

Motivation as Bases of Creativity in Classroom Setting

Remaz Mohamed Albasher Ibrahim

ABSTRACT

Despite the increasing interest in creativity in various fields from business to engineering to applied linguistics, it still seems to be marginalized within foreign language education. The research in this paper takes a different look at creativity by using the work of Amabile (1982, 1996) and to see if there is some relation between intrinsic motivation to learn a foreign language and creativity. Two instruments were used for data collection which were a questionnaire and creativity test for (57) university students. The finding of the study confirm that intrinsic motivation has a significant effect on the student's verbal creativity with English.

المستخلص

على الرغم من الاهتمام المتزايد بالإبداع في مجالات مختلفة من الأعمال إلى الهندسة إلى علم اللغة التطبيقي، إلا أنه لا يزال يبدو أنه مهمش في مجال تعليم اللغات الأجنبية. وقد تناولت هذه الورقة نظرة مختلفة عن الإبداع باستخدام عمل Amabile (1982، 1996) ومعرفة ما إذا كان هناك علاقة بين التحفيز والإبداع في تعلم اللغة الأجنبية. وتم استخدام أداتين لجمع المعلومات وهما: استبيان و إختبار إبداع لعدد (57) من الطلاب الجامعيين. أثبتت نتائج الدراسة أن التحفيز الداخلي له دور مؤثر على إبداع الطلاب في اللغة الإنجليزية.

INTRODUCTION

Natural language is the greatest form of improvisation, which rolls off the tongue seamlessly from our thoughts, interplaying with the words and sounds. Often ludic, language gets manipulated, played with and reshaped often for the lone purpose of entertainment, which can take place at the dinner table (see Crystal 1998).

The creativity of language cannot be denied. Nowadays browsing a corpus is rather easy below is an excerpt from an article from the USA Today I came across while looking for examples of the phrasal verb "roll out". One will quickly notice while reading it that sales can "soar" without wings, you can pay a lot by "shelling out" even if you are allergic to nuts, and a product can be "juiced-up" and we are talking about accounting software! Not long after sales at his Houston-area Krispy Kreme operation began to soar, Jason Gordon discovered that his \$ 200 Intuit accounting software couldn't keep up. So two years ago, the small-business owner nearly shelled out \$

100,000 for high-powered accounting software.

At the last minute, Gordon learned that Intuit was about to roll out a juiced-up product for \$ 2,500. He jumped on it and hasn't looked back. (Acochild: 2003) How do second language learners approach this creativity, which is so common in everyday language? Often many teachers express what Danesi (1995) has alluded to that often learners of a foreign language sound unnatural because they speak or write in an "over-literal" way lacking the opportunity to be exposed to these metaphorical structures. To become creative with the language extends the language beyond the often basic utilitarian view of a foreign language (especially English) or the superficial "self-talk" about family, interests, and work and perhaps may even be connected to learners' intrinsic motivation to learn the language. Amabile (1990) suggests that "people will be



most creative when they feel motivated primarily by the interest, enjoyment, satisfaction, and challenge of the work itself - and not by external pressures” (p. 67). This paper will look at the connection between creativity and motivation in a foreign language. First I will briefly address research into creativity and some ways to measure it, then look at motivation in foreign language studies, especially intrinsic motivation. Next I will present the results of a small exploratory study measuring motivation and creativity. Finally, I will discuss some issues and complications with this experiment and possible future research in this area.

• Objectives of the study

This study aims to achieve the following objectives:

- 1- Analyze and diagnose the obstacle that face learners and teachers in creating a motivating atmosphere.
- 2- Give constructive feedback to teachers.
- 3- Help learners to use language in a large context outside the class.

3. Creativity

The word creativity carries with it a weight that divulges stories of the birth of life, to the whispering of the nine muses, to the lone-mad artist with his chisel and brush, so one must use it nowadays with caution. It has traveled across time, transforming from divine inspiration to an “ah-ha” moment of figuring out that this paperclip on my desk could be reshaped into a business card holder. The internet boom generation gave it an idiom, *to think outside the box*, which quickly became a cliché after the second boom went bust. When one word has so much meaning attached to it, so much background knowledge, full of images,

myths and fantasies that for a long time researchers rather preferred not to get their hands dirty with it. At least not until Guilford (1950) addressed the American Psychological Association and stated “the neglect of this subject by psychologist is appalling”. He most likely had no idea the firestorm that would follow in the coming decades. Now there are many journals entirely devoted to the subject such as; *Journal of Creative Behavior* (established in 1967); *Creativity Research Journal* (established in 1988) ; *Psychology of Aesthetics, Creativity, and the Arts* (established in 2006); and *Thinking Skills and Creativity* (established in 2006).

