

## **Insights About Creativity: Questioned, Rejected, Ridiculed, Ignored<sup>1</sup>**

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*The intent of the author was to identify some of his insights from creativity research which have not been widely accepted, describe what generated the insight, summarize the evidence in support of the insight, and to state what is at stake. It was soon evident that this was a larger task than could be accomplished in an article. The author stated the problem, discussed two examples, and identified fifteen of these insights. A few of them are supported by considerable research evidence but none of them have yet come into acceptance and widespread practice. Others are supported by enough research to convince the author but not enough to convince very many others. The author urges other investigators to examine these insights and to test the validity of some of them. New instruments will have to be created and developed. Longitudinal studies, statistical and qualitative, will be necessary. Experimental studies will also be needed. The author hopes that investigators will be intrigued by some of these insights and will be compelled to investigate them further. Who knows what a new generation of creative investigators will produce?*

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### **INTRODUCTION**

During my 46 years of experience in creativity research and study I have developed numerous insights about creative behavior that are counter

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to accepted and established ideas. These insights have been questioned, rejected, ridiculed, or ignored. This should not have surprised me because I know that a person who has an original idea is always in a minority of one, at least at first. Fortunately some of these insights have been accepted by a few people and this has diminished my discomfort enough to enable me to continue. In other cases, someone of a later generation comes along and develops the same insight and it is readily accepted. Then, there was readiness for them.

The latter route to the partial acceptance of the insight is especially important. Let me offer a couple of examples. Very early in my attempts to understand what made for creative achievement, I developed the insight that being in love with what you are doing was very important in creative achievement. I began collecting data that would enable me to find out. For example, I tried to find out what elementary school children were in love with year after year in my longitudinal studies launched in 1958. Later (1980, 1981a, 1983, 1987), I published evidence in support of this insight. This finding was ignored. None paid attention to this finding. If they did, they were opposed to it and disbelieved it. It was unthinkable for children this young to know what they were in love with. The fact is that many of them did know, recorded this fact in their own handwriting, and as adults they were doing what they loved, and they were doing it creatively.

Then Teresa M. Amabile independently came out with the same insight (1986, 1989) and wrote, "Extraordinary talent, personality, and cognitive ability do not seem to be enough—it's the 'labor of love' aspect that determines creativity" (Amabile, 1986, p. 12).

Early in my research, I developed the idea that information processed (read) with a creative mind set was more likely to be used creatively. My associates and I conducted several experiments and found consistent support for this insight (Torrance and Harmon, 1961, 1962; Torrance, 1969). Again, Ellen Langer, a generation later and using different terminology, came up with the same insight (Langer, *et al.*, 1989, Langer, 1989, 1990). She used the terms "mindfulness" and "mindlessness" for the sets that she gave, but she was dealing with the same phenomena. No one listened to me, and no one I know applied the results. Langer's results made headlines and *Reader's Digest* (March, 1990).

A whole generation separates my work from the works of Amabile and Langer. Neither Amabile nor Langer appear to be familiar with this work, yet their findings were almost immediately accepted. Perhaps I un-

knowingly have done the same thing, although I deliberately searched the older literature and used it.

### CHANGING THE GOLDEN RULE

Some ideas are so widely accepted that no one thinks of questioning them, preventing the emergence of new insights. For example, the Golden Rule, "do under others as you would have them do unto you," is one such established rule. For a long time, I have had the information that could have led to the insight that we should also "treat people like they want to be treated." I have seen and accepted the value of the "role reversal" technique (Moreno, 1946) in psychodrama, sociodrama, and role playing. I have heard and accepted the American Indian prayer, "Great Spirit, let me not judge a man (woman) until I have walked a mile in his (her) moccasins." I had embraced Harry Stack Sullivan's theory (1953) that human relations and lives go wrong when people behave toward others as though they have attitudes, motivations, skills, and other qualities different from what they actually have. I had taught it and written about it. Let us examine a couple of examples of what happens.

I know a tremendously gifted, creative 17-year-old boy who had been "in love with science" practically all of his life. In elementary school, he had achieved quite well and he had been looking forward to high school when he could take science courses. He had already done a lot of reading in science and had conducted some science experiments. When he entered high school, his counselor refused to permit him to register for the General Science course, telling him that it was too difficult for him. His older brother tried to intervene for him with the counselor. However, the counselor told the brother that it would be unfair to place his younger brother in a science course and have him fail. The mother also tried to intervene, but the counselor lectured her about trying to push her son too hard.

The boy, however, was able to find a science teacher at a nearby college to work with him. This professor said that the boy's understanding of chemistry was superior to his college students. Through the influence of this professor, some of the high school teachers permitted him to take other science courses and he excelled in them. In his senior year, he won a scholarship in the Westinghouse National Science Talent Search and achieved top scores in the College Board Examinations. The local newspaper wanted to interview the boy, the school principal, and some of the teachers.

