

# What Makes a Creative Person?

### Ci2011 Scholarship Applicants Psychological Assessment of Creativity

The Creative Innovation Conference 2011 organisers invited GeneSys Australia to use the new me2 Creativity workplace diagnostic tool to find out more about how people use their creativity by assessing Ci2011 scholarship applicants. The conference organisers were keen to help add to the research about creativity and the factors that constitute highly creative behaviour and application.

A total of 60 scholarship applicants participated by completing the me2 questionnaire and as a result a number of interesting findings about the group were identified.

The me2 is based on years of extensive research into the psychology of creativity by Dr. Mark Batey and the Psychometrics at Work Research Group at Manchester University's Manchester Business School. It has been designed specifically for the workplace to assess and develop creativity and problem-solving.

me2 assesses the way in which individuals use their creativity so that it can be developed and applied in the workplace to innovation, problem-solving, teamwork, change and adaptation, and leadership.

The me2 **General Factor of Creativity** is made up of **4 dimensions** composed of 12 factors which, when assessed together, provide an insight into how an individual uses their creativity.

The participants were asked a number of questions about their thinking style, personality, motivation and confidence in relation to their creativity and problem solving. The results were then combined as a group and the characteristics across the group were analysed in order to identify any consistent trends or themes.

As a group, the 60 Ci2011 scholarship participants who completed the assessment showed a number of interesting indications about how people who exercise high levels of creativity operate. Overall, the applicants returned very high scores for the General Factor of Creativity compared to the general population. This indicates that the mix of me2 factors and dimensions that the majority see themselves possessing is closely aligned to those often found in people with highly developed creative skills and functioning. However, a majority also scored in the typical range for some of the factors. This can be a reflection of the environment in which they work creatively or suggest areas of development which could lead to even higher creative performances.

### **General Factor of Creativity 8** Extreme High

Overall, the Ci2011 Scholarship Applicants returned extremely high scores for the General Factor of Creativity compared to the general population.



# **Participant Scores**

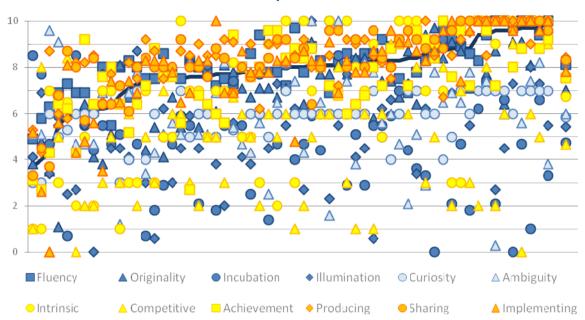


Figure 1. Participant's Individual Scores for the 12 Creativity Factors

# Mean Scores for the 12 Factors

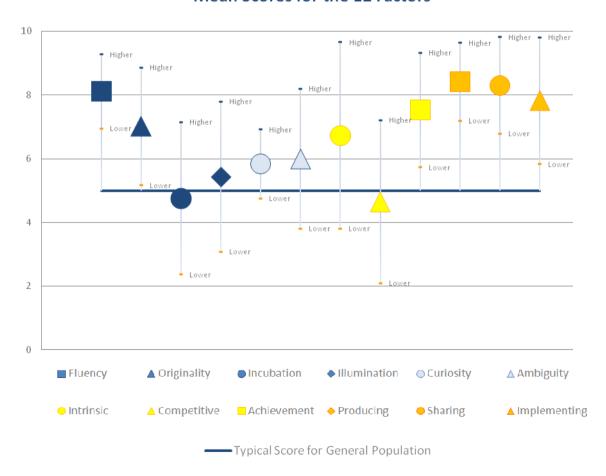


Figure 2. Mean Scores for the 12 Factors



#### **Idea Generation**

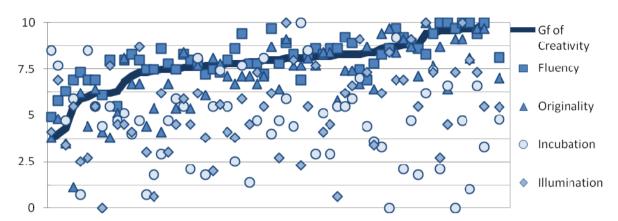


Figure 3. Idea Generation

People who freely use their creativity are highly fluent, which means they produce lots of ideas. Whether these ideas are practical or not, the key is the volume of ideas they are able to produce. As well as the number of ideas they produce, these people tend to produce different or unusual ideas. In their approach to thinking, they often like to incubate, or let their thoughts percolate for while. This period will often be followed by moments of illumination, or "eureka" moments, when ideas seem to just come to them.