With all this research, a modern working definition of the term must be available, something that extends beyond the notion that creativity is something impossible to define in words (Bohm, 1996. P 445). An influential and highly referenced definition is that creativity “is the ability to produce work that is novel (i.e., original, unexpected), high in quality, and appropriate (i.e., useful, meets task constraints)” (Sternberg, Kaufman, & Pretz, 2002:1). Though others still feel this definition should be expanded to include beauty (Arden, Chavez, Grazioplene, & Jung 2010) or the transforming ability that creativity can have on the domain (Csikszentmihalyi, 1996. p115). Creative researches use many P’s to talk about creativity. Originally there were four, but more recently this number has expanded to six. The first four are; person, place (press), process, and product and later persuasion (Simonton, 1990) and potential (Runco, 2003) were also included



Since the word creative could at the same time be used to mean the “Guernica” painting by Picasso and my daughter’s finger painting of a cherry blossom, the word creative

within creativity research has been divided by magnitude into three sizes, the mini-c (Beghetto & Kaufman 2007), the little-c, and Big-C. (Kozbelt, Beghetto, & Runco 2010)

The now vast amount of research into this field certainly is like walking into a deep, verdant forest. Theories abound, economic theories as Sternberg and Lubart (1995) advise that the key to creative performance is “buying low and selling high” and a “Darwinian” theory of creativity (Simonton, 1999) that uses historiometrics to look at how creativity changes over broad periods of time. However, Amabile (1982) developed a social psychology of creativity that looked at how the environment influences creativity. Using a technique she labeled as the “consensual assessment technique”, a group of judges would act as the “press” and subjectively determine the creativity of a “product”. Through decades of empirical findings she has shown how beneficial intrinsic motivation is to creativity and how extrinsic motivation can inhibit it, terming this the “Intrinsic Motivation Principle of Creativity” (Amabile, 1996.p 234).

3.1 Creativity in SLA

Creativity research in second and foreign language acquisition is surprisingly sparse considering the amount of attention it has received in the past 50 years in the field of psychology. Ottó’s (1998) early study looked at how creativity could be a factor in the language classroom, as more language

classrooms adapted a communicate language teaching (CLT) approach. In his small study (n= 34), he concluded though with expected caution that there is a relationship between creativity and successful language learners. Albert and Kormos (2004) investigated how creativity may effect oral narrative tasks, though their findings appear to be inconclusive or having only a “moderate” affect, they do mention that “creativity can account for certain differences in learners’ performance on oral narrative tasks” (303). Albert (2006) researched to see if there was any relationship between creativity, language aptitude, and proficiency, but contrary to Ottó’s findings, found the three to be unrelated. An interesting note all three of these researchers (at the time they wrote their articles) were from the same university in Budapest, Hungary.

3.2 Measuring Creativity

The idea of actually being able to measure creativity can always cause a bit of skepticism. Though most psychometric tests in the Guilford tradition, often measure divergent thinking, which is defined by Runco (1999.p. 577) as “cognition that leads in various directions”. These tests look to measure *fluency*, the total number of ideas, (Runco, 1999:577) *originality*, the unusualness of the ideas, (Runco ,1999:577) *flexibility*, the uniqueness of categories in the answer (Guilford, 1968:99), and *elaboration*, the extension of ideas (Guilford, 1967:138). A very common psychometric test developed by Paul Torrance and through the years has been redesigned multiple times (Torrance, 1962, 1974) (Torrance & Ball, 1984) is the Torrance Test of Creative Thinking (TTCT).



There is definitely some debate about the reliability of this test (Baer, 1993, Cropley, 2000 and Kim, 2006) and how trustworthy it can be for measuring creativity. Cropley (2000) suggest that when measuring creativity since it is so multidimensional that one should utilize multiple tests to try to better assess it. There are two sections to the TTCT, the TTCT-verbal and TTCT-figural. The TTCT-verbal has 3 Ask-and-Guess sections and 4 other verbal subtests; 1) product improvement, 2) unusual uses, 3) unusual questions, and 4) just suppose. The TTCT-figural has three subtests; picture construction, picture completion, and lines/circles. TTCT-figural tests are assessed by fluency, originality, and elaboration, as well as, resistance to premature closure and abstractness of title. While the verbal tests are assessed by fluency, originality, and flexibility (Kaufman, Plucker, & Baer, 2008).

As mentioned in the previous section Amabile (1996) developed a consensual technique for creativity assessment. Instead of using an individually trained researcher to assess these creativity tests, she employs a group of judges knowledgeable of the domain to assess the creative product. These judges should work independently, rate other aspects such as technical or aesthetic appeal, rate the product relative to one another (not against some abstract ideal), and view the products in a different random order (Amabile, 1996). In one of her studies, to measure verbal creativity, she used a short writing exercise called an “American Haiku” which is “unrhymed poetry consisting of five lines: line 1 is a single noun; line 2 consists of two adjectives describing the noun; line 3 consists of three verb forms relating to the noun; line 4

contains any number of words (a phrase or sentence about the noun); line 5 repeats the noun in line 1.” (Amabile, 1996:55). Judges were then asked to rate them based on their “own subjective definition of creativity”. She found high inter-judge reliability using this consensual technique.

