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FACULTY OF GRADUATE AND
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Faculty of Education

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Exploring the processes that lead young adults to channel their creativity in various fields and degrees of social acceptance: an interactionist grounded theory study.

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**EXPLORING THE PROCESSES THAT LEAD YOUNG ADULTS TO CHANNEL
THEIR CREATIVITY IN VARIOUS FIELDS AND DEGREES OF SOCIAL
ACCEPTANCE: AN INTERACTIONIST GROUNDED
THEORY STUDY**

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A dissertation submitted
in partial fulfilment of the requirements
for the degree of Doctor of Philosophy in Education

University of Ottawa

2006



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Your file *Votre référence*
ISBN: 978-0-494-15046-7
Our file *Notre référence*
ISBN: 978-0-494-15046-7

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ABSTRACT

The purpose of the present study was to better understand creativity and creative development as well as the many factors that contribute to the processes that lead young adults to channel their creativity in various fields and degrees of social acceptance. Adolescents, parents, teachers, educational systems, and society as a whole would benefit from a deeper understanding of how creative individuals interact with, shape and seek out environments to fulfil their various creative needs. Society can ill-afford the incalculable loss of squandered or negatively applied creative talent.

The present project was guided by an interactionist (Woodman & Schoenfeldt, 1989)/ecological (Harrington, 1990) process model of creativity which takes into account the four major strands (person, process, product and press) of inquiry involved in creativity research and provides the basis for a robust conceptual framework for their holistic study.

To this end, a constructivist, qualitative approach was adopted. The research design for the present study adheres most closely to the social constructionist interpretation and application of the grounded theory method as outlined by Charmaz (1990, 2000).

Biographical questionnaires and interviews, or “guided conversations”, were undertaken with twenty-six (26) participants; ages ranging from 17-31 with the majority (22) aged between 18-24. They were chosen because they are notably creative in fields of varying degrees of social acceptance and because they represent a wide variation of schooling experiences and backgrounds. Specifically, they represented, among many others, high school valedictorians and drop-outs, graffiti artists, JUNO nominated musicians, painters, writers, actors, as well as scientific innovators. They were selected as a result of: high school peer and teacher nominations, nominations from two guidance counsellors in a high school, judgement of products, snowballing, and informal peer nominations.

Insights resulting from the questionnaire and interviews include a grounded theory process model for the “evolution” of the creative person. In addition, the methodological implications of adopting a constructivist perspective together with the newer relational views of research validity are examined; as are the implications the findings hold for educational policy and practice as well as the potential implications the research holds for the future study of young adults and creativity.

ACKNOWLEDGMENTS

Transformative achievements come from the concerted, and at times unrecognised, contributions of many. Belonging to a community and benefiting from the input and support of a wide network of sympathetic actors, I believe are key contributors to what may appear to be seemingly individual successes. I, therefore, attribute and dedicate this successful endeavour to the vast array of significant players that I have had the grand fortune to have entered my life; this achievement is truly OURS. Many, many, feelings of gratitude...

Special note of thanks to my family, they have been warm, un-boundlessly loving, and for more times than I care to admit a psychological, physical, spiritual, and financial safety net. Always loving and encouraging, I feel very fortunate that they decided to pick me out of the ethereal. For all that is and has gone well in me and my life it is because of you. I, of course, take full responsibility for all the things that fall somewhere in between.

To my patient and wise advisor, Dr. Cynthia Morawski, I sincerely thank you. You always knew when to push and when to leave space, and were always a fountain of encouragement. WOW! Cynthia, can you believe it's been over 8 years of guidance and working together?! Many thanks.

To my committee, Drs. Jan Ahola-Sidaway, Raymond Leblanc, and Richard Maclure, your specialised and erudite input and careful attention to detail has not gone unnoticed or unappreciated. Gros Merci. I hope to one day be as meticulous and informative to countless other similarly placed graduate students!

Evan, many mercis for the discussions and countless editorial suggestions and input; you were, and are, a most able editor and friend. Also, to the Thornton-Smith family, many thanks for all the nourishment: intellectual, corporeal, and emotional (not always in that order!).

To the wonderfully creative and original participants for their time, input, and insight and to the high school and community who welcomed me so cordially, thank you.

Thank you OGS, U of O, FGPS, GSAED, and the Faculty of Education, for your financial and otherwise support.

Some key players:

To Tracy whose contributions were numerous and generous, Todd Huckabone whose assistance was instrumental in helping me get that crucial first degree so many years ago--many, many thanks and sincere gratitude.

To all the cats from the Café, all the cats from the Laff, all the past and present GSAED Exec members (special hats off to Lucie for her never ending and kind support), Annie, Brian, Charlie, Erin, Len, Paul, Suby, (in alphabetical order) AND all the countless other interesting and unique Spirits with whom, and from whom, I have had the good fortune to interact and learn. THANK YOU. I end with my favourite number 3.141592653589793...

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CHAPTER ONE: INTRODUCTION

-“The vigorous creative imaginations which survive early stifling and opposition may become dangerous to society and civilization if they learn to act vigorously without guidance” (Torrance, 1965, p. 11).

*-“Lilies that fester smell far worse than weeds”
(Shakespeare, as quoted in Mead, 1959, p. 223).*

Creativity in historical terms

From the beginning of history, as portrayed in both classical and biblical texts, the root metaphors for creativity have been couched in terms of deviant acts (Kearney, 1991); for instance, Prometheus stole fire from the gods, and only after eating from forbidden fruit were Adam and Eve free to imagine. Buber, explaining creative imagination vis-à-vis the book of Genesis, writes “imagination is good and evil, for in the midst of it man [humans] can master the vortex of possibilities and realize the human figure proposed in creation, as he could not prior to the knowledge of good and evil...Greatest danger and greatest opportunity at once” (as quoted in Kearney, 1991, p. 2).

Closer to our time, yet over four decades ago, Carl Rogers noted in his definition of the creative process that creativity may be applied for “good” or “bad” purpose and that, furthermore, such a valuation may change with time and context.

My definition of the creative process is that it is the emergence in action of a novel relational product, growing out of the uniqueness of the individual on the one hand, and the materials, events, people, or circumstances of

his [her] life on the other... It makes no distinction between “good” and “bad” creativity. One man [person] may be discovering a way of relieving pain, whereas another is devising a new and more subtle form of torture for political prisoners. Both these actions seem to me creative, even though their social value is very different... Galileo and Copernicus made creative discoveries which in their own day were evaluated as blasphemous and wicked, and in our day as basic and constructive.

(Rogers, 1959, p. 71 italics in original)

Definition of creativity: Creativity, discovery, invention, and innovation

Various terms are often employed to describe creative activity; for instance, “Hamlet was created, the telephone was invented, and the structure of DNA was discovered” (Ottino, 2000, p. 2750). These distinctions may lead to the assumption that the underlying creative processes involved in each case somehow differ; however, as Dunbar (1999) states, “most researchers see scientific creativity as being composed of the same mental processes that guide all other forms of creativity” (p. 525). It follows then that instead of being a strict categorisation of specific types of creative processes, the choice of term appears largely to be a function of the discipline with which one is associated; typically, for example, *creativity* in the arts, social sciences, and humanities, *discovery* in the natural sciences, *invention* in the applied sciences, and *innovation* in business and high-technology (Cromptley, 1999; Root-Bernstein, 1999; Hertz, 1999; West & Rickards, 1999, respectively). Nevertheless, it should be noted that certain individual authors may, at times, specify idiosyncratic distinctions among these terms.

The concept of creativity has been defined in numerous ways by many researchers (Davis, 1992; Parkhurst, 1999). Davis (1992) states, "... there are as many definitions, theories, and ideas about creativity as there are people who have set their ideas on paper..." (p. 38). Although a variety of definitions and words are used to describe creative activity (Davis, 1992; Parkhurst, 1999), there does seem to be agreement on some basic intrinsic requirements necessary for an act or product to be considered creative irrespective of discipline (Benack, Basseches & Swan, 1989). Characteristics that are most commonly mentioned are *novelty*, *usefulness*, and *harmony* or *elegance*, with the caveat that no one criterion is in itself sufficient for the product to be considered creative (Voss & Means, 1989). Most definitions are sufficiently broad to encompass each of the disciplines whether they are characterised as artistic or scientific; for example, there is considerable consensus on the following definition (Vernon, 1989):

creativity... [is the] capacity to produce new or original ideas, insights, restructurings, inventions, or artistic objects, which are accepted by experts as being of scientific, aesthetic, social, or technological value. In addition to novelty as our major criterion, we must incorporate in our definition the acceptability or appropriateness of the creative product, even though this valuation may change with the passage of time. (p. 94)

In addition, for the purpose of the present study, creative persons will be characterised as possessing a combination of the following attributes: having many ideas, different ideas, unique ideas, curiosity, problem-solving ability, and inventiveness (Hocevar, 1981).

Definition of deviance

People are often labelled as “deviant” because their actions are judged by others as not conforming to how they ought to be (Curra, 1994). “Since innovation can be... psychologically threatening to a culture, innovation is more often negatively labeled in the beginning” (Heckert, 2000, p. 38). For the purpose of the present study, deviance, as negatively applied creativity, will be defined as creative behaviour that is either non-acceptable within the social context in which it is manifest, or within the norms or laws of Canadian society. One should keep in mind that creative behaviours not acceptable within one context, for example, the school system, may be acceptable within another, for example, high-technology organisations, and vice-versa.

A brief description of the present study:

The following qualitative, grounded theory study examining creative expression and the creative process is based on interviews with 26 young adults who were chosen as a result of their notable creativity in fields of varying degrees of social acceptance. In addition, they were chosen because they represent a wide range of schooling experiences and backgrounds.

Rationale for the study

When students are taught and their achievements are assessed in a manner that values their creative talents, their academic performance actually tends to improve (Sternberg, Ferrari, Clinkenbeard, & Grigorenko, 1996). In fact, research suggests that creativity not only necessitates motivation, but may also be a source of it (Sternberg & Lubart, 1999). Perhaps even more promising, recent research suggests that if given an opportunity to be creative, students might choose otherwise than to become disengaged from school instruction; instead they may actually find their interest captured (Sternberg & Lubart,

1999). Yet sadly, in the past, schools have not fared well in this regard (Isaksen, 1987; Passow, 1977; Sternberg & Lubart, 1995; Torrance, 1977).

As we begin, perhaps less romantically, to view creativity in the manner the current literature suggests, as not merely the spark that arises mysteriously from the mind of genius, but as the product that arises as a result of at least a considerable amount of social influence, the relationship between a young adult's school and social community is transformed into one where considerable reciprocal responsibility emerges for the successful completion of creative endeavours (Montuori & Purser, 1995). Aspects of this social community include, for example, teachers (Torrance, 1981a, b), mentors (Prentky, 1989; Simonton, 1978, 1984; Torrance, 1983; Zuckerman, 1979/1983), parents (Dacey, 1989a; Harrington, Block & Block, 1987), peers (Polaine, 1995; Smith & Carlsson, 1985; Ross, 1976), and the sociopolitical context (Csikszentmihalyi, 1990; Feldman, Csikszentmihalyi, & Gardner, 1994). As Feldman (1999) states, "the enduring belief that great creativity is developed alone, without assistance from teachers, mentors, peers and intimate groups is largely a myth" (p. 176). This is not to imply that the importance placed on individuals and individual motivation should be diminished, but rather, it should be highlighted that teachers, schools, and other sources of preparation for later creative work are of critical significance and should not be taken for granted (Feldman, 1999). Yet, somewhat surprisingly, as Woodman and Schoenfeldt (1989) point out, the social psychology of creativity is probably theoretically less well developed than either personality or cognitive styles perspectives.

Moreover, the central problem for the creative mind is the tension between creativity and conformity; creativity and deviance are in many ways synonymous (Brower, 1999). As Eisenman (1991) states "the creative person is, by definition, deviant, since his [or her]

behavior is statistically infrequent” (p. 69). It is important to acknowledge that deviance refers to positive as well as negative outcomes. In strictly statistical terms, creativity is as deviant as crime (Eisenman, 1991). The key difference is that creativity is perceived as positive, within the limits not formally against the law, whereas deviance typically refers to behaviour that is not socially acceptable and frequently against the law. However, both behaviours are similar, and both threaten the status quo and the structures in place to preserve it. As well, the profiles of creative and deviant individuals share in large measure the same characteristics. For example, creativity research has identified the following personality correlates to creative behaviour: “unconventional behavior, avoids entrenched ways of thinking, dissatisfied with the status quo, sets own rules, takes risks, rejects limits imposed by others, is willing to try new things, is open to new experiences and growth, is receptive to new ideas and so on” (Plucker & Runco, 1999, p. 541-542). Given both the negative connotations of deviance, as well as the importance of deviance to creativity, the relationship that exists between these two concepts must be explored. Research must examine the “relationship between creativity and open-mindedness, psychosis, contrarianism, eccentricism, crime and drug use and abuse” (Plucker & Runco, 1999, p. 542).

The purpose of the present study

The purpose of the present study is to better understand the many factors that contribute to the processes that lead young adults to channel their creativity in various fields and degrees of social acceptance. Creative young adults representing a wide range of schooling experiences must be given the opportunity to offer their constructive voice. Their voice must be sought in order to inform our understanding of the nature of creativity and creative development, and to contribute to our ability to implement programs that are

optimal for directing creative and potentially creative young adults channel their creativity in socially positive areas. Society can ill-afford the incalculable loss of squandered or negatively applied creative talent.

Examining the experiences of a wide variety of creative young adults involved in various avenues of creative expression will enhance our understanding of the nature of creative environments as well as enrich our educational systems and the creativity literature with their informative voice.

Conceptual framework

Studies aimed at integrating and informing the many distinct academic fields of inquiry involved in creativity research are needed (Cropley, 1997). Harrington (1990) draws our attention to the fact that, although these diverse lines of creativity research have proven fruitful in their own terms they “have generally not connected with one another in mutually illuminating ways ... human creativity would benefit from careful attention to the processes by which creatively active people choose and shape their own environments in order to facilitate their creative growth and activity” (p.145-161). In order to more fully understand creativity we must move “from an exclusive focus on the individual to a systemic perspective that includes the social and cultural context in which the ‘creative’ person operates.” (Csikszentmihalyi, 1990, p. 190). Situation, organism, and the unfolding interaction between the two must be understood to explain the creative organism in its environment (Woodman & Schoenfeldt, 1989). As well, one must always consider the massive and impersonal influences of the *Zeitgeist*, i.e., the spirit of the times, which roughly fall into four categories: cultural factors, societal factors, economic factors and political factors (Simonton, 1999). For instance, today’s contraband supplier (alcohol, cigars,

pesticides, etc.) may be tomorrow's innovator and astute, powerful, and legitimate business person (i.e., during Prohibition in the 1920s, the Bronfman family supplied bootleggers and gangsters with alcohol, yet now successfully run a large complex of legal corporations).

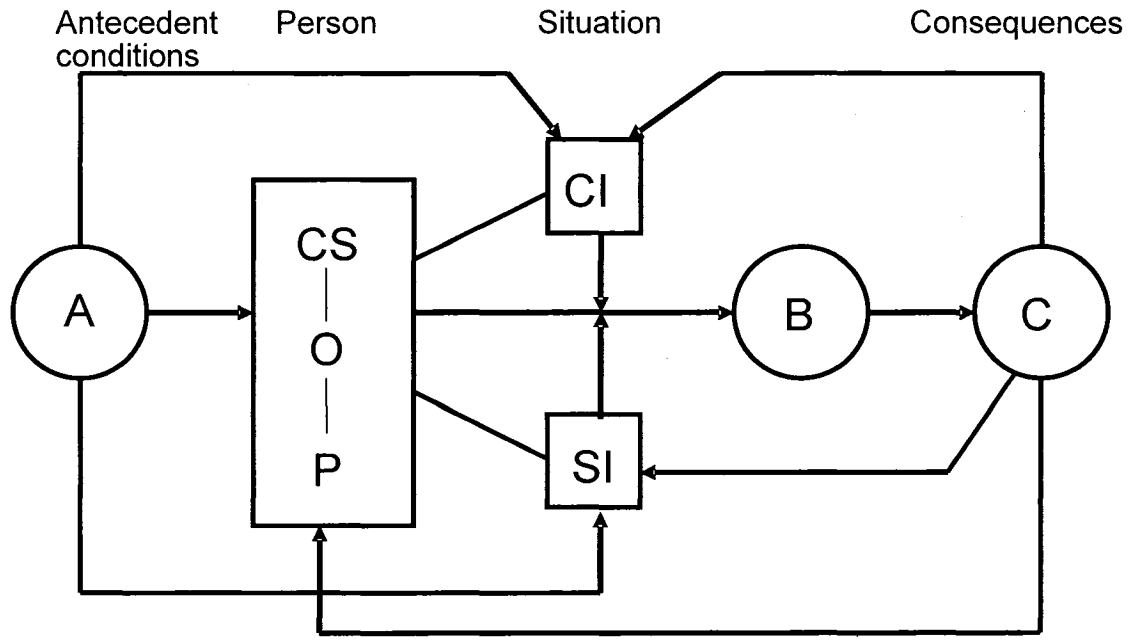
Alternatively, Heckert (2000) explains:

Positive deviants due to the fact that in essence they are as different from "normal" as negative deviants and perhaps threatening to the dominant social order, can at times, be originally labeled negative deviants (e.g., the French Impressionists, Galileo, civil rights leaders) by the powers that be. (p. 32)

Feldman (1999) states, "the scope of creativity research is therefore exceptionally broad and the need for ways to integrate the findings of disparate researchers' work into an overall framework exceptionally important" (p. 172). To this end, Woodman and Schoenfeldt (1989) have proposed the interactionist model of creative behaviour (see Figure 1, for the interactionist model). The interactionist model helps organise and relate previous findings which have been made under each of the four strands of creativity research.

Explaining complex human behaviours within equally complex social settings, as creativity research requires us to do, necessitates models which attempt to integrate findings from each of the four traditional areas, i.e., person, process, product and press. The interactionist model offers a comprehensive visual depiction for the organisation of past discoveries by addressing antecedent conditions, creative behaviour, and consequences, in

Figure 1. An interactionist model of creative behaviour (Woodman & Schoenfeldt, 1989, p. 81)



A = Antecedent

B = Creative Behavior

C = Consequences

Examples:

past reinforcement history;
early socialization;
Biographical variables sex,
family position, birth order

O = "Organism" (person)

Gestalt of attitudes; values; intentions to behave; motivational orientations; and individual differences

CS = Cognitive Style/Abilities

Examples:

Cognitive complexity
Divergent thinking
Verbal/ideational fluency
Problem-Solving styles/approaches
Perceptual openness
Field independence/dependence

P = Personality Dimensions/Traits

Examples:

Locus of control
Dogmatism
Autonomy
Self-Esteem
Narcissism
Intuition

CI = Contextual Influences

Examples:

Physical environment
Culture
Group/organization "climate"
Task and time constraints

SI = Social Influences

Examples:

Social facilitation
Evaluation expectations
Rewards/punishments
Role Modeling

relation to the person's cognitive styles/abilities, and personality dimensions/traits, as well as contextual and social influences. As Woodman and Schoenfeldt (1989) explain:

[The] potential advantage of the interactionist model of creative behavior might be its ability to integrate these diverse perspectives, each of which captures variables of some explanatory power. Combining personality, cognitive, and social psychology explanations of individual differences in creative behavior could serve to improve our ability to understand creative persons, processes, and products. (p. 80)

Recalling that creative endeavours may be interpreted as positive or negative by a social community, the conceptual framework adopted for the purposes of the present project is underpinned by the interactionist/ecological perspective. More specifically, it is based on a conceptual framework developed as a result of previous research that examined perceptions of creativity enhancing environments in young adults selected from an academically oriented high school (Spooner, 1999). The present study follows the natural progression of grounded theory research by seeking to continue expanding and pushing theoretical sampling in order to more fully understand how and under what conditions a phenomenon, in this case creativity, operates (Glaser, 1978). The result is a grounded theory model for the creative process that gains increasing robustness as theoretical sampling is expanded to include other high schools and creative young adults from a wider and wider variety of educational backgrounds and areas of creative application and social acceptance.

The model conceptualises the "cultivation" of creativity from an interactionist/ecological perspective. As Maxwell (1996) explains,

...the conceptual context of your study—the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs your research—is a key part of your design. This context, or a diagrammatic representation of it, is often called a conceptual framework...the most important thing to understand about your conceptual context is that it is a formulation of what you think is *going on* with the phenomena you are studying—a tentative *theory* of what is happening and why. (p. 25, italics in original)

“Cultivating” framework

The “cultivating” framework grounding the present study contains the five following elements: *antecedent conditions*, *phenomenon*, *context*, *intervening conditions*, and *consequences*. Explored within the *antecedent conditions* are the various experiences with early socialisation conditions; including, biographical variables, gender, siblings, perceived birth order, the presence of early role-models, enrichment opportunities, parental styles and past reinforcement history. These various factors contribute, in part, to the development and discovery of one’s creative self (*phenomenon*). This discovery may take place from both within (internal psychological discovery) and from without (interaction with the environment). Included are such factors as internal and external motivation, personality traits, as well as one’s initial attempts at expressing one’s creativity via one or a variety of avenues (i.e., the multiple intelligences) and an awareness of one’s needs for creative expression (i.e., other people, alone time, etc.). *Context* involves the environmental reactions to one’s creative expressions. One’s creative offerings may be either accepted or

rejected. If they are rejected then one must make adjustments to one's chosen mode of delivery, seek an alternative environment, attempt to cease being creative in at least a social manner, or continue to experience rejection. Examples of factors explored within this heading are one's persistence, motivation, confidence and awareness of creativity, educational experiences, peers, and so on. Once creative actions have been expressed, and a supportive ecology has been found, creativity may be channelled and honed. Various *intervening conditions* include actively seeking training opportunities and increasingly supportive ecologies. Through this process communities of like-minded individuals may develop and evolve. Protected in safe solidarity, or in motivating competition, individuals encourage and push each other's creative interests forward. Spurred on through group interaction, each member offers unique contributions which results in a dynamic, synergistic exchange of creative thought and growth.

Moreover, as one's precision of expression and one's opportunities for specialisation are increased, one's deviance (shifting further away from the statistical norm) may also be amplified. Finally, depending on the culture, the spirit of the times, and one's chosen arena of expression, one's creative or "deviant" offerings may either be perceived as positive and socially accepted, or negative and socially non-accepted (*consequences*).

Main research question

The following research question has helped guide this study: According to the participants' perspective, what are the main factors that contribute to their creative process and development, as well as to the processes that lead them to channel their creativity in various fields and degrees of social acceptance.

Organisation of the study

The present study is organised and presented in six chapters corresponding to the following main components: Introduction, Literature Review, Methodology, Findings, Discussion of Findings, and Conclusion. Specifically, in Chapter II the current literature on creativity is reviewed. It is divided into two main sections: areas of traditional creativity research and newer integrative theories and systems view models of creative behaviour. Links between creativity and deviance are also examined.

In Chapter III, the methodology employed in the present study is outlined. Discussed are the present author's ontological and epistemological assumptions, notions of validity and praxis, data collection tools, participant selection strategies, procedures, and data analysis techniques.

Chapter IV is divided into two main sections. In section I, participants are introduced via profiles and summary tables. In section II, findings of the present inquiry are organised and presented as themes, categories, and sub-categories.

Further discussion of the findings in relation to the extant literature on creativity appears in Chapter V. They are organised under the basic social process of "evolving" creativity which contains at least five elements: Initial Socialisation, Discovering Creativity, Creativity Expressed, Purposive Honing, and Consequences.

Within Chapter VI, the final and concluding chapter, the Research Question and Sub-questions are reviewed and a grounded theory process model for the "evolution" of the creative person is presented. As well, the methodological implications of adopting a constructivist perspective together with the newer relational views of research validity are examined; as are the implications the findings hold for educational policy and practice as

well as the potential implications the study holds for the future study of young adults and creativity.

CHAPTER 2: REVIEW OF THE LITERATURE

-“To study creativity by focussing on the individual alone is like trying to understand how an apple tree produces fruit by looking only at the tree and ignoring the sun and soil that support its life. It is a step forward, but not nearly enough...” (Csikszentmihalyi, 1990, p. 202).

-“One of the greatest pains to human nature is the pain of the new idea. It...makes you think that after all, your favorite notions may be wrong. Your firmest beliefs ill-founded... Naturally, therefore, common men [and women] hate a new idea, and are disposed more or less to ill-treat the original man [or woman] who brings it” (William Bagehot, as quoted in Everett, 1983, p. 312).

Traditional creativity research

Although considerable research has examined creativity in the past, creativity still lags far behind most mainstream topics in psychology (Feldman, 1999). As well, few studies have examined the links between deviance, in this case, creativity that has been judged to be socially non-accepted, and socially accepted creativity (Agnew, 1989; Eisenman, 1991). Furthermore, much of the existing creativity research has been conducted in one of four strands: person, process, press (environment), or product (Barron, 1988; Brown, 1989; Cropley, 1997; Davis, 1992 chap 3; Isaksen 1987; Rhodes, 1961/1987). According to Mumford (2003), “there is a need to begin integrating theories and findings into coherent systems” (p. 118). We must begin to better understand the social forces which shape creativity and innovation (Mumford, 2003). Before examining newer integrative theories and systems views of creativity and links between creativity and deviance, the four traditional strands of creativity research will be briefly outlined and reviewed.

The creative person

The research contained within this strand involves describing the creative person, often yielding lists of traits found in creative people. Traditionally, much of the creativity

research has focussed on this strand. Included is information concerning personality, intellect, temperament, physique, habits, attitudes, self-concept, value systems, defence mechanisms, and behaviour (Hunsaker, 1992; Rhodes, 1961/1987). These factors fall under three broad and interwoven categories, *personality traits*, *cognitive abilities*, and *biographical traits*; it should be noted that some traits or abilities may be easily classified in one or more categories, (e.g., humour, originality, perceptiveness) (Davis, 1992).

Personality traits

The first category, *personality traits*, generally involves research that has examined creative people and produced a list of common traits. Not every trait will be found in every creative person. One should keep in mind that there exists too much diversity in both creatives and forms of creativity for such generalisations to be feasible (Davis, 1992). Davis has provided a list of twelve characteristics derived from the many studies which have explored the nature of the creative personality. According to Davis, creative people tend to possess or embody the following characteristics: aware of their own creativeness; original; independent; enjoy taking risks; energetic; curious; a sense of humour; attracted to complexity or novelty; artistic; open-minded; a need for privacy, or alone time; and, perceptive. For an expanded view of this list that includes sub-topics see Table 1.

In addition to these traits, creative people have also been shown to share the stereotypical qualities of both genders, holding these interests in addition to, rather than in place of, interests stereotypically associated with members of their own gender (Martindale, 1989). As Woodman and Schoenfeldt (1989) explain, creatives appear to possess both a “psychological femininity and masculinity” (p. 78). However, it should be made clear that

Table 1. Personality Characteristics of Creativeness (Davis, 1992 p.70-72)

1. Aware of Creativeness

- Value originality and creativity
- Value own creativity

2. Original

- Imaginative
- Full of ideas
- Flexible in ideas and thought
- Is a 'What if?' person
- Resourceful
- Non-conforming
- Unconventional in behaviour
- Challenges assumptions
- Enjoys pretending
- Constructs
- Builds and rebuilds
- Finds ways of doing things differently
- Radical
- Bored by routine

3. Independent

- Individualistic
- Internally controlled, inner directed
- Sets own rules
- Self-aware
- Self-confident
- Self-sufficient
- Self-accepting
- Unconcerned with impressing others
- Uninhibited
- May dress differently
- may not fit environment
- May resist societal demands
- Dissatisfied with the status quo
- May experience conflict between self-confidence and self-criticism
- May need to maintain distance from and avoid contact with peers

4. Risk Taking

- Does not mind consequences of being different
- Not afraid to try something new
- Willing to cope with hostility
- Willing to cope with failure
- Rejects limits imposed by others
- Optimistic
- Courageous

5. Energetic

- Adventurous
- Sensation seeking
- Seeks interesting situations
- Enthusiastic
- Alert
- Spontaneous
- Industrious
- Persistent
- Persevering
- Impulsive
- Unwilling to give up
- Driving absorption
- Drive for accomplishment and recognition

- Ambitious
- Thorough
- Goes beyond assigned tasks
- Strives for distant goals
- Task-oriented
- Excitable, enjoys telling about discoveries/inventions
- High commitment
- High intrinsic motivation
- High need for competence in meeting challenges

6. Curious

- Questioning
- Experimenting
- Inquisitive
- Wide interests
- Open to new experiences and growth

7. Humorous

- Playful
- Plays with ideas
- Childlike freshness in thinking

8. Attracted to Complexity

- Attracted to novelty
- Attracted to the mysterious, asymmetrical
- Is a complex person
- Tolerant of ambiguity
- Tolerant of disorder
- Tolerant of incongruity
- Tends to believe in psychical phenomena, flying saucers

9. Artistic

- Artistic interests
- Aesthetic interests

10. Open-minded

- Receptive to new ideas
- Receptive to other view points
- Open to new experiences and growth
- Liberal
- Altruistic

11. Needs Alone Time

- Reflective
- Introspective
- Internally preoccupied
- Sensitive
- Likes to work by himself or herself
- May be withdrawn

12. Perceptive

- Intuitive
- Sees relationships
- Uses all senses in observing

these are cognitive and not sexual orientations. What is more, contrary to “common knowledge”, homosexuals are no more creative than heterosexuals (Martindale, 1989). This misconception may be rooted in the fact that homosexuals who have decided to “go public” may also possess the necessary traits that facilitate creative acts; for example, being courageous, independent, resisting societal demands, being self-accepting, and willing to accept the consequences of being different.

