risky decisions will produce positive outcomes	9	I believe that risky design concepts will lead to positive design outcomes	P		Lovallo, D. P., & Sibony, O. (2010). The case for behavioral strategy. McKinsey Quarterly, 2(1), 30-43.
				10	I believe that risky design concepts will lead to negative design outcomes	R		
	4	Hindsight bias	The extent to which an individual believes that past experiences predict or heavily influence current or future events. The 'I knew it' bias.	11	I do not let my experiences with previous projects alter my perceptions and behaviors in future projects.	P		Christensen-Szalanski, J. J., & Willham, C. F. (1991). The hindsight bias: A meta-analysis. Organizational Behavior and Human Decision Processes, 48(1), 147-168.
				12	I use my experiences with previous projects to alter my perceptions and behaviors in future projects.	R		
	5	Receptivity of new ideas	The varying degrees of receptiveness is based on the individual's prior experiences and inclinations. Individuals who have more knowledge on subject matter will respond	13	I am receptive to new ideas	P		Kaplan, Norman. "Some organizational factors affecting creativity." Engineering Management, IRE Transactions on 1 (1960): 24-30.
				14	I will seriously consider novel ideas	P		
				15	I am closed off to new ideas	R		
				16	I disregard novel ideas	R		
	6	Ambiguity Aversion	The extent to which an individual is not tolerant of uncertain situations and tries to reduce the uncertainty inherent in many real-life situations.	17	I am tolerant of ambiguous or unknown information during the design process	P		Heath, C., & Tversky, A. (1991). Preferences and Beliefs: Ambiguity and Competence in Choice Under Uncertainty. Journal of Risk and Uncertainty, 2, 5-35. Sorrentino R, Roney CJR (2000) The Uncertain Mind: Individual Differences in Facing the Unknown, vol 1. Psychology Press, Hove, UK
				18	I embrace ambiguous or unknown elements in the early phases of design	P		
				19	I have no need to maintain a sense of certainty during the design process	P		
				20	I do not like dealing with ambiguous or unknown elements in the design process	R		
				21	I seek to reduce ambiguous or unknown elements in the early phases design	R		
				22	I feel the need to maintain a sense of certainty during the design process	R		
7	Cognitive way of finding answers.	Determining how the individual views the solution to the problem can provide information on creativity. Thinking is either... "convergent (obtaining 1 right answer) or divergent (obtaining a relative answer). Creativity is influenced more by divergent	23	I try to find multiple solutions to a design problem.	P	Guilford, Joy P. "Creative abilities in the arts." Psychological review 64.2 (1957): 110.		
			24	I believe that there are often multiple correct solutions to a design problem	P			
			25	I try to find a single solution to solve a design problem.	R			
			26	I believe that there is usually one correct answer to a design problem	R			
8	Risk preference	An individual's preference for risk-taking	27	I prefer taking risks during design projects	P	Sitkin, S. B., & Pablo, A. L. (1992). Reconceptualizing the determinants of risk		
			28	I avoid taking risks during design projects	R			

	9	Risk inertia	An individual's tendency to take risks based on their prior risk behavior. Researchers argue that if an individual has typically taken risks in the past, they will be likely to take risks in the future, and vice versa.	29	In the past, I have tried to take risks during projects	P	Sitkin, S. B., & Pablo, A. L. (1992). Reconceptualizing the determinants of risk behavior. <i>Academy of Management Review</i> , 17(1), 9-38.
				30	In the past, I have tended to stay away from taking risks during projects	R	
	10	Outcome history	An individual's personal experience with taking risks. If an individual experiences positive outcomes when taking risks, they are more likely to take risks again, and vice versa.	31	I tend to have positive experiences when taking risks during projects	P	
				32	I tend to have negative experiences when taking risks during projects	R	Thaler, R. H., & Johnson, E. J. (1990). Gambling with the house money and trying to break even: the effects of prior outcomes on risky choice. <i>Management science</i> , 36(6), 643-660.
	11	Burden of proof	The extent to which an individual requires 'proof' that a risky decision will pay off before making said risky decision	33	I am easily convinced that risky design concepts will be successful	P	Mounarath, R., Lovallo, D., & Dong, A. (2011). Choosing innovation: How reasoning affects decision makers. Paper presented at the
				34	I require proof or substantial evidence that a risky design concept will be successful before taking risks.	R	
Creative confidence and motivation (25 items)	12	Self-efficacy for identifying and selecting	An individual's belief in their capability to identify and select creative ideas	35	I am confident in my ability to identify when ideas are creative	P	Coopersmith S (1967) <i>The Antecedents of Self-Esteem</i> . Freeman, New York. NY
	13	Creative Confidence/ purpose	The extent to which an individual believes that they are capable of and intends to bring a novel, original, and creative idea into being.	39	I believe that I am a creative individual	P	
				40	I tend to pay more attention to creative ideas	P	
				41	I tend to favor creative ideas	P	
				42	I intend to increase the creativity of the design process	P	
				43	I do not believe that I am a creative individual	R	
				44	I tend to disregard creative ideas during design	R	
				45	I tend to not think highly of creative ideas	R	
				46	I am not focused on increasing creativity during the design process	R	
		14	Genuine sense of self and confidence.	A person who is comfortable with themselves and willing to accept failure is a creative person. They have the ability to be puzzled and the ability to accept conflict.	47	I am comfortable with failures during the design process	
			48	I often feel confused or lost while tackling a design problem	P		
			49	I am comfortable with conflicting design requirements	P		
			50	I believe that I generate valuable ideas	P		
			51	I am not comfortable with failure during the design process	R		
			52	I am seldom confused or lost while tackling a design problem	R		
			53	I am not comfortable with conflicting design requirements	R		
	15	A person's intrinsic motivation to perform the task.	Generating creative ideas requires a lot of time, effort, and ability to stay focused on the task at hand. A person's investment in the project will influence the quality of solutions provided.	54	I believe that I do not generate valuable ideas	R	Andrews, Jonlee, and Daniel C. Smith. "In search of the marketing imagination: Factors affecting the creativity of marketing programs for mature products." <i>Journal of Marketing Research</i> (1996): 174-187.
