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Jessurun, Haiko; Anthonio, Gabriël; Weggeman, M. C. D. P.

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Building Bridges: On the Overlap Between the Component Model of Creativity and the Model of High Giftedness

J.H. Jessurun, MSc

- Eindhoven University of Technology, Industrial Engineering & Innovation Sciences, the Netherlands
- TweeMC MIResearch, the Netherlands
- e: jhjessurun@tweemc.nl

Prof. Dr. G.G. Anthonio

- University of Groningen, Faculty of Behavioural and Social Sciences, the Netherlands
- e: g.g.anthonio@rug.nl

Prof. Dr. Ir. M.C.D.P. Weggeman

- Eindhoven University of Technology, Industrial Engineering & Innovation Sciences, the Netherlands
- e: m.c.d.p.weggeman@tue.nl

Summary

In this short article a bridge is build between two domains, both using the concept *creativity*. The similarity between the two models, the one by Amabile (2004, 2006) within the organizational sciences domain and the other by Renzulli (1978, 2002) in the psychological sciences domain, are compared and found to be overlapping. The intent is to start thinking about these similarities and the differences that there still might be.

Introduction

Different domains of research often use different frames of reference, and even different theories, to describe similar phenomena. For instance, when describing the influence of personality,

in organizational sciences, often the Big Five is used, whereas, in clinical psychology, this concept hardly plays any role. The same holds true for emotional intelligence, made popular by Goleman (1995), which is hardly ever mentioned within clinical psychology, and concepts like *mentalization* (Fonagy et al., 2004) are predominant. The influence of the concept *multiple intelligences* (Gardner, 1983, 1993, 1999) is mainly in the field of education, had some references in organizational sciences, but is not relevant within clinical psychology, while when looking at them all three have considerable overlap.

In this short contribution we will build a bridge between two models in which the concept *creativity* plays an important role, one which is used in the organizational domain on creativity by Amabile and her group (Amabile, 2004, 2006), and the other within the domain of psychology on high giftedness (Renzulli, 1978, 2002). Creativity is important, not only as an output variable, but also as a source of well-being for the employees (Helzer & Kim, 2019; Jessurun et al., 2020)

The use of the concept of creativity in two domains

In the Component Model of Creativity, Amabile (2006) connects creativity to creative skills, expertise and task motivation. She states that when there is no intrinsic drive, obviously not much creative will happen. This model is used within the domain of organizational sciences, and expanded upon in the Dynamic Componential Model of Creativity (Amabile & Pratt, 2016). Amabile (2006, p. 6) describes Creative Skills as including “a cognitive style favourable to taking new perspectives on problems, an application of techniques (or “heuristics”) for the exploration of new cognitive pathways, and a working style conducive to persistent, energetic pursuit of one’s work”. She further describes that a creative thinking skill depends on personality characteristics such as independence (autonomy), self-discipline, tolerance for ambiguity, perseverance, and a relative unconcern for social approval. Characteristics seen in high gifted people (Kooijman-van Thiel, 2015; Van Thiel & Slief-Boom, 2019) are overlapping with those mentioned above.

Within the psychology domain, the model by Renzulli (1978) on the definition of high giftedness, resembles the Component Model. See Figure 1 to observe the similarities. Expertise may be seen as equal to a Higher Intelligence. From multiple intelligences theory (Gardner, 1983, 1999) it can be derived that one can only be creative, if there is a certain amount of expertise in a certain domain, so you must be good at it, thus ‘more intelligent’. Task Motivation is essentially the same as Task Commitment. The concept of Creativity appears in both models but in a different place.

This difference might be solved if we argue that the Creativity Skills of Amabile is the Creativity mentioned by Renzulli.

Figure 1: *Models of Amabile (2006) and Renzulli (1978) compared*

Renzulli (1978) describes creativity having characteristics such as divergent thinking, and quotes a study by MacKinnon on architects and creativity, listing dimensions of creativity to be 1) originality of thinking and freshness of approaches, 2) constructive ingenuity, 3) ability to set aside established conventions and procedures when appropriate, and 4) a flair for devising effective and original fulfilments of the major demand of architecture. Also, he describes that there is very few validation evidence for tests of *creative accomplishment* (1978, p. 5) and this is, by the way, still an unsettled issue (Said-Metwaly et al., 2017). The arguments, Renzulli describing the different characteristics a person should have, opens the way, we think, to assume that Creativity in Renzulli's model can be rephrased to Creative Skills, thus aligning it to Amabile's model. The middle intersections might be seen as the *expression* of the combination of what is in the three circles.

Conclusion

If the above statements are seen in a 'mathematical way', that expertise equals higher intelligence, task motivation equals task commitment, and creativity in the model of Renzulli equals the creativity skills in the model of Amabile, then the obvious conclusion would be that creativity

equals high giftedness. However, we are dealing with concepts from different domains, which are similar but not exactly the same, and which are meant to describe different phenomena. However, it may be fruitful to be aware of this bridge between the two domains, for instance in defining what we mean with creativity, is it meant as output or as a set of skills, or what we mean with ‘intelligence’ and ‘expertise’, are they both a certain level of skills, or is the one a potential and the other a ‘shown level of skills’. We hope that this article will be instrumental in starting the discussion on creativity, bridging the different scientific domains.

References

- Amabile, T. M. (2004). A Model of Creativity and Innovation in Organizations. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 10, pp. 123–167). JAI Press.
- Amabile, T. M. (2006). *Creativity and innovation in organizations*. Harvard Business School.
- Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in Organizational Behavior*, 36, 157–183. <https://doi.org/10.1016/j.riob.2016.10.001>
- Fonagy, P., Gergely, G., Jurist, E. J., & Target, M. (2004). *Affect regulation, mentalization, and the development of the self*. Karnac Press.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. Basic Books.
- Gardner, H. (1993). *Multiple intelligences: New horizons*. BasicBooks.
- Gardner, H. (1999). *Intelligence Reframed—Multiple Intelligences for the 21st Century*. Basic Books.
- Goleman, D. (1995). *Emotional Intelligence*. Bantam Books.
- Helzer, E. G., & Kim, S. H. (2019). Creativity for Workplace Well-Being. *Academy of Management Perspectives*, 33(2), 134–147. <https://doi.org/10.5465/amp.2016.0141>
- Jessurun, J. H., Weggeman, M. C. D. P., Anthonio, G. G., & Gelper, S. E. C. (2020). Theoretical reflections on the underutilisation of employee talents in the workplace and the consequences. *Sage Open*, 10(3), 1–12. <https://doi.org/10.1177/2158244020938703>
- Kooijman-van Thiel, M. (2015). *Hoogbegaafd. Dat zie je zó!/: Verslag van een onderzoek naar en een symposium over zelfbeeld en imago van hoogbegaafden*. OYA Productions.

- Renzulli, J. S. (1978). What Makes Giftedness? Reexamining a Definition. *Phi Delta Kappan*.
- Renzulli, J. S. (2002). Emerging Conceptions of Giftedness: Building a Bridge to the New Century. *Exceptionality*, 10(2), 67–75. https://doi.org/10.1207/S15327035EX1002_2
- Said-Metwaly, S., Noortgate, W. V. den, & Kyndt, E. (2017). Approaches to Measuring Creativity: A Systematic Literature Review. *Creativity. Theories – Research - Applications*, 4(2), 238–275. <https://doi.org/10.1515/ctra-2017-0013>
- Van Thiel, M., & Slief-Boom, I. (2019). *Kracht en kwetsbaarheid. Over het leven van hoogbegaafde volwassenen*. OYA Productions.