The various combinations of traits found in creative people are not always interpreted or manifested in positive, socially accepted ways. Creative people can sometimes be defiant or questioning of authority, stubborn, self-centered, disorganized, forgetful, temperamental, argumentative or demanding (Davis 1992; Davis & Rimm, 1994; Torrance, 1981a).

Creativity has been linked to alcohol and drug use (Martindale, 1989), as well as a variety of psychopathological disorders, such as, schizophrenia, bipolar depression, and various mood disorders (Barron, 1969; Bowden, 1994; Richards, 1994; Rothenberg, 1990). Creativity, it would appear, may at once lead to tension and anxiety as well as help resolve it, depending on the individual and the contexts involved (Runco & Shaw, 1994).

Cognitive abilities

Within the second category related to the creative person, *cognitive abilities*, the relationship between intelligence (*as measured by IQ*) and creativity is debated. Although IQ and creativity are linked, it would appear that beyond a certain threshold the configuration of psychological traits, stimulating family, education, and cultural dimensions are more important to creativity than high levels of intelligence (Walberg, 1988). Research has demonstrated that once the threshold for intelligence, again it should be noted, *as*

measured by IQ, has been met (IQ greater or equal to roughly 120) little correlation with creativity exists (Mackinnon, 1978; Simonton, 1987).

Barron (1988) has produced a list of six factors that are central to creative abilities. These traits include: recognising patterns, making connections, taking risks, challenging assumptions, taking advantage of chance, and seeing in new ways. A list describing other abilities compiled by Davis (1992) incorporating past creativity research by Torrance (1962, 1979, 1984, 1987, 1988) and Tardif and Sternberg (1988) includes: fluency, flexibility, originality, elaboration, transformation, sensitivity to problems, ability to define problems, visualization/imagination, analogical/metaphorical thinking, ability to predict outcomes/consequences, analysis, synthesis, evaluation, logical thinking, able to regress, intuition, and concentration. Definitions can be found in Table 2.

In a similar vein, Root-Bernstein has spent over a decade studying the skills and tools employed by some of the world's most creative individuals, including among many others, Albert Einstein, Jane Goodall, Amadeus Mozart, and H. G. Wells (Root-Bernstein & Root-Bernstein, 1999; see also, Root-Bernstein, 1987, 1996, 1997). He has found that a basic set of tools in various combinations are at the root of their creative understanding and guide their creative endeavours. They include, but may not necessarily be limited to: *observing, imaging, abstracting, recognising patterns, forming patterns, analogizing, body thinking, empathizing, dimensional thinking, modeling, playing, transforming, and synthesising* (Root-Bernstein & Root-Bernstein, 1999). Each thinking tool will be briefly examined next. One should keep in mind that the thinking tools operate in concert with one another and are presently examined individually solely for clarity.

Table 2. Definition of terms as found in Davis (1992, p. 89-90)

Fluency:	is the ability to produce many ideas, verbal or nonverbal, for an open-ended problem or question.
Flexibility:	is the ability to take different approaches to a problem, think of ideas in different categories, or view a problem from different perspectives.
Originality:	Is just that- uniqueness, nonconformity in thought or action.
Elaboration:	is the important ability to add details to an idea, which includes developing, embellishing, improving and implementing the idea.
Transformation:	is "seeing" new meanings, implications or applications or adopting something to a new use.
Sensitivity to problems:	reflects the ability to find problems, detect difficulties, detect missing information, and ask good questions.
Problem defining:	includes the abilities to (1) identify the "real" problem, (2) isolate important and unimportant aspects of a problem, (3) clarify and simplify a problem, (4) identify subproblems, (5) propose alternative problem definitions, (6) define a problem more broadly.
Visualization:	is the ability to fantasize, to "see" things in the "mind's eye", to mentally manipulate images and ideas. Used interchangeably with imagination.
Analogical/Metaphorical thinking:	is the ability to borrow ideas from one context and use them in another, borrow a problem solution from a related problem, or otherwise "see a connection" between one situation and another.
Predicting outcomes or consequences:	is the ability to foresee the results of different solution alternatives and actions.
Analysis:	is the ability to separate details, break down a whole into its parts.
Synthesis:	is the ability to see relationships, to combine parts into a workable, perhaps creative whole.
Evaluation:	is the ability to separate the relevant from the irrelevant, to think critically, to evaluate the "goodness" or appropriateness of an idea, product, or solution.
Logical thinking:	is the ability to make reasonable decisions and deduce reasonable conclusions.
Ability to regress:	includes a facility for "thinking like a child," whose mind is less cluttered by habits, traditions, rules, conformity pressures, etc.
Intuition:	is a little-understood capability to make "mental leaps" or "intuitive leaps," to see relationships based upon little, perhaps insufficient information, to "read between the lines"
Concentration:	is the ability to focus one's attention.

Observing. One must learn to perceive the world in a variety of ways in order to effectively develop the ability for complex understanding. The keenest observers employ and assimilate sensory information from each of the senses. Creative artist and scientists spend years training to “see” (taken metaphorically to include each of the senses) even the most mundane details. As Osborn (1963) states “observation capitalizes inspiration” (p. 330); one must learn to be alert in order to take advantage of leads. Both artist and scientist must learn to break out of perceptual habits by learning to rely on all the senses rather than concentrating on only a few (Root-Bernstein & Root-Bernstein, 1999). Perception is enhanced in creative individuals who use all senses in observing (Davis, 1992, p.72) One manner in which individuals may learn to become more observant is by increasing the opportunities for art-science interactions to occur; as Root-Bernstein and Root-Bernstein (1999) state “Art improves scientific observation as science can improve artistic observation” (p. 47). The following anecdote by Bohm and Peat (2000) eloquently describes the process by which perspective shapes one’s sensory awareness:

A group of people walking through the forest, for example, see and respond to their environment in different ways. The lumberjack sees the forest as a source of wood, the artist as something to paint, the hunter as various forms of cover for game, and the hiker as a natural setting to explore. In each case the wood and the individual trees are perceived in very different ways which depend on the background and expectations of the walker. (p. 65)

Imaging. The ability to imagine, to see, hear, smell, taste, and touch with the mind’s eye is an important thinking tool common to many fields and has been found to be

significantly correlated with creative success (Root-Bernstein & Root-Bernstein, 1999). This is further supported by Ward, Smith and Finke (1999) who state “there is little doubt from historical and anecdotal accounts that imagery plays a central role in creative functioning...” (p. 204). Imagery is described “as schematic representations of thought.... They can occur spontaneously or be deliberately generated and manipulated by conscious effort” (Houtz & Patricola, 1999, p. 2). According to Houtz and Patricola (1999) several ways in which this skill may be targeted include, a) allowing the use of imagery when attempting to solve a problem, b) elaborating on images by manipulating or making changes to an image, c) using guided imagery as a practice activity, or d) performing three-term series problems, for example, “if Grace is taller than Carol, and Carol is shorter than Nessa, is Nessa taller than Grace” (p. 2).

Abstracting. The ability to remove all but key essential elements from one’s observations and thinking, to reduce complex visual, physical, emotional, or analytic ideas to bare, stripped form, often reveals non-obvious properties and hidden connections. Abstracting may take on many variants as different fundamental aspects are explored (Root-Bernstein & Root-Bernstein, 1999). As Mumford and Porter (1999) explain “...abstract relational mappings may provide a particularly useful way of identifying viable relationships when people must work with diverse concepts” (p. 74). As will be discussed, this skill is also an important element of modeling. One might consider the use of modeling software as well as other informational database applications as additional tools that may contribute to one’s ability to abstract and to reduce complex visual, physical, emotional, and analytic ideas into simpler, abstracted forms. An alternative technique, mind mapping, is a visual procedure that “facilitates recording thoughts and associations through a connected nodal structure”

(Proctor, 1999, p. 301). Such a structure may be illustrated manually or with the aid of computers and is quite useful in (a) helping with the reconstruction and sorting of views on a problem, or (b) mapping ideas and connecting interrelated problems with one another (Proctor, 1999). (see also discussion below under *modeling*).

Recognizing patterns. Discovery occurs when observations do not fit into expected patterns; or when one perceives new patterns and connections are made between previously thought to be unrelated things or ideas. “We derive from patterns that we recognize general principles of perception and action and base our expectations on those patterns. Then we try to fit new observations and experiences into these expectations” (Root-Bernstein & Root-Bernstein, 1999, p. 94). This view is supported by Loehle (1994) who maintains that pattern recognition is central to the discovery process and that “such a skill is particularly useful for finding relationships in phenomena...” (p. 241). Root-Bernstein and Root-Bernstein (1999) suggest several ways to improve the ability to recognize patterns and perceive relationships; including, learning the pattern biases of other cultures by exploring the manner in which they view order, inventing and solving puzzles, and by exploring a variety of musical patterns.

Forming patterns. Forming patterns helps to create new knowledge and a richer understanding. Juxtaposing simple patterns often yields strikingly complex ones with surprising properties. Newly created patterns often reveal patterns that occur naturally, but that have been overlooked (Root-Bernstein & Root-Bernstein, 1999). Discussing scientific discovery Loehle (1994) argues that:

It is far closer to puzzle solving or mechanical work. That is, a pattern or mental structure or understanding does not necessarily come all as a piece and in a flash, but rather may be built up slowly and piecemeal as one links facts

together and builds and rearranges a mental framework for the problem. It involves tinkering, puttering, patience, and stubbornness. That is, we may say that the scientist is involved in constructing patterns. These patterns consist of networks of relationships between fact, assumptions, mathematical relations and methods, measurement techniques, rules of thumb, and hunches. (p. 242)

Analogizing. Metaphoric thinking or to create analogies is to recognize a “correspondence of inner relationship or function between two (or more) different phenomena or complex sets of phenomena” (Root-Bernstein & Root-Bernstein, 1999, p. 142). Often these comparisons will reveal unsuspected shared properties. Ironically, in many instances “it is the inexact, imperfect nature of the analogy that allows it to bridge the gap between the known and the unknown” (p. 143). Research by Harrington (1980) suggests “the possibility that creative problem-solving skills might be incremented by teaching the conscious use of analogy-encouraging representational modes” (p. 21). This viewpoint is further supported by Gordon (1961) who argues problem-stating and problem-solving “...mechanisms are to be regarded as specific and reproducible mental processes, tools to initiate the motion of creative process...and by definition subject to conscious and deliberate use...” (p. 36). Synectics, as Gordon (1961) has coined them, have played an important role in “strip[ping] from the creative process the aura of sheer accidental intuition”(Gordon, 1976, p.255) by devising a teachable strategy for employing their use. Among the techniques recommended by Gordon (1976) to help people think unhabitually and contributing to the creative problem-solving process are *direct analogy, personal*

analogy, and *compressed conflict* (symbolic analogy). Briefly explained: *direct analogy*, is characterised by comparing one thing with another, for example, Darwin compared evolution in nature to the controlled breeding of livestock farms; *personal analogy*, is characterised by the empathetic identification with something outside oneself, for example, a scientist imagines him or herself as a lightbeam (also included as technique for empathizing); and *compressed conflict*, or, *symbolic analogy* which is akin to the process of resolving seemingly contradictory concepts, for example, in close-coupled statements where the ideas fight each other as occurs in the oxymoron “gentle toughness”.

Body thinking. Insights may take the form of various types of muscular expression, as Gardner (1993) has demonstrated, the body harbors an intelligence; proprioception may take the form of a visceral, emotional, or kinesthetic feeling (Root-Bernstein & Root-Bernstein, 1999). This tool highlights the need for alternative pedagogies and ways of knowing to be explored. Research has demonstrated that kinesthetic representations can sometimes “play significant roles in the creative problem-solving activities of some adults (Harrington, 1980, p. 14-15). Preliminary research by Harrington (1980) appears to suggest “kinesthetic modes of representation tend to facilitate creative thinking by encouraging or demanding analogical/metaphorical transformations of information...” (p. 21). The use of role playing may help by simultaneously incorporating body thinking as well as several of the other thinking tools proposed by the Root-Bernsteins; including empathizing.

Empathizing. To become “other”, which distinguishes it from simply imaging or proprioceptive thinking, allows the individual to gain insight by entering a problem in such a way that one becomes a part of, one with, the problem—to develop a sympathetic intuition and understanding (Root-Bernstein & Root-Bernstein, 1999). For instance, Einstein

described using personal fantasy thought processes as he entered a problem which led to “the development of the special and general theories of relativity” (Harrington, 1980, p. 15).

Gordon (1961) explains how the personal analogy technique, which closely resembles what Root-Bernstein and Root-Bernstein have categorized as “*Empathizing*” may be useful:

Personal identification with the elements of a problem releases the individual from viewing the problem in terms of its previously analyzed elements. A Chemist makes a problem familiar to himself [or herself] through equations combining molecules and the mathematics of the phenomenological order. On the other hand, to make a problem strange the chemist may personally identify with the molecules in action. (p. 37)

Dimensional thinking. Dimensional thinking involves the ability to move from one dimensionality to another and may be useful by helping to create a common level for comparison or juxtaposition. This ability may take one of several forms, including, *mapping*, the ability to transform information provided in one set of dimensions to another set, *scaling*, being capable of altering the proportions of an object in any given dimension, or *conceptualizing* dimensions beyond space and time as we know it (Root-Bernstein & Root-Bernstein, 1999).

Modeling. Modeling combines several tools at once, for example, abstracting, analogizing, and dimensional thinking, and is the ability to create one or all of the following: *representational models* which display physical characteristics of a real object, *functional models* which capture the essential operations of an object or mechanism, *theoretical models* which embody the basic concepts governing the operation of any given process, or

imaginary models which display the features of an object or process that cannot be observed directly (Root-Bernstein & Root-Bernstein, 1999). Like dimensional thinking, modeling may help juxtapose disciplinary information in a succinct format revealing unseen properties, and thus, increasing the likelihood for creative insight to occur. For instance, Savolainen and Cantamessa (1995) contend that “building several models of the problem area from different viewpoints increases the knowledge, insight, ownership of the problem and motivation to find a solution” (p. 302); while, “having the models in representations, which have powerful tools of the ‘side-meanings’ to ‘play’ with the information and make information transformations, even ‘illegal’ [ones], increases the probability of innovative ‘accidents’ or associations [to occur]” (p. 302). Discussing computer simulated modeling, Meyer, Swanson and Williams (2000) note “whereas computers made peripheral impact in the past, they are likely to be central to every aspect of research in the future, even—or especially—the creative aspects” (p. 120).

Playing. Playing is more than just being playful in exercising the other thinking tools; it is a tool in, and of, itself. Playing involves the ability to retain a sense of humour, an almost childlike curiosity, and a playful attitude towards one’s life and one’s work which contributes to the breaking of normal habits of action, thought, and perception (Root-Bernstein & Root-Bernstein, 1999). Playfulness is a well documented trait of many creative people (Davis, 1992). Individuals who are playful, or encouraged or permitted to be playful, may well find that adopting such an attitude allows them the flexibility required to consider various viewpoints. Adopting a playful attitude provides a great freedom to “play” with concepts in a risk-free mindset and environment.

Transforming. Transforming is “the serial or simultaneous use of multiple imaginative tools in such a way that one (set of) tool(s) acts upon another (set)...” (Root-Bernstein & Root-Bernstein, 1999, p. 273). As concepts are transformed from one form to another, they often yield unexpected properties and new discoveries (Root-Bernstein & Root-Bernstein, 1999). Moreover, as previously discussed at the beginning of this section, in order to communicate solutions, ideas and insights must be transformed “through many tools for thinking and translated into one or more expressive languages” (p.273).

Transforming concepts or insight from one domain to another may be facilitated by ignoring disciplinary constraints (Boden, 1994). A graphic example of the power and use of this technique is provided by Root-Bernstein and Root-Bernstein (1999) who discuss the innovation of musical urinalysis which involves the transformation of typically numerical and graphical data into musical form; a representational form that allows researchers greater acuity to chemical differences than did traditional light wavelength analysis. Other similar transformations include musical DNA which allows researchers to be able to hear similarities in sequences more quickly than visually scanning them. As Root-Bernstein and Root-Bernstein (1999) argue, “the more unexpected the transformation, the greater the likelihood that a surprising insight will result” (p. 285).

Synthesising. Inevitably transformational thinking leads to a synthetic understanding, a multimodal understanding stemming from the fusion of multiple-sensing of the world; according to Flowers and Garbin (1989) “Theorists and artists long have recognized the correspondences, interrelationships, and interdependencies of the senses as they are used to capture information about the world” (p. 157). In order to generate complex and creative understanding the “integrated use of thinking tools [must be] such that, first, we synthesize

sensory impressions and feelings and, second, we fuse our sensory synthesis with the abstract knowledge that exists in our memories as patterns, models, analogies, and other higher-order mental constructs” (Root-Bernstein & Root-Bernstein, 1999, p. 298).

There is an important clarification to be made between the tools people use to think creatively and the ones they use to express their innovations. Unlike Howard Gardner (1993) who tends to categorise creative individuals by the mode or specific domain in which they express themselves (Root-Bernstein & Root-Bernstein, 1999) research by Root-Bernstein and Root-Bernstein (1999) and Spooner (1999, 2004b) suggests there is an important distinction to be made between the mental tools and skills people use to think creatively and the ones they use to communicate their novel ideas; for instance, Einstein relied heavily on visualization, body thinking, and empathy to help generate creative understanding, yet communicated his findings and theories through mathematical formulae (Root-Bernstein & Root-Bernstein, 1999). It appears more likely that the underlying thinking tools involved in the creative process are the same regardless of domain or discipline of application (Amabile, 1983, 1990), albeit in varying degrees of emphasis (Root-Bernstein, 1987, 2000; Root-Bernstein & Root-Bernstein, 1999).

Biographical traits

In addition to personality traits and cognitive abilities, researchers have also examined *biographical traits* in an effort to shed light in the quest to better understand the creative person. Biographical characteristics of creative people suggest that creativity takes on new forms and changes through the course of one’s lifetime (Sasser-Coen, 1993). Lehman (1960, 1966) for instance, found that major contributions were most likely to occur relatively early in one’s lifetime, yet net productivity peaked later in middle adulthood.

Other factors surrounding creativity include birth-order effects and handedness. For instance, Hetherington and Parke (1979) concluded that first and only borns manifested many traits which were not considered conducive to creative acts (e.g., anxious, conforming, and worried about failure), whereas, Simonton (1988) found that firstborns tended toward greater independence and achievement. Equally puzzling, Runco and Bahleda (1986) report no differences between first-born, second-born and third-born groups on divergent thinking tests, whereas, Clark and Rice (1982) report conflicting findings depending on which tests are used to measure creativity. It would appear that firstborns excel at creativity when measured by complexity-simplicity tests, yet when measured by word association and uses tests, laterborns excelled. As well, the fact that laureate prize winners in the latter half of this century have also tended to be laterborns could suggest that smaller families and universal public education have made being the firstborn less advantageous in the competition for limited family resources (Clark & Rice, 1982).

However, perhaps as Albert (1980) suggests, rather than birth-order, it may be more fruitful to consider “special family position”— accenting the fact that many high achievers are perceived and treated as “special” in the family early in their development. This view is supported by research by White, Campbell, Stewart, Davies, and Pilkington (1997), which demonstrates the usefulness of considering *perceived* birth order as opposed to *actual* birth order position when exploring an individual’s future career interests. However, their research has demonstrated that “psychological order constructs cannot be fully effective when isolated from other central aspects of the individual” (p. 102). In addition to birth order effects, equally inconclusive debates concerning the relationship between creativity and handedness can also be found in the literature. For example, Dacey (1989b) found that

sixty-five percent of students enrolled in a major art school were left-handed, whereas Katz (1980) and Hattie and Fitzgerald (1983) have found no significant differences between right and left-handed participants on separate creativity scales.

Also inconclusive, in a study of 91 of the most creative individuals of our time representing fields as varied as the sciences, arts, business, and government Csikszentmihalyi (1996) found that successful creative adults tended to make the past consistent with the present. He states “a person who is relatively happy and content may remember more sunshine than there actually was, and someone wounded by life may project more misery into the past” (p. 172). Such a phenomenon sets the stage for biographers to have it both ways: those convinced that creative individuals must have suffered will find evidence of grief, while those convinced that successful creative individuals must have experienced “a happy childhood...will presumably find quite a bit of evidence for that, too” (p. 173).

Still other research suggests that chance plays a large role in novel discovery (Brown, 1989; Vernon, 1989), although as Pasteur is reported to have once said, “chance favours only the prepared mind” (cited in Hayes, 1989, p. 136). That preparation plays a crucial role and is an important precursor to creativity is not disputed in the literature (Hayes, 1985, 1989).

In summary, the literature identifies many diverse and at times seemingly contradictory personality traits, cognitive abilities, and biographical characteristics, with each contributing some illumination towards understanding creative individuals. Yet, as the paradoxes suggest, more research is needed in order to understand how to optimize the goodness-of-fit between differing personality constellations and the environments in which they operate.

The creative process

The creative process typically refers to (1) steps or stages, (2) perceptual changes or transformations, or (3) techniques and strategies that are used to inform or to produce the creative act (Davis, 1992). One of the earliest and perhaps best known creative process models is the four stage configuration proposed by Wallas (1926). To account for the process by which “the making of a new generalization or invention, or the poetical expression of a new idea...was brought about” (p. 79), Wallas (1926) proposed the following stages: *preparation*, *incubation*, *illumination*, and *verification*. Briefly explained, (a) *preparation* involves observing a need or deficiency as well as clarifying the precise problem followed by a period of “reading, discussing, exploring, and formulating many possible solutions, and then critically analyzing these solutions for advantages and disadvantages” (Torrance, 1988, p. 45); (b) *incubation* involves a period of preconscious, offconscious, or unconscious mental activity, and from this activity flows; (c) *illumination* entails a flash of insight that is characterised as “a sudden change in perception, a new idea combination, or a transformation that produces a solution” (Davis, 1992, p. 101); and finally, (d) *verification* consists of selecting a solution and testing it.

Wallas’s model has served as the basis for, or is quite similar to, a wide range of subsequent models (Torrance, 1988); for instance, most notably, the creative problem-solving model attributed to Osborn (1963) which originally consisted of three stages, (1) fact-finding, (2) idea-finding, and (3) solution-finding. It was later adopted and expanded by Parnes (1981) and more recently by Treffinger, Isaksen, Dorval (2000) and now comprises six specific stages (see Treffinger, Isaksen, Dorval below). Using the Wallas model as a guide, a variety of theorists have added, amalgamated or somehow modified the various

stages of the creative process (e.g., Basadur, 1987; Davis, 1992; Parnes, 1981; Treffinger, Isaksen & Firestien, 1982); however, to an extent these models remain closely related to the original.

The six flexible stages of the Treffinger, Isaksen, Dorval (2000) Creative Problem Solving model (CPS) are divided into three major process components: a) *understanding the challenge*, which consists of constructing opportunities, exploring data, and framing problems; b) *generating ideas*; and c) *preparing for action*, which consists of developing solutions and building acceptance. According to the model: (1) *constructing opportunities* involves identifying and selecting a challenge or goal to be pursued; (2) *exploring data* involves investigating the various aspects of the task and then focusing on the principal goal for one's CPS efforts; (3) *framing problems*, is the stage in which as many alternative problem statements as possible are generated and a specific problem statement is selected; (4) *generating ideas* consists of "generating many, new and unusual, or varied ideas to respond to the problem statement, [and] then identifying the most promising possibilities" (Treffinger, Isaksen, Dorval, 2000, p. 14); (5) *developing solutions* consists of analyzing and evaluating the possibilities and then shaping the most promising ones into potential solutions; and, finally, (6) the *building acceptance* stage involves putting the solution/s into action by considering sources of resistance and acceptance as well as formulating plans to implement and evaluate the actions. One should note that each step may be followed in sequence or in a more concurrent style, the emphasis here being on improving the likelihood of finding a solution. Further, each stage consists of a divergent phase, where many ideas are sought, and a convergent phase, where only the most promising ideas are selected for

further exploration. These stages are reflected by Torrance's (1988) definition of creative thinking as:

the process of sensing difficulties, problems, gaps in information, missing elements, something askew; making guesses and formulating hypotheses about these deficiencies; evaluating and testing these guesses and hypotheses; possibly revising and retesting them; and finally communicating the results.

(p. 47)

Correspondingly, after questioning over 700 inventors, each holding an average 39.3 patents about the process of invention, Rossman (1964) proposed the following steps to the inventive process:

1. Observation of a need or difficulty,
2. Analysis of the need,
3. A survey of all available information,
4. A formulation of all objective solutions,
5. A critical analysis of these solutions for their advantages and disadvantages,
6. The birth of the new idea—the invention,
7. Experimentation to test out the most promising solution, and the selection and perfection of the final embodiment by some or all of the previous steps.

(p. 57)

It should be clarified that for Rossman (1964), and as previously introduced in

Chapter I, the term invention is “not necessarily limited to developments in the physical sciences or in the industries, as it is ordinarily assumed. The term invention embraces all new developments in the social, administrative, business, the technical, scientific, and esthetic fields” (p. 8).

The press (environment)

The creative press involves social and psychological environments and descriptions of situations which help or hinder creativity. Foremost in the literature is the recommendation that in order to foster creativity an environment should be warm, risk-free, and supportive as well as free from external pressure or control (Goree, 1996; Macleod, 1987; Martindale, 1989; Rogers, 1959; Torrance & Myers, 1970). In contrast, surveillance and externally imposed deadlines appear to be detrimental to creativity (Amabile, 1983). However, research using one or a combination of the various interactive models may be instrumental in informing and reconciling paradoxes such as the ones surrounding external rewards and pressures and creativity.

Studies have found that creative role-models and mentors provide support and influence and play an important role in the development and emulation of creativity (Prentky, 1989; Simonton, 1978, 1984; Torrance, 1983). One study by Zuckerman (1979/1983) found that over half of the Nobel prize winners had previously studied under a Nobel laureate. Research by Torrance (1981b) and Sosniak (1985) also suggests that certain “special” teachers have played an important role in the future careers of highly creative individuals by enabling and keeping alive their creative spark.

Other environmental factors include the discriminating characteristics of one’s family. In testing Rogers’ theory, Harrington, Block, and Block (1987) demonstrated that

child-rearing practices congruent with establishing psychological safety and psychological freedom were antecedents of adolescent creative potential. In support of these findings, the parents of highly creative adolescents in Dacey's (1989a) study also shared similar parental styles. For instance, they did not prescribe rules, per se, to govern their children's behaviour. Instead, they exercised control by modelling and engaging in family discussions regarding behaviour. They also rarely punished their children for actions for which they disapproved. The fact that parents were disappointed was enough to motivate the teenagers to modify their behaviour. Much joking and "fooling around" characterised their relationship. Additionally, parents usually provided ample opportunities for fostering many of the creative traits we have already examined.

Creativity and ecosystems

Other research has examined the process by which creative individuals actively seek supportive environments for their creative offerings (Harrington, 1990; Spooner, 1999). According to the ecosystems perspective, individuals, when faced by a hostile ecological setting, may either modify their own behaviour, modify their "habitat", or seek a more supportive one. This is of key importance to the school system where environments that threaten some individuals may promote the development of others (Harrington, 1990). For instance, the need for autonomy may be advantageous in isolated working conditions, yet unconstructive in situations requiring high levels of interaction or collaboration. Similarly, and perhaps the case for some adolescents, the desire to defy authority may foster creativity in ecosystems that discourage creativity, yet may actually inhibit creativity in ecosystems that explicitly encourage or demand it. As Harrington states, "... I am not ... displac[ing] the individual as a crucial unit of analysis ... I am however, attempting to add the ecosystem as a

unit of analysis essential to a full understanding of creatively active individuals and their work” (p. 154).

As creativity research evolves, we will likely be able to state with more certainty the types of environments and techniques that are optimal for particular personality constellations. For now, one should not give up hope, keeping in mind that “many outstanding creative individuals have succeeded despite apparently unfavourable home, school, or other conditions” (Vernon, 1989, p. 106). Examined next will be the creative product.

The creative product

Some theorists argue that there exists a continuum of creativeness, similar to intelligence, from lesser to greater, depending on the characteristics of the people and their products (Amabile, 1983; Brown, 1989). For others, there is originality that occurs within the constraints of a given tradition and an originality that involves an alteration of some aspects of the constraints themselves. For example, Ghiselin (1963) believed there exists two qualitatively distinct forms of creativity: a lower level creativity which simply “extends some known concept into a new area of application” (Brown, 1989, p. 12) and a higher level creativity which “alters the universe of meaning itself, by introducing into it some new element of meaning or some new order of significance, or more commonly both.... the new insight may supplant all or part of some strongly established area of vision” (Ghiselin, 1963, p. 42). Revolutionary or grand scale creative acts carry with them an element of destruction as the old is subsumed by the new.

Creative products are generally thought of in terms of tangible evidence to creative acts. Non-agreement in the literature usually stems from the lack of an agreed-upon standard

for judging creative artifacts according to value of idea or degree of originality. Specific requirements are typically decided by experts operating in the appropriate field.

However, there does seem to be agreement on some basic intrinsic requirements necessary for a product to be considered creative (Benack, Basseches & Swan, 1989). The product characteristics that are most frequently mentioned are *novelty*, *usefulness*, and *harmony* or *elegance*, with the caveat that no criterion is in itself sufficient for the product to be considered creative (Voss & Means, 1989). Bailin (1984, 1988), for instance, argues that one cannot be considered creative without creating tangible products. Others take a more process oriented definition which simply requires the perception of an important relation where one had not been known or even suspected by connecting seemingly contradictory elements (Koestler, 1964; Voss & Means, 1989). Still others see creativity as a response to an ill-defined problem (Hayes, 1981). As well, some have even adopted a combination of all three criteria reviewed above (Benack, Basseches & Swan, 1989). Therefore, when examining creativity it is vital to include some discussion about the creative product being considered.