This also brings in the “press” into the creative process, as the judges act as the gatekeepers in determining if the product is “novel”, but also “appropriate” and of “high quality”.

4. Motivation

To motivate, or to stimulate towards some action, is an essential part of psychological studies of the self. Motivation, the process whereby goal-directed activities are energized, directed, and sustained (Schunk, Pintrich, & Meece, 2008 p.214), is often seen as being just as important as aptitude in predicting success. Motivational intensity can vary greatly depending on “individuals’ thoughts, beliefs, and emotions” (Schunk & Usher, 2012:13) as they interact with others in their social environments. An ideal state of motivation has been referred to as “flow” (Csikszentmihalyi, 1996), an autotelic experience of doing something simply for the joy of doing it, often linked to intrinsic motivation. Below I will review a brief history of motivation research in SLA and then directly look at Deci and Ryan’s (1985) Self Determination Theory.

4.1 Motivation in SLA

Motivation has been extensively studied in SLA from the early work of Gardner and Lambert (1972) to Gardner’s (1985) socio-educational model, which became so widely accepted in the literature that many scholars began to question its dominant impact and possible limitations.



1. Crookes and Schmidt (1991 p.501) stated that “this particular approach was so dominant that alternative concepts have not been seriously considered.”

2. Dörnyei (1994p.273) further commented on the above quote by stating how “this resulted in an unbalanced picture, involving a conception that was as Skehan put it, ‘limited in terms of the range of possible influences that exist.’”

Through research and further study into motivation, various researches discovered a greater array of possible motivational factors that influence a learner’s desire to achieve the goal of language learning. Dörnyei (1990) mentioned the simple desire for stimulation. While Oxford and Shearin (1994p. 375) listed many and varied motivational orientations that surprised researches since they did not conform to the integrative/instrumental model. Nearly two-thirds of the students in her research responded to learning Arabic for reasons such as “personal challenges” and the “elitism of taking a difficult language” or a “fascination with the Arabic writing system” (p. 12). The Modern Language Journal published these articles by Dörnyei (1994), Oxford et al. (1994), and Crookes et al. (1991) which sought to open up a dialogue among the researchers to further explore various approaches to motivation and “practical instructional implications” (Dörnyei 1994:274) specifically for teachers in the classroom. Subsequently Garner and Tremblay (1994 p.180) responded to these articles by addressing the two main points; the limitations of the Gardner model and bringing in other areas of research that might help further develop a more robust theory on motivation in SLA. He concludes by summarizing how “motivation is best

explained as a complex and dynamic process with room for several intervening variables” (p. 366).

Another issue with the socio-education model of motivation involved the concept of “integrativeness”. Gardner (2001) distinguishes integrative motivation into three constructs; motivation, which includes effort, desire, and positive affect; attitudes towards the learning situation such as the teaching material, one’s classmates, school, teacher, and so forth; and integrativeness, the openness and respect for the culture and the language and an interest to become closer to it. It is this last part, this “integrativeness” that caused many researchers to question the validity of such a motivational orientation, as English spread around the world. For what “culture” would one like to become closer to? Shaw (1983 p. 33) addressed this concern by stating “at least the whole aspect of integrative motivation should be re-examined in terms of a desire among learners to join an indigenous group of English language speakers or a vague international one rather than a group of foreign native speakers”. Yashima, Zenuk-Nishide, and Shimizu (2004) and Yashima (2009) also approached this concern in a similar way by creating a new construct called “international posture”, as a motivation for Sudanese learners to learn English, not in any “interest to become closer” to some English culture, but rather to become a part of this “vague international one” that exists beyond the borders of Sudan. Lamb (2004 p. 3)

also states in a similar way that “individuals may aspire towards a ‘bicultural’ identity which incorporates an English-speaking globally-involved version of themselves in addition to their local L1-speaking self”



Looking at motivational research in SLA, it is easy to become overwhelmed by the sheer number of theories associated with it now. Dörnyei (1996) makes a clear note of this as he states, “it is not the lack but rather the abundance of motivation theories which confuses the scene.” (p.72) Dörnyei (2005) tried to synthesize some of these motivational approaches into one overarching construct which he called the “L2 Motivational Self System”, especially trying “to make it applicable in diverse learning environments in the current, increasing globalized world” (Dörnyei 2009: 212). Using research done in the field of psychology and specifically the work done by Markus and Nurius (1986) and their concept of “possible selves”, Dörnyei (2005) looked to develop a future oriented sense of the self within the educational context. This system of the self first is situated in the immediate learning environment with a component associated with the “ideal self”, the person that one would like to become, and an “ought self”, which are important attributes that one should possess in order to meet expectations (of society, parents, teacher, etc.) (Dörnyei, 2005).