### Fluency 8 Extreme High

The group sees itself as being extremely fluent in idea generation, finding it very easy to produce many ideas. When presented with a problem or opportunity, the participants are likely to see many alternative courses of action. Their production of ideas would be easy and relatively effortless. This is a major strength when trying to solve problems or exploit opportunities.

### **Originality 7** High

The group reports a high capacity to generate original ideas. When producing new ideas they are likely to come up with suggestions or concepts that others would not normally consider and often enjoy the process of thinking and tasks in which there is an emphasis on being able to gather together novel ideas and strategies.

### **Incubation 5** Typical

The scholarship applicants as a group prefer to find a balance between spending a long time incubating a problem and seeking a rapid conclusion. A tendency to delay judgement contributes to idea generation, because incubating an idea allows more obscure options or alternatives to be considered. In contrast, someone who comes to a conclusion quickly will often ignore all but the most obvious suggestions and approaches. The balance between incubating ideas and reaching fast conclusions in this group was typical compared to the general population.

#### **Illumination 5** Typical

The scholarship applicants group reported experiencing moments of illumination as frequently as other people. These moments of insight are a relatively regular occurrence for them, but not more so than the general population.

# Personality

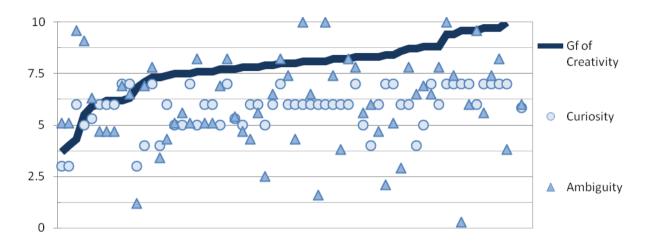


Figure 4. Personality

Creative thinkers are inclined to be very curious. They ask lots of questions, and want to know how things work the way they do, and why. The other personality trait that stands out in people who exercise creativity freely is that they are comfortable with a high level of ambiguity and uncertainty. These people tend not to see things in black and white, and are quite happy with contradiction, competing evidence and shades of grey.

### **Curiosity 6** High

Most participants in the group see themselves as being highly curious. They are likely to have a strong urge to ask the questions that are the starting point for curiosity: Who? When? Why? What? Where? They are likely to have a strong desire to understand the world around them, and regularly push themselves to find out how things work, why people do the things they do, or to analyse trends. They will be inclined to challenge assumptions and question if their environment can be improved.

# **Ambiguity 6** High

Most of the scholarship applicants report being very comfortable with uncertainty and ambiguity. They would be happy to make decisions without complete information. The advantage to being highly tolerant of ambiguity is that they will be unlikely to rush to a decision due to the discomfort of not having all the facts. This will allow them to spend more time combining different ideas and suggestions in order to produce more creative solutions.

### Motivation

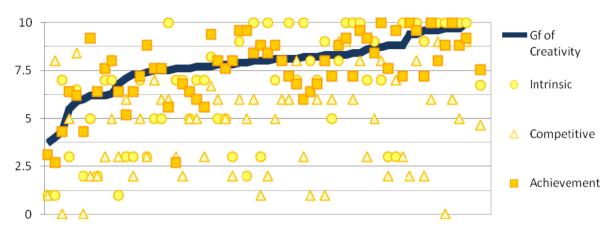


Figure 5. Motivation

Creative thinkers tend to be motivated intrinsically. This means that they have a strong drive that comes from within them. They will be very self-motivated. In addition, these people tend to be quite competitive, and may want to "beat" other people with their ideas or be the first with their ideas. Although they may work well in a collaborative team environment and be willing to share their ideas with colleagues, they might want the team to do better than its competitors. People who operate in a highly creative way will likely show high achievement, in that they tend to push themselves to work very hard and to achieve excellence in the way they work and the things they produce.

### **Intrinsic 7** High

On average, the scholarship delegates perceive themselves to be highly motivated by the joy or challenge inherent in the tasks they engage in. They are likely to enjoy roles where they can become involved with the work they do and can get so engrossed with the work that they do not notice the passage of time. The underlying drive for much of the work they do is that it intrigues or engages them. The advantage for creativity in their high level of intrinsic motivation is that they will be likely to work beyond finding a satisfactory idea or solution. Being engaged deeply with their work increases the chances of playing with ideas and finding insightful and creative combinations.