Integrative and systems view models of creativity

In response to the widespread call for more inclusive models, creativity has been enriched by recent confluence models that require the convergence of multiple components for creativity to occur. Like the interactionist model (Woodman and Schoenfeldt, 1989), the following models conceptualise the creative process in a more complex and interactive manner, rather than the strictly person-centred approaches of past research. Mockros and Csikszentmihalyi (1999) explain:

Recently theorists have begun to recognize the importance of looking at creativity in terms of interacting multiple systems (e.g., Albert 1990; Csikszentmihalyi, 1988, 1990; Feldman & Goldsmith, 1986; Gruber, 1980, 1981, 1982; Gruber & Davis, 1988; Simonton, 1988; Tannenbaum, 1987; Walters & Gardner, 1986). The systems in question are comprised of individuals, fields, and domains, as well as the social and cultural forces that impact these subsystems...In this model, creativity is not an attribute of individuals, but of social systems making judgments about individuals. (p. 175-176)

Three such models figure significantly in the scholarly literature on this topic. The models to be examined presently are: the *componential model*, the *systems view of creativity*, and the *developmental evolving-systems model*.

Componential model

The first model, Amabile's (1983, 1990) componential model, consists of three necessary components for creativity to occur: domain-relevant skills, creativity-relevant skills, and task motivation. In Amabile's model, these three necessary components operate at different levels of specificity and have an impact on the creative product. The higher the level of each of the three components, the higher the overall level of creativity will be.

The first component, *domain relevant skills*, "is the basis from which any performance must proceed" (Amabile, 1990, p. 76). These are the cognitive pathways that may be followed to solve a problem or perform a given task, including, factual knowledge, technical proficiency, and special talents in the domain in question. *Creativity relevant*

skills, the second component, comprises the “something extra”, the cognitive style that is favourable to exploring new cognitive pathways and taking new perspectives. It is dependent to some extent on personality characteristics related to independence, self-discipline, risk-taking, and unconcern for social approval. Finally, the third factor, *intrinsic task motivation*, makes the difference between what a creative person *can* do and what he/she *will* do. Motivation is affected by both a person’s baseline attitude toward a task and the perceived reasons for undertaking such a given task. See Table 3 for a breakdown of each of these three components.

By examining the interaction among the three components, as well as the internal and external factors operating within each component, Amabile (1983) proposes that “creativity is best conceptualized not as a personality trait or a general ability but as a behavior resulting from particular constellations of personal characteristics, cognitive abilities, and social environments” (p. 358). See Figure 2, for a graphic representation of the componential model.

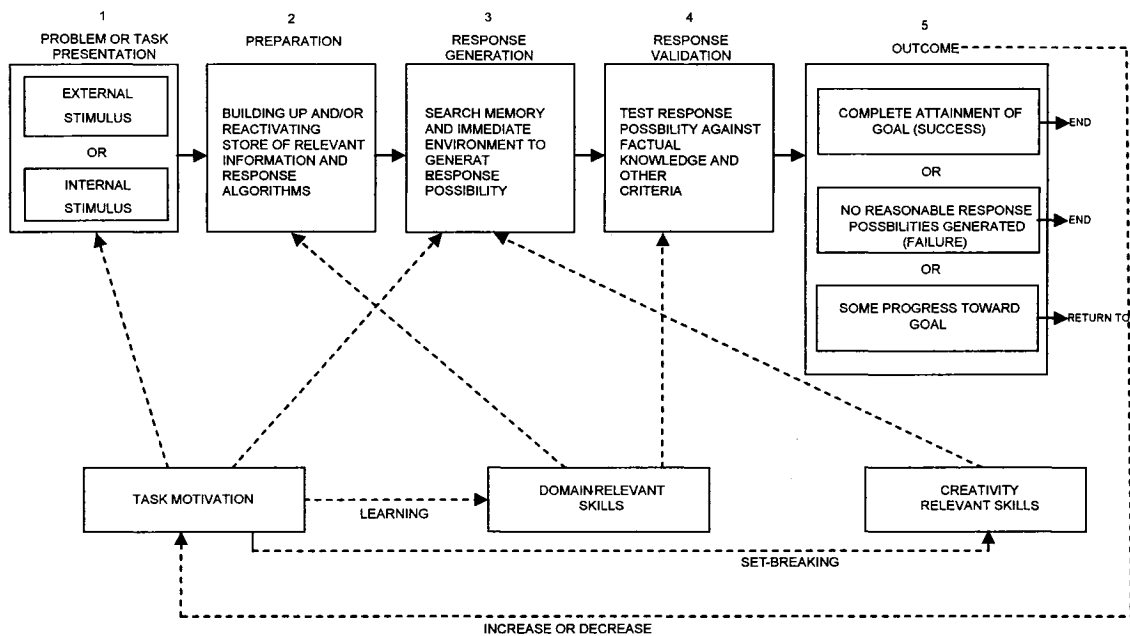
Systems view of creativity

The second model, the systems view of creativity, also features a domain component, and examines various interactions drawing our attention to the importance of the field in determining what products are to be deemed creative or deviant. Proposed by Csikszentmihalyi (1990), the systems view accounts for creativity by looking at the interaction among three sub-systems, *the domain*, *the field*, and *the person*. Each sub-system performs a specific function as well as influences the other: “the domain transmits information to the person, the person produces a variation, which may or may not be selected

Table 3. Components of creative performance (Amabile, 1983, p. 362)

<p>1</p> <p><u>DOMAINRELEVANT SKILLS</u></p> <p>INCLUDES:</p> <ul style="list-style-type: none"> -KNOWLEDGE ABOUT DOMAIN -TECHNICAL SKILLS REQUIRED -SPECIAL DOMAINRELEVANT "TALENT" <p>DEPENDS ON:</p> <ul style="list-style-type: none"> -INNATE COGNITIVE ABILITIES -INNATE PERCEPTUAL AND MOTOR SKILLS -FORMAL AND INFORMAL EDUCATION 	<p>2</p> <p><u>CREATIVITYRELEVANT SKILLS</u></p> <p>INCLUDES:</p> <ul style="list-style-type: none"> -APPROPRIATE COGNITIVE STYLE -IMPLICIT OR EXPLICIT KNOWLEDGE OF HEURISTICS FOR GENERATING NOVEL IDEAS -CONDUCTIVE WORK STYLE <p>DEPENDS ON:</p> <ul style="list-style-type: none"> - TRAINING - EXPERIENCE IN IDEA GENERATION - PERSONALITY CHARACTERISTICS 	<p>3</p> <p><u>TASK MOTIVATION</u></p> <p>INCLUDES:</p> <ul style="list-style-type: none"> - ATTITUDES TOWARD TASK - PERCEPTIONS OF OWN ABILITY ABILITY TO BREAKING THE TASK <p>DEPENDS ON:</p> <ul style="list-style-type: none"> - INITIAL LEVEL OF INTRINSIC MOTIVATION TOWARD THE TASK - PRESENCE OR ABSENCE OF SALIENT EXTRINSIC CONSTRAINTS IN THE SOCIAL ENVIRONMENT - INDIVIDUAL ABILITY TO COGNITIVELY MINIMIZE EXTRINSIC CONSTRAINTS
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Figure 2. Componential framework of creativity (Amabile, 1983, p. 367)



NOTE: Broken lines indicate the typical sequence of steps in the process. Only direct and primary influences are depicted here.

by the field” (p. 200). No product or act can be considered creative without input from all three sub-systems.

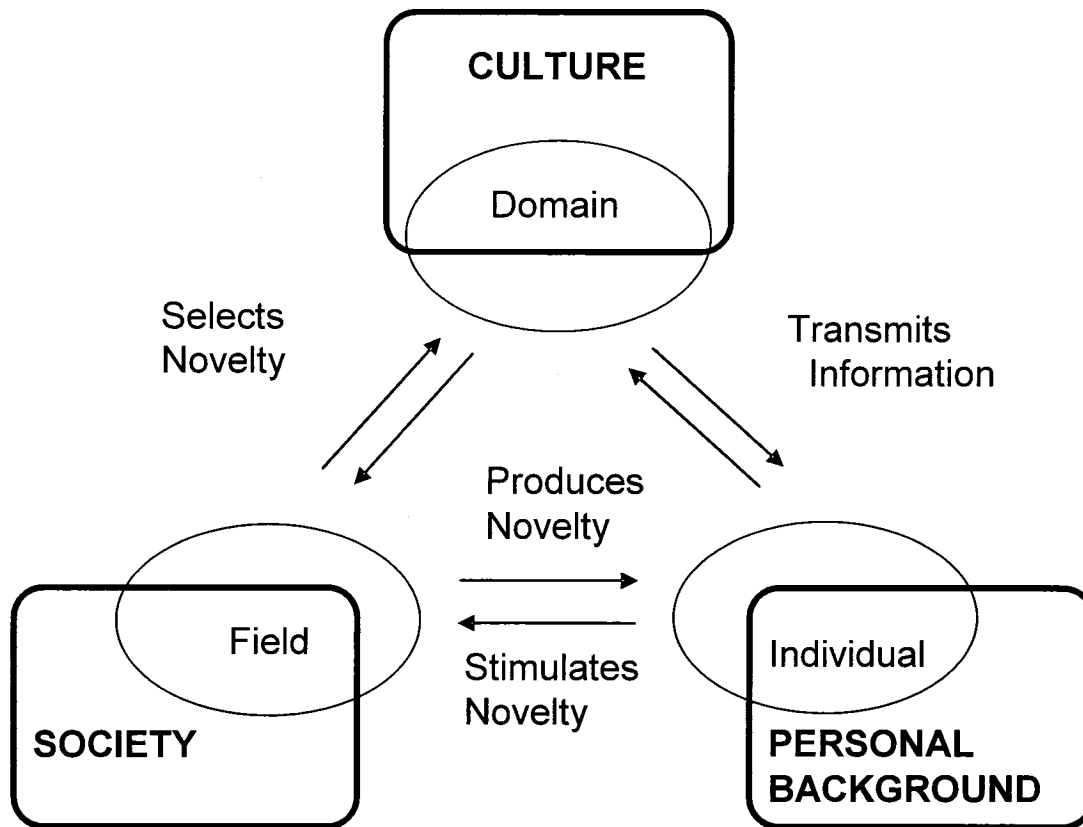
The domain sub-system is the organised body of knowledge about a particular topic and consists of the set of rules and vocabulary and grammar of a given area; however, creativity is never judged by the domain, but rather by the field. *The field* is “composed of individuals who know the domain’s grammar or rules and are more or less loosely organized to act as gatekeepers to it” (p. 201). The field includes all the persons that can affect the structure of a domain. It decides whether a product or performance meets the criteria of the domain and, if the product should depart from the standard; it also decides if these innovations should be accepted and added to the domain, or if they should be labelled as “deviant” and rejected. The third and final sub-system, *the person*, are individuals who have assimilated so well the various aspects of the domain that they can produce variations which extend the original domain. These individuals will probably possess many of the characteristics that distinguish creative people, the personality traits, values, problem finding orientations, intrinsic motivation, and so on.

Thus, as Feldman, Csikszentmihalyi, and Gardner (1994) explain, “persons, domains, and fields...need to be studied in relation to each other, as well as independently....Persons, however original or determined or skilled, make contributions to domains that have structure and yield to or transform constraints” (p. 25). See Figure 3, for a representation of this model.

Developmental evolving-system model

Last, the developmental evolving-system model for understanding creativity is a

Figure 3. The systems view of creativity. (Csikszentmihalyi, 1999, p. 315)



“The system view of creativity. For creativity to occur, a set of rules and practices must be transmitted from the domain to the individual. The individual must then produce a novel variation in the content of the domain. The variation then must be selected by the field for inclusion to the domain.”

theory of the individual as viewed as an inter-related system. This model features three components, *purpose*, *knowledge* and *affect*. Gruber and Davis (1988) explain, “in describing the creative person at work, we have found that it is useful to conceive of the person as a system of three main interacting subsystems: knowledge, purpose, and affect” (p. 266). As each of these components grows over time, deviations encountered are amplified which leads to an individual’s production of creative products (Gruber & Davis, 1988). *Knowledge* refers to both how an individual acquires and uses it. Developmental changes in the *knowledge* system occur over time; “... creative works take a long time.... it is this peculiar combination of improbability and fitness that leads people ... to exclaim ‘How stupid not to have thought of that’” (p. 265). *Purpose*, refers to a set of interrelated goals, that develop and guide an individual’s actions and behaviours; how they seek out and select problems to work on. Joy or frustration which influence undertaken projects are encompassed by the *affect*. Affect involves several sub-components, including, how individuals maintain motivation and task commitment, as well as how they interact with others who have influence over their life and work. Gruber and Wallace (1999) state, “with well educated hindsight, we may be able to understand the various solutions that come in response to some eco-pressure for change” (p. 93).

The evolving systems model is further described by Gruber (1988) in the following manner:

The approach is *developmental and systemic*: Creative work evolves over long periods of time. It is purposeful work and there is constant interplay among purpose, play, and chance. The approach is *pluralistic*: The creative

person enjoys and exploits not one but many insights, metaphors, social relationships, projects, and heuristics. The approach is *interactive*: The creative person works within some historical, societal, and institutional framework. The work is always conducted in relation to others. At the same time, the creator works alone, even when intimately bound up with others. This interaction produces varying patterns of conflict, influence, and collaboration. The approach is *constructionist*: The creator participates in choosing and shaping the milieu within which the work proceeds, the skills needed for the work, and the definition of the ensemble of tasks.... The approach is *experientially sensitive* (or phenomenologically aware)... Such a person has emotions and aesthetic feelings, and social awareness of the relation of his or her work to the world's work... (pp. 28-29, italics in original)

The three more fully developed confluence models outlined above each help to shed light on the creative process as well as highlight the importance of social and psychological environments. In addition to the effects exerted by motivation, both internal and external, the field, which ultimately judges the creativity of products, and developmental changes which amplify deviations over time, there are other research studies that have examined the link between positive creativity and negative, "deviant" creativity.

Creativity and deviance

Currently it is not in vogue to suggest that creativity is linked with delinquency; however, this trend has not always held true in the past (Agnew, 1989). Agnew (1989) elaborates:

These early views were eventually rejected or forgotten, not so much because of the accumulation of evidence against them-- but more because certain social changes in post-World War II America lead researchers to focus on the positive aspects of creativity. The research evidence, however, suggests that there may be some validity to the early assertions linking creativity and crime/delinquency. (p. 104)

In fact, research by Brower (1999) suggests that creativity and deviance are in many ways synonymous, with the creator rebelling against, contradicting, and negating established ways of thinking. Brower (1999) explains "... creativity is doing things in a novel way as well as breaking out of established patterns. As a result of this break, the creator frequently is seen by society as a rebel, a deviant, and a gadfly" (p. 3). A central problem for the creative mind is the tension between creativity and conformity (Brower, 1999). The profiles of creative and deviant individuals often share in large measure the same characteristics, for example, "unconventional behavior, avoids entrenched ways of thinking, dissatisfied with the status quo, sets own rules, takes risks, rejects limits imposed by others, is willing to try new things, is open to new experiences and growth, and is receptive to new ideas" (Plucker & Runco, 1999, p. 541-542). Given the importance of deviance to societal progress, the relationships among "creativity and open-mindedness, psychosis, contrarianism,

eccentricism, crime and drug use and abuse” (Plucker & Runco, 1999, p. 542) must be examined.

In a similar vein, the literature on deviance has become interested in creativity and the contributions creative individuals make to society (Spreitzer & Sonenshein, 2004); for example, Heckert (2000) points out that social order:

...is potentially challenged by such examples of positive deviants as innovators in any realm of the social order, from science to art to politics to religion, or by reformers. This phenomenon might address the issue of why certain positive deviants are not generally easily accepted in their time and place. Deviance is relative; many positive deviants also experience this relativity in that the initial reception to their actions is negative. In this sense, these types of positive deviants can potentially, at least, be deemed hard deviance, in the sense that the social order is challenged. (p. 38)

Moreover, Kallen (1973) examining social change and innovation has noted that although:

innovators are not necessarily rebels... Nevertheless, innovators are forced into a combative position. For their novelties enter a social organization most of whose establishments are going concerns and enter as competitors and deprecators of one or another. If they succeed in establishing themselves, they become embodied in the organic flow of the mores. They cause the flow to deviate to a slightly different gradient definable by what they represent.... Innovations are mostly resisted out of motives of self-interest and fear. The

new is quite usually synonymous with the unreasonable, the dangerous, the impossible. (pp. 449-450)

Additionally, it has been “remarked that thwarted creative ability is less likely to be extinguished than to take an antisocial turn. There is a good bit of evidence that delinquents are often creative” (Lewis, 1991, p. 62). Research by Terry (1998) has explored the link between creativity and delinquent, substance abusing adolescents. Terry has found that compared to national norms, the participants in her study had high mean scores on creativity and originality, but low scores on verbal expressiveness and idea elaboration as measured by the Khatena-Morse Multitalent Perception Inventory and the Torrance Tests of Creativity (Morse & Khatena, 1991). Similarly, a study by Lewis (1991) that compared (1) actors involved in full-scale theatrical productions with (2) delinquents who had all been adjudicated by courts for serious crimes, found that individuals used theatre acting or delinquency to discharge strong emotion. The delinquents scored higher than the creative actors on tests of figurative creativity; however, they were far outstripped by the actors on verbal creativity test scores. One interpretation of these findings may be that adolescent delinquency is due, in part, as a result of frustration caused by an inability to positively express creative offerings within school system that privilege one expressive avenue, for example, verbal, over another, for example, figurative/symbolic.

Summary

Creativity research has led to many key insights falling under two main research directions. The first involves creativity research that has examined the four broad areas of the creative experience in isolation; namely, persons, processes, presses (environments), and

products. The second involves newer integrative and systems views of creativity that characterise the creative process as resulting from the confluence of multiple components, including the unique amalgam of personality characteristics, cognitive abilities, social environments, and the Zeitgeist.

These newer integrative models bring to the fore the reality that creative products arise as a result of at least a considerable amount of social influence; for instance, teachers, mentors, parents, peers, and the sociopolitical context. Moreover, the manner in which one's creative offerings are received by one's social community as well as how an individual responds to his or her ecosystem must be better understood in order to allow one's positive creativity to be fully realised.

Research drawing links between creativity and deviance was examined. Foremost among these links is the observation that creative individuals and deviants often share similar personality correlates, and that both creativity and deviance result in behaviour that often challenges the status quo and deviates from the statistical norm.

By seeking the input of today's young adults, we may better understand factors that contribute to the processes that lead young adults to channel their creativity in various fields and degrees of social acceptance. Creative young adults representing a wide range of schooling experiences must be given the opportunity to offer their constructive voice. The goal of the present study is to inform our understanding of the nature of creativity and creative development as well as to suggest educational practices that may be optimal for nurturing and directing creative and potentially creative young adults channel their creativity in socially positive areas. Few studies have specifically sought the voice of young adults including those operating at the margins of socially accepted creative expression.

In order to shed light on these research goals, and as previously introduced in Chapter I, the present study examines creativity through an interactionist/ecological “cultivating” perspective. The “cultivating” conceptual framework contains the five following elements: *antecedent conditions*, *phenomenon*, *context*, *intervening conditions*, and *consequences*. Explored within the *antecedent conditions* are the various experiences with early socialisation conditions; including, biographical variables, gender, siblings, perceived birth order, the presence of early role-models, enrichment opportunities, parental styles and past reinforcement history. These various factors contribute, in part, to the development and discovery of one’s creative self (*phenomenon*). This discovery may take place from both within (internal psychological discovery) and from without (interaction with environment). Included are such factors as internal and external motivation, personality traits, as well as one’s initial attempts at expressing one’s creativity via one or a variety of avenues (i.e., the multiple intelligences) and an awareness of one’s needs for creative expression (i.e., other people, alone time, etc.). *Context* involves the environmental reactions to one’s creative expressions. One’s creative offerings may be either accepted or rejected. If they are rejected then one must make adjustments to one’s chosen mode of delivery, seek an alternative environment, attempt to cease being creative in at least a social manner, or continue to experience rejection. Examples of factors explored within this heading are one’s persistence, motivation, confidence and awareness of creativity, educational experiences, peers, and so on. Once creative actions have been expressed, and a supportive ecology has been found, creativity may be channelled and honed. Various *intervening conditions* include actively seeking training opportunities and increasingly supportive ecologies. Through this process communities of like-minded individuals develop

and evolve. Protected in safe solidarity, or in motivating competition, individuals encourage and push each other's creative interests forward. Spurred on through group interaction, each member offers unique contributions which results in a dynamic, synergistic exchange of creative thought and growth.

Moreover, as one's precision of expression and one's opportunities for specialisation are increased, one's deviance (shifting further away from the statistical norm) may also be amplified. Finally, depending on the culture, the spirit of the times, and one's chosen arena of expression, one's creative or "deviant" offerings may either be perceived as positive and socially accepted, or negative and socially non-accepted (*consequences*).

The following sub-questions complement the Research Question: *According to the participants' perspective, what are the main factors that contribute to their creative process and development, as well as to the processes that lead them to channel their creativity in various fields and degrees of social acceptance:*

Sub-questions

1. How has perceived support (or lack thereof) from family, peer, or teachers/school acted as a contributing factor in the schooling experiences of creative young adults?
2. In what avenues have creative young adults sought to express and hone their creativity?
3. What are the effects, if any, of seeking out training opportunities and supportive ecologies on deviancy/creativity? (including role-models)

4. What factors are perceived by participants as contributing to their choice of expressing creativity in either socially accepted or socially non-accepted ways?
5. What are some possible relationships, if any, between channelled creativity and degree of proficiency (or lack thereof) in any particular mode of expression?
6. What have been the perceived consequences of expressing their creativity in socially accepted or socially non-accepted avenues?

The methodology employed to answer these research questions and to develop a grounded theory are presented next in Chapter III. Examining the experiences of a wide variety of creative young adults involved in various avenues of creative expression will enhance our understanding of the nature of creative environments as well as enrich our educational systems and the creativity literature with the informative voice of creative young adults.

CHAPTER THREE: METHODOLOGY

- "Facts only speak when interrogated, and they always reply in the language in which they are spoken to" (Shea, 1990, p. xiii).

The following chapter is divided into four main sections. Within the first, notions of ontology/epistemology/methodology and validity are examined. Under the second section, *Research as Praxis*, beliefs and practices surrounding research and action are outlined. Under the third and fourth sections, *Modes of Data Collection* and *Method*, the various procedures that guided the present study are described.

Constructivist paradigm:

In terms of methodology, the theoretical perspective of the present study is based on a qualitative approach employing grounded theory methods. Furthermore, the research design adheres most closely to the social constructionist interpretation and application of the grounded theory method as outlined by Charmaz (1990, 2000) (see Data Analysis).

A strand within the constructivist paradigm that focusses "more on social process and interaction is generally known as social constructionism" (Schwandt, 2001, p. 31). Charmaz explains that "a social constructionist grounded theory views the process of [analysing data] as dialectical and active, rather than as given in the reality and passively observed by any trained observer" (Charmaz, 1990, p. 1165). This perspective assumes an active, non-neutral observer "whose decisions shape both process and product throughout the research" (p. 1165). The final report is shaped by the interaction among the researcher, the participants, and the data; the resulting product is a constructed "discovery" guided by the questions brought to the data.

Similarly, according to Denzin and Lincoln (1998, 2005), the qualitative researcher is a bricoleur creating a collage-like product shaped by the interaction of his or her personal history, biography, gender, social class, race, and ethnicity, as well as those of the people being studied. These stories are viewed through a theory and value window, and are framed by the adopted storytelling traditions (paradigms); they have power and political implications (Guba & Lincoln, 1998). Paradigms are not open to proof, “there is no way to elevate one over another on the basis of ultimate, foundational criteria” (Guba & Lincoln, 1998, p. 201-202). Even in the so-called “hard” sciences, the ideal of an inquirer objectively discovering phenomena as through a one-way mirror has been shattered by evidence such as the Heisenberg¹ uncertainty principle and the Bohr² complementarity principle (Guba & Lincoln, 1998). “Indeed, the notion that findings are created through the interaction of inquirer and phenomenon (which, in the social sciences, is usually people) is often a more plausible description of the inquiry process than is the notion that findings are discovered through objective observation...” (p. 200).

As Strauss and Corbin (1990) explain, qualitative research lends itself to research that attempts:

to uncover and understand what lies behind any phenomenon about which little is yet known. It can be used to gain novel and fresh slants on things about which quite a bit is already known. Also, qualitative methods can give the intricate details of phenomena that are difficult to convey with quantitative methods. (p. 19)

Grounded theory methods are employed to build theory that is “grounded” or faithful to an area under investigation. They are useful for uncovering the emic views of the participants. Researchers in this tradition hope their theories will have useful application and that, ultimately, they are related, in cumulative fashion, to others within their respective disciplines (Strauss & Corbin, 1990).

Consistent with the symbolic interactionist roots of grounded theory (Benoliel, 1996; Glaser, 1992, 1998) the present research is situated within a social world that is fluid and dynamic. Interactionists explain social behaviour in terms of intertwined dialectical processes (Rock, 1982). Central to grounded theory analyses is the development of *basic social process* (BSP) theories (Bigus, Hadden & Glaser, 1982; Glaser, 1978). BSPs seek to account for the organisation of behaviour by simultaneously considering social psychological and social structural variations occurring over time (Bigus, Hadden & Glaser, 1982; Glaser, 1978, 1998).

The advantages of employing a grounded theory approach include: (a) its effectiveness in uncovering the emic views of the participants; (b) its ability to produce a theory that both *works* to explain relevant behaviour in a substantive area of research, and (c) *fits* within the substantive area; (d) the *relevance* of its findings to the people in the substantive area, and (e) the readily modifiable nature of the theory as new data emerge (Glaser, 1998).

Nevertheless, as Wolcott (2001) suggests, doctoral dissertation methodology chapters need not spend an inordinate amount of space defending qualitative methods and research. However, validity or alternative notions of how and what constitutes “good” research must be addressed. Following a brief review of various notions and formulations of what

constitutes validity in qualitative research, a discussion is presented on how they have influenced the present project.

Conventional qualitative validity: Postpositivist/Neo-realist

For neo-realist qualitative researchers, conceptions of validity undergo adjustments to better reflect qualitative methodologies, but nevertheless tend to closely mirror the basic philosophical underpinnings of traditional validity and reliability as they are typically thought of in quantitative terms. For instance Kirk and Miller (1986) state

...appropriate and useful... [is] the partitioning of objectivity into two components: *reliability* and *validity*. Loosely speaking, “reliability” is the extent to which a measurement procedure yields the same answer however and whenever it is carried out; “validity” is the extent to which it gives the correct answer. These concepts apply equally well to qualitative observations. (p. 19, italics in original)

Guiding Maxwell’s (1992) and Johnson’s (1997) research are the principles of *descriptive validity*, *interpretive validity*, *theoretical validity* (which includes Johnson’s *internal validity*) as well as, for Maxwell, *generalizability* (which includes Johnson’s *external validity*) and *evaluative validity*.

Briefly stated: *Descriptive validity* refers to the factual accuracy of accounts reported by the researcher. Researchers must not fabricate or distort events or things they report they saw or heard. One must also keep in mind that descriptive validity can “refer to issues of omission as well as of commission” (Maxwell, 1992, p. 287). Included in this category is the monition that if qualitative claims imply frequency they should be supported by simple

number counts; for instance, when reporting that events occurred “often”, happened in “large” number, were “typical” or “rare”. Words implying degree can quickly lead to researcher bias if they are not accompanied by specific frequencies that clearly define them in the context of the current research endeavour. All other validity categories are dependent first and foremost on this primary validity. Crosschecking with other observers or with a recording device can help corroborate observations.

Interpretive validity is concerned with “what objects, events, and behaviors *mean* to the people engaged in and with them” (Maxwell, 1992, p. 288, italics in original).

Interpretive research seeks to understand events not according to the researcher’s perspective, but from the participant’s perspective. Interpretive researchers are concerned with the emic rather than etic viewpoint. Johnson (1997) suggests member checks, which although not perfect, are frequently of use to clear up areas of miscommunication; whereas Maxwell (1992) is decidedly more cautious, he writes: “it is essential not to treat latter accounts as incorrigible; participants may be unaware of their own feelings or views, may recall inaccurately, and may consciously or unconsciously distort or conceal their views” (p. 290).

Theoretical validity refers to a theory’s workability and fit, the theory’s success at functioning as an explanation of a phenomenon. Contained within this notion of validity are two components: a) that the concepts or categories employed by the theory are relevant to the phenomenon, and b) that the putative relationships between these categories interact as the researcher claims they do; what some call *causal validity* or what Johnson (1997) refers to as *internal validity*. To improve theoretical validity some researchers employ theory triangulation, comparing their theories with others about the same phenomenon. An

alternative technique used to improve this type of validity is negative case sampling. Cases that do not fit one's explanation are useful for expanding one's theory and help to ensure that one is not merely looking at confirmatory cases. Peer review is also suggested as a useful technique in order to help point out problems/gaps with the explanation provided.

Generalizability is comprised of two components, one internal, and the other external. Involved in internal validity is generalising within the community to people, events, and settings that were not directly observed. External validity refers to generalising to other communities, groups, or institutions; the former, internal validity, according to Maxwell (1992) being of much more importance to qualitative researchers than the latter, external validity. Last, *evaluative validity* refers to the evaluation of the behaviours of participants as "right" or "wrong". Elaborating on his position concerning evaluative validity, Maxwell states "[it] is not as central to qualitative researchers... to raise questions about the evaluative framework implicit in an account, however, as many critical theorists do [raise questions], [this] *creates* issues of an account's evaluative validity, and no account is immune to such questions" (p. 295, italics in original).