4.2 Self Determination Theory

Deci and Ryan’s (1985) Self-Determination Theory (SDT) argues that people share the psychological needs for autonomy, competence, and relatedness. These are essential for the individual to grow and socially develop, as well as, the individual’s overall well-being (Ryan & Deci, 2000a).

SDT looks at various forms of motivational behavior and distinguishes between choice and compliance. When one voluntarily decides to act under one’s own “free will”, it is an internal decision and intrinsically driven for its own sake. Intrinsic motivation

measurements often use “self-reports of interest and enjoyment of the activity” (Ryan and Deci, 2000b). It is important to have social and environmental factors that facilitate rather than undermine intrinsic motivation (Ryan et al., 2000b). Noels, Clément, and Pelletier (1999) used Self-Determination Theory to examine the relationship between students’ perception of the teacher’s communicative styles and the students’ motivation. Students with higher levels of intrinsic motivation perceived their teachers as less controlling, while conversely amotivated students perceived the teacher as controlling. The difference between having an autonomy-supportive environment compared to the constraining feeling of being externally controlled has also been observed in other studies in classroom learning (Deci, Nezlek, & Sheinman, 1981).

Extrinsically motivated behavior is more based on compliance. Though they may appear as dichotomous in nature, extrinsic motivation can actually have various stages of regulation from external regulation (reward, punishment) to introjected regulation (internalizing the external through coercion; guilt and self-aggrandizement) to identified regulation (identify and accept the activity and internalizing it though still instrumentally orientated) to integrated regulation (the activity is integrated into the learners sense of self) (Deci, Vallerand, Pelletier, & Ryan 1991). Though this final stage may appear like intrinsic motivation the difference being “intrinsic motivation is characterized by interest in the activity itself, whereas integrated regulation is characterized by the activity’s being personally important for a valued outcome” (Deci et al., 1991:330)

5. Methodology

5.1 Participants

A group of 57 undergraduate students (n=57) at some different universities in Khartoum participated in this research.

The age of the participants ranged from 18 to 22 years old. 41 of them were enrolled in a mandatory introductory English course while the remaining 16 were enrolled in an higher level English course.

5.2 Procedure

The participants were informed that this was part of a research project on motivation and creativity in a foreign language and had no relationship whatsoever to their English course or final grade in the course.

The participants were asked to fill out a a motivation questionnaire and a creativity test.

Time was not strictly enforced, but due to class schedule constraints, the participants roughly took 20 minutes to complete all the materials.

5.3 The Material: Motivation Questionnaire The questionnaire used in this research has 7 categories with 3 items each. The following are the categories; amotivation, external regulation, introjected regulation, identified regulation, intrinsic/knowledge, intrinsic/accomplishment, and intrinsic/stimulation. One item in the questionnaire in the introjected regulation category was nulled due to a misprint in the questionnaire along with one item in the

intrinsic knowledge category after running a reliability test, so in total there was 19 items. A Likert 5-point scale was used with responses ranging from *it doesn't apply to me to (5) it applies to me.

5.4 The Material:

Figural and Verbal Creativity Test

The creativity test had a figural section and a verbal section. The figural used the "picture completion task" based on the Torrance Test of Creative Thinking (TTCT).

The participants were given some connected lines on a piece of paper and were asked to complete the picture. The verbal section used the "American Haiku" as described in Amabile (1996) (see Appendix 2).

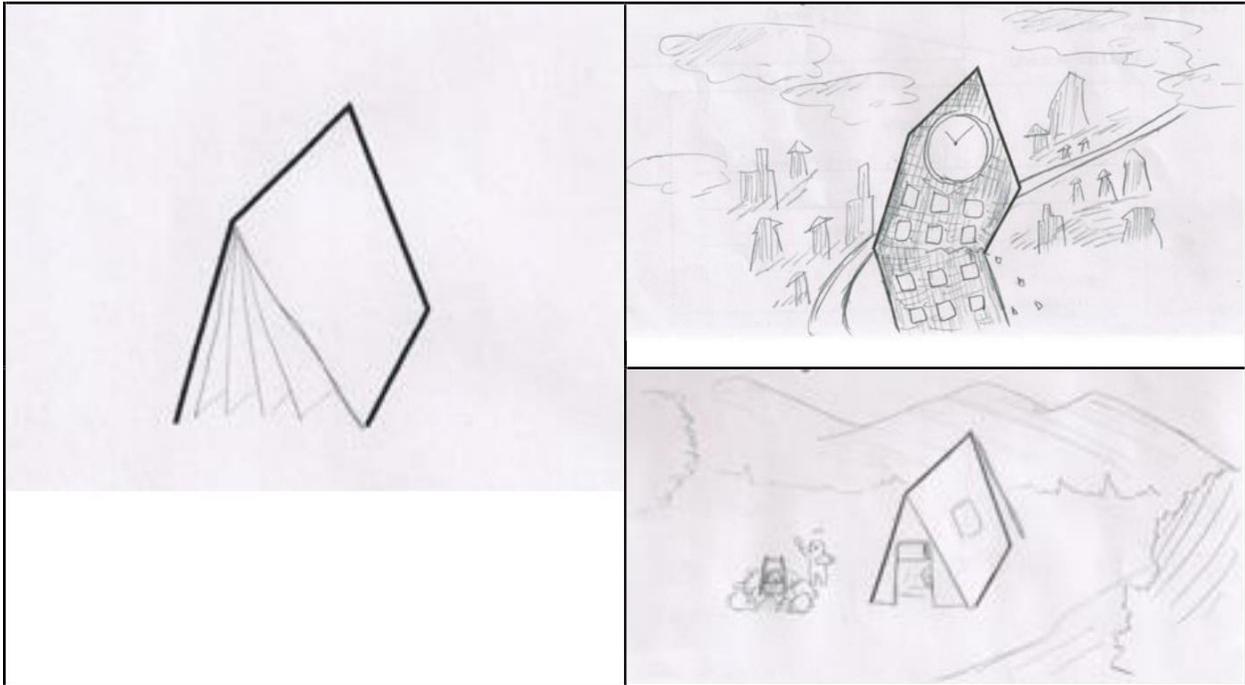
The participants were presented with a theme, either "winter" or "spring" and were asked to complete the poem.