#### **Competitive 5** Typical

This group is typical of the general population in regard to being motivated by competitive compared to collaborative opportunities. On one side there will be times when they will want to be competitive and would wish to have their successes recognised, and on the other hand there will be times when these issues are not so important to them.

### **Achievement 8** Extreme High

The scholarship applicants see themselves as exceptionally achievement oriented. They place a very strong emphasis on hard work, continuous personal improvement and attaining excellence in how they approach work. They will prefer a role in which they can chart their progress and feel that they are achieving excellence in what they do. Possessing a very strong desire to excel can help to overcome obstacles to seeing creative ideas become a reality. This focus on achievement can help when creative ideas are criticised or challenged by others.

### Confidence

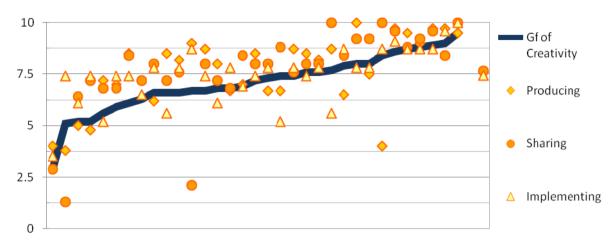


Figure 6. Confidence

Creative thinkers tend to be very confident about their ideas. This applies to having ideas, believing in the quality of their ideas, sharing them, and being able to confidently implement them.

### **Producing 8** Extreme High

The participants perceive themselves to be extremely confident in their capacity to generate and work with ideas. This is not to say that they necessarily consider themselves to be highly creative but that they are happy to make an effort. When presented with a problem or opportunity they will seek to produce creative solutions. They would enjoy roles or tasks in which they can demonstrate their creativity and consider challenges as opportunities to try out new approaches. Their confidence in producing ideas would be particularly important in a work context where pressure to perform is very high.

### Sharing 8 Extreme High

The scholarship applicants report being extremely open to sharing ideas. This can be very important to stimulate further ideas in other people, which often lead to new levels of originality in seeking solutions exploit an opportunity. The willingness to share ideas can give others who are less confident the self-assurance to contribute which is an important part of building the right environment for creativity.

### **Implementing 8** Extreme High

The participants see themselves as being able to make things happen. They are extremely likely to enjoy roles in which there is a need to make sense of an idea and devise the necessary steps and activities to put a plan into action. This has significant relevance to innovation, in which creativity drives the production of new products and solutions.

#### **Conclusion:**

That these participants in the main scored extremely high on many of the factors that identify creative thinkers, should be of no surprise given the nature of the group, although it does provide further support for the tool's validity. What is of far greater interest is the small number of factor scores that were more typical of the general population.

These factors were Competitive, Incubation and Illumination. That the group scored within the typical range for Competitive is likely to reflect the diversity of the participants' work environments, where roles that require a degree of collaboration and roles that require competitiveness are equally likely to occur, with a probable slight leaning to the more collaborative. The degree of fit to the work environment is a more likely predictor of success than simply scoring high on this factor.

Incubation and Illumination, the other two scores in the typical range, could also be reflective of environmental factors. However, by not allowing sufficient time to incubate, the potential for illuminative moments is much reduced. Even when working with acute time constraints, time to incubate can be built in, with spectacular results. Time constraints, like any other problem, can benefit from the application of creative thinking.

This study shows that these individuals share many characteristics in the way they think, how they behave, what motivates them and their degree of self-confidence in being able to produce creative work. However, it also shows that even those individuals who scored highest on creativity overall can gain scores that are typical or even low on some factors. The reverse can also be true for those who score in the typical range on creativity, but who also attained very high scores on some factors.

After all, it's not just how creative you are, but how you are creative, that counts.

## **GeneSys Australia**

GeneSys Australia has been conducting an Australian validation study for the me2 Creativity Diagnostic Tool in association with its publishers E-METRIXX, and has just launched the me2 for use in Australia. GeneSys Australia is a national workplace psychology practice.

Stephen Kohl & Lynette Jensen are available to discuss the findings or the me2 Creativity Diagnostic at the conference.

For more information: <a href="www.genesysaustralia.com">www.genesysaustralia.com</a> or <a href="me2@genesysaustralia.com">me2@genesysaustralia.com</a> 0433 206 638