Validity as it is conceptualised by neo-realist qualitative researchers is largely concerned with getting the descriptions and inferences "right"; the inquirer's subjectivity is downplayed. Validity is very much couched in procedures that are thought to enhance the researcher's ability to provide quasi-isomorphic accounts of the experiences under scrutiny.

Somewhat related to the neo-realist approach to validity are the early reconceptualisations made by researchers such as Lincoln and Guba (1985), which still retained holdovers from positivist assumptions; although they made significant adjustments to the conception of validity in order to more accurately reflect the divergence between the

philosophical foundations that separated the approaches for generating scientific knowledge, they were still very much tied to the hegemonic discourse of the dominant positivist worldview. Guba and Lincoln (1989) reflect on their earlier attempt: "...there remains a feeling of constraint, a feeling of continuing to play 'in the friendly confines' of the opposition's court" (p. 245). This is not to suggest that the 1985 reformulations are not innovative and useful for many, but as they explain, these reconceptualisations were still tied in with, and organised according to, the dominant text, in this case quantitative notions of validity.

Constructivist validity

Validity standards proposed by constructivists Lincoln and Guba in 1985 reflect the differing ontological/epistemological foundations that underpin many qualitative inquiries; however, they were still framed by, and parallel to, quantitative notions of validity. For example, suggesting four (at the time) new constructs for judging the **trustworthiness** of qualitative inquiries, they proposed: (a) credibility, which parallels internal validity and addresses the inquirer's success at providing assurances that the proposed representations and reconstructions are congruent with those of the participant's views, (b) transferability, which parallels external validity, and addresses the issue of generalisation by demanding that researchers provide sufficient information to allow subsequent readers to judge the applicability and degree of similarity of the current study to other cases where the findings might be transferred, (c) dependability, which parallels reliability, and requires the inquirer to demonstrate that the research process is logical, traceable, and documented, and finally, (d) confirmability, which parallels objectivity, and calls for the researcher to establish that the data and subsequent interpretations are linked and not merely figments of the

researcher's imagination; assertions, findings, and interpretations must be linked to the data themselves in readily discernible ways. "The reader should note that trustworthiness is a matter of concern for the consumer of inquirer reports" (p. 328), contrary to the positivist position which holds the researcher as guarantor of validity.

It is of note that for certain qualitative researchers, the reformulations of validity suggested by Maxwell (1992) as well as those by Lincoln and Guba (1985) are the de facto criteria by which to assess qualitative validity. However, as Gergen and Gergen (2000) admonish "it would be intellectually irresponsible simply to return to business as usual—as if the validity critiques had never occurred" (p. 1031).

To this point, the discussions of validity have rested mainly on the methodological plane (Guba & Lincoln, 1989). They are foundational in nature and, as underscored earlier, they reflect previous notions of validity as conceptualised in positivistic discourses.

Reviewed next are conceptions of validity that "could have been invented by someone who had never heard of positivism or its claims for rigor" (p. 245).

Validity: A relational rather than methodological turn

As forms of resistance and innovation grow more sophisticated and the legitimacy of qualitative research continues to assert itself "...new emerging criteria...[are increasingly] relational, that is, they recognize and validate relationships between the inquirer and those participating in the inquiry" (Lincoln, 1995, p. 278). This marks a significant shift away from focussing solely on foundational concerns and the crisis of legitimation; ethics are now considered part and parcel of the researcher's craft (Lincoln, 1997). The conceptions of validity that follow are grounded in the crisis of praxis (e.g., Guba & Lincoln, 1989) and of representation (e.g., Lather, 1993).

By 1989, Guba and Lincoln no longer depend on dominant philosophical and quantitative formulations as an implicit backdrop to their updated criteria for guiding and evaluating qualitative endeavours. In these later reformulations, they propose **authenticity** as an alternative form of validity reflecting the differing goals of inquiries rooted in constructivist epistemologies. This newer reconceptualisation differs quite markedly from their previous stance (Lincoln & Guba, 1985) as well as from more traditional notions of validity, both quantitative and in certain cases, qualitative. Their new criteria include: 1) fairness, the extent to which researchers solicit and represent respondents' constructions and values in a balanced manner, 2) ontological authenticity, the extent to which participants' own constructions are enhanced or made more informed as a result of being in the study, 3) educative authenticity, the extent to which participants are made more aware, appreciative, and understanding of the constructions of others, 4) catalytic authenticity, the extent to which action is spurred on by the research process, and last, 5) tactical authenticity, which refers to the empowerment of participants as a result of the research process.

Newer reconceptualisations as proffered by Guba and Lincoln (1989) and Lincoln and Guba (2000), are decidedly emancipatory and characterised by research as praxis. As dialogue grows more complex, multi-vocal, and reflexive, the field of qualitative research continues to experience creative tension and vibrancy (Gergen & Gergen, 2000). For example, critical theorists such as Lather (1993) hope to incite researchers into discourse, thereby causing both notions of validity as well as research practices to undergo continual re-examination.

Other conceptions of validity: Critical theorist

Lather (1993) proposes four alternatives to validity. The four “guerilla” attacks to traditional representation that Lather (1993) proposes as reframings of validity are: *validity as simulacra/ironic validity*, *Lyotardian paralogy/neo-pragmatic validity*, *Derridean rigour/rhizomatic validity*, and *voluptuous validity/situated validity*. Briefly explained: A) viewing *validity as simulacra/ironic validity*, is to refuse closure, to use researcher power to undercut representation; to “[use] simulacra to resist the hold of the real and to foreground radical unknowability...” (p. 677). It is in response to the crisis of representation, and employed to demonstrate the unreliability of meaning— that truth is unrepresentable. B) *Lyotardian paralogy/neo-pragmatic validity*, holds to highlight differences and contradictions. As Lather explains, “such a strategy refines our sensitivity to differences, introduces dissensus into consensus, and legitimates via fostering heterogeneity” (p. 680); it “reinforces our ability to tolerate the incommensurable” (p. 679) and highlights language games and the multiplicity of voice. C) *Derridean rigour/rhizomatic validity*, pushes researchers to follow the anarchistic spread of systems and their arbitrary branching-offs and to acknowledge the tangled ideas which resist being represented as an orderly structure. It is multi-centred complexity that “call[s]...[to] the otherness of any system” (p. 680); it calls into question what counts as fact and what as detail. Last, D) *voluptuous validity/situated validity* highlights “risky practice”; it is meant to encourage researchers to go too far, to write beyond what they understand (Creswell, 1998).

The validity framings that Lather (1993) offers are meant to take into account postmodernist/poststructuralist problems with, not to provide solutions for, achieving validity. They are to act as provocateurs to beliefs about validity and representation; to

“...position validity as incitement to discourse” (p.674). Another provocative approach to validity is to outrightly reject it as useful in guiding qualitative research.

Validity: Not our concern

“Validity neither guides nor informs my work” states Wolcott (1994, p. 356), he explains: “I do not accept validity as a valid criterion for guiding or judging my work.... I suggest we look elsewhere in our continuing search for and dialogue about criteria appropriate to qualitative researchers’ approaches and purposes” (p. 369). According to Wolcott validity distracts from the researcher’s task at hand of trying to *understand* what they have observed. Discussing *understanding*, Wolcott claims that contained in most significant qualitative reports, there is an inherent sense of tension and dialectic reflecting “normal” human contradictions; this belief mirrors Lather’s Lyotardian paralogy/neo-pragmatic validity.

The present study:

Lincoln (1995) explains “...[the] qualitative research community might well think about which criteria, at which stage, are the most useful and important, and to whom” (p. 286). As “truth is located within particular communities at particular times and used indexically to represent their condition” (Gergen & Gergen, 2000, p. 1032), validity is transformed into a function of user and purpose; certain issues may emerge as dominant as others may fade to the background. Certainly, as a responsible researcher, I believe my role is to reconstruct descriptions and interpretations that are supported by evidence, and to develop theories that both “fit” and “work”. Moreover, I believe that as a qualitative researcher my goal should be to strive: a) to understand social phenomena inductively, from the participants’ own perspectives, b) to re-present it in as transparent and credible a fashion

as possible, and c) to act in a manner that translates my research and position of privilege into tangible, positive contributions to the communities under investigation.

Further, though each framing of validity has something to offer, ultimately:

as finite beings, all we can do is construct social and educational worlds... constructed realities for which we are morally responsible.... there may be little more to say than this about judgment, criteria, and validity.... Our individual judgments inevitably must be moved into a public space where they are placed in concert with the judgments of others. (Smith & Deemer, 2000, p. 891)

For this reason, I believe that the role of researchers must also be that of agents of change; “to be responsive to local situations, conditions, and stakeholders’ needs” (Johnson & Onwuegbuzie, 2004, p. 20). It is on this issue that constructivist inquiries and practice move towards “forms of critical theorist action, action research, or participative [inquiries]...each of which is predicated on creating the capacity in research participants for positive social change and forms of emancipatory community action” (Lincoln & Guba, 2000, p. 181).

It has been observed that, within a field, handbooks function as cumulative summaries which both define it *as it is* as well as provide departure points for future study (Mumford, 2003). In the period between the appearance of the first edition of the *Handbook of Qualitative Research* (Denzin & Lincoln, 1994) and the publication of the Second Edition (Denzin & Lincoln, 2000) newer re-formulations of validity have placed the role of researcher to be much more participatory and action oriented. For example, Lincoln and Guba (2000) state in their critical issues table that constructivist action is “intertwined with

validity; inquiry often incomplete without action..." (p. 172). With the recent publication of the third edition of the handbook (Denzin & Lincoln, 2005) this trend has become even more in evidence; as Guba and Lincoln (2005) state,

whatever the source of the problem to which inquirers were responding, the shift toward connecting research, policy analysis, evaluation, and/or social deconstruction...with action has come to characterize much new-paradigmatic inquiry work, both at the theoretical and at the practice and praxis-oriented levels. (Guba & Lincoln, 2005, p. 2001)

Research as Praxis

The present study acknowledges the importance of Lincoln and Guba's (1985) notion of trustworthiness, but also reflects their more recent reformulations of validity as requiring an element of action (Guba & Lincoln, 1989, 2005; Lincoln & Guba, 2000). Viewing praxis as a fundamental component of constructivist research validity (Spooner, 2004a), this study was guided as well by Tierney's (2000) caveat that:

Although a qualitative researcher might carefully craft a research design, acquire important findings, and develop notable conclusions, unless the researcher is able to translate these findings for public use, one might assume that all is for naught. Yet in traditional academic settings, it is often considered enough to complete a study for an exclusive and academic audience.... These traditional notions of qualitative research and application should not be taken as acceptable norms in today's academic and public circles. (p. 185)

I am proud to declare that, throughout the course of this project, I have had the opportunity to use my own research, the research of others, and my position of influence in the manner Tierney (2000) advocates. In each of the communities involved with this research project, small but significant changes were made contributing to improvements to participant environments, participant action, and participant creative expression. Although, not the profound emancipatory changes envisaged by Lincoln and Guba (2000), the following avenues of action do represent engagement and a conscious effort on the part of the researcher to bring about tangible, positive change.

Aligning practice with theory

For example, being aware of Rogers' widely cited and tested theory (Harrington, Block, & Block, 1987) that environments ideal for fostering constructive creativity are comprised of the following two conditions: psychological safety and psychological freedom (Rogers, 1959)— a finding supported by my own previously completed study of creativity enhancing environments (Spooner, 1999)— I decided to use my position of influence to give back to both the participants as well as the local creative community.

In order to accomplish this, I started a weekly open-stage coffeehouse night at a campus café-bar where all forms of creative expression would be welcome. Over the years, as a graduate student active on the Executive of the Graduate Students' Association, I had found myself in charge of a small Café-bar; it was at this bar that I helped to create a night and an environment where all of Rogers' conditions would be present. I hired staff accordingly and volunteered my time every Thursday night over a two year period. The rules for the night were simple: the staff and I would exercise and model the conditions as set out by Rogers. All in attendance were directed "to be as supportive and creative as you

can". To further lead by example, it was not uncommon for us to actively participate by performing.

The results were overwhelmingly positive. This is not merely my contention, but as evidenced by several articles in both francophone and anglophone university newspapers as well as an article in the *Ottawa Citizen*. For example, the francophone newspaper *La Rotonde* dubs us "Place aux artistes" (front cover) stating "ici, tous parlent de l'ambiance chaleureuse, intime, confortable, idéale pour partager ses talents et créer des contacts" (Sénécal, 2002, p. 16). In the anglophone newspaper, *the Fulcrum*, the open stage coffeehouse night is featured in the article "Atmosphere is Here" in which the journalist states, "Performers on Thursdays sense the respect and appreciation they are given for what they're doing, and this is one of the reasons many play week after week" (Dunbar, 2002, p. 15); we were also featured in a second article by *the Fulcrum* in which the headline reads: "Celebrating creativity: Profile of a campus bar" (Cormack, 2003, p. 11). Last, Ottawa's largest daily newspaper, *the Ottawa Citizen*, featured the Café in an article that reads "The Café Nostalgica Thursday Night Coffeehouse has been a hotbed of emerging artistic talent..." (Smiderle, 2003, p. E3). Two additional articles, one in the *Ottawa Sun* (Wigney, 2005), and one in the *Ottawa Citizen* (Langston, 2005) have profiled performers who are part of the regular musical programming of the Café's creative scene.

Additionally, the Thursday coffeehouse night together with its employees has been variously acknowledged in the liner notes of several musical discs released by among others a Juno-nominated artist, on numerous websites, and in songs written about the night. Moreover, the night has been featured on community television (Rogers 22, September, 2003), not to mention numerous personal acknowledgements. The night has also spawned

several new musical groups and collaborations, and at the behest of the many patrons and performers, a music and poetry disc featuring the artists who routinely perform during the night has been recorded and produced (which is now played on campus radio stations in locations as diverse as Fredericton, Ottawa, Toronto, & Edmonton). Since this initial recording several additional musical records have been produced at the Café and credit its unique and supportive environment. The Café and the Graduate Students' Association (GSAED), through my office as VP-Services, have also helped support, in resources and spirit, a monthly poetry poster entitled "Spire" which at the time of the study was loosely centred on the poetry readings at the Thursday night coffeehouse (McKay, 2003).

Changing the City of X's approach to graffiti art

Given that the present study on creativity involved interviews with young adults involved with graffiti art, in August 2002, I spoke at length with the Coordinator for the City of X's Community Pride Program about creating spaces for graffiti artists to paint and display murals. We discussed various models and approaches for controlling graffiti in the city. In addition, I corresponded via email with a local city councillor who had become involved with the issue. Although I would not take credit for a change in policy, I would guess that our discussions did contribute in some small manner. I am delighted to report that according to Betty, a participant I interviewed in January, 2003, "his [City of X's Community Pride Program Coordinator] mind was totally being open. He said he felt ashamed of City X, because, it didn't have um murals or, or art for the public and so, he was wanting to work with us [her arts group], and, and to get that moving you know?"

High school participants

Since a substantial portion of the present study took place in a high school over several months and involved interviews with fifteen senior high school students, I wanted to contribute in a positive manner to their environment. To that end, on several occasions I spoke to the principal and most of the teachers involved in this project and shared with them the positive news that the majority of the students I spoke to found their school to be supportive of their learning and their creativity. I also submitted and circulated a written memo detailing the positive impressions I had heard from the students I interviewed. In addition, I addressed a school-wide assembly about my own educational experiences: the good, the bad, and the ugly. By sharing my background high school experience which, marks wise, was less than stellar, as well as my later university successes, I hoped that I might demonstrate by example that anything is possible with the right motivation. Moreover, the research I am currently conducting will eventually be reported in various professional journals which will, hopefully, in some small way, contribute to improved educational conditions for creative and potentially creative young adults.

Reciprocity

As well, every participant in the present study received remuneration in the form of a \$20 record store gift certificate or in some cases \$20 for their time and effort; apart from a doctoral research grant, I received no separate funding or compensation for this out-of-pocket expense. Furthermore, fully acknowledging and adhering to Article 2.2 of the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (Public Works and Government Services Canada, 2003) which states that “the offer of benefits in some contexts may amount to undue inducements” (p. 2.4), it should be made abundantly clear

that participants were not aware of the fact that they would be receiving any compensation, nor was it advertised— only after the interviews were completed in their entirety did participants receive this small token of appreciation.

Validity and research as praxis: Conclusion

As previously reviewed, ontological, epistemological, and methodological choices have far-reaching effects on how validity is viewed; these effects greatly shape the role and responsibility of the researcher as well as what constitutes valid, “good” research.

According to the constructivist perspective adopted for the present project, validity is a function of the researcher’s active participation and effort at translating his/her research and position of privilege into tangible, positive contributions in the communities involved.

Given the realities of my current position as a doctoral candidate, I feel I have, to the best of my ability, engendered local, positive change. Next, data collection techniques and procedures are examined.

Modes of Data Collection

Data were collected via a short biographical questionnaire as well as a guided conversation (interview) that employed a semi-structured protocol.

Biographical questionnaire

A biographical questionnaire consisting of ten questions (see Appendix A) was developed in order to allow the collection of routine data simply and efficiently (Anderson, 1990). Consisting of both open- and closed-ended questions, the questionnaire provided a standard method for collecting needed background and demographic information that could be consulted during subsequent data analysis stages.

The questionnaires were administered in an informal manner with the researcher providing clarification as requested. And although questionnaires are not particularly well suited for the collection of detailed and personalized data (Anderson, 1990; Bogdan & Biklen, 1998), the subsequent interviews allowed participants ample opportunity to reveal their unique perspectives in their own words.

Interview protocol

The interviews, which more aptly could be characterised as “guided conversations” were conducted using an interview guide that was strategically developed to gain insight into each of the research questions steering this study. The guide consisted of 14 open-ended questions (see Appendix B).

The interview questions were specifically designed to elicit participants’ perceptions of the various processes and environmental factors that lead them to channel their creativity in various fields and degrees of social acceptance.

Strauss and Corbin (1998) advise that interview protocols should not be adhered to rigidly and should give way to emerging concepts. Glaser (1998), on the other hand, advocates abandoning the interview guide altogether. The guided conversations (interviews) adopted an interview protocol which included both researcher-directed and participant-directed questions; by doing so not only were aspects of both Glaserian and Straussian applications of grounded theory combined, but university and ethics requirements were also satisfied.

Method

Participant selection process:

Twenty-six (26) participants were interviewed through the course of the present study; their ages ranged from 17-31, with the majority (22) of the young adults aged between 18-24. They were chosen because they are notably creative in fields of various degrees of social acceptance and because they represent a wide variation of schooling experiences and backgrounds. Specifically, they were selected as a result of: peer and teacher nominations in a high school (10: 6M, 4F), nominations from two guidance counsellors in a high school (5: 5M), judgement of products and informal peer nominations (7: 7M), and snowballing and informal peer nominations (4: 2M, 2F). As well, a variety of organisations were contacted and meetings held in order to solicit their help with finding participants, for example, Prison Arts Foundation, John Howard Society (both nationally and locally), Rittenhouse, and the City of X; however, although sympathetic and seemingly interested ultimately none agreed to participate. No reasons for their failure to re-contact me were given and I respected their decision without any form of pressure as was agreed upon initial contact.

A large part of creativity research takes place in educational settings where teacher ratings are a commonly used criterion of creativity (Hocevar & Bachelor, 1989). Peer nominations have also been used in the past as a criterion of creativity (Hocevar & Bachelor, 1989). Torrance (1965) has found that pupils receiving a large number of teacher or peer nominations on various criteria of creative thinking achieved higher scores on tests of creative thinking than did their peers not so nominated.

Similarly, outside of the school context “peer nomination is a common measure of creativity. With this technique, experts in a particular domain are asked to nominate especially creative members of their fields” (O’Quin & Besemer, 1999, p. 416). Still other situations call for the use of eminence as a criterion for deeming someone creative “where recognition for creativity has been given by society or by relevant professional organizations in forms including prizes, awards, honors, publication, and other forms of recognition” (Richards, 1999, p. 31).

In order to avoid ambiguity in the case of peer and teacher nominations, a standard for identifying creative behaviour was employed. Peers and teachers were asked to base their nominations on the following specific criteria: ideational fluency (lots of ideas), flexibility (many different ideas), originality (unique ideas), curiosity, problem-solving ability, and inventiveness (Hocevar, 1981). Additionally, they were reminded that creativity may be expressed and viewed as positive, socially accepted behaviour, or negative, socially non-accepted behaviour depending on one’s perspective. For instance, “it could be argued...that if some individual or group has a goal and devises a way of achieving it, this is always positive from the actor’s perspective. However, from some, often most, other

perspectives, the outcome of creativity [may be negative]” (James, Clark, and Cropanzano, 1999, p. 212).

One should keep in mind that participants were chosen purposively not for conventional generalisability, but rather for “an understanding of the conditions under which a particular finding appears and operates...” (Huberman & Miles, 1998, p. 204). In the case of grounded theory research this process is referred to, and guided by, *theoretical sampling* which is a concept central to most versions of grounded theory methodology.

Theoretical sampling is purposive sampling aimed at further developing the emerging theory; not for increasing generalizability of results (Glaser, 1978). Strauss and Corbin (1998) define it as:

Data gathering driven by concepts derived from the evolving theory and based on the concept of “making comparisons,” whose purpose is to go to places, people, or events that will maximize opportunities to discover variations among concepts and to densify categories in terms of their properties and dimensions. (p. 201)

Often grounded theory sampling is not predetermined before undertaking the study, but rather evolves during the process (Strauss & Corbin, 1998). However, since the present research is an extension of a previous grounded theory study (Spooner, 1999), in this particular case an a priori theoretical sampling matrix was developed. A priori theoretical sampling may be employed when conducting a follow-up to previous grounded theory research where, prior to entering the field, one already has a notion of certain categories whose properties and dimensions require greater exploration. In this instance, in order to

further the scope of previous research it was deemed necessary, and of interest, to capture the creative and educational experiences of young adults representing a wide variation of schooling experiences who were involved in creative activities that may be viewed as either socially accepted or socially non-accepted.

An a priori theoretical sampling matrix combines aspects of both an *open sampling* technique where participants are sampled systematically rather than theoretically (Strauss & Corbin, 1998) and more traditional theoretical sampling techniques where comparisons are made based on categories that need to be more fully developed. Perhaps it is unnecessary to underline that a certain degree of flexibility is required both in order not to stifle creativity as well as to allow the investigator the opportunity to take advantage of fortuitous incidents that occur in the field (Strauss & Corbin, 1998). At the core of grounded theory is the process of simultaneous coding, collecting and analyzing data throughout the research project (Glaser & Strauss, 1967; Charmaz, 1983). Differences in data often emerge naturally as a result of the natural variations in the situations experienced by participants (Strauss & Corbin, 1998).

Furthermore, as Charmaz (1995) illustrates, there exists much diversity in the application of the theoretical sampling techniques amongst grounded theory researchers. For example, she explains: "I recommend conducting theoretical sampling later in the research to ensure that you have already defined relevant issues and allowed significant data to emerge. Otherwise, early theoretical sampling may bring premature closure to one's analysis" (p. 45). Elsewhere in her work Charmaz (1990) has elaborated on this point by stating, "delaying focused theoretical sampling fosters gaining an in-depth understanding of the realities and issues at hand. Hence, theoretical sampling fits into the research and analytic process much later than initial sampling of sites, people, or documents (p. 69)".

The a priori theoretical matrix combined with a flexible sampling outlook that did not blindly turn away serendipitous sampling moments, a strategy adopted for the present study, ensured that a wide variety of participants representing a rich diversity of creative activities and educational experiences could be incorporated into the final grounded theory analysis. Guiding the sampling of participants for the present study were the following factors: a) whether they tended to gravitate towards socially accepted modes of creative expression, or socially non-accepted modes of creative expression, and b) whether they represented a wide range of schooling and training experiences; ranging from succeeding, or having had success in high school (grade average $\geq 70\%$); not succeeding or having had success in high school (grade average $< 70\%$); having been previously sentenced for crimes, but now succeeding in a regular high school, having dropped out before completing high school; having gone on to post-secondary education; or being in transition between educational programs and career employment.

Procedure

Initially, permission to conduct research within a city high school was sought through the local school board's Committee for Ethical Research; however, this was denied without any possibility of appeal or methodological modification. Therefore, a different high school, in another school board was contacted and the principal agreed to grant permission for the study to be undertaken.

Nomination forms were placed in each teacher's mailbox (see Appendix C & D for nomination forms). With the help of the school's administration, student forms were given to each teacher of OAC (Ontario Academic Credit [senior year of high school]) classes; these would be distributed to students and subsequently collected by the teacher. In

addition, in order to provide maximum possibility for participation, blank teacher forms were left in the office for teachers who had misplaced the original forms. Blank student forms were also left with the librarian for students who may have been absent or who had a scheduled study period during the initial distribution. Announcements were made throughout the week to inform OAC students who had not completed a form that one could be obtained from the librarian and also to remind students and teachers to return the completed forms to a drop-off box placed in the school secretariat office (see Appendix E for text of announcement). Teachers were asked to give students time to complete the form as well as to direct students not to complete more than one form (see Appendix F for teacher instructions).

Seventy seniors, approximately half of the total number of seniors in the school, had returned acceptable forms (forms nominating Hollywood actors or with vulgar messages were not included). As well, thirteen teachers responded to the nomination questionnaires. Their nominations were logged and the frequencies tabulated. As a result of the aggregate, rank-ordered ratings on both the teacher and peer nomination forms combined, thirteen students were given an introductory letter asking them to provide a phone number so that they might be contacted with more details about the study (see Appendix G for introductory letter). After a second reminder, ten of the thirteen students initially contacted returned the form and subsequently agreed to participate. The school's two guidance counsellors also nominated five other students and each agreed to participate in the study.

Upon arrival for the interview, the rationale of the study was briefly explained to the participants, although only in terms of the university requirements needed to complete a doctoral thesis and the present author's general interest in creativity and education. Little

information was given before the interviews in order to minimise any perceived researcher bias or Halo effect on the part of the participants; or what Glaser (1998) refers to as being “properlined” which occurs when participants say only what is proper to tell the researcher, or what they feel they are supposed to say. Additionally, before any information was collected, participants read the consent form and only once I had answered any of their questions did they sign it (see Appendix H for consent form); except in the few cases where the participant was under the age of consent. All but two participants had attained the age of majority and prearrangements were made in order for one of their parents to also sign the consent form. Confidentiality was assured to all participants. Each of the fifteen seniors (either in grade 12, OAC, or somewhere in between) who participated was interviewed individually in a booked spare office within the school. Ten of the remaining eleven participants not selected as a result of high school peer and teacher nominations were interviewed in my office at the university. The single remaining interview was conducted via email to total 26 (15+10+1).

Each participant was asked to complete a short biographical questionnaire. The interviews lasted between thirty and ninety minutes, with an average time of forty minutes. They were, with prior explicit consent, audio-taped for transcription purposes. Mainly conversational in nature, the interviews were much more akin to a guided conversation than to an interview; participants felt comfortable enough to share many personal details and anecdotes. Although I used an interview guide, the interviews allowed considerable latitude for participants to pursue a range of topics and shape much of the interview content.

Moreover, as suggested by the literature (Bogdan & Biklen, 1998), the guide did provide the interview with a general focus while allowing it to remain open to new and

emerging themes. As well, probes and follow-up questions were employed throughout the interview in order to clarify and complete answers, signal expected depth, and demonstrate interest. Adopting a flexible style with regard to the order and general procedure of the interview protocol allowed the interview to adapt to each of the informants' personal style.

Following the advice of Bogdan and Biklen (1998) for open-ended interviewing, participants were treated like experts. Also serving as guidance were Spradley's (1979) suggested techniques for performing and completing successful interviews. Spradley's suggested techniques include: listening instead of talking, taking a passive rather than assertive role, expressing verbal interest and showing interest by eye contact and other non-verbal means. These techniques and the special nature of each of the participants combined to allow for rich, textured, and productive interviews. At the very end of the interview, participants were given an appreciation gift certificate valid for redemption at a local music store, or in some cases a twenty dollar cash equivalent. In the case of the one interview conducted via email the token gift certificate was declined by the participant stating his interest in the project was sufficient remuneration.

Data analysis

Each interview was transcribed and analyzed following grounded theory techniques outlined in Glaser and Strauss (1967), Glaser (1978, 1992, 1994, 1998), Strauss and Corbin (1990, 1998) and Charmaz (1983, 1990, 1995, 2005). Also informing the analysis were the biographical questionnaires, notes taken during and after the interviews, and memos composed throughout the course of this research.

Grounded theory is an evolving method; earlier works (e.g., Glaser & Strauss, 1967, Glaser, 1978) tend to be at once phenomenological as well as positivistic and thus, at times,

seemingly inconsistent and confusing (Annells, 1996, 1997; Charmaz, 1990). Also confounding the application of the grounded theory methodology is the fundamental cleavage between the method as applied by Glaser (e.g., 1978, 1992, 1994, 1998) and that of Strauss (e.g., 1987) and Strauss and Corbin (e.g., 1990, 1998) (Annells, 1997; Melia, 1996). Nevertheless, techniques, suggestions and procedures were adapted and adopted as best seen fit in order to further the research process and remain consistent among ontological, epistemological and methodological positions assumed by the present author. As Barney Glaser (1996), a co-founder of grounded theory states: “[grounded theorists] show their particular adjustments of grounded theory to handle the unique conditions of their research situation. They do not “baggage” wrestle ... rather they bend grounded theory methodology carefully to their emergent needs” (p. xii). Accordingly, the data analysis procedures which follow most closely adhere to the social constructionist methods as outlined by Charmaz (1983, 1990, 1995, 2005). However, methods, techniques and suggestions from Strauss (1987), Strauss and Corbin (1990, 1998) and Glaser (1978, 1992, 1994, 1998) imbue the present application and analysis.