A small group of judges provided consensual scoring to the creativity tests.

They used their own subjective opinion of creativity to judge the poem and the picture. The researcher asked them to consider such elements as originality, elaboration, richness of imagery, emotionality, flexibility, and their overall fondness of the poem or the picture.

There was quite a lot of consistency between the marks and finally the researcher provided each participant a figural and verbal creativity score from 1 to 6, one being the lowest and 6 being the highest. Table 1 shows three figural examples that scored high on the test.

Table 1: Examples of high scores on the Figural Creativity Test



The ones on the right scored high based on elaboration and originality, the one on the left scored high, not on elaboration but due to simplicity and the unexpected. So drawing skills are no doubt helpful in this

task, but just as important is having a creative idea or the ability to see a shape, as in a book, in a few randomly positioned lines that nobody else (of the 57 participants) perceived.

Table 2: Examples of low scores on the Figural Creativity Test

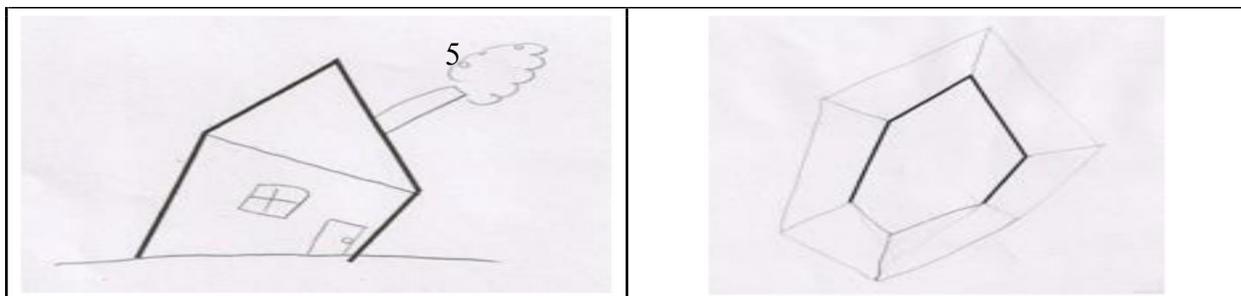


Table 2 shows two examples of pictures that scored low due to the lack of originality and elaboration. Of the 57 participants, ten houses were drawn and five diamond shapes.

Table 3: Haiku Examples

| | |
|--|--|
| <p>Spring</p> <p>windy beautiful</p> <p>fog, ice, date</p> <p>I've loved the girl</p> <p>Spring</p> | <p>Winter</p> <p>Cold, hard</p> <p>See ice, Christmas</p> <p>Men only wear his clothes</p> <p>Winter</p> |
| <p>Winter</p> <p>cold, quiet</p> <p>freeze, snow, shiver</p> <p>There were footprints on white</p> <p>Winter</p> | <p>Winter</p> <p>cold</p> <p>Ski</p> <p>Winter</p> |

Table 4: Means, standard deviation, and Cronbach's alpha of the sub-scales

| | Means | Standard Deviation | Cronbach's |
|----------------------------|-------|--------------------|------------|
| 1. Amotivation | 1.66 | 0.63 | 0.72 |
| 2. External Regulation | 2.89 | 0.88 | 0.68 |
| 3. Introjected Regulation | 3.35 | 0.92 | 0.73 |
| 4. Identified Regulation | 4.30 | 0.66 | 0.72 |
| 5a. Intrinsic Motivation K | 4.08 | 0.75 | 0.66 |
| 5b. Intrinsic Motivation A | 3.26 | 0.93 | 0.84 |
| 5c. Intrinsic Motivation S | 3.82 | 0.85 | 0.87 |

Table 4 shows the means and standard deviations of responses from the motivational questionnaire. I did not average the three groupings in the sub-scale intrinsic motivation, but



rather kept each group separate. Doing this intrinsic motivation *accomplishment* stands out as being considerably lower than the other intrinsic items, knowledge and stimulation. It is even slightly lower than introjected regulation. Similar to Yashima et al. (2009) identified regulation noticeably scored the highest.