The principal and teachers called in for the interview would not believe he had won this honor and wondered if he had cheated. Fortunately, he was defended by one of the science teachers. Using his cumulative folder, it was discovered that his home room number and IQ had been transposed in his permanent record when he entered high school.

I have since learned that this kind of situation is not uncommon. In Japan, a professor and principal of a university high school told me of a similar case with which he was dealing at that time. This laboratory school included a group of "feeble minded" students of high school age. There was one boy among this certified "feeble minded" group who was excited about science and asked to take physics at his new school. The principal allowed him to enroll in the regular high school physics course. At the time I talked to this principal, this "feeble minded" boy was leading the class in physics, and he had been retested and attained an IQ of 115. The principal had treated him as he wanted to be treated.

Being a speech writer is a profession which demands a high degree of the kind of creativity involved in treating a person as s/he wants to be treated. Peggy Noonan (*American Legion*, April 1991) worked as a speech writer for both Presidents Reagan and Bush. She says that being a presidential writer, the challenge was not so much determining what they wanted to say, but how they wanted to say it. Reagan liked to be sharply declarative, to be very clear and very blunt; whereas Bush saw the benefit in a certain amount of vagueness, so he often confused his enemies. Noonan found the creativity required in speech writing for these presidents exciting and fun.

There are other examples just as dramatic as the ones I have described. Behaving toward others as they want to be treated certainly challenges one's creativity more than does the Golden Rule and appears to facilitate creativity and result in more satisfying outcomes.

### FIRMLY ESTABLISHED IDEAS

When I went to the University of Minnesota as Director of the Bureau of Educational Research, the Dean of the College of Education said to all of the faculty at the annual banquet and faculty meeting, "Over half of what you teach is false. It's time you got busy and found which are true and which are false." Every Fall until his untimely death, he gave us the same challenge. I was deeply impressed by this challenge. I soon found out that it is difficult to question something that you have been teaching and that is widely accepted. Then if you stumble upon an original insight, you are afraid to make it known. Being a minority of one is very uncomfortable.

A few of my original insights have been rather widely accepted, but the ones I would like to share with you have not been accepted. Some of them have been rejected, ignored, or ridiculed. Some of them have angered some educators. Let's examine one of them.

### **Is Past Performance the Best Predictor of Future Performance?**

Do you accept the idea that the best predictor of future behavior (performance, achievement) is past behavior (performance, achievement)? Almost all educational institutions live by this "law." Business lives by it. The Army lives by it. I shall never forget the stories, told to me in World War II, by men who had been court martialed and were being dishonorably discharged. It was a story repeated over and over. They would reach their units before their records did and they performed exceedingly well until their records arrived. From then on, their attempts to perform well seemed impossible.

The same phenomenon occurred in some of the school drop-out students (Lichter, Rapien, Siebert, and Sklansky, 1962). One school had a very successful program for potential drop-outs. The students were achieving well, attended class regularly, and behaved well. When they returned to their regular classrooms, their teachers responded to them not as they now were, but as they were before the counseling and intensive academic program. As would be expected, the students failed. Their teachers apparently would not let them succeed.

When I came to the University of Georgia, I was delighted, in most respects, with the policy of admitting students to the Graduate School. Under this policy, the Graduate School could admit students who met certain requirements involving their past performance (GRE score and undergraduate grade point average). They had a section of the application blank which called for the applicant's future career image, although some candidates left this blank and it was never used in admitting students. Each department could admit students who did not quite meet the requirements as "unclassified post graduates." If their performance was satisfactory, they could be admitted to a degree program. The Department of Educational Psychology had a policy which provided an opportunity to admit students as "unclassified post graduates." Generally we looked at their future career image as expressed on the application blank, their strong motivation, and their clear indication of commitment to a career in Educational Psychology.

After about 10 years, the Dean of the Graduate School decided that we were admitting too many students under this policy. He then decreed

that the Graduate School would not admit any more Educational Psychology students under this provision. One of the things I did at this time was to take a look at the records and positions held by these students after graduation. To my surprise, the students who entered degree programs upon admittance to the University of Georgia had statistically significant lower GPAs than did the ones who had come into the graduate school as "unclassified post graduates." I also found that they held professional positions as good as those who had been admitted outright. With this kind of evidence, the Graduate Dean relented and admitted students in Educational Psychology under the "unclassified post graduate" category.

Now that 20 more years have elapsed, we find from the list of ten students who were not admitted on the standard criteria that there have been: three past presidents of the National Association of Gifted Children, the founder and first president of the American Creativity Association, the authors of hundreds of professional articles in Educational Psychology, dozens of Educational Psychology texts and other books, one Educational Psychology Department Head, the founders of several innovative programs, a Distinguished Scholar Award winner, and other distinctions, far exceeding the accomplishments of those who were admitted outright without question.