Coding proceeded in a two-phase process. First, an *initial* coding phase was conducted and subsequently followed by a second, *focussed* coding phase. Examining the collected data in a line-by-line fashion the researcher studies the data for what he or she can define and discover. For instance, actions or events occurring or being represented are labelled. Proceeding in a line-by-line manner prompts the researcher to gain a full theoretical accounting of the data and “keeps the researcher examining the *collected* data, rather than lapsing entirely into theoretical flights of fancy which have little connection to the data” (Charmaz, 1990, p. 1168). It also helps dispel earlier preconceived assumptions

about the data, and facilitates viewing the data analytically (Charmaz, 1983, 1990, 1995; Glaser, 1978).

Data were examined in this manner in order to actively toy with, and develop leads, ideas, and issues. Systematically and gradually, codes are rendered into categories which are then defined analytically by delineating and sorting their various properties and dimensions. Emerging categories are constructed (discovered) and are clearly shaped, however implicitly, by the author's assumptions about reality as well as his or her research perspectives and interests (Charmaz, 1990; Denzin & Lincoln, 1998; Glaser, 1996).

The same material was coded several times from many differing vantage points in order to slowly create order in the emerging themes. Each putative category must earn its way into the analysis. Data were not examined simply for description or sequence of event, but rather for possible patterns, processes, conditions, participant actions and beliefs, changes in the process and their consequences (Charmaz, 1995). Two techniques not suggested in the literature consulted which proved to be quite useful in allowing themes to emerge were reading the transcripts while listening to the actual interview tapes and also reading only the participants responses without initially reading the questions. Also, during the initial write-up of results, both the hardcopy of transcripts as well as each of the transcription data files are kept open on the desktop for quick consultation and direct cutting and pasting.

During *focussed* coding, the selective and conceptual phase, initial categories were weeded out leaving a more limited set of developed categories. Categories are no longer simply labelled or summarized topics, but rather are analytically raised to conceptual categories and applied to large amounts of data. Charmaz (1983) states:

The purpose of focused coding is to build and clarify a category by examining all the data it covers and variations from it. Frequently, this means going back through the data it covers and resifting it in relation to the newly devised category. New categories may subsume earlier materials that were left uncoded or were coded in different ways. (p. 117)

During this phase, constantly comparing and questioning, data with data, situation with situation, and concept with concept, facilitates developing general categories which can then be broken down into their respective subcategories. Constant comparison of data is done in order to explicate and exhaust each of their various properties. Here it is important to keep in mind that the researcher actively shapes the “discovery” process. Order is not discovered within the data but rather, created by the researcher’s explication, organization and presentation of the data (Charmaz, 1990). These more fully developed categories are then woven together into a processual analysis rather than treated separately as single topics. By concentrating on defining and developing more generic processes, codes are raised to categories with defined properties, as well as specific conditions under which they arise, continue and permutate. Additionally, their consequences as well as relations to other categories should be elucidated. Moreover, categories may be created and labelled by the researcher or they may be taken directly from respondents’ discourse, in which case they are referred to as *in vivo* codes. As Glaser (1978) states,

[a grounded theorist] is constantly looking for the “main theme” [core category], for what-- in their view-- is the main concern or problem for the people in the setting, for what sums up in a pattern of behavior the

substance of what is going on in the data, for what is the essence of the relevance reflected in the data, for the gerunds which bring out process and change (two properties of BSP's). (p. 94)

At this point, the extant literature may be used as direct data as well as a source of questions and comparisons in an attempt to develop an increasingly informed substantive theory. A major strength of the grounded theory method is its open-endedness and flexibility, allowing researchers to pursue leads and ideas as they develop (Charmaz, 1990). Data coded one way may also be coded in several other ways as the constant comparing proceeds. Grounded theories are not verified in a traditional sense, rather, as new data emerge they are compared and the ever developing theory simply gets modified in order to produce a theory of ever increasing conceptual power and durability. Glaser (1996) states, "new incidents do not prove a concept or hypothesis wrong, they are just more grist for constant comparison, and the subsequent generation of new properties" (p. xii) . Therefore, through the process of theoretical sampling, which includes the extant literature, the theory is refined and elaborated, leading to greater and greater conceptual density.

Outlining the various steps throughout each of the data analysis phases may give the impression that these were completed in a neat and orderly fashion. On the contrary, illuminating this process are various levels of codes and memos which pepper most available sides and blank spaces of the transcript sheets. Additionally, more elaborate memos were kept in a log book together with notes as to what properties or comparisons each entry referred to and where in the transcript sheets they could be found. Memos varied in conceptual depth from simple code labels to intricate and complex notes on connections and

relations between categories. Furthermore, transcripts and memos were reread several times with each subsequent examination becoming more abstract than the previous.

The techniques outlined above represent the fundamental practices for completing a grounded theory research project that results in an analysis of a field at a substantive level. Analysis need not remain at this level, however; formal theories may also be developed utilizing a grounded theory methodology. Nonetheless, as with the present project, the majority of grounded theory researchers typically strive to develop rich conceptual analyses emphasizing “analytic categories that synthesize and explicate processes in the worlds they study rather than constructing tightly framed theories that generate hypotheses and make explicit predictions” (Charmaz, 1995, p. 48). The data analysis techniques and procedures, although derived from the original methods as presented by Glaser and Strauss (1967), were significantly informed by later elaborations and explications of the method (e.g., Charmaz, 1983, 1990, 1995; Glaser, 1978, 1992, 1998; Strauss, 1987; and Strauss & Corbin, 1990, 1998).

Data presentation

A few points should be noted regarding the presentation of the findings subsequent to data analysis. Striving for greater transparency, I have attempted to eschew the common practice of providing interpretations backed by punchy, short-length snippets quoting many participants but using few of their own words to back up or legitimise the interpretation. I agree that such a strategy does tend to tell a “cleaner”, perhaps even more “convincing” story, but does not accurately reflect the nature of qualitative data. There are two facets of validity and “voice” at play here. First, there is the issue of *fairness* in regards to participant voice—input and perspectives from every participant “should be apparent in the text” (Guba

& Lincoln, 2005, p. 207). Second, researchers must become "...simultaneously more conscious of having readers 'hear' their informants...[and] letting participants speak for themselves...." (Guba & Lincoln, 2005, p. 209). As suggested by Guba and Lincoln, and Wolcott (2001), to a large degree, the descriptive material will be kept separate from the more in-depth analysis to be presented in the Discussion chapter. For instance, Wolcott (1994) advocates:

In striking a balance between providing too much detail and too little, I would rather err on the side of too much; conversely, between overanalyzing and under analyzing data, I would rather say too little. Accordingly, my accounts are often lengthy; informants are given a forum for presenting their own case to whatever extent possible and reasonable.... More subtly, my growing bias toward letting informants speak for themselves is exactly that-- a bias in favor of trying to capture the expressed thoughts of others rather than relying too singularly on what I have observed and interpreted. (p. 350)

Additionally, acknowledging Lather's (1993) insightful characterisation of truth and meaning as being essentially unreliable and unrepresentable, the findings are nevertheless hoped to embody an authentic attempt at a composite portrait of the evolution of the creative person—they are intended as a mosaic pieced together from kernels of penetration developed as a result of each interview. Naturally, they are not intended as an isomorphic account of any one creative individual, but rather, as a general overview based on specific details and insights learned throughout the course of the research. In doing so, they aim to reflect the contradictions of self and of re-presentations of self. For as both Gergen and Gergen (2000)

underscore, “each individual participant is polyvocal” (p. 1028), and Lather (1993) reminds, what constitutes an important finding and what an inconsequential detail may always be called into question.

Every effort was made to present the results within emergent categories and in the unbleached words of the participants themselves. Nevertheless, order was imposed on the data. The following findings and the categories which give them shape are presented under the five major themes: Initial Socialisation, Discovering Creativity, Creativity Expressed, Purposive Honing, and Consequences. Together they create, in Duchamp fashion, a word-mosaic of action. I am referring here to the art of Marcel Duchamp, and particularly to “*Nude Descending a Staircase # 2*” (please see Appendix K). The qualitative research I am attempting to construct, like cubist art, “represents subject matter simultaneously from different perspectives” (Miller, 2000, p. 422); while also containing a fourth dimension which is motion in time.

It should be noted that when one or only a few participants are quoted as having discussed any given aspect of the creative process it may reflect the fact that they appeared more insightful and/or articulate about that particular aspect of the process, or that the insights into the creative process came to light as a result of the direction the relatively free flowing interviews had taken given the personalities, time, and spontaneous intangible factors involved.

Moreover, having a great number of participants quoted as discussing any given insight may simply reflect the fact that it was a generally more obvious point. In addition, needlessly quoting many participants similarly repeating the same point does nothing to increase the value of the findings other than to make them appear more convincing to some

readers consciously or unconsciously holding to quantitative notions of validity. Recall there are two main issues involved in regards to validity and participant voice: 1) input and perspectives from every participant “should be apparent in the text” (Guba & Lincoln, 2005, p. 207), and 2) researchers must allow “participants [to] speak for themselves....” (Guba & Lincoln, 2005, p. 209). In fact, validity may very well be served to a greater degree by quoting fewer participants at greater length sharing an insight, thus allowing them to be “heard” in a more transparent, in-depth manner, than by quoting many participants in truncated and repetitious fashion making the same point stripped of context and with sterilised precision.

Summary

The final sample included twenty-six participants selected as a result of peer and teacher nominations, nominations from two guidance counsellors in a high school, judgement of products, and snowballing and informal peer nominations. Participants were interviewed following an open-ended guided conversation which was itself guided by an interview protocol. Interview times ranged from thirty to ninety minutes. Each interview was audiotaped and transcribed verbatim. Participants also completed a short biographical questionnaire.

Additionally, a social constructionist grounded theory approach was employed to analyse the data. Recall that this perspective assumes an active, non-neutral observer “whose decisions shape both process and product throughout the research” (Charmaz, 1990, p. 1165). As well, interactionists explain social behaviour in terms of intertwined dialectical processes (Rock, 1982). The final analysis proceeded by an initial line-by-line coding and was subsequently followed by a second more focussed coding.

Next, the findings of the study will, as much as possible, be presented in the manner suggested by Wolcott (2001); “no footnotes or academic asides, no intrusive analysis, just the facts, carefully presented and interestingly related at an appropriate level of detail” (p. 31). Although as he reminds “...there is no such thing as *pure* description. Distinguishing among description, analysis, and interpretation is only a matter of emphasis” (p. 36).

CHAPTER 4: FINDINGS

- *“We would argue that interpersonal, social, and economic questions are not only of great relevance to our understanding of creativity as a larger, social and historical phenomenon, but can have direct influence on the potential of individuals to be creative, on the reception of works, and on the direction of their creative efforts.... We are therefore interested in individuals, groups, and communities operating in their social, political, and economic contexts, along with the larger philosophical, methodological, and theoretical problem of differentiation between social and personal, external and internal, what is necessary and unnecessary to our understanding of creativity, and the whole issue of the role of environments in fostering or suppressing creativity ” (Montuori & Purser, 1999, p. 7).*

The findings are divided into two main sections. In section I, participants are introduced via profiles. In section II, a further examination of the findings are presented.

Section I: Participant Profiles

Participant demographics:

The twenty-six participants ranged in age from seventeen to thirty-one years old. Their self-reported average grade throughout high school had a wide range from 48% to 93%, with a median of 78% and a mean of 76%.

The participants of the study:

The following profiles are intended to give the reader a brief apercu of the participants who took part in this study. They by no means do justice in capturing these outstanding, dynamic, and spirited young men and women. They do, however, permit one to gain a cursory degree of familiarity with each of them. Note that participant ages reflect their age at the time the interviews took place.

1. **Andreas**

A young woman, just shy of her eighteenth birthday, Andreas is the firstborn. She lives with her mother, stepfather, and a younger sister and stepsister. At the time of the interview, she

was completing her final year of high school. Her estimated average grade throughout high school is ninety percent. Her creative activities include drawing, painting, and photography. In her opinion, she has not used her creativity in a manner that could be characterised as socially non-acceptable. For her, “creativity is an individual’s ability to think outside the box and create new and interesting things using their own ingenuity and skills. There are many forms that creativity takes and they must be respected. Creativity can be a personal goal or discovery or maybe something you depend on for an income.” She was identified by peer and teacher nominations and has won awards for being in the top 5 percent academically in her high school.

2. Armand

A young man, just shy of his eighteenth birthday, Armand is the youngest child. He lives with both his mother and father and has one older sister. At the time of the interview, he was completing his final year of high school. His estimated average grade throughout high school is eighty-eight percent. His creative activities include: constructing art exhibits, student leadership (he has developed several student council activities in this role), performing as the MC for the school’s talent show, sports, having many ideas, and being witty. He discussed pranks and clever put downs as forms of his creativity that could be characterised as socially non-acceptable. For him creativity is “the expression of an individual’s individuality, in any format they feel capable of expression within.” He was identified by peer and teacher nominations and has won awards for sports, leadership, a national quilt competition, and a computer company artistic design competition.

3. Betty

Betty is a twenty-one year old female; the firstborn, she lives with her mother and father and a younger brother and foster brother. At the time of the interview, she was not enrolled in school. She completed grade twelve in 1999. Her estimated grades during high school started in the eighties and nineties and ended in the sixties. Her creative activities include: various painting formats, for instance, professional murals, studio, and live installation work, as well as graffiti art, and art as activism. She discussed the form her art takes as sometimes being legal, other times illegal (graffiti). According to her, the subject matter of her art (lesbian scenes) could be characterised as socially non-acceptable creativity. When asked to define creativity, she wrote: “something spontaneous. There is debate as to whether thought can be classified as art-- Thought alone. So that’s step 1 but I believe that devotion will help aid to manifest your thoughts.” She was identified through snowballing and informal peer nominations; and apart from working as a professional artist, her artwork won the yearbook cover design at her high school, as well as being displayed at City Hall.

4. Briag

Briag is a twenty-one year old male; the youngest child, he has one older brother. Originally from France, during high school (Lycée), he lived with both his mother and father. At the time of the interview, he was enrolled in a university undergraduate program. His estimated grade average throughout high school is seventy-five percent. His creative activities include: playing various forms of music and musical instruments (guitar, drums, and saxophone), singing, and to a lesser extent photography. In his opinion, he has not used his creativity in activities that could be characterised as socially non-acceptable. For him creativity is “bringing something unreal into reality but going beyond what already exists—to make

already “exploited” fields broader or open.” He was identified by judgment of products and informal peer nominations.

5. Camille

Camille is a nineteen year old female, the youngest child, she lives with her mother and father and her three older sisters. At the time of the interview, she was completing her final year of high school. Her estimated average grade throughout high school is eighty-two percent. Her creative activities include: music (piano), step dancing, student council leadership, and teaching. In her opinion, she has not used her creativity in activities that could be characterised as socially non-acceptable. For her creativity is “being different or doing things differently. Putting a spin on things. Having fun!” She was identified by peer and teacher nominations. In addition to receiving various certificates and trophies throughout her musical career, she has won awards in sports and for being on the honour roll.

6. Chase

Chase is an eighteen year old male, the third child, he has two older brothers and eight younger sisters (some half). He currently lives with his mom, but, at times, has been kicked out of his house and has lived in foster and homeless “houses”. At the time of the interview, he was finishing courses in order to return to high school the following year to complete his final year. His estimated grade average throughout high school is sixty percent. His creative activities include: computer programming and graphics, drawing, and sports. In his opinion, he has used his creativity in what could be characterised as socially non-acceptable to test boundaries and to invent dirty words. For him creativity “it’s what makes you an individual.

Your ability to improvise. It provides ideas.” He was identified by the high school guidance counsellors.

7. Evoke

Evoke is a twenty-four year old male. He is the youngest child and has one older brother and sister. Now living with his girlfriend, during high school he lived with his mother. At the time of the interview, he was not enrolled in school. He completed high school in 1997 or 1998 (he could not remember). His estimated grade average throughout high school is sixty-eight percent. His creative activities include: painting, drawing, acting, directing short films, and surviving in life without 9-5 employment. Using his talents to paint graffiti art is one form his creativity has taken that could be characterised as socially non-acceptable; he has been previously arrested for doing so. When asked to define creativity he wrote: “I am mostly a visual artist, graffiti painter; rarely planning, I improvise paintings free flow.” He was identified through snowballing and informal peer nominations. He has won awards for his murals in high school, received an art gallery grant to develop a 10 minute short film, and has held various solo painting exhibitions in professional art galleries.

8. George

George is a nineteen-year-old male. He is the second child and has one older brother, one younger brother, and seven younger sisters; he lives with his grandparents. He has been in and out of prison and detention centres for fighting. At the time of the interview, he was finishing courses at both the OAC and grade twelve level. His estimated grade average throughout high school is seventy-five percent. His creative activities include: computer programming, building and fixing computers, acting, and songwriting. In his opinion, he has used his creativity in what could be characterised as socially non-acceptable to plan

ambushes on people for fights. For him creativity is “coming up with something original.” He was identified by the high school guidance counsellors and has won awards in wrestling, track and field, and other sports.

9. Jack

Jack is an eighteen-year-old male, the firstborn child, he has one younger brother and lives with his mother and father. At the time of the interview, he was completing his final year of high school. His estimated grade average throughout high school is eighty percent. His creative activities include: art (sketching, drawing, and painting), science (able to problem-solve and to come up with many different ideas), and sports. In his opinion has not used his creativity in what could be characterised as a socially non-acceptable manner. For him creativity is “inventing or visualizing something original and transcendent.” He was identified by peer and teacher nominations.

10. Jimi

Jimi is a twenty-four year old male. He is the firstborn and during high school he lived with both his mother and father, and younger sister; he now lives alone. He graduated from high school in 1997, and subsequently earned a Computer Science engineering degree; not working in his field at the time of the interview, he was not enrolled in any other studies. His estimated grade average throughout high school is ninety-two percent. His creative activities include: playing and composing various forms of music on wide variety of instruments (organ, keyboards, and wind instruments), computer programming, and in high school, poetry and science. In his opinion he has used his creativity in what could be characterised as a socially non-acceptable manner to get out of class and for various other high-school pranks. For him creativity is “the capacity to produce new ideas or products,

using one's past experience." He was identified by judgment of products and informal peer nominations. He has won first place at the National Science Fair competition and first place at the Regional finals in Français. He now supplements his income working as a studio musician and by playing keyboards in a working jazz band.

11. Josh

A nineteen year old male, Josh is the firstborn child. He lives with both his mother and father and has one sister and one brother. At the time of the interview, he was completing his final year of high school. His estimated grade average throughout high school is eighty-seven percent. His creative activities include: playing and composing music (piano), painting and other art projects, acting, teaching, and step-dancing. He discussed using his creativity to bend the truth in order to keep up moral standards (in the context of his bisexuality) as forms of his creativity that could be characterised as socially non-acceptable. For him creativity is "the ability to approach problems of [a] different nature and be able to solve them. To come up with new ideas." He was identified by peer and teacher nominations and has been the "X" County medallion winner for the highest mark in high school in both year 4 and year 5. He has also won trophies for sight reading and piano solo in the Kiwanis music festival.

12. Kyle

A nineteen year old male, Kyle is the firstborn child. He lives with both his mother and father and has one sister and one brother. At the time of the interview, he was completing his final year of high school. His estimated grade average throughout high school is seventy-five percent. His creative activities include: painting, teaching, problem-solving, having lots of ideas, and sports. He discussed painting nudes as an expression of his

creativity that could be characterised as socially non-acceptable. For him, creativity “would be something that you see fit, something that pleases, and makes you feel good about yourself. An idea, thought, or just something you come up with on the spur of the moment which you yourself can define as creativity.” He was identified by peer and teacher nominations and has been a badminton and volleyball MVP at several county finals.

13. Kathleen

A nineteen year old female, Kathleen is the youngest of six sisters. She lives with her mother and father. At the time of the interview, she was completing her final year of high school. Her estimated average grade throughout high school is seventy percent. Her creative activities include: making her own clothes and handcrafts, painting, and computer design. As a manner in which she has used her creativity in what could be characterised as socially non-acceptable, she discussed bending the truth to get out of awkward situations. She writes, “creativity to me is the ability to think and create differently and effectively.” She was identified by peer and teacher nominations.

14. Lee

Lee is an eighteen year old young man. He is the fourth child and has two older brothers and one older sister. For most of his life he lived with his mother where there was alcohol and drug abuse in the home; he now lives on his own. He has been in and out of prison and detention centres for breaking and entering. At the time of the interview, he was finishing courses at the grade twelve level. His estimated grade average throughout high school is eighty-two percent. His creative activities include: computer programming, sculpting, drawing, and woodworking. He is ambivalent as to whether he has used his creativity in the socially non-acceptable activities in which he was engaged; for instance, selling and growing

drugs and breaking and entering. For him creativity is the “personal expression of thought on a graphical medium.” He was identified by the high school guidance counsellors.

15. Mathew

A nineteen year old young male, Mathew is the youngest child. He lives with both his mother and father and has one older sister. At the time of the interview, he was completing his final year of high school. His estimated grade average throughout high school is eighty percent. His creative activities include: painting, drawing, playing guitar, student leadership, and sports. He discussed his witty remarks as a form of his creativity that could be characterised as disrespectful and socially non-acceptable. For him creativity is “the ability to express yourself in any way, shape, or form” He was identified by peer and teacher nominations and has won a Canadian Legion art contest as well as a student leadership award.

16. Otis

Otis is an eighteen year old male; the firstborn, he lives with his mother together with one younger brother. At the time of the interview, he was completing his final year of high school. His estimated grade average throughout high school is seventy percent. His creative activities include: developing and directing short films, painting, sculpting, constructing various artworks, making people laugh, teaching, student leadership and verbal jousting/quick wittedness. He discussed pulling off a wide variety of pranks (one attracted the attention of the police; no charges were laid, but he was compelled to make restitution) and acting the class clown as forms of his creativity that could be characterised as socially non-acceptable. For him creativity is “the use of the imagination to create.” He was identified by peer and teacher nominations and has been elected to the student council.

17. Patricia

Patricia is a twenty-two year old female and the youngest child. During high school, she lived with her mother and father; she now lives with two roommates and a cat. At the time of the interview, she was not enrolled in school. She completed her final year of high school in 1999. Her estimated average grade during high school is eighty-two percent. Her creative activities include: designing and making clothes, embroidery, painting, being on the improvisation team, acting, developing and directing short films, and stencilling. She discussed graffiti art and pranks as forms of her creativity that could be characterised as socially non-acceptable. For her creativity is “to invent or construct ideas or objects by drawing upon one’s influences, experiences, and education.” She was identified through snowballing and informal peer nominations; and as well as having her art work displayed in several galleries, during high school she also won prizes in drama and history, and was on the honour roll.

18. Palooka

Palooka is a thirty-one year old male and the firstborn. During high school, he lived with his mother and father and his younger sister. He now lives with his wife and two children. At the time of the interview, he was not enrolled in school. He completed his final year of high school in 1990. His estimated average grade during high school is eighty-five percent. Palooka’s creative activities include: writing and composing lyrics and music, playing guitar, singing, and problem-solving in mechanics. He discussed pranks as a form of his creativity that could be characterised as socially non-acceptable. For him creativity is “the ability to make something out of nothing” He was identified by judgment of products and informal peer nominations. He is a professional musician who has three musical albums and one

soundtrack to his credit and he has been nominated for both a JUNO and a CASBY (Canadian Artists Selected By You) award. In high school he won awards for creative writing.

19. Peter

A twenty-two year old male, Peter is the firstborn. During high school, he lived with his mother and father and younger brother; he now lives with his girlfriend. At the time of the interview, he was enrolled in a Master's degree program in political science. He completed his final year of high school in 1997. His estimated average grade during high school is ninety-one percent. Peter's creative activities include: writing and composing lyrics and music, playing guitar, singing, and writing political science essays. In his opinion, he has not used his creativity in what could be characterised as socially non-acceptable. Peter states, "my feelings towards creativity are shaped partly by my experience in music and by my reading of C.[Charles] Taylor. To me, creativity is an individual's own authentic way of using artistic and linguistic mediums available within their environment to express the previously unarticulated feelings they have about what in the world is meaningful, beautiful, good, powerful, or spiritually inspiring." He was identified by judgment of products and informal peer nominations. He earns money by working in a professional capacity as a singer-songwriter. He has two musical albums to his credit and has won academic awards in high school and university.

20. Son

Son is a twenty year old male and the third child. During high school, along with his two older sisters and one younger brother, he lived with his mother and father. He now shares a house with two other roommates. He graduated from high school in 2001 and is currently

enrolled in an undergraduate degree program. His estimated grade average throughout high school is sixty-five percent. His creative activities include: playing guitar and singing, constructing structures (i.e., a cabin), and playing drums. In his opinion, he has not used his creativity in ways that could be characterised as socially non-acceptable. To him, creativity “is the product of existence; for as long as you’re alive, you can’t escape it. Even then, your death could inspire someone else. Thus, life or death, you can’t escape it. This applies to all dualities, or polarities, or whatever you want to call it. Freedom or slavery, love or hate—both extremities and everywhere in between.” He was identified by judgment of products and informal peer nominations. He has won “battle of the bands” competitions twice and plays, or sits in, with several working blues and jazz bands.

21. Steve

Steve is an eighteen year old male, the firstborn, he has one younger brother and lives with his mother. At the time of the interview, he was completing his final year of high school. His estimated grade average throughout high school is sixty-five percent. His creative activities include: sculpting, teaching and sports. He discussed pulling off a wide variety of pranks (one attracted the attention of the police; no charges were laid, but he was made to make restitution) as a form of his creativity that could be characterised as socially non-acceptable. For him creativity is “the personal use of imagination, free from outside influences.” He was identified by peer and teacher nominations.

22. Thelonius

A twenty-one year old young man, Thelonius is an only child. During high school, he lived with both his mother and father; he now lives with two other roommates. He is missing two credits to graduate from high school (1999); he subsequently attended an Arts and Science

program for two years at college. At the time of the interviews, he was not enrolled in any other studies. His estimated grade average throughout high school is seventy percent. His creative activities include: playing and composing various forms of music on a wide variety of instruments (saxophone, drums, bass, guitar, and piano), singing, songwriting, sketching, painting, sports and activism. In his opinion, he has used his creativity in ways that could be characterised by some as socially non-acceptable during political/environmental protests. For him creativity is “an individual’s twist on how they view life. Creativity = Freedom and vice-versa.” He was identified by judgment of products and informal peer nominations. He now earns a large portion of his income by playing saxophone in a working jazz trio.

23. Truman

Truman is an eighteen year old male; the firstborn, he has one younger sister and lives with his mother and father. At the time of the electronic interview, he had recently completed his final year of high school. His estimated grade average throughout high school is eighty-five to eighty-eight percent. His creative activities include: developing and directing short films, writing (screenplays, short stories, and magazine articles), acting on stage and professionally on television, and music. He describes composing non-politically correct satirical stories as a form of his creativity that could be characterised as socially non-acceptable. For him creativity is “the practice of art and invention.” He was identified by judgment of products. He achieved the highest grade average in his OAC year and has won the OAC Writer’s Craft Award, Music Award, and Science in Society Award. He has acted professionally on television and has had an essay published in Canada’s largest (in terms of subscription) national magazine.

24. Uncle 3

Uncle 3 is a twenty-six year old male. He has one twin sister. Now, as during high school, he lives with his grandmother, grandfather, and uncle. At the time of the interview, he was not enrolled in school. He did not complete high school, but did complete a high school equivalency (date not stated). His estimated grade average throughout high school is forty-eight percent. His creative activities include: painting, drawing, breakdancing, filming videos, and writing and singing freestyle rap. Using his talents to paint graffiti art, breakdance, and rap are, in his opinion, forms his creativity has taken that could be characterised as socially non-acceptable. When asked to define creativity he wrote: “sensitive to the thoughts in your head and the possibilities around you, to express self.” He was identified through snowballing and informal peer nominations. He has won City of X sponsored breakdance competitions, and awards for his art murals and videos.

25. Virginia

A nineteen year old female, Virginia is the firstborn. She lives with her mother, father and her two younger sisters. At the time of the interview, she was completing her final year of high school. Her estimated average grade throughout high school is eighty-to-ninety percent. Her creative activities include: sports, brainstorming for various school activities, and drawing. In her opinion, she has not used her creativity in what could be characterised as socially non-acceptable. For her creativity is “a person’s way of expressing themselves—thoughts, feelings, etc. About something—could be expressed through a variety of ways, art, writing, music, acting, etc. Fun! It’s abstract.” She was identified by peer and teacher nominations. She was on the honour roll and has won numerous sporting awards in soccer, basketball, and badminton.

26. Winston

Winston is an eighteen year old young man. He is the firstborn and lives with his father and one younger brother. At the time of the interview, he was completing his final year of high school. His estimated grade average throughout high school is sixty-five percent. His creative activities include: painting, writing, and thinking up new ideas. He discussed having lots of “awful ideas” (i.e., giant spiders and war machines) as a form of his creativity that could be characterised as socially non-acceptable. For him creativity is “original ideas created in someone’s mind, expressed in a variety of ways; art, music, literature, etc.” He was identified by peer and teacher nominations.