Table 5: Correlations between the sub-scales

| | 1 | 2 | 3 | 4 |
|---------------------------|------------|---------|---------|---------|
| 1. Amotivation | | | | |
| 2. External Regulation | -0.18 | | | |
| 3. Introjected Regulation | -0.18 | 0.32 * | | |
| 4. Identified Regulation | -0.56 ** | 0.35 ** | 0.38 ** | |
| 5. Intrinsic Motivation | -0.32 * | 0.27 * | 0.14 | 0.60 ** |
| Note n=57* p < .05 | ** p < .01 | | | |

Table 5 shows the correlations between the sub-scales. As identified regulation had the highest means, it also had the highest negative correlation to amotivation.

Table 6: Means, standard deviation of the creativity tests

| | Means | Standard Deviation |
|-----------------------|-------|--------------------|
| 1. Figural Creativity | 3.28 | 1.47 |
| 2. Verbal Creativity | 3.21 | 1.33 |

Table 6 provides the means and standard deviation for the two creativity tests.

Table 7: Correlations between Verbal / Figural Creativity and the Motivation sub-scales



Motivation sub-scales

| | Extrinsic Motivation | | | | Intrinsic Motivation | | |
|-----------------------|----------------------|------------|-------------|--------------------------|----------------------|----------------|-------------|
| | Amotivation | External | Introjected | Identified Regulation | Knowledge | Accomplishment | Stimulation |
| Verbal Creativity | -0.10 | 0.15 | 0.10 | 0.22 | 0.30 * | -0.02 | 0.28 * |
| Figural Creativity | 0.01 | 0.05 | 0.12 | 0.10 | 0.05 | 0.06 | 0.11 |
| Note n=57 | * p < .05 | ** p < .01 | | | | | |

Table 7 shows the results. Identified regulation, intrinsic motivation knowledge, and intrinsic motivation stimulation ($p < .05$) all showed signs of having some significant relationship with verbal creativity, while none of the motivational sub-scales seemed to have any relationship with figural creativity. Since the figural creativity task was not related with the language and the motivational questionnaire asked specifically about learning English, this seems rather foreseeable.



6. Results

Firstly data gathered from the motivational questionnaire was examined. Secondly data from the creativity test was examined. Thirdly, a test of statistical significance was conducted to test the correlations between the variables of figural and verbal creativity with those of the sub-scales on the motivational questionnaire.

7. Discussion In this study intrinsic motivation showed to have a significant effect on the students' verbal creativity with English, though it should be taken with some caution since it was a small (n=57) exploratory study. One other interesting and rather unexpected result was the disparity between the three types of intrinsic motivation, notably accomplishment. This item asked such questions as "For the pleasure I experience when surpassing myself in my English studies" and "For the enjoyment I experience when I grasp a difficult construct in English". It would be interesting if a replicable result using a larger number of participants could be found, especially if performed cross-culturally to see if this intrinsic motivator is more culturally bound than the other two. This motivational questionnaire only partially grasps the dynamic and complex nature of motivation, failing to grasp the "person-in-context" (Ushioda, 2009), possible cross-cultural differences in the perception of the self (Markus and Kitayama, 1991) and the influence these

differences may have on motivation (Chen, Warden, Change, 2005), especially outside the Western context. Two of the intrinsic motivational sub-scales on the questionnaire, achievement and stimulation, fall under the values of self-enhancement and openness to experience respectively.

Self-enhancement motivations have been previously assumed to be a universal human trait, though more recent studies have looked at how cultures can considerably differ in self-enhancement (Falk, Heine, Yuki, & Takemura, 2009). Perhaps simply translating questionnaires from English into the local language is not enough, but needs to be indigenized to meet cultural differences. The creative product here, a figural drawing and a short poem, is a highly individual product and does not grasp the social side of creativity. It was also very limited since only one test was used to measure figural and verbal creativity. To measure one overall creative score, one slight change could have been made. After the picture completion task, the participants would then be asked to write a short 100 word story describing the picture or to combine the picture with a haiku. Also providing the theme "spring" or "winter" in the haiku task might have also constrained the participants' creative potential, so telling them to chose their own theme might be easier to judge by adding one more originality variable.