			55	I am motivated to solve design problems	P		
			56	It is easy for me to stay focused on the task at hand during a design project	P		
			57	I feel personally invested in the success or failure of the outcomes in a design project	P		
			58	I am not motivated to solve design problems	R		
			59	It is hard for me to stay focused on the task at hand during design projects	R		
Social effects and environment (29 items)	16	Learning culture and creative climate.	"The results indicated that both learning culture and creative climate contributed 58.5 percent to the explanation of the observed variances in the innovation construct."-	61	I feel that my current working environment encourages and fosters creativity	P	Ismail, Meriam. "Creative climate and learning organization factors: their contribution towards innovation." <i>Leadership & Organization Development Journal</i> 26.8 (2005): 639-654.
				62	I feel that my current working environment does not encourage or foster creativity	R	
	17	Sensitivity to criticism	The extent to which an individual is dismayed and easily discouraged by criticisms to their ideas	63	I am usually unaware of when I am being criticized	P	Sternberg RJ, O'Hara LA, Lubart TI (1997) <i>Creativity as an Investment</i> , California Management Review, 40:8-21
				64	I am not easily discouraged when I am being criticized	P	
				65	I am usually aware of when I am being criticized	R	
				66	I am easily discouraged when I am being criticized	R	
	18	Freedom to express opinions	The extent to which the individual feels comfortable expressing their ideas and opinions in a group	67	I feel comfortable presenting my ideas to my team members	P	Hoffman, L. Richard, Ernest Harburg, and Norman RF Maier. "Differences and disagreement as factors in creative group problem solving." <i>The Journal of Abnormal and Social Psychology</i> 64.3 (1962): 206.
			68	I do not feel judged by my team members for my ideas and opinions	P		
			69	I do not feel comfortable presenting my ideas to my team members	R		
			70	I feel judged by my team members for my ideas and opinions	R		

19	Competition	Wanting to outperform others can lead to one expressing ideas more freely and therefore expressing more creative ideas. More likely to take a risk if it will give them the upper hand	71	I have a competitive nature	P	Paulus, P. (2000). Groups, Teams, and Creativity: The Creative Potential of Idea-generating Groups. <i>Applied psychology</i> , 49 (2), 237-262.
			72	I want to outperform others	P	
			73	I am not competitive	R	
			74	I do not feel the need to outperform others	R	
20	fear of rejection and failure	people with certain personalities are more likely to be more creative when they aren't afraid of their creative ideas being rejected	75	I like to take ownership of my ideas and opinions	P	Paulus, P. (2000). Groups, Teams, and Creativity: The Creative Potential of Idea-generating Groups. <i>Applied psychology</i> , 49 (2), 237-262.
			76	I tend to express my ideas freely	P	
			77	I tend to handle failure well	P	
			78	I prefer to submit my ideas anonymously	R	
			79	I am not comfortable expressing my ideas freely	R	
			80	I do not cope well with failure	R	
21	Opinion of others/assessment by peers	how much does someone else's opinion of you influence your decisions	81	I prefer to go against the grain	P	Sternberg, R. J., O'Hara, L. A., & Lubart, T. I. (1997). Creativity as investment. <i>California Management Review</i> , 40, 8-21.
			82	I often have unique ideas and opinions	P	
			83	I do not follow trends	P	
			84	I am not intimidated by other people's opinions of me	P	
			85	People's opinions of me seldom affect my own actions	P	
			86	I prefer to not go against the grain	R	
			87	I often have conventional ideas and opinions	R	
			88	I often follow trends	R	
			89	I am often intimidated by other people's opinions of me	R	
			90	People's opinions of me often affect my own actions	R	
22	Assessment by superiors	How focussed one is on their grades or what their boss will think of them	91	I want to impress my superiors (supervisor, instructor, professor, leaders)	P	Davies, T. (2000). Confidence! Its role in the creative teaching and learning of design and technology.
			92	I want to get good grades	P	
			93	It is not important for me to impress my superiors (supervisor, instructor, professor, leaders)	R	
			94	I do not care about getting good grades	R	
23	Network/ Team Centrality	The distance between the individual and the rest of the design team. High centrality indicates that the number of links required to access other members of the network are few, whereas low centrality indicates that the number of links required to access other	95	I play a central role in teams that I am a part of	P	Perry-Smith JE (2006) Social yet creative: the role of social relationships in facilitating individual creativity, <i>Academy of Management Journal</i> , 49:85-101
			96	I believe that I influence the direction and progress of projects that I am a part of	P	
			97	I do not typically play a central role in teams that I am a part of	R	
			98	I believe that I have little impact on the direction and progress of projects that I am a part of	R	