Additional participant information

Readers interested in the personality characteristics that, in the participants’ view, contribute to their creativity can consult the table presented in Appendix I. The personality characteristics are also presented by theme in Appendix J. Tables 4 & 5 summarise the participants’ formal educational experiences as well as tendency towards socially accepted or socially non-accepted creative behaviour. As Tables 4 & 5 indicate, the participants in the present study, for the most part, were engaged in socially accepted creative behaviour (21/26). Five participants tended towards socially non-accepted creative expression. Two of the five (Betty & Uncle 3) had dropped out of high school before completing their final year, two (Evoke & Patricia) were not currently enrolled in any formal education or involved in what they perceived to be career employment, and one (Steve) was enrolled in high school, but was not succeeding as measured by an average grade equal to or above 70%.

Additionally, two participants (George & Lee) had previously been sentenced for crimes but were now succeeding in school and gravitating towards socially accepted creative activities.

Table 4. Participant chart denoting formal educational experience¹ and tendency towards socially accepted or socially non-accepted creative expression

Name	In high school	In post-secondary	Dropped out before final year of high school	Not enrolled in an educational program	*Ave $\geq 70\%$	*Ave $< 70\%$	Gravitates towards socially accepted creativity	Gravitates towards socially non-accepted creativity	Previously sentenced for crimes (ranging from B & E to assault and drug dealing)
Andreas	X				X		X		
Armand	X				X		X		
Betty			X	X		X		X	
Briag		X			X		X		
Camille	X				X		X		
Chase	X					X	X		
Evoke				H		X	X	X	
George	X				X		X		X
Jack	X				X		X		
Jimi				P	X		X		
Josh	X				X		X		
Kyle	X				X		X		
Kathleen	X				X		X		
Lee	X				X				X
Mathew	X				X		X		
Otis	X				X		X	X	
Patricia				H	X		X	X	
Palooka				P	X		X		
Peter				P	X		X		
Son		X				X	X		
Steve	X					X	X	X	
Thelonius			X	X	X		X		
Truman	X				X		X		
Uncle 3			X	X		X		X	X
Virginia	X				X		X		
Winston	X					X	X		

1 = please note transitional nature of school/work experience in young adults. None was engaged in what he/she perceived as career employment

* = estimated grade average during the period of time in high school

H = Graduated from high school, but currently not enrolled in any educational program

P = Graduated from high school and a post-secondary institution, but currently not enrolled in an educational program

Table 5. Participant chart by educational experience and tendency towards socially accepted or socially non-accepted creative expression

Current (at time of interview) educational experience	Gravitates towards socially accepted creativity	Gravitates towards socially non-accepted creativity
succeeding in high school as measured by high grades ($\geq 70\%$):	Andrean (F) Armand (M) Camille (F) Jack (M) Josh (M) Kathleen (F) Kyle (M) Mathew (M) <i>Otis* (M)</i> Truman (M) Virginia (F)	<i>Otis* (to a lesser extent)</i>
not succeeding in high school as measured by high grades ($< 70\%$):	Chase (M) <i>Steve* (to a lesser extent)</i> Winston (M)	<i>Steve* (M)</i>
previously sentenced for crimes, but now in regular high school and succeeding in school as measured by high grades ($\geq 70\%$):	George (M) Lee (M)	
has dropped out before completing final year of high school ($< 70\%$):	Thelonius (M) 1(=70%)	Betty (F) Uncle 3 (M)
enrolled in a post-secondary educational program:	Briag (M) Son (M) Peter (M)	
not currently enrolled in school and not engaged in what they perceive to be career employment:	<i>Evoke* (to a lesser extent)</i> Jimi (M) <i>Patricia* (to a lesser extent)</i> Palooka (M)	<i>Evoke (M)</i> <i>Patricia* (F)</i>

(M) = Male

(F) = Female

* = engaged in both socially accepted or socially non-accepted creative expression in a more equal ratio than the other participants

1= note his estimated average grade was reported as exactly 70%.

Section II: Central Findings and Themes

In this section, the main themes that emerged as a result of the questionnaire and participant interviews and developed by the discovery process (an act of construction) will be presented. As suggested by Wolcott (2001), the descriptive material presented herein will, as much as possible, be kept separate from the more in-depth analysis to be presented in Chapter V.

The following section will feature quotations taken directly from the interview transcripts with the aim of "...having readers 'hear' their informants...[and] letting participants speak for themselves..." (Guba & Lincoln, 2005, p. 209). They were modified only by the addition of punctuation and in some cases the removal of interviewer vocalisations or active listening affirmations, such as "uhmms" or "oh yeah". Respondents chose their own pseudonyms and any references that could compromise anonymity were changed in a manner that would not alter the general meaning of the statement. Every effort was made to present the results within emergent categories and in the unbleached words of the participants themselves. Nevertheless, order was imposed on the data. The following findings and the categories which give them shape are presented under the five major themes: Initial Socialisation, Discovering Creativity, Creativity Expressed, Purposive Honing, and Consequences. Please note that the following findings are based on the young adults who took part in this study. It would get repetitive and pointless to incessantly remind the reader of this fact; therefore, the phrase "for those who took part in this study" will not be repeated every time a theme is discussed, but should be implied. Last, for clarity major

themes are demarcated by bolded capitals, categories underlined, and sub-categories italicised.

INITIAL SOCIALISATION

The present research suggests that initial socialisation into creative endeavours typically occurs as a result of early encounters with any number of individuals who expose and model a variety of creative modes of expression. This exposure contributes to the internal recognition or discovery of the creative self. According to participants in this study, parents, siblings, other family members, and peers/school play an important role in this socialisation process by not only introducing individuals to various modes of creative expression, but also by responding to their attempts to communicate via one or several. Although initial socialisation into various creative avenues generally occurs early in one's lifetime, one's initial encounter with various forms of creative expression can actually occur at any time. Initial Socialisation consists of two broad categories Within family and Outside of family.

Within family

Contained in the category within family are the sub-categories *parents*, *grandparents* and *siblings*, each of whom have played an active role in helping to shape the creative development of various participants.

Parents

For example, when asked in what ways his parents contributed to his creativity, Briag states, "...my parents were both musicians. And I grew up listening to so kind – like many music like all day long. We- whether it be jazz or rock or classical or even like traditional or folk music like every kind of music?" Thelonius describes a similar experience, "well

completely my parents. I, ohh, my father's music collection, just ever since I was young just, he'd play me all kinds of music on the record player and he'd, he'd play all kinds of things on his guitar..." Jimi adds, "My parents were both teachers, so uh, I mean and there were always a lot of books around when I was a kid. I was a total bookworm. I'd read like crazy. And uh we had an old Commodore 64 I'd screw around with that and try different things, or the piano, uh I was always, my parents paid for piano lessons they always pushed me to uh, a lot when I was a kid so that, sort of I think that sort of stuck in." Son states "my Dad got me into music at a very young age even though, like I got that drumset at 5, but I didn't even start playing again, and get a real drumset till I was 9 or 10 years old".

As the above examples demonstrate, one manner in which parents can contribute to their children's creative endeavours is by providing encouragement as well as materials and opportunities for learning. However, this is not always the case. Parents need not necessarily be encouraging in order to influence the creative expression of their children; for example, when I asked Betty "Who has helped you, or encouraged you to pursue your creativity?" she answered, "Hmm. Well, okay my father in a negative way- I've released a lot of anger and vented a lot [through creative endeavours] - because of him, you know?"

Grandparents

Initial socialisation may be guided by other family members in one's environment and these interactions need not always be positive in order to spur on creative discovery and expression. For instance, while discussing who helped her pursue her creativity, Betty states "Ummm, other family members, like my granddad, same thing, he's very structured, very strict and I, rebelled I'm like "fuck you!". In Andrian's case we can see how a grandparent questioning one's ability to succeed in a given task may also act as a motivator; she states, "I

told her I was taking a course – at the school? And um, she told me that I wouldn't do well in it 'cause she's like that. But I got a hundred in it.” In describing a more positive socialisation experience, Kyle explains “Mm, I think it all started off when I was younger actually I think the environment at home really did it because my grandfather was really good at drawing. I know it's, he was always showing me drawings and stuff and he was good –he also did a lot of artwork so he's really good at drawing and painting and stuff. I think I saw that, I think that's what actually started me off with, and then just at home I'd be – always be drawing and stuff like that?” Thelonius shares an analogous experience, “uh, my grandfathers both – both painted, and uh, I started.” Discussing how his grandfather influenced him to become a painter, Jack states “my grandfather was a... he painted also after he retired from being a chemist, so, he took up a lot of uh, like abstract art and stuff like that, so. Things like that.”

Having access in one's environment to family members who are adept and willing to share their creative endeavours can potentially play an important role in the initial socialisation into one's creative identity as Steve, Thelonius, and Jack's experiences illustrate. However, in counterpoint Betty and Andrian's experience demonstrate one's interest and motivation for applying oneself in various creative activities may also find their impetus as a response to a negative aspect in one's environment; for example, in defiance of the poor assessment by others of one's abilities, or to a perceived overly structured and controlling environment.

Siblings

As in the case of *Grandparents*, motivation to engage in creative activities may be as a result of both positive learning experiences, where creative forms of expression are taught,

or as a result of negative home experiences where one feels they have something to prove or rebel against. Discussing how her sisters were a factor in her creative development, Kathleen's experience mirrors the tension between *learning* from family members on the one hand, in this case sisters, and having to prove oneself to them on the other; she states, "Mmm, I guess, my family too, a lot of my sisters are creative. And I kind of feel like I'm not, like, living up to them, but you know, if they can do this, I can too and you know and like they teach me things...".

Somewhat similar to Kathleen's experience, Evoke's childhood offers insight into how the presence of siblings can provide the impetus for one's creative pursuits in an attempt to forge a unique identity within the family unit. Evoke explains, "I s'pose being, like the youngest kid, being the youngest kid I've always, every young – every young child always seems to have like, some need to be like, bigger than they are you know and have some kind of 'look at me I'm crazier than the rest of you'— Not like my brother and sister or something like that, and that was maybe the beginning for me... Right away drawing was an easy thing and I just continued from drawing, onwards you know and drawing seemed like the natural way to go for me."

Outside of family:

Examined within Outside of family are *peers/early schooling*. It is at this point in time that participants often first encounter the structured school environment and the new opportunities for learning and exposure to creative domains and materials. It is also a time when participants encounter a new brand of feedback: that of teachers and school peers.

Peers/Early schooling

Early interactions with peers and schooling outside of the family influence one's initial socialisation experiences with forms of expression and creative endeavours by providing development opportunities and exposure to alternative viewpoints. Kyle explains "...when I got to school we, you know the younger grades you did a little bit of art... and then when you moved up in the grades you started actually have, okay, this hour set aside for art you know. I think that's when it [his creative expression] really took off I remember I started to like it so. I'd probably say at home is where it started it, and school built up a bit, from there." For Palooka early school experiences provided both an avenue and an audience for his musical talents; he states "I was never shy, no. I s- I got up and sang in kindergarten. You know on the, on the stage. Yeah, probably early on in, in public school, yeah." For Jack, positive feedback from peers has encouraged his creativity and helped define him as a creative person; he explains "Well I guess it's like definitely other people, like I been – like I know I've always been told, it's like 'Oh you're really good at drawing and stuff like that,' so. It's... [a] good sign that I'm creative... Yeah, I definitely feel it. It's just kind of a part of who I am. It's being creative."

In the case of Kyle, Palooka and Jack these early encounters with peers and school were positive, however, participants also recount negative experiences with peers and the school system as they move from primary to junior, and then as will be discussed, from intermediate to senior grades.

Initial socialisation into creative endeavours it would appear consists of both an internal recognition or discovery of the creative self as well as some form of external

interaction and modeling. Parents, siblings, other family members, and peers/school may all play an important role in this socialisation process.

DISCOVERING CREATIVITY (and the creative self)

Involved in this discovery phase of creativity is the interplay among several factors, including one's creative self-discovery, one's response to environmental interactions, and the discovery of one's affective motivations and impetuses for engaging in creative endeavours.

Self-discovery: From within

For some participants, creative activities precipitate self-discovery and identity. Creativity may be used as a tool or an avenue for gaining insight into one's self, for instance, Betty states "you know, sometimes like, I'm afraid to paint because, I'm afraid of what, I'm going to tell myself, cause art is like a dialogue to me?" Similarly Chase observed "I've never felt like I fit in, with everybody? And that's really given me a chance to spend more time with myself, and, just, be able to discover what kind of creative stuff I have inside me. And you know, channel it." Life experiences can shape who one is and the form in which creativity manifests itself; Andrean elaborates, "I think everybody's life experiences help to shape them and to help shape – and help to shape what they create." For Briag, as he discovers who he is, his creative activities become a central part of his identity, "if people want to know me, they have to see me on drums". Jack emphasizes the importance that creativity holds for him, "[creativity] it's an important part of a person, of, of life, cause you have to express it, otherwise, you know, you'll go crazy."

Other participants discussed using creative expression as a form of self-discovery that brings meaning to otherwise confusing emotions or events. Describing situations when

he is most creative, Peter states “I think that it’s confusing events that I have to work out in my life... they also cause questions that can be explored through songs. Like they make great, and at least through artistic expression you can take a negative, and sort of transvalue it and like make it this thing that happened in your life come to life, embodied in a, in an independent piece of art. Like a song. That is a good thing. Like it’s something that you sort of can then come away with, at least, from that. And learn, and it’s a way of working through, coming to terms with confusing times.”

Son clarifies that confused emotions seem to initially stifle creativity, yet in the end, they actually fuel creative activities as the person tries to make sense of what he/she is feeling. “You’re either so upset and confused that you really just can’t get anything out, you can’t write music, you can’t really write anything cause you just – it’s a big mess right? Um, but when you do finally do – like when you, - when you do, finally write something down, um, it can be beautiful you know – Like a beautiful work of art.... But it all comes out in the end you it will – There’s all – there’s always, one way or another that it – it has to come out, in a sense, you’ve got to find some way to express it one way or another.”

The creative-self and the environment

As one discovers the creative self and expresses oneself the response from one’s social milieu may not necessarily always be positive. Palooka has experienced jealousy from his peers as result of his creative pursuits, “I remember – Like, I know, I have, I remember having friends who a, who were maybe jealous of creativity. Uh, because they couldn’t uh, couldn’t fathom how it worked”.

An even more drastic example of the response one may receive is recounted by Jimi. He elaborates “I was just ah – such a geek in uh, in school I’d get beat up all the time but

like – Yeah man, I mean you know, I was the total geek. And uh we had an old Commodore 64 I'd screw around with that and try different things, or the piano". Further recounting his experience growing up, Jimi explains how he was teased for being a bookworm and how he eventually became a bully himself. He tells his story, "Oh boy. Oh, I guess, I went through my little teenage rebellion like, everyone else. As a teenager uh, well, like I said I was a total geek when I was a kid. Like a big book worm –Got beat up a lot and, and uh, coming into grade 7, grade 8, I said, okay, it's never going to happen again – I'm never, going to get called a geek again. So I became a huge bad-ass."

Getting picked on by his peers at school had such an effect on Jimi that in response, he became a bully himself. He describes this process in greater detail, "I got picked on all, all my life and then in grade 8, I, you know, I told you I, I'd never be like that again. I was a – I became a bully. I, I was sick of getting picked on and I said it would never happen again– so I took on the role of bully and I remember beating up kids all the time and get in fights all the time, pick on all the nerds... and that lasted for a good while in high school." Jimi's experience, as well as Palooka's to a lesser extent, demonstrate the possible repercussions of standing out vis-à-vis one's peer group. More telling are the possible reactions that may take place within oneself as the process of discovering and sharing one's creativity unfolds. In this instance, Jimi went from being a bookworm and self-described geek to taking up the characteristics of his oppressors and becoming a bully himself. Fortunately, in Jimi's case positive change was possible. As Jimi gained more confidence in himself and started making friends his behaviour changed for the better. As he relates, "I started getting more confidence in myself, uh, started getting girlfriends, uh, makin' friends, you know, then I realized well, what am I doing, you know, I don't need to do this at all you know?" Jimi's

experience provides clues to the key roles that acceptance and confidence play in having the courage to continue with one's creative pursuits even while faced with adversity.

Warm, risk-free environment or a hostile one

Explored up to this point were the effects of creativity on self-discovery and identity as well as the potential dangers of a hostile environment on the behaviour of creatively gifted students. A closer examination of the effects of one's environmental microsystem is now the focus. Paradoxically, environments that are warm and risk-free, or hostile, can both contribute to motivation. Thelonius explains "Places where I know that, people aren't, aren't judgmental. Well that's when I know I can for sure – without even thinking about it, I can express, exactly how I feel – but at the same time, I kinda get off when I know that - that people, aren't liking it? And, and I just, I like to put it in their face, you know, you know what I mean? I dunno. Yeah, out of spite. But it's not comfortable. You know like, where you really are creative is, I find, with friends and people who, who are comfortable, with you and you know well".

Challenge/competition

Shedding light on the seeming paradox of how both a warm, risk-free, or a hostile environment can contribute to motivation, participants discussed enjoying a challenge. As George succinctly states "I enjoy a challenge" and Andrean, concurs, "Oh. I think new challenges uh help to pursue creativity." Andrean and Patricia explain how they find it motivating to prove to people who do not believe in them or their idea that they can succeed. Andrean describes how her grandmother did not believe she would do well, "I told her I was taking physio-anatomy which is, like a university-level course- course – at the school? And um, she told me that I wouldn't do well in it 'cause she's like that. But I got a hundred in it.

Yeah. I think it – like, I think in some situations I thrive on competitiveness”. Patricia elaborates, “if I have an idea that I’m really excited about and I tell it to someone that I think is gonna, really think it’s great and they don’t, then I get kind of bummed. But a lot of time I’ll just go well fuck you then! I’ll show you when I do and, it’ll be fantastic!”.

The same can be said for competition. Describing his relationship with his high school peers, Peter explains “the only way that my school peers helped me in any way, would be acting as a competition. I’m very driven. They helped my creativity, by, me developing a competitive spirit. I didn’t really get along with a whole bunch of them, you know? It was a small class, we were kind of all sick of each other by the end of high school I find? But there was a couple people who did really, really well in school. And, we had a friendly competition goin’ on. And so we wanted to just do well. And to do well you had to work hard, and to work – That sort of work hard, focus mentality is good for people who wanna, I find who wanna create, right?” As Thelonus, George, Andrean, Patricia and Peter’s examples help to demonstrate, challenge, competition and spite can contribute to one’s creative drive in certain situations.

Others’ expectations

A challenge can come in the form of others’ expectations. Otis explained that people expect him to be creative and that he enjoys forcing himself into such situations, “Um, so I guess, rea – I’m look, I’m looking for an audience really. I’m looking for people to listen to me be creative. Uh, and that puts – that also puts me on the spot, and forces me to be creative. Uh would – I sorta like that challenge.” He elaborates, “Often times I think it’s verbal– I think on my feet pretty quickly”. Peter articulates how the fact that people started to expect songs from him helped motivate his creative output. “you know people I met at

Pub X, who just sort of say ‘Hey Peter, when’s the next song coming?’ You know there’s that sort of expectation or recognition that sort of feeds your output, you’re responding to something”.

Discovering affective motivations for engaging in creative endeavours:

In many cases creativity is found in the tension; whether working through self-discovery, confusing times, or strong emotions (positive or negative). “Well I believe that the ups and the downs for sure – That’s – it’s in, it’s tho- it’s in that – that tension that – that the songs come out of. For sure.” Peter also recounts the consequences of lacking tension, in this case, as either a result of the use of anti-depressant medication, or due to one’s relationship being in an even, comfortable period. “And I see it with my friend who’s on, was on medication for manic depression and he didn’t write a poem. The whole time he was on it. And then when he got off it, and now it’s like: And I think too like, like I said, being with ‘Marie’, and living sort of a good [life]– That’s almost like a pill, you know what I mean?” (Peter).

That anti-depressants have an adverse effect on creativity was experienced first hand by Uncle 3 who recounts how the doctor “told me to take it 3 times a day cause we found it worked, so I, ended up taking more like even after school so I could do homework and stuff, and then I realized that like, I wasn’t doing anything really... I could like memorize anything and, you know, do really well, but then I wasn’t and then I got this job and with a lot of art and I got hired to do this uh this design, for this logo and then I like uh I don’t remember what it was, I think it was like creating some sort of some characters or something and I, sat down and tried to do it and it took me like nearly like, 8 hours – and I couldn’t – and my brain wasn’t working you know wasn’t I dunno I just remember being so utterly

frustrated? ... Just, couldn't do anything you know?" One reason may be that anti-depressant medications help to alleviate or eliminate tension and emotional sensitivity which others have found to be important to creativity.

Needing emotion to fuel creative activities

Participants discussed needing an emotional "feeling" or a certain state of mind as impetus to their creative activities. Jimi explains emotion, "Well, uh, as far as music goes, we, we're still human being we have moods, sometimes, you just feel more creative than others. Um, I'm tired if I have, if I have a lot of things on my mind, I'm stressed out, then it's not going to work. But if uh, if my mind is clear or for, if I'm feeling a particularly strong emotion, if I'm really sad or I'm really happy or I'm really, what I'm feeling really triggers something you know?" The stimulus for creative behaviour is similar for Son. He states, "Something really positive? Or something really negative? Either you uh you meet a really cute girl and um she seems really interested and it's – ah it's magical and especially the excitement of, something new happening right in your life? Anything that's – that's really new and, and exciting will definitely – Um, uh, prompt something creative, you know, uhm, also, mm, you know, maybe if you've just had a bad day, or if you're going through, tough times, you know like uh, havin' uh, havin' some troubles in uh, in a relationship? I dunno, if you lose a family member, lose a friend." As these examples demonstrate the emotional feelings that trigger creative output may be pleasant or unpleasant; nevertheless emotions appear to be an important element in providing the drive and energy to carry out creative projects.

Creativity as therapeutic and emotional outlet

Going beyond the experiences of Jimi and Son which demonstrate that emotions play a key role in motivating creative endeavours, several participants perceive their creativity as a self-therapeutic tool useful for working through emotions and difficult times. Evoke discusses how he uses his art to help him deal with his mother's stomach cancer; "that's what more of my art was about right now, when she's like, about, her sickness." Of a different personal nature, Josh has used his experiences on the stage to become less shy "Well I, I've always been sort of when, when I was younger, I was always more conservative and shy, but then through the, through the experiences on stage, you know, I've allowed myself to be less shy I guess?"

Briag describes how he channels heartbreak into creative endeavours, "some, really bad moments? Umm. Like this past month and just now! But –This – yeah, but this is really good like, because, I didn't really, since I'm here, um, okay maybe I've composed maybe 2 – one or 2 songs, and, and, like this month? This with this, this is really good, like musically speaking it's a good time because I've tons and tons of stuff because, uhhh, let's say like some relationship... uhh, went, kind, kind of wrong?... So I've tons of stuff. That's a good thing like, like next time, I'm in, like, a low creativity. I'll take a dangerous girl. Once again. that's such a, even if it hurts, it hurts."

Briag's last statement suggests some creative individuals not only use the wellspring of emotions conjured by bad experiences and unpleasant memories as fuel for their creative acts, but they actually may seek them out. In Andean's case, she describes how she has the option of re-visiting past unpleasant memories as dark fuel for her art. Discussing abuse Andean introspectively reflects "I mean obviously, you're still going to be hurt by

something like that. But it's not as if it drives me down every day, you know?...Kind of gives you that element of darkness sometimes? If you want it. It's kind of like a door you could open, check in there, how's it going – shut it and then, you know, do something with it – it's, you can, you can use it as a creative outlet I think.”

Channelling emotions and aggression through creative acts helps Patricia if she is upset and also gives her a sense of control. Patricia elaborates, “Um, Well, I use, well if I've had a fight, if I'm really upset then sometimes I channel that like I guess is just destructive, and I'll go out and I'll like bomb [graffiti term meaning to paint prolifically], like take it out on the city or something like, fuck you, and it's like – If I can't, if I can't be in charge there at least I can like be in control of that you know? And like, go out and do my thing and know that I've done it and it's there and it's solid. You know? And uh, I used to work at this terrible, terrible bar. And, it was the worst place in the world and it was good money and it was – the worst place in the world and I used to be there like, Thursday, Friday, Saturday night like selling shooters to people that I, didn't wanna talk to at all like I had nothing to say to these people and like, I had to spend like my weekend there and, it just like, it made me so miserable and, I would just go out after that like, yeah, just get everything out.”

Betty illustrates this process when asked what prompts her to use her creativity to paint graffiti art, “um, I dunno sometimes, I'll, I'll just go out because I am angry or frustrated, and um sometimes it's just, because of my emotion it's not cause of society.” I asked “Who has helped you, or encouraged you to pursue your creativity?” and Betty answered, “Hmm. Well, okay my father in a negative way – I've released a lot of anger and

vented a lot – because of him, you know? Ummm, other family members, like my granddad, same thing, he’s very structured, very strict and I, rebelled I’m like “fuck you!”

There appears to be a dual nature to the interplay between emotion and creativity. Creative activities may at once act as a form of therapy to deal with emotions, but also emotions and tension appear to act as catalysts to creative activities and inspiration as well.

Emotional sensitivity

Moreover, participants not only seem to require emotional tension to engage in creative acts, they also appear to be more sensitive to it. For example in Thelonius’ case it’s his very sensitivity, or emotional awareness, that plays a role in pushing him to creative activities. Thelonius explains “That’s – that’s – that’s the number one thing [that contributes to his creativity]. Sensitive to bad things, sensitive to good things. And, also, I guess, a creative and logic way to take, the things that I find sensitive in the world and, to make sense o- of them and, kind of spit them out in my, well my own individual kind of way, I dunno.” Delving further, he states, “emotionally like everything – everything just, is extremely powerful and – I can’t – whereas I find some people, they can seem to just get by in life with kind of – maybe ignoring a lot of things, because it’s easier – it’s more convenient and easier for them to get through their lives if they don’t have to think about things maybe? But, it – being sensitive also involves I think a lot of suffering. And that would make sense with, uh, the a- artistic, you know, type – type of person you know. Uh, there’s a lot of artists who seem to – they have that sensitive side but – it can also be a negative thing at the same – same time, I think.”

To this point the discussion has focussed mainly on how participants react to affective situations they have experienced; however, they also proactively engage in creative

activities for a variety other reasons. For example, creativity can also serve as an answer to boredom, as well as add adventure, enjoyment and feelings of satisfaction.

Need for change and hatred of boredom

Boredom was found to be intolerable for several participants in this study. The desire never to be bored was a motivational factor for undertaking creative projects; for instance, Andrean states, “I want to have a job that has a lot of creativity because my desire is to not – not- is not to be bored at all”. Andrean also states “I hate that, you know, it’s one of the worst things, I think, is to be bored”. For Briag it’s a need for change, for novel stimulation, “I like things to be changed, it’s not that I don’t like when nothing happens or being in a really constant place or state of mind, but I like things to be changed, I guess I kinda get bored easily”. When asked what it is in her view about her personality that contributes to her creativity, Camille responded, “I’m bored easily”. Steve discussed his creativity as a useful tool to turn to when “you run out of things to do you know you’re forced to come up with something”.

For others such as Evoke, a graffiti artist, the very aesthetic of the built environment, if perceived as boring, “needed fixing”. He explains “what I’ve seen myself going towards is painting things which actually benefit architecture and make things—a lot of boring buildings need—just anything is better than crappy building cinderblocks...grey walls for grey people”.

Stimulation seeking; taking risks

Betty explaining the relationship between one’s life and one’s art, “I think uh, I live the craziest life imaginable so it’s kind of like I dunno I feel that, the crazier you live your –

your, your life the more your art will improve. You know be crazy, go out, you know, go on a weird field trip you know? And then, and then your art will reflect your life.”

Several graffiti artists mention their art as being a rush. Betty states, “it’s well okay, it’s, it’s like a rush you know like, and I can’t stop it. Like I’ll look at something, and I’ll just say okay that needs this picture on it, but the problem with that is, I get, really anxious because it’s – it’s not legal you know so I almost have to like dart around look around, and I’ve run before. I’ve been tracked before, soo – that, it’s kinda scary in that regard, but that’s one of the reasons why I do it because it’s such a rush for me”. For Evoke, as a graffiti artist, in addition to being enjoyable and exciting, the extra stimulation helps him concentrate: “it’s fun you know? It’s fun and it’s – it’s exciting, it’s an adventure. I like to creep into train yards and hop trains and I like to creep into train yards and draw on trains that’s certainly like a part of like the stealth aspect, comes in. But I’m much better at painting graffiti– I do much better work much better line control my – my brain doesn’t wander, because I’m like – have to be in the zone you know? Have to be – cause there’s one time to do it, there’s speed involved, you gotta worry about cops, colours, you have to plan everything, in terms of colours but I mean, I li – I leave it a little bit open, in terms of shape and, and composition because that’s fun.”

Others seek stimulation by putting themselves in situations where they know they will be out of their comfort zone. For example, Son enjoys putting himself into strange places and situations for which he is seemingly ill-prepared, “I love to experience things and I’ll, um I love throwing myself, into situations, that I would never, ever be in let’s say or that I would rarely ever put myself in?” Son describes going to local nightspots that he would not normally “go to in a million years”, yet, “for example one night I went to, like X that

Latin club. By myself. Just went and threw myself into it. I'm planning to do the same and go to the X, like NEVER would I never would I go to the X you know?" Incidentally, he is going to Mexico City as a university exchange student early in the New Year. Peter who is originally from Alberta decided to go to university in Ontario for the adventure and to meet new people. As previously outlined above, creative individuals in this study were willing to risk in order to learn and grow. Briag mentions the need for change, "environments, like changing environments, like we always come back to that same stuff, like change is [good]. Uhm in a different place, than home. Or maybe going back home after a long time outside home."