Also organizing a group of judges to assess the creative product (especially to assess an English creative product like the haiku) was rather logistically difficult. I can see the benefit of this technique but it does require an extensive amount of preparation, time, and networking. Future research could look to see if there is a unilateral relationship between creativity and motivation. A possible project could be a longitudinal study to measure if teaching creativity in the foreign language classroom changes students' intrinsic motivation over the course of the semester to learn the language.

Creative language teaching such as "language play" (Crystal, 1998; Cook, 2000) could involve such activities as introducing humor, teaching more metaphorical and idiomatic language, creative writing, have students do figural creative exercises and then attach stories to them, exploratory research on topics of their choice, and many other possibilities.

References

Acohido, B. (2003). Software giants think small. *USA Today* (Money Section 12/11/03) Albert, Á., & Kormos, J. (2004). Creativity and narrative task performance: An exploratory study. *Language Learning*, 54, 277-310.
Albert, Á. (2006). Learner creativity as a potentially important variable: Examining the relationships between learner creativity, language aptitude and level of proficiency. In M. Nikolov & J. Horváth (Eds.), *UPRT 2006: Empirical studies in English applied linguistics* (pp. 77-98). Pécs: Lingua Franca Csoport.

Amabile, T. (1982). The Social Psychology of Creativity: A Consensual assessment technique.

Journal of Personality and Social Psychology, 43, 997-1013.

Amabile, T. (1990). Within you, without you: Towards a social psychology of creativity and beyond. In M. A. Runco & R. S. Ablert (eds.), *Theories of Creativity* (pp. 61-91). Newbury Park, CA: Sage.

Amabile, T. (1996). *Creativity in Context*. Boulder, CO: Westview Press.

Amabile, T. & Pillemer, J. (2012). Perspective on the Social Psychology of Creativity. *The Journal of Creative Behavior*, 46, 3-15.

Arden, R., Chavez, R. S., Grazioplene, R., & Jung, R. E. (2010). Neuroimaging creativity: A psychometric view. *Behavioral Brain Research*, 214, 143-156.

Baer, J. (1993). Why you shouldn't trust creativity tests. *Educational Leadership*, 51, 4: 72-73.

Beghetto, R. & Kaufman, J. (2007). Toward s broader conception of creativity: A case for "mini-c" Creativity. *Psychology of Aesthetics, Creativity, and the Arts*, 1, 2, 73-79.

Bohm, D. (1996). *On Creativity*. New York, NY: Routledge.

Chen, J. F., Warden, C. A., & Chang, H. T. (2005). Motivators that do not motivate: The case of Chinese EFL learners and the influence of culture on motivation. *TESOL Quarterly*, 39, 4, 609-633.



**Sudan University of Science and
Technology**
Deanship of Scientific Research
Journal of Linguistic and Literary Studies



- Cook, G. (2000). *Language Play, Language Learning*. Oxford, UK: Oxford University Press.
- Cropley, A. J. (2000). Defining and measuring creativity: Are creativity tests worth using? *Roeper Review*, 23, 2, 113-115.
- Crystal, D. (1998). *Language Play*. Harmondsworth: Penguin Books.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Rollins.
- Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York: HarperCollins.
- Csikszentmihalyi, M. (1999). Implications of a systems perspective for the study of creativity. In R. J. Sternberg (ed.), *Handbook of Creativity* (pp. 313-335). New York: Cambridge University Press.
- Danesi, M. (1995). Learning and teaching languages: the role of "conceptual fluency". *International Journal of Applied Linguistics* 5, 3-20.
- Deci, E. L., Nezlek, J., & Sheinman, L. (1981). Characteristics of the rewarder and intrinsic motivation of the rewardee. *Journal of Personality and Social Psychology*, 40, 1-10.
- Deci, E. L., Vallerand, R., Pelletier, L., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26, 3&4, 325-346.
- Deci, E. L. & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L. & Ryan, R. M. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- Dörnyei, Z. (1990). Conceptualizing motivation in foreign language learning. *Language Learning*, 40, 46-78.
- Dörnyei, Z. (1994). Motivation and Motivating in the Foreign Language Classroom. *The Modern Language Journal*, 78, 273-284.
- Dörnyei, Z. (1996). Moving language learning motivation to a larger platform for theory and practice. In R. L. Oxford (Ed.), *Language learning motivation: Pathways to the new century* (pp. 71-80). Honolulu: University of Hawaii Press.
- Dörnyei, Z. (2005). *The Psychology of the Language Learner*. Mahwah, NJ: Lawrence Erlbaum.
- Dörnyei, Z. (2009). *The Psychology of Second Language Acquisition*. Oxford: Oxford University Press.
- Falk, C. F., Heine, S. J., Yuki, M. & Takemura, K. (2009). Why do westerners self-enhance more than east-asians? *European Journal of Personality*, 23, 183-203.
- Gardner, R. C. (1985). *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Edward Arnold Publishers.