There have been many studies conducted by professionals from educational psychology and personnel that appear to support the contention that past performance is indeed the best predictor of future performance. None of these studies, however, have used a measure or indicator of future image. Of course, there is no standardized measure of future self-image. I have been wrestling with this problem for at least 35 years. I have experimented with the following types of measures or indicators:

1. Both fantasy and realistic expressions of future self images (two longitudinal studies) (Torrance, 1972, 1981).
2. Future orientation based upon scoring of the verbal TTCT (Torrance, 1972, 1981).
3. Persistence in realization of career choice made in elementary school over a three-year period (longitudinal 22-year study) (Torrance; 1987).
4. Scenarios scored for Achievement Motivation (learning disabled students).
5. Biographical inventories scored for future achievement motivation and clearness of future images.

Thus far, the results have been positive and statistically significant, but much more work needs to be done. The implications are far reaching.

### Examples of Insight About Creativity that Have Been Questioned, Rejected, Ridiculed, or Ignored

The following are examples of some of the insights which have been developed over the years. These examples are intended to give readers something to think about.

1. *Insight.* Creativity tests, such as the TTCT, are lacking in economic and racial bias, especially if the tests are given early (Torrance, 1977).

*Accepted Belief and Practice.* All standardized tests, including creativity tests, are culturally biased (Torrance, 1977).

2. *Insight.* In administering creativity tests, subjects must be motivated to give the kinds of responses you are looking for (Torrance, 1974).

*Accepted Belief and Practice.* Students should not be motivated toward test items or be told what is expected of them as that will bias the results of the test.

3. *Insight.* In giving creativity tests, subjects should be “aroused” rather than being relaxed or stressed (Treffinger, Torrance, and Ball, 1987).

*Accepted Belief and Practice.* Students should have a relaxed or playful atmosphere to perform on creativity tests or should take tests in strict, standardized conditions.

4. *Insight.* The way to evaluate an educational program to develop creativity is *not* to give a pretest in October and a post test in May or June or to give a pretest early in June and a post test in July or August. Such procedures give spurious results. The pretests are given when students are at their peak and the post tests are given at a time when they are past their peak.

*Accepted Belief and Practice.* Students are given pre and post tests under whatever conditions exist at the time to evaluate whether they have learned anything from their creativity training.

5. *Insight.* Disadvantaged children may perform better than affluent or gifted students in brainstorming (Torrance, 1977).

*Accepted Belief and Practice.* Disadvantaged students do not have sufficient experience with creativity materials to compete with affluent or gifted students in brainstorming experiences.

6. *Insight.* Disadvantaged children perform as well or better than affluent children on tests of ability to improvise with commonplace materials (Torrance, 1977).

*Accepted Belief and Practice.* Affluent children perform better than disadvantaged children on all tests of creativity.

7. *Insight.* In longitudinal studies using creativity tests scores as predictors of adult creative achievement, give enough time for creative achievement to “pay off.” I found only a moderate correlation after 6 years,

a higher one after 12 years, and a lower one after 30 years when other indicators like love of one's work, risk taking, persistence, courage, and the like become more important.

*Accepted Belief and Practice.* For creativity tests to accurately predict future creative achievements, you must measure the subjects' creativity in regular, short-term intervals.

8. *Insight.* Apparent procrastination may result in greater incubation and creative achievement (Torrance and Safter, 1991).

*Accepted Belief and Practice.* Procrastination is a negative trait and should be dealt with as an impediment to creative production.

9. *Insight.* High creatives, not so high IQ, have higher creative achievement than high IQs, not so high creatives, and equal those high in both (Torrance and Wu, 1981).

*Accepted Belief and Practice.* High IQ is necessary for real creative achievement of any kind.

10. *Insight.* Fourth graders are less creative than third graders (Torrance, 1968).

*Accepted Belief and Practice.* Creativity is developmental and consistently increases with age and education.

11. *Insight.* It is not necessary in scoring for originality to adjust to group, culture, gender, and so forth (Rungsinan, 1976).

*Accepted Belief and Practice.* Scoring of all creativity factors must be adjusted to account for cultural or gender variables.

12. *Insight.* Generally, disadvantaged children do not have mentors, yet they need them more than more affluent children (Torrance, 1991).

*Accepted Belief and Practice.* Disadvantaged children have as much access to significant role models as advantaged children but because they do not think that they need them, they ignore these opportunities.

13. *Insight.* The willingness to disagree in a group facilitates creativity and the making of better decisions (Torrance, 1957).

*Accepted Belief and Practice.* Group cohesion and cooperation is the best facilitator of creativity and decision making and disagreement is disruptive to this process.

14. *Insight.* Young children can begin learning negotiation skills (Murdock and Torrance, 1988).

*Accepted Belief and Practice.* Young children do not have the ability to learn negotiation skills, nor should they take time away from their basic skills instruction.

15. *Insight.* Creatively gifted children with learning disabilities may attain a high degree of success in a field that he/she loves if his/her strengths are regarded positively (Torrance, 1992).



*Accepted Belief and Practice.* There is no such thing as a gifted child with learning disabilities. If a child is learning disabled he/she will always be so handicapped, he/she cannot achieve success.

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