Enjoying the creative process

As Briag enthusiastically states "Because it's, it, if there's one place in the world, where I feel good, it's on a drum chair, like- Yeah, because it's something which really makes me, it pleases me or it makes me really I don't know like happy, and, and in the both ways like, um mentally and physically because it's, it's also like for me it's physical feeling you just feel. When you beat like a cymbal, or, like the skins and stuff you just feel like it's physical? And it's in the, in the same extent I dunno but, simultaneously it's all, all just, in the, in your brains like it's mental, and physical?". Describing how creative activities make her feel good, Kathleen explains "doing creative things I find just funner too, I feel more motivated to do it". Son describes the feeling of satisfaction he felt when he was seven and had just built his first sculpture and how that is the same feeling he gets now as an adult "to create something and really having an idea you know? And, it's funny because, I look back on it now, and like, that feeling. That I just, I just uh – I remember? Is the same feeling I felt when I built my shack this summer".

Discovering environmental conditions optimal to the creative process:

As individuals engage in creative activities they begin to gain a better understanding of what they require to facilitate the process. Certain environmental requirements may differ depending on at what phase of the creative process one is engaged in. Early on interaction and exchanges with other people may serve as a useful source of ideas, for example, Peter states “just look to other peoples’ life stories, and have them serve as a sort of a narrative form...You know, as an observer.” However, once one is ready to give form to the creative ideas solitude is often required or preferred; for example, Peter describes his process “So usually what I, I’ll do is, I’ll sit down once in a while um, when I get stuff actually figured out, like new stuff, I’m alone. I’m alone.” Peter’s example provides clues to the balance between the social aspects of creativity where interaction with others may help to provide ideas, emotions, or information, and the more product-based aspects of the creative process which require focussed, solitary engagement.

Discovering creativity consists of an internal dialogue with the creative self that may lead to self-discovery and identity. The creative self is also influenced by the environment’s response to one’s creative offerings as well as by a complex interplay of motivations and external and internal conditions. Creative activities appear to be born out of a sense of enjoyment and stimulation or through a sense of tension and emotion, and seem to require both other people as well as alone time.

HIGH SCHOOL

High school spans several phases of personal and creative growth and plays an important role in the development of creative young adults. A substantial portion of a young adult’s life is spent interacting and learning within educational systems, and as such, they

merit focussed attention. Examined in this section will be the role high schools play in the development and motivation of young adult creative endeavours.

General school environment:

A high school that celebrates their students' creativity is seen as a key factor for creative development. Andean describes how the teachers and her school help to promote creativity, "because they're able to recognize, um, creativity and talent. And, I mean there's a lot here. But, you know, they, they really know how to honour it." The main high school participating in this study was remarkable in a number of ways. First, the school is not a specialised "arts school", but it was, however, replete with the products of student creativity; for instance, murals covered many of the school hallways and ceilings, and in the month I was there, they were holding both a "battle of the bands" competition, as well as an open format talent show. Moreover, the school boasts a photography lab, a video splicing lab, various athletic facilities, and a green house. Kyle was proud to discuss the mural he had painted, "yeah well I made that one, that was my mural. I made it, ah grade 10, on third floor of the art wing, I made one of the comic characters." Discussing what it was about her high school, in this case a specialised arts high school, that she felt contributed to her creativity, Betty remembers "just – just being around artists, like, artists are just generally more open-minded.... it's just it – anything that might not be of the norm or socially accepted, sort of was there. So and it just felt totally normal." A high school environment that recognises creativity and is accepting of a diversity of forms of individual expression appears to have played a key factor for many participants.

In contrast, Briag's account of high school tells a different story. Briag who attended lycée in France explains why he felt he could not be creative in high school, "because, I

guess high school wasn't a place to be creative. You went to school and you just had your classes, and then you went back to like, you go back home. So you don't do that really – you don't do it.” Patricia, who was in gifted French immersion, never felt she could express her creativity within the classroom, “high school was a chore, I didn't want to go to that high school. But my parents, made me go to that high school because of the uh, like, I was in gifted French immersion.” For both Briag and Patricia who attended secondary schools that place a heavy emphasis on academics, school was not seen as an appropriate location to be creative.

Grades and academic pressure:

The tension between an emphasis on strict academic accountability and whether or not creativity is seen as a valued component in the assessment of school work is a thread that runs throughout the educational experiences of these participants. Inhibiting the creative activities of a few creative students is the pressure to get good marks. For instance, Kathleen found the pressure to do well in school made her less willing to take a chance on originality, she remarks “probably the pressure of, of marks cause even if you want to be creative, if you don't think the teacher's gonna like the creativity, I mean, you may not do what you – what you would originally do, because you know, there's marks involved and... you know. You're – you're not usually marked on creativity a lot in classes, you're marked on content and you're marked on – like the academic part of it? So I mean you may skip the it-creativity cause it would take long and just get the marks, because you need the marks for the assignment or something.”

Ironically, Otis, on the other hand, has decided not to aim for great marks and use his aptitude and creativity to get by without doing his homework. Otis avows “I know I

should've tried harder and done my homework and gotten better marks. But, I didn't....

Um, but I think that, because I'm creative, I can often come up with things off the top of my head, write them down, and, they'll be partially right. I think that my creativity's helped... it allowed me to not do much, in the way of actual work. Um, but, by the same token, that may have made me lazy, and not want to do any work. Uh, unless I was really interested in it." This may also be why Otis seems to enjoy the pressure of deadlines as he procrastinates until the deadline looms and he feels extreme pressure to complete the given assignment or task. In fact, Otis affirms that he stopped doing well when "Sort of it was sort of a sense of urgency, that stopped or, a lack of a sense of urgency that maybe that stopped me, I just sorta let it be and I sort of became complacent and stuff with how I was doing and I really shoulda done – I know I should've tried harder and done my homework and gotten better marks. But... I didn't..." Otis undertook the "challenge" of getting by without legitimately completing his work by relying on his creativity instead. Perhaps had more weight been given to creativity within the scope of regular classroom assignments, he would have been better served with increased motivation to take up the "challenge" of expressing his creativity in his school work

No time for creativity, homework

Time is always a central concern. Truman felt strongly that school has taken valuable time away from his creative pursuits. For others it is a constant source of tension where something has to give. Kyle and Steve explain how the time required to complete school work took away from the time they had to work on their other creative pursuits; respectively, "So you go home or something and you wanna work on art yourself, but you have math homework and it's your own art so that comes second you know?" (Kyle); "You got like all

this homework all the time and you don't have any like fun classes you know or any spares or anything? That, that makes it kind of tough for creativity and it also raises your stress level too, you're always a bit stressed out about something, you know?" (Steve)

Others like Josh get quite adept at juggling their time, he describes the situation "I know my mother for the longest time was worried that I was pushing myself too hard, because I, I had so much on the go. I had my music, I had my step-dancing, I had school, I had whatever play I was in at the moment, and this is all happening at the same time. Like I, I guess out of this I've learned how to have good organizational skills if anything!"

No time for home/work, creativity

Naturally, it can either be one's creativity or one's schoolwork that suffers in the tug of war between the two. Kathleen describes how she is sometimes willing to put her grades in jeopardy in order to engage in creative pursuits, "Like a lot of people see things I do and they must think I have a lot of time on my hands, but really I'll just sacrifice other things to do creative things, like you know, there's kind of an imbalance, but like, like doing school work like I'll procrastinate homework...I don't know maybe I'll get marks deducted...I'd rather, you know, spend my time doing other things if I'm not really motivated to do it."

Having time to work on creative endeavours not only has repercussions for the homework one chooses to complete, but also for what type of employment one seeks. In Thelonius' case, he explains that he only wants to work enough to get by and still have enough free time to be fully committed to his music; "So I'm gonna be making enough [money], and still have quite a bit of free time."

Independent learning:

Jimi and Otis credit, as factors that have influenced their creativity, their ability to learn independently and in a more in-depth manner than the school can provide.

For Jimi, what the school was teaching wasn't challenging enough; he found school boring, so he started buying and reading "tons of books, started reading up and teaching myself.

School computer programs are really, really boring they don't teach much, They touch—you know—WordPerfect..." Similarly, when Otis found school wasn't teaching what he wanted to learn he decided, "I'll just, I'll learn about it on my own. Uh, like I'll read, I'll read a book or something that tells me let's say I want to learn about, like, camels for whatever reason. I had a, I had a strong inclination to learn about camels, uh, they weren't teaching it in school so I went out and I learned it on my own, I think that has a part in my creativity because it gives me I think it gives me an edge on people who don't go out and learn on their own. Who don't sort of, you know, go out and read stuff and, uh only know what – what's happening here in school. Uh, so. I mean it's not so – I mean in that, in that sense, I suppose it wouldn't be so much that I'm more creative than them, it's just that I have a wider base of experience."

Jimi and Otis's experiences demonstrate that under certain conditions they are quite willing to invest time and effort when they are curious and intrinsically motivated. Otis also suggests that there are experiential (having a wider experience base) as well as cognitive (having creative aptitude) factors involved in creative thinking.

TEACHERS

Teachers are an important contributing element in the development of a school's culture and learning environment. Participants had many impressions and suggestions as to

what characteristics play a role in determining whether a teacher was a “good” or a “bad” one.

“Good” teachers:

According to these creative young adults, effective teachers are passionate and committed, involved in the subjects they are teaching and supportive of student endeavours. They willingly push their students by treating them as intelligent and with respect, engaging them in conversations, contributing ideas, and suggesting potential new areas of investigation.

Passionate and committed

According to George a prerequisite to good teaching is to have teachers who are committed to their subject areas and who “actually know what they’re tryin’ to teach.” For Armand, good teachers must have passion for their subject, “If they have a passion for their subject, other than the fact that they have to teach it to get money to go home. Uh, I think it really helps. So, I dunno, if they put the effort in, to teach, then it, it really shows up. But, yeah, so, like, there’s certain science teachers like, well I, I think primarily science teachers, the three I’ve had, here. They all really put a lot of, like effort in, they really take their subjects seriously. But they, they help you enjoy it, they make it interesting.” Otis agrees, a “good teacher has to be interested in the subject they’re teaching themselves.” Others also concurred, for example: Virginia “And so, like I think people who are really passionate about what they teach,”; Thelonus “...right I had an awesome, science teacher it was the only year I did really good in science. Just, cau – extremely enthusiastic about what they’re teaching and what they’re getting across and when you can see that someone – it’s fascinating for them – to learn about it, they’re really getting a lot out of it, you wanna, you

wanna know what they wanna – what they know you know so it’s – uh, uh yeah, just generally an enthusiastic teacher is what I find generally nice.”; and Lee “They have to be fair, they have to like their job, they have to like – like the teacher has to like being a teacher. They can’t just be comin’ in to get their paycheque. They have to want to teach, they have to like – like the class they’re teaching. Like I guess an example our math teacher. The guy gets so into teaching the lesson he’ll start jumpin’ around and he’ll be like, just right into it so much. And it gets you right into it yourself and you just actually like learning math.”

Not only do creative young adults respond to a teacher’s knowledge and passion for a subject area, but they also seek and respond to engagement on the part of their teachers. A teacher’s commitment and personal passion for teaching their subject matter exudes a spark that encourages the development of disciplinary knowledge and passion in their students. They take on an active role in helping students develop a full and creative understanding of the subject matter at hand. Andrean explains how effective teachers are involved and provide support; “Like, not excitable as in you know she runs away weeping, but like she’s very um involved in what she teaches. And she’s always been, uh, a very, big influence on my literature, and how it comes across. And, I mean she’s always really into what she’s doing. So, she thrives on her own creativity, and, she really relishes when students get creative, you know?” Briag and Kathleen respond to active interactions with their teachers. For instance, Briag states, “Like, yeah the interest he has in his subject. And the interest he brings like students to – to the subject and, I don’t like, like teachers who only read their, like there in class like I don’t like that. I like to, like, if the teacher is is open to discussions? Or, even after class if it takes too long.”; describing a good teacher Kathleen recalls “She’s

[teacher] really enthusiastic like, if you have a good idea like she'll – she'll feed off of it and give you more good ideas.”

Josh agrees, recounting a good teacher “she’s really amazing like she um – her creative – like she really encouraged me to be creative. Um, just by, by the way, like I, I’d come with an idea, and then she’d say ‘Oh!’, that’s a good idea and she’d have suggestions to help me do my idea...” Briag and Jack express a similar view, “easy way to talk with his students and like he was interested when – when he saw you, had, not only good grades, but you had an interest. He he was like, going to you and talking” (Briag). Jack states, “Yeah she gets really involved in it, too. Like she’ll come and help, and, like, you know, contribute ideas and stuff.” Good teachers are passionate and committed to teaching as well as to their respective areas of specialisation; they respond positively to their students’ input and in doing so promote an engagement and passion for learning.

Challenging and respecting students

Certain creative young adults enjoy a challenge, therefore it comes as no surprise that they also enjoy being pushed and treated as intelligent and with respect. Andrian appreciates teachers who push her to excel, to reach, in her chosen avenues of application. For example, Andrian states, “It’s hard to really push your own boundaries if you’ve never been forced to. Miss X has really been a challenging teacher because she’s kind of forcing us all to think outside the box and to do all this stuff, it’s a very positive thing that she’s making us do. Like really examine ourselves and, and go for the gold basically. Like not taking any, you know, half-assed tries, you know she really she really wants us to put ourselves out there.”

Part of pushing students is to know how to challenge students from every level. Jimi explains “One thing I really appreciate with my teachers, are the ones that know how to, bring the most out of students at different levels, so the really advanced students? And the, the ones with more difficulty. Uh, I had a math teacher I think Monsieur X uh, really really good at that – he, he’d manage to keep the classes at a level that uh, one can follow? But he’d always have challenges or quizzes or riddles for the, the more advanced students. I remember me and my science geek friends we’d go home and we’d like call each other ‘okay d’you figure this out this is nuts’ you know uh like chess problems or things like that or uh huge mathematical equations and we’d like write computer programs to get, I remember I had this one problem, I had my computer running for a week, before it spit out the answer. And I came running to school you know and showed him ‘hey hey hey’ I got it you know? he really, and at the same time the weaker students still, didn’t feel threatened or anything uh, they still understood very well, the guy was a great teacher.” As Jimi’s example demonstrates it is important for teachers to push students on an individually assessed basis. Pushing students in pedagogical terms is not simply an operational variant of Vygotsky’s Zone of Proximal Development (ZPD) where students can bridge the gap between what they could not achieve alone but are able to master with the guidance of a more skilled assistant, but rather it is also viewed by students as a sign of respect for their abilities which creates the conditions for students to want to live up to the teachers expectations.

Therefore, respect from teachers plays an important role in the creative development of students. Elaborating on the practices that make a good teacher, Armand states, “they treat you, like the teachers that, they treat you as if, you have the capacity for, you know, intellectual thought. They don’t, sort of dumb it down for you. And I find that’s, it’s a good

incentive for you. To work to both to live up to their expectations but also to to sort of, improve yourself, to better yourself. And I find they give you o – good opportunity to do that.” Mutual respect and high expectations can really have an effect on how students react to teachers, Jimi explains “One thing I always appreciated with teachers is a mutual respect a teacher that, respects his students and, uhh, treats ‘em, with respect, a lot of ‘em have this, condescending kind of, you know? But uh, and then they – the student uh, you know reacts, uh the way he’s expected to, to, to to act. Sort of you know, if the teacher’s always screaming and treating him like shit, well they’re going to be a bad ass right? But, ah, if the teacher, treats you like a, an intelligent being, well then you’re – you’re going to wanna live up to that you know? I think that’s important too.”

Respect also means valuing student input. Patricia reacts positively to teachers who “Uh, um, like encourage conversation and like guide conversation in the class without letting things get out of hand.” A good teacher according to George will consult the students “Like, I like a teacher, that’ll read the assignment ask suggestions and ask for other peoples’ input, is this a good assignment? Or do you wanna learn this, uh do you already know it.”

“Bad” teachers:

In several ways “bad” teachers resemble the natural corollary one would expect based on what the participants stated about “good” teachers. Bad teachers were characterised as, not pedagogically sound in their approach to teaching, lacking subject matter knowledge, or not respectful or open to student ideas.

Not pedagogically sound: Passive teaching, rote style

Contrary to good teachers, bad ones teach in a passive or rote style. Armand describes a less than ideal teaching scenario, “Uh some teachers I know, they’ll just sort of

sit back and assign work from a text book? And they'll be like 'alright, just get along with that, do that homework.'" George agrees, "a bad teacher is somebody who follows the book too much. And uh, tries to do everything the way it says right in the book. And just reads it out loud and says 'That's what you do.' I – that's like – I don't like teachers like that at all." Kathleen further describes the actions and teaching style of a bad teacher in her view, "Or classes where it's like you know, you just get sheets, hand-outs you know you, do questions, or like, the same kind of thing all the time? Or, if teachers just like they don't really teach, teach a lesson, they like, you know give you a textbook." Thelonius finds it disconcerting when "teachers don't really know what – don't really follow the curriculum, they don't really know what they're teaching, uhm, just – mean – like hard – some teachers are really hard to go to, for questions, I find and, if you're asking about, you know what – what they're teaching, yeah. Lack of knowledge, basically. That's the most frustrating thing."

Not open or who do not value student input/ideas

Bad teachers it would appear are teachers who are not open to student input or ideas, who are, as Patricia states, "heavy-handed". Betty describes a bad teacher as someone who "has boundaries, um, someone that, that limits you, um, someone that, that isn't, that isn't open, or, or won't feed off what you have to say it's just, what – it's – it's them, out-putting on to you it, it's not a dialogue, you know?" Teachers that do not seek input from their students are not regarded well by Chase, "they always want it done their way, and I'm always doin' everything, going off and doing my own thing or, I dunno teachers don't like that. And, I don't like that. I don't like the way they treat me."

As noted earlier, respect for students' input is an important dimension of a good teacher and an aspect that contributes to a student's self-concept and motivation to engage in

the creative process. Otis explains when respect is absent it can be very damaging, “some of the teachers just don’t – they don’t respect the ideas of a student? Uh I mean I think that’s pr- I think that’s pretty poor of them? Um, and I think that, I think that played a large part sort of in I think that plays – plays a large part, in people not being creative. I think just there not being any respect that these people are showing. Like you feel, you feel sort of – you feel stupid, really. You feel like, you know, I guess my idea just isn’t good enough for these guys to be listening to me.”

High schools play a key role in the formative years of creative students’ lives. For some participants, high school set the stage for creativity to take root by offering an environment that fosters and celebrates the process and the products of creative pursuits. On the other hand, for others, the division between academic and creative activities was well established and essentially antagonistic within their secondary education. The same could largely be said for the teachers within these school milieus. Certain individual teachers set the groundwork for creativity to flourish by respecting and pushing students, while others downplayed it by not leaving students with the sense that they were capable young thinkers expected to be creative.

High school also allows for the exposure and discovery of the various modes of expression present and valued in our society; that is to say the possible areas that are available in which to express oneself along with the accepted vocabulary of that system. Also examined within the theme Discovering Creativity were participants’ various motivations for engaging in creative pursuits, the effects on creativity of a variety of environmental conditions, and the key role schools and teachers play in its development. As

creative individuals gain a better understanding of their creative potential they become more adept at expressing it.

CREATIVITY EXPRESSED

As creative individuals gain a better understanding of themselves, their creative potential, and the world that surrounds them, they become increasingly more adept and confident at expressing their creative visions. This occurs, in part, as they become more aware of the various forms of expression available to them, their general proclivity toward each of these modes of expression, their practice at them, as well as their ability to more ably match what they “see” with the mind’s eye and the steps and avenues they are to adopt to effectively communicate their creative ideas with confidence.

Domains and creative avenues

A manner in which to conceptualise a mode of expression, or domain, is to think back to Gardner’s (1993) multiple intelligences (i.e., Visual/Spatial, Musical, Verbal, Logical/Mathematical, Interpersonal, Intrapersonal, and Bodily/Kinesthetic) and to imagine talent which, although rooted in one or several of these intelligences, may be manifest in a variety of ways. For instance, if one were to exhibit musical intelligence, the genres and forms that this musical talent may take will depend on those offered by the community and culture in which one is embedded. As well, other factors will also come into play including one’s proficiency in one’s chosen mode of expression, one’s ability to decode the language of that particular domain, one’s investment in learning the domain, and one’s confidence in employing and sharing the products of this expression.

Discovering available avenues

Young adults must be initiated into the various avenues for expressing their creativity. Part of discovering one's creativity is to learn what is available in terms of creative modes of expression. Peter explains “– I become aware of the different artistic mediums that are available, for me, in the community that surrounds me. You know because sometimes there'll be a way of expressing yourself that you've never even thought of before, but that will be most adequate, for that inner pulse that you have that, whatever you really want to get out.” One must be exposed to various domain possibilities in order to become aware of the creative avenues that are available.

Creativity not domain-specific

Although creativity is expressed in a certain domain, the tools and approaches participants employ to generate their creative thinking do not appear to be domain-specific. Palooka whose main creative outlet and livelihood is centred around music elaborates, “Yeah, yeah. I think it – I think it, it's definitely it's not just uh, pigeonholed. I think creativity can seep through anywhere you need it to seep. You know it's uh, I think I've said before I've worked on cars before and maybe the most direct route doesn't work. And it's I think creativity helps you envision another way to get around it and to uh to find a, uh, an alternative. In, in the same vein that uh there's, you know there's poets who paint. And there's painters who write and they, it's you know it's a it, it doesn't – it doesn't just go down one path it's a I think it can branch out.” Jack also describes how he sees creativity as a general disposition “...definitely. Because like, I know I – I'm kind of creative, generally, like in all aspects of what I do, but that's, I have one main outlet. Oh like I'll paint, draw – um, I actually even use computers, too.” When asked if his creativity comes from the same

place whether he is playing music or painting Thelonius similarly responded “I see a lot of similarities between the way I paint and the way I play saxophone. I don’t know exactly how to how to relate it, But it’s like, um, it’s like a – it’s like a - it’s the same feeling but you can express that – that feeling through sound or through, through visual, you know?”

The shared insights of: Palooka, who expresses his creativity in both music and mechanics, Jack who sees himself as creative in all aspects of being, but who prefers expressing it via painting or computers, and Thelonius who expresses his creative feelings aurally through music (his saxophone) or visually through painting, suggests that creativity is not a domain-specific attribute, but rather a general one that may manifest itself in a variety of domains. Furthermore, their examples demonstrate that these domains can be quite disparate at once spanning the arts, sciences, and humanities.

Needing a certain level of proficiency

It would appear that creativity, although not domain-specific per se, *does*, however, require a certain level of skill or proficiency in a certain mode of expression. This may help to explain the ongoing debate between researchers who find creativity to be domain-specific and those who do not. Creative young adults must develop a certain level of proficiency within one of the expressive domains in order to effectively communicate their creative visions to the external world. The ability to express oneself in certain domains largely determines the outlets creative young adults choose to apply their creativity within. For instance, Betty describes how her lack of language mastery impedes her ability to communicate her creative ideas via certain modes of expression; “I feel that I can’t, um verbally express myself very well to people? I – I don’t know any of that stuff. So this [visual art, graffiti art] is my only way of, how I can put these visual symbols in my head and

show them to you.” Thelonius contends “I’m really bad with words, I read a lot, but I just, I can never get my point across that’s why – when I paint or when I play music, everything that I can’t say just comes, rushing out.” Evoke experiences a similar difficulty when attempting to verbally describe what he “sees”. He explains “Yeah, it would be, I wouldn’t be able to describe too much, what it’s about, but I feel – But – It’s there you know? It’s – it’s getting’ out... I’m a vis – I’m visual you know. So, everything that I do is like, a symbol, like icons or symbols that sort of layer.” It should be noted that Betty, Evoke and Thelonius reported being left unsatisfied with the academic aspect of their high school experience; Betty and Thelonius dropped out before their final year, and Evoke did not enjoy success as measured by a grade point average of 70% or greater. Perhaps their lack of verbal/language ability played a part in their dissatisfaction with a school system that emphasises language arts, mathematics, and sciences.

However, lack of expressive ability is not limited to verbal expression as Mathew informs, “Well, mostly...we can be creative in sciences, but I’m not very good at sciences so I tend to be more creative in like, um, things like law, and ah, English. Like English, my papers in law, the questions I ask.” For Andrian her creative expression takes on a much more tactile nature, “I dunno I’m not – I’m not really a, see people could be creative in math, but, I’m not really a math, and science, like I am, but I, I really feel connected to, working with my hands, you know, the sort of, um, drawing, painting, taking pictures it makes me feel more connected.” These examples demonstrate some of the diverse forms their creative expression has taken, for example, visual, musical, verbal, and tactile, as well as the importance of having the ability to match up one’s creative ideas with an outlet for their

expression; to both possess creative thinking and to harness an expressive form in order to effectively communicate those thoughts.

Moreover, Winston demonstrates that the choice of expressive instrument and domain are dependent on the creative vision one is trying to transmit to others: “I do more drawing than painting because uh, I can’t work a paintbrush as well as I can a pencil because a pencil’s really fine and the paintbrush is, is –Yeah. I usually like more detailed drawings. So I don’t really like – painting a lot, cause it’s not as detailed as pencils are.” Here it becomes evident that creative goals must be matched with the proper tools even within the appropriate domain in order to more effectively translate and communicate one’s ideas to others.

In order to move from an initial idea to a tangible creative product requires a translation of those ideas into an avenue for external communication. To achieve a creative product requires skill and much practice in one or more modes of expression. Patricia details the process, “the 21st time you sew a shirt it’s going to be really, well done and professional and when you get to that level you can – it’s really easy to translate ideas into like, like the physical. So that’s – that’s why I choose sewing.”

Needing to be well versed in the technique to understand

Not only does one require the skill to communicate one’s creative ideas, but one also needs to be well versed in the technique to understand others’ creative expression; for instance, Peter explains “I find it sometimes like that, yeah. Um, then again, maybe I’m just not well versed enough in, in that technique, you know you have certain abstract painters that I don’t... know, I don’t, I can’t understand. But to some people that are in that uh that realm of expression. They totally relate to it...”

Takes time to learn a mode of expression

Honing their skills and the precision with which they can transform ideas into being, through one or several modes of expression, for instance, Gardner's (1993) intelligences, may take place over a long period. It can take many years of practice and learning before one develops a certain level of proficiency in any given mode of expression (and thus) minimising the gap between what one "sees" and what one is capable of producing in a visible or tangible form. Briag makes the distinction that in music he is able to translate what he "sees" with his mind's eye into a tangible product, yet in photography he cannot. He explains "Because maybe it's, I don't have the technique, have the technique to express what I real want – like, or impress on the paper. Or, print on the paper...like, now in music. Like, with, on the drums or the saxophone or on the guitar maybe not too much on the guitar, but I have enough technique and because yeah it's been 15 years now so, I don't really need, lessons anymore. Just, like, listening and, really thinking about that? So it's not this – like, if I wanted to do something on my drums or on the saxophone or maybe on my guitar I just – I, I know I can do it. Like, if I want to. I do it like really easily. But with photography it's totally different because, you don't have this technique so I can spend a lot of time in the dark room – but it's not what, what I want and it takes, so much time to, like to have what I really, to try to get it, what you're thinking." Detailing further, he goes on to say, "So, like it's kind of I guess, this is the place [playing music] where like, that, that I like the most because it's– I guess I have the technique. Or, enough technique to really express what I want to express. If I wanna do something or, just, or even, let's say complex? Pattern or rhythm... I just don't think about it, I just do it...." Briag and Patricia's observations shed

light on how it may take many years, and much practice, before translating one's ideas to tangible form becomes more second nature.

Peter juxtaposes his creativity in terms of music and academia, "learning the basics...you're learning the language, like are you learning it – an expressive language. In undergrad, you just sort of hear it, and you're tryin' to learn it, and find your way, and see how thinkers related to each other. Um, just as an artist or a painter would learn different techniques and, learn how colours related to each other, and shapes and different painters. In the Masters it's a bit more of that with a bit more of creativity and then of cour – as you know, the PhD in most uh fields, institutionally, like the demands are you're going to come up with something a little bit – Original... However I still think that um the creative, the personal creative uh, injection, into the work is much less, with my political philosophy, than with my music. Absolutely. Because I, I still feel, in the music there's more room, for me. I still feel like I'm really just, trying to get my bearings on the language...I think it will change if, but it takes, I think this takes a lot more time. This – language takes a lot more time to master. To, understand...."

Once one has creative ideas and the proficiency in a mode of expression, Thelonius explains that it is still a struggle to translate the ideas in his head to external creative expression; he describes "if there's some – something I w- a particular uh... s- there's something I want to get out, or I want to hear in my sound or, or, see in a painting or some some – something I wanna express I'll – I'll keep at it, for days until, I get it just to sound right, or to look right, I guess, so. That has a bit to do with it as well... It just kind of pushes me." Through Thelonius' description one can envision the tenacity, struggle and resolve required to effectively translate and communicate one's ideas to the world. Patricia also

alludes to the frustration and potential for self-destructive behaviour when one simply cannot adeptly bring their inner ideas to tangible form, “it can just be, self-destructive behaviour. You know in like a different, sort of, different sort of channel like, frustration from – even frustration from like, the wanting to be creative and not, not being actually capable of doing it you know like, like having idea in your head of what you wanna draw and then drawing it and not being able to get it down right.”

Takes confidence to explore, to push limits and to grow

Over time as knowledge of one’s creativity and mastery in an expressive form grows, one may become more confident and increasingly willing to push the boundaries and take risks within that form. Briag, states “what makes me feel happy about it I have the ability to do what I wanna do. When I play the drums....I’m really confident. At that time. So I’m losing all my – this self – like lack of self confidence?” Josh asserts that one must learn how everything works first, “But then um like I – in my photography, once I got past the learning how everything works, I was starting to push, push the bounds and, just, take, taking risks with my projects and trying to come up with something new and that I liked. I, I think you’re, you’re more open to discoveries. And –When you’re, when you’re pushing, like, taking risks, you’re more open to discovering things and I, learning too. Like I, I learned, I learned a lot of stuff by trying to push the boundaries and trying to just, just experiment like I know there, there was, I there was like one point in before, like I’d always, I’d always, look for approval? But then when I started to stop looking for approval? That’s when I, I really started growing in that aspect.” One must have a certain level of proficiency and confidence in a domain not just to effectively express oneself, but also to understand and to grow within the domain. Briag and Josh’s experiences suggest achieving a certain level of proficiency

within a domain increases one's confidence as well as one's willingness to experiment and to take risks and to stop looking for approval.