**Sudan University of Science and
Technology**
Deanship of Scientific Research
Journal of Linguistic and Literary Studies



Gardner, R. C. & Tremblay, P. F. (1994), On Motivation, Research Agendas, and Theoretical Frameworks. *The Modern Language Journal*, 78: 359–368.

Gardner, R. C. (2001). Integrative motivation and second language acquisition. In Z. Dörnyei & R. Schmidt (eds.), *Motivation and Second Language Acquisition* (pp. 1-20). Honolulu, HI: University of Hawai'i Second Language Teaching & Curriculum Center.

Guilford, J. P. (1950). Creativity. *American Psychologist*, 5, 444-454.

Guilford, J. P. (1967). *The nature of human intelligence*. New York: McGraw-Hill.

Guilford, J. P. (1968). *Intelligence, creativity and their educational implications*. New York:

Robert R. Knapp.

Kim, K. H. (2006). Can we trust creativity tests? A review of the Torrance Test of Creativity Thinking (TTCT). *Creativity Research Journal*, 18, 3-14.

Kozbelt, A., Beghetto, R. A., & Runco, M. A. (2010). Theories of creativity. In J. C. Kaufman, R. J. Sternberg, J. C. Kaufman, R. J. Sternberg (Eds.), *The Cambridge handbook of creativity* (pp. 20-47). , New York, NY: Cambridge University Press.

Lamb, M. (2004). Integrative motivation in a globalizing world. *System* 32, 3-19.

Markus, H. & Nurius, P. (1986). Possible selves. *American Psychologist*, 41. 954-969.

Markus, H. R. & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224-253.

Noels, K., Clément, R. & Pelletier, L. (1999). Perceptions of Teachers' Communicative Style and Students' Intrinsic and Extrinsic Motivation. *The Modern Language Journal*, 83, 1, 23-34.

Noels, K., Clément, R. & Pelletier, L., & Vallerand, R. (2003). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*, 53, 33–64.

Ottó, I. (1998). The relationship between individual differences in learner creativity and language learning success. *TESOL Quarterly*, 32, 763-773.

Oxford, R. & Shearin, J. (1994). *Language Learning Motivation: Expanding the Theoretical Framework*. *The Modern Language Journal*, 78, 12-28.

Runco, M. A. (1999). Divergent thinking. In M.A. Runco & S. Pritzker (eds.), *Encyclopedia of Creativity: vol. 1 Ae-h* (pp. 577-582). San Diego: Academic Press.

Runco, M. A. (2003). Education for creative potential. *Scandinavian Journal of Education*, 47, 317-324.

Ryan, R. M. & Deci, E. L. (2000a). Self-Determination Theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 1, 68-78.

Ryan, R. M. & Deci, E. L. (2000b). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54-67.

Schunk, D. H., Pintrich, P. R., & Meese, J. L. (2008). *Motivation in Education: Theory,*



**Sudan University of Science and
Technology**
Deanship of Scientific Research
Journal of Linguistic and Literary Studies



- Research, and Applications (3rd ed.). Upper Saddle River, NJ: Pearson Education.
- Schunk, D. H. & Usher, E. L. (2012). Social cognitive theory and motivation. In R. Ryan (ed.), *The Oxford Handbook of Human Motivation* (pp. 13-27). New York, NY: Oxford University Press.
- Shaw, W.D. (1983). Asian student attitudes towards English. In L.E. Smith (ed.), *Readings in English as an International Language* (pp. 21-33). Oxford: Pergamon Institute of English.
- Simonton, D. K. (1990). History, chemistry, psychology, and genius: An intellectual autobiography of historiometry. In M.A. Runco & R.S. Albert (eds.), *Theories of Creativity* (pp. 92-115). Newbury Park, CA: Sage.
- Simonton, D. K. (1999). *Origins of Genius: Darwinian Perspectives on Creativity*. New York, NY: Oxford University Press.
- Sternberg, R. J., Kaufman, J. C., & Pretz, J. E. (2002). *The Creativity Conundrum*. New York: Psychology Press.
- Sternberg, R. J., Lubart, T. I. (1995). *Defying the Crowd*. New York, NY: The Free Press.
- Torrance, E. P. (1962). *Guiding Creative Talent*. Englewood Cliffs, NJ: Prentice-Hall.
- Torrance, E. P. (1974). *Torrance Test of Creative Thinking: Norms Technical Manual*. Bensenville, IL: Scholastic Testing Services
- Torrance, E. P. & Ball, O. E. (1984). *Torrance Test of Creative Thinking: Revised Manual*. Lexington, MA: Ginn.
- Ushioda, E. (2009). A person-in-context relational view of emergent motivation, self, and identity. In Z. Dornyei & E. Ushioda (eds.), *Motivation, Language Identity, and the L2 Self* (pp. 215-228). Bristol, UK: Multilingual Matters.
- Yashima, T., Zenuk-Nishide, L. and Shimizu, K. (2004). The influence of attitudes and affect on willingness to communicate and second language communication. *Language Learning*, 54, 119-152.