Armand pithily describes why, in his opinion, some people do not express their creativity: "Why do I think they wouldn't? Um, sometimes they, they don't wanna put the effort in? Sometimes, they, they do it, they don't wanna be creative or express opinions, because it's you know, they're with a group of friends and the friends like, look down on it or kinda thing. Uhh sometimes it's because they're too lazy, or sometimes it's because they don't have the capacity to express their thoughts to the fullest extension, they don't have the, I don't know the not vocabulary but, just don't have the, the capacity to explain – their ideas. I think they have ideas they, they can't get them out sometimes? Sometimes people, they kind of think inside themselves?" Armand's insightful observations ably sum up many of the key points presented within the Creativity Expressed theme. For instance, that creativity, although it would appear is a general attribute requires an avenue by which to be communicated, that it takes a certain level of proficiency within an expressive domain in order to share one's thoughts to the fullest, and that such a proficiency takes time to learn (one can't be lazy), and that it takes a certain level of confidence and disregard of other's approval in order to do so publicly.

PURPOSIVE HONING

Within this part of the creative process, young adults seek out other people's ideas, encouragement, and teaching in order to further their own development. Training opportunities and fertile ecologies are often sought out in order to purposively hone their creative skills and abilities.

Springboarding:

An important process to learning and honing both one's creative thinking and one's skills at expressing it is springboarding. Overwhelmingly, participants discussed using other people and other people's ideas and creations as springboards to their own creativity. Springboarding is not limited to creative ideas, but also to motivation, and expressive techniques.

Springboarding of ideas

Explaining the springboarding process, Andean states "I think it's kind of exchanging of ideas. Like, you know I'll say 'Oh, you know, Colleen, do you think this is a good idea?' And she'll say 'Yeah. But I think you should do this.' And I'll say 'Okay.' And it makes it, it just adds, it helps to augment the, the whole final project and I think really, and or you know, if they can give good constructive criticism, and they're creative people, you know it really helps to make your work better." Virginia agrees, "Um, it's good whenever you like can feed off each other, so like, like, you can all throw ideas out and like, try to build off of them." In Jack's case creative people tend to cluster by seeking each other out as good sources of inspiration. Jack explains. "Yeah, you get together with creative people also, just 'cause you can kind of bounce ideas back and forth. Right? Yeah, that's important. Yeah, yeah, I think it –I think it helps, I think it helps hanging around with other creative people also. Like it it can really uh, be a good source of uh, inspiration and stuff."

Mathew clarifies that some friends can be seen as helpful with creative ideas while others may not be: "Um, well, most like, some, some have helped and some like don't, like there's no real effect like some, like, we kinda feed off each other creativity wise. And, that, um, in that aspect, like they help a lot but some of the guys...we just hang around."

According to Mathew, friends who are also creative help to push forward one's creativity, while other friends are seen more in the role of companions.

In addition to peers, springboarding ideas can also involve teachers. Mathew describes how teachers "talk [to him] in the halls and stuff like that and they're always saying, 'you know, you gotta, you should do this, this is a good idea, this is what we're hearing kids talking about, they'd really like this.'" So, you know, they give me ideas and you know, we kinda feed off of each other, well not feed off of each other, I kinda feed off them."

Steve alludes to the fact that completing creative endeavours requires both the creative idea and the follow through to a final product. "I think hanging out with people who uh who are creative is more fun cause together you can come up with pretty cool ideas or things to do. Or ideas for things to do but you never actually do them." It would seem that people are good for idea generation and development, but, as was examined earlier in *Creativity Expressed*, the integration and production part of the creative process may require alone time in order to actually invest the time to follow through and give the creative ideas tangible form.

Springboarding of motivation

Springboarding can be a process that not only helps cultivate ideas, but also motivation. Otis explains "They just sorta egged me on to do that. I didn't get into any trouble for that but that was a lot of fun. Uh, I think my friends have a, have a pretty big role in my creativity. Maybe it's sort of like a spring board like I'll have an idea. And then, I'll throw it to them and they'll give, they [give] advice on it or somethin'. And then I can make it better from their advice. Um I think that's I'll, like I'll take it one step further? Sort of,

like it's sort of like a leap frog- well, not really a leap frog thing cause, oftentimes, I'll go as far as it'll go." Otis's experience provides clues to how friends, by supplying advice and encouragement, contribute to pushing creative ideas forward.

Another aspect of springboarding motivation occurs when creative peers understand one's domain both in terms of its language and practice. Such an understanding leads to the ability to share ideas on a more specific level which also helps generate creative ideas and motivation. Patricia describes her situation "Um, well, uh, I have a new roommate who sews as well, and that, like that's really good for me, cause she gets excited like she understands, cause she can, she sees things the same way I do in terms of like, the con- the, like, process of making something? So she'll get excited about something that's halfway done, and also I'll come home and she'll be sewing and it makes me wanna sew, and I see the things she's making and, it, you know just sparks ideas like oh if she can do this I could do this, and, it, you know gets the ball rolling? And that's really good." As Patricia's situation demonstrates seeing a peer's work in a similar domain as one's own can act as an example, a confidence builder, as well as a friendly prod to action.

Patricia elaborates on how people with similar creative interests help to motivate her creative action, not only through their creative ideas or because they understand the domain, both of which are important aspects, but because they also view creative activity as a valuable endeavour. She states, "sometimes people... get stoked on like the same things...it's not even the, the that, necessarily that even would spark like a creative process but...I guess being around other creative people is definitely good. Definitely, definitely that's part of it. Yes for sure and being around creative is like, a big, big thing....if I'm just

talking about it, most people sort of like, drift off, halfway through me explaining something 'cause they don't really understand [the point]."

Springboarding of skills/training opportunities

Springboarding is both an emotional and a cognitive process. Evoke discusses how he and his peers borrow and learn from each other, even though it is not always overtly stated; "we painted together I mean it's not like a given thing like hey, it would never be discussed, it's like an unwritten thing you know I never said 'hey you're welcome to use my, the way I, you know, make hands or, draw hands' like it would never be said like that but 'hey, have you tried this'." Springboarding for Uncle 3 is the process of "See[ing] something beautiful and kinda adapt it. Or uh, mimic it."

Kyle, Peter, and Thelonus elaborate on the springboarding learning process by describing how being exposed to a variety of techniques can help one become aware and learn that a certain technique is possible and how it may be achieved. Learning sources are also varied and may include television, movies, recordings, or seeing artists live. Kyle states, "I'd say, a lot of stuff that I've seen in uh what other people were doing. Maybe in TV and movies? Some of that stuff that I like the idea of seeing that?" Peter and Thelonus describe this process in terms of their music, "Another style, another technique or style that I've heard another musician do. Like Mississippi John Hurt's C-chord based finger-picking style dum dum dum. You know? Or Ron Sexsmith something, so I can do you know? I'll be doin' that, and then I'll quit playin' exactly what they played, I'll just stay in that sort of technique, and I'll come up with something that sounds like that, that something that I've made up" (Peter). It should be noted that these techniques are not simply copied, but rather transformed into one's unique and individual style, "Yeah and I would just come up with

combinations of chords or – or voicings that I - I thought sounded particularly nice? Or a lot of times what it would be too is I would hear a song, some – there would be some, some interesting, part of the s- of a song that I – I liked and I wanted to reproduce that sound basically just to figure out how – how to do that, how to reproduce that sound so but no matter how much you try to reproduce someone, it's always gonna come out as your own thing?" (Thelonius).

Betty sums up the springboarding process in terms of attending an "arts" high school during some of her high school years and the role that played in her creative endeavours. She states "Oh yeah, and just being around like, people that were into the same things that you were? And uh, and, you inspire each other like imagine 15 to 20 artists – in this huge studio space you know we're all the same age we're all going through the same teenage shit you know. So we could feed off each other and, and learn techniques off each other and styles and teachers were just great, and uh – we still keep in touch, most of the people from Art school X. They just help motivate you, and, inform you." Her experience highlights each of the springboarding processes previously examined; for example, the springboarding of ideas with peers, friends, and teachers, of motivation, and of techniques and training.

Springboarding to ecology formation:

This springboarding process is not limited to chance occurrences, but rather creative individuals actively seek out supportive ecologies and/or carry them through from their high school experiences. As training opportunities and supportive ecologies are cultivated, they come to play a larger role in one's creative self-identity and personal associations.

Participants seek training opportunities in a variety of combinations and sources from within formal educational circles and from within their communities. They seek out peers and

mentors, and/or choose places of work or study that will allow them to devote much of their energy to their creative pursuits. Other times young adults may choose to downplay their creative ambitions and, for a variety of reasons, pursue a “proper”, safe career that finds its basis more in perceived future employability than in creativity.

For Betty the decision is a natural one. She eloquently describes how the springboarding and purposive honing processes working in parallel: “It’s this drive, it’s this drive like, I’ll dream about art, I’ll wake up and I’ll go to my studio and I’ll paint or like – and it’s – it’s my life like all my friends are artists or, I work in an art store like it’s just what I – It’s really great, like, over the years, it’s kinda like I had to, to, filter out like my friends because some people held me back from my artistic endeavours. And my roommate’s an artist now so we’ll feed off each other and, show each other our works or uh just, other friends because you get to network, with them? You get inspired from them, and they – they help you and you help them, get your art out, with connections...” Betty’s example provides clear insight into how young adults who are driven by their creative passions will actively seek out supportive ecologies to the point of filtering out friends that are perceived as holding them back from achieving their goals. In Betty’s case each component of her life becomes focussed on her end goals as an artist: her dreams and motivation, her studio, her work, her roommate, and her friends and the elaborate network they provide; whatever or whomever is not perceived as furthering this goal is pushed aside. She further describes her situation, “And I felt like socializing with them [her perceived to be non-creative friends] was more of a habit rather than, furthering, my being, you know? So I had to cut them off and go out with, the other artistic friends.” This is not limited to peers, but also to relationships “I, broke up with someone, because I couldn’t do my art. You know it’s just

like, I can't, I can't do this like it took up too much of my energy, for me to be able to go over to my studio and be like okay!" The selection of ecologies can also be accomplished using the internet; for instance, Winston has set up an online community to discuss his science fiction ideas.

Role models/mentors

Creative young adults are active shapers of their own environment. They will seek out peers, training opportunities, and mentors to help them further their creative aspirations. Although potential mentors may be found at school, in Evoke's case he states "I had really bad luck with teachers, and I had lot of, I mean, I was much more interested, Friday afternoon came around, and I was gonna head downtown and I was gonna and go, paint graffiti with Go-Dolphin [his mentor]. My art class I would doodle ALL class long every class." This is in juxtaposition to Betty's arts high school experience which was a much more positive force in helping to shape her creative identity.

Peter explains how while still in high school one of his idols helped him envision the type of musician he wanted to become and who actually gave him a few lessons. Peter discusses, "I went to Edmonton Folk Festival when I was, when I was in high school. And I saw some players there that blew me away and I – I saw – I saw Bill X, play. He lives in Edmonton. I took some guitar lessons from him for a couple summers, aft – much after I got into it. And, I was like that's – that's, that's what I, wanna do. That's so cool what he's doing. It's one guitar, one voice and it's beautiful, and he's got the people enthralled." He also explains how it took another mentor-like figure to encourage him and to push him to really apply himself to his craft; "but the medium I use today, which I really value is the songwriting thing only really happened, you know, fir – first year university, and then when

I met Trevor Spider, who is an important sort of older peer, like a mentor almost. Not an official one, but just sort of someone I admire a lot. He had been doing it for about 10 years, professionally... music, and uh, I look – I read, I read his lyrics and I listened to his songs, and he sort of like, he sorta like, put a new line in the sand and sorta invited me to, to come up to it, like sort of raise my level of writing, up to it. And, it was then that I realized like, I, can write, a song, if I focus on it that's as good as most people's, you know? I can really do this if I just focus on some real emotion, and not try to go just for this just, kind of fun.”

For Jack, Steve, and Thelonius significant members of their family either acted as role-models or mentors to their creative development. Jack, for instance, shares “Yeah, I guess...art is the easiest way to like express myself... cause like, my grandfather was a he painted also...” Steve discusses the role his grandfather played in helping him pursue his interest in art by providing art supplies, taking art courses with him, and sharing a love of comic books, “- he's encouraging too and like uh he gave me like papers, uh, and paints and all that stuff, he took like uh, some art classes and stuff and other we used to, be heavy into comic books and that. Like uh, Marvel and that, and uh, we actually, went to a course, and they actually had a second course for us, and they invited us back.” Finally, Thelonius details learning and honing his musical abilities with his father, “Um, well, I'd say – well ever since I was, about 12 years old I when I started playing saxophone, my father's a really, a really good uh, guitar player. And um, so as soon as I started, getting into the saxophone a bit, he pushed me towards, playing blues saxophone with him and everything and, so, a certain accomplishment was, playing in, in a band with him for, about four – four years up North. I didn't – like I didn't have to – get a summer job or anything. Yeah. So that was a huge...”

Choosing the path to a career:

Young adults are faced with important and difficult educational and career choices as their ecology formation and training opportunities progress. Young adults increasingly face various pressures to commit to a career path that may be at odds with their creative passions as they balance employability concerns with creative aspirations. The pressure to choose one over the other may be perceived to come from external and internal sources as they struggle to reconcile their creative and educational/employment options.

Choosing the “right” career (family influence)

It is interesting to note that, although several participants are willing to take risks to achieve and to publicly share their creative products, they are much more conservative when it comes to choosing the perceived “right” (stable/profitable) employment field, over their creative passion. Parental opinion is pivotal in this regard. As much as parents in this study have— in the young adults’ perspective— supported their creative endeavours, several pushed their children to choose the “right” career. For example, according to Armand, “they [his parents] pretty much just let me uh express myself however I want, as long as I you know, do well. So, um the one thing that I sometimes they’re a little bit too realistic about life? Like, for university I’m going to university next year, I kind of wanted to go into English and, like, English literature? But uh they kinda kept drumming into me that there were – that there weren’t the career opportunities and the sort of, the options available to me after university are not so good. [Q. So what’s the alternative?] Well... science. Yeah. And I kinda figure it’s like, this is what – they’re also science – they’re also big into science, and like, my Dad’s a physics teacher, and my Mom is like, a microbiologist, and all this kind of stuff. So they - they want me to get into that, partly cause of their own ambition? But, partly

because they realize that it's a lot more stable. And I kind of occasionally I disagree with them. Or, I can go, I can try and get a job in this field, because it's a lot more interesting, but the pay's no good, I may not be guaranteed to work for that long, stuff like that. So, I don't know. [Q. How would you um settle this?] I'm – uh. I'm headed into science."

A similar situation arose for Briag: "my mother...I don't like this word, but she's kind of really materialistic says, get a job. Yeah practical, like, yeah. And like like she she – because I'd like to enter a school of jazz next year, for 2 or 3 years, and... really try to do my best, in this um medium of music. And see if it works. And if it works, that's perfect and I'd like to go on with that. And if it doesn't work, I still can do like another year of u- of university, I can do my master degree and stuff. My mother said, always says to me like, you know you could do that, the year after. Like, do your last year, finish this one. And then we'll see. But, like, it's for me th- which – what I feel is really, it's now or never." A follow up email revealed he had sided with his mother and remained in his economics program.

Andrean has also experienced similar pressure to put aside her artistic passions and focus on an academic career; she explains "Like I know other people have had different experiences but for me personally, my Mum's always been there to really support whatever I have to do. I suppose not all good because, my grandparents would be shocked if I ever decided to have a career as an art student, or if I went to art school. I think it's because they themselves have given up their artist side to go for the gold in terms of making money in the real world – Well if it's my grandma, I mean, it's kind of tough when, you love art and somebody in your family tells you well, you know, don't do that. Na. Na. Na. But actually, I just kinda wanna focus on the good because my Mum has really encouraged me in everything I do and my stepdad was the one who bought me the camera, lent me ALL his

photography books...” In Andrean’s case it would appear her family is quite supportive of her artistic passions as long they remain a creative hobby and not a career choice. In fact, in each of the examples discussed above most of the pressure from their family seems to be born out of the perception and concern that creative careers do not lead to stable, financially comfortable employment opportunities.

There is a danger that family pressure to stay with the “right” career path may not hold the expected outcomes. In Steve’s case he always wanted to be a culinary chef, yet his parents insisted he stay in the academic stream in order to keep his options open even though chef training is done through colleges that only demand a general-stream high school diploma for admittance. Because he was not motivated to be in the academic stream, Steve did not apply himself in high school. He states, “I think I might have been in the wrong programs this whole time, you know like the academic programs. But you know Mom and Dad said you know keep your [options open]... But I would have done better I think had I taken like the general level.” Fortunately, Steve was still able to gain admittance to college despite the lower grades he obtained in the academic stream.

Pressure to choose the “right” career (internal influence)

Pressure to do the right thing in terms of career choice need not come overtly from parents’ admonishings; for instance, it can also be an internalized value. Peter discusses being a singer-songwriter “It’s what – it’s, it’s not what I wanna do as my final career that I would depend on. Because I see academia as the thing that I’m interested that might conceivably be able to support me and my future you know, family. Years down the road. There’s an element of wanting to have a secure future. In it that’s playing seriously in my a- in my plan here. It holds me back with music creativity...the more and more time I spend, in

school, the less time I have to practice guitar. Definitely a sacrifice... So I see my commitment to academia not a hundred percent chewing up my musical creativity. Chewing it up time-wise, but giving to it in terms of uh, conceptual material that I c- that will, that will like just making me a r- a r- more aware person, that will make my creative output more rich potentially. The music, I want to keep going as long as I can. As old as I am, not as my main career, because folk musicians for the most part can't support themselves. It's just not a viable." At the time of the interview he was deciding whether or not to spend another year off from university education or to go on an extended musical tour. Since then, after a year off he has decided to continue to pursue his doctorate with a full national scholarship. Nevertheless, Peter's example helps to highlight the tension and struggle between wanting to balance one's wish to undertake a career in a creative domain and seeking the perceived financial stability afforded through an academic career. The two are not necessarily mutually exclusive, although in this case, Peter has stated many times that his preferred mode of creative expression is music; also it should be noted that he displays equally high levels of aptitude in both artistic and academic (political science) domains, therefore, it is more a question of time limiting his choice and ability to fully commit to both.

Choosing a career path (teacher influence)

Other times, teachers play a pivotal role in helping creative students justify to themselves and to their parents a career that follows their passion. For example, Jack describes the steps his art teacher took to help justify his choice to his parents "Oh they finally agreed to let me, like take art in university, they weren't quite sure about that before. Yeah they support me. [Q.How did you resolve that? Was it, did you have a discussion?] Yeah, I just decided that like, it's something I wouldn't, I don't know, I couldn't really do, it

would be there, like no matter what I do I'd always want to, like, get into something arts so, 'cause it was hard to choose because I'm pretty good at like science courses and math and stuff, so, it was a pretty hard choice.... Well the art teacher's always, uh, she's always really good, good for that, like and just kinda motivating you and stuff like that... Yeah, she thought it was a really good idea that I go into painting and stuff like that. Yeah, and she even talked to my parents telling them there's, you know, lots of good there's lots of good jobs, too that can be done afterwards."

Maintaining one's resolve while facing familial pressure

Evoke explains how hard it can be to stick with one's creative endeavours as a career choice when faced with a significant amount of pressure to "do the right thing". "You know [they wanted me to follow] traditional educational skills. So that was, that feels like the – it's a- it feels good you know? Cause this year I've had good luck, selling paintings and having art shows and stuff, and I've been able to support myself so up till now my family is a big thing you know? I have a tight family and being poor and being you know s- you know whatever away for a long time and, wanting to stick with it you know. And then being like, deputy minister of X my parent you know? And my m- my sibling being like uh chairman of X hotels is like you know they're – they're like the classic examples of what I don't wanna be. So, you know? Being able now to actually have money, and be a little bit more you know relaxed, all of a sudden they see it as me being successful which is hilarious because, all the while I mean I was – still doing the same things, oh like I'd go to my sibling's wedding 2 weeks ago and all my uncles were like 'Oh Evoke I've heard you're established' –And this kind of attitude you know? It's so pathetic right, 'It's so fantastic, I've heard from your mother, and you had a great art show' and everything you know 'Super.'...

Legitimized now, so for them it's good, 'now Evoke's okay, we don't have to worry about him anymore'. It's total bullshit, but at the same time it's good cause I think you know that's it's I didn't, it's creative cause I'm – I'm didn't, I've walked down another path you know and I did a whole bunch of things that I, for the longest time I – I was questioning like why the fuck, you know? Why am I like this you know?" His situation demonstrates in a graphic manner the difficulties of maintaining one's chosen career path in the arts when faced with great familial pressures to do otherwise. In his case he feels like he is not meeting his parent's expectations, or his extended family's, and he is being tacitly compared to his sister who has followed the more traditional route. It also becomes evident that choosing to follow through with one's creative and perhaps less conformist calling is not without hardships, financial and psychological. One may be filled with much inner doubt as one chooses to take "a road less traveled."

Other times we change paths

Jimi explains how it came to be that he became a computer engineer in an effort to do the right thing and only later realised that, in his heart, it was a career in the fine arts that he wanted to pursue all along. Jimi recounts "I, I always, I wanted to do the right think you know? Music is not the, the right thing to do. And at the time computers was, the safe thing to do right? it was a booming industry, it was great it was the right thing to – so I was just tryin' to be a good boy and do the right thing. So um so it was sorta make sense. I sorta liked it – Yeah so I came here, I did software engineering, uh.. uh I did it for 5 years it was a lot of work (laughs) And uh yeah and now I'm an engineer." I recently learned that he had decided to return to university in a fine arts program after having tried to make the "right"

choice career wise. Perhaps in some future career both his passion and training in the fine arts, and his computer training will become an asset.

Still others face no apparent pressure to choose the “right” career:

Interestingly, pressure from parents to go into the right career was not felt by all participants. For example, Patricia states “my family has actually always been really encouraging. And um my parents, regardless of what they, might have hoped I might have become like a doctor or a psychiatrist or lawyer they, were always, really encouraging of me being creative. They had always encouraged my sister and I to like have wild imaginations, they never told us to stop playing make-believe or, or anything like that they were always like, really gung-ho and uh, very positive too I mean, you know I show them anything I’ve done and it was always like oh that’s fantastic Pat like and they were always, they were good with that.” Patricia’s dad is a diplomat and her mom works in a bank which may not seem noteworthy; however, even though they wanted her to be a professional, her dad has always been a non-conformist and has encouraged her to question authority which may have played a role in her lack of feeling pressure to choose the “right” career.

Within the fourth theme, Purposive Honing, the various dimensions of creative springboarding were examined. These dimensions were both emotional and cognitive in nature and included the springboarding of ideas, motivation, and learning opportunities potentially leading towards the formation of entire educational and supportive ecologies. Moreover, throughout the process, role-models and mentors enter into the process play an important role in creative development. As creative young adults make significant decisions in terms of career and educational training paths both external and internal pressures factor into the decisions they make. Creative young adults begin to seek out opportunities that

shape their very social, educational, and occupational worlds and their lives within them. As the development and evolution of creative individuals continues, the consequences of their creative expressions, the networks they seek out and shape, and the training/work opportunities they pursue become increasingly pivotal to the self-identities they form and the lives they are to lead.

CONSEQUENCES OF CREATIVE EXPRESSION/PRODUCTS OF NOTE

The participants in the present study were involved in a wide variety of creative activities and production. While many of the products arising from their creative expression tended to be viewed as socially-accepted, others to varying degrees were not. Apart from the more conventional areas of creative expression— for example, drawing, painting, photography, playing various forms of music and musical instruments, songwriting, poetry, acting, step-dancing, computer programming, computer graphics, and computer building, directing short films, scientific innovation, general problem-solving, sculpting, woodworking, construction, and so on (see participant profiles for a more exhaustive list)— the discussion that follows will focus on the creative activities and products that tend to be less traditionally examined. These products may not be what one initially associates with creativity and represent a wide range of often overlooked, marginalised, or controversial forms of creative expression; including, graffiti art, lying (bending the truth), jokes/put-downs, pranks, subversion, social activism, semi-serious crimes, creativity in sport and teaching as creative enterprise.

Shared creativity:

One common aspect to all the creative forms of expression examined in the context of the present study is that they are, in some capacity, publicly shared. Shared creativity is

often referred to in the literature as social creativity (see for example Montuori & Purser, 1999), as opposed to individual acts of creative expression that never enter the public sphere. Such private forms of creativity, for example, creative poetry in one's diary or secret personal paintings, and so on in a similar vein, will not be discussed; nor are they typically discussed in the creativity literature.

By sharing one's creative offerings it follows that they may be critiqued, and are thus a potential risk; a risk that leaves one vulnerable and open to criticism. For some creators there is an aspect of connection between one's art and one's identity that can leave one vulnerable to criticism. Andrean discusses, "I can say that, I mean, even though I don't receive a lot of criticism, criticism still hurts. And I think, I mean, nobody, well nobody I know is completely, uh, I don't know, is, is able to kind of take it. In terms of criticism? Like, a lot of times people can dish it out but they can't take it. So it's hard, a lot of times, I feel very connected to my art after I've created it. So, if somebody were to insult it, it's kind of like they're insulting me. So I get upset, on the inside because, that sounds really wimpy but – you know when you just, you feel like, you feel like they don't understand, and, you know they – they just can't see the work you've put into it and I mean, it's always good to give creative – like, constructive criticism. But when you, there's a certain element of ego there. I mean, I don't, I don't really know anybody who's completely, you know, able to ignore attacks on them..." For Andrean there is a direct and emotional connection between her identity and the products of her creative expression to the point where criticism of her art leaves her feeling hurt and not understood.

However, this is not the case for every participant; for instance, Winston's attachment to his art is more cognitively based. He states "I'm not really attached

emotionally to things [his art] because, well, I could just paint up another one exactly like that... So it's not as if it's a part of my life I'm selling to you. So it – it wouldn't be too great of a loss." Perhaps this occurs in Winston's case because he appears to be somewhat emotionally detached, when asked about his parent's divorce he responded "I don't think it affected my creativity because it didn't r- uh it didn't really affect me almost at all? I don't feel sad. So I didn't really know what to do."

It would appear that certain individuals who share their creativity can develop defense mechanisms to overcome the pain attached to creative vulnerability by becoming more confident and thick-skinned, dismissive of critique from others, or seemingly not becoming attached to the products of their creativity at all. Or another optional reaction may be to seek, alternative, more supportive ecologies to share and learn one's chosen craft as examined in Purpose Honing where supportive networks are formed.

Creativity may be used for "good" or "bad" ends:

Creativity can be employed for socially positive as well as negative outcomes. Creative people can use their creative minds to generate "positive" as well as "negative" creative ideas that may be channelled to good or sinister outcomes. For instance, Steve remarks "I find that you get just as many good ideas as you do ideas that aren't necessarily the best ideas. You know like it, it's just which ones you follow through with? Like, cause every creative person gets them. It's, it's just what ideas you uh you actually act on. Cause you get just as many good and bad it's where and when and how you use your ideas of creativity." Therefore, it is largely where, when, and how one chooses, or is forced, to apply one's creative thinking that determines the nature of one's creative offerings as well as how they are perceived.

Graffiti artists and high school:

In the case of the participants in the present study, the non-graffiti artists tended to transform their emotions, good and bad, into a force that fuels their socially accepted creative endeavours, whereas the graffiti artists tended to adopt a less socially-accepted, “outsider” form of expression. They chose to go outside of the school structure to share their creativity and to seek mentors and learning opportunities. Perhaps this occurs as a result of their negative experiences within the school system. For example, Uncle 3, who dropped out of high school, stated that school was never a place to point out what he was good at; “never really stayed at school for too long...[had to] fight, always be uh...like, don’t kick me out yet.” Betty who also dropped out states, “I didn’t pay attention in school, you know?” In Evoke’s case, he did not enjoy success in high school as measured by grades (average below 70%) and states, “haven’t really been back to high school it was such a bad vibe I can’t” ... “teachers, it was always grief that I got...” Although Patricia, did well in high school as measured by grades, she recalls unpleasant memories, “well sometimes they stifled my creativity in that like, I would get in trouble, I got in trouble a lot in high school.”

Graffiti art:

According to Csikszentmihalyi’s (1999) systems view of creativity those in power decide what is accepted and what is deviant; for example, graffiti art, in one context is vandalism, in another, professional art. Betty is a particularly intriguing example. She has been earning money performing in several nightclubs using the same skills and processes that she would use if she were doing graffiti; she states that she has been producing her graffiti inspired art with “a community of artists, and, and people that are creative and we’re doing lots of shows? Like live art installations, there’ll be a band playing, like really trippy

bands, and we're on stage we have canvases we'll paint, and this is a regular occurrence that's happening now." Each of the graffiti artists in this study has been legitimately commissioned to create or perform art in the graffiti style by various local businesses. In Betty's case these businesses included, nightclubs, a farmers market, and a grocery store. On the other side of the coin, the graffiti artists have each applied their creative skills in contexts that were illegal. In Evoke's case he was arrested and the other graffiti artists each report close brushes with the police.

Whether graffiti art is viewed as socially acceptable art and valid commentary that should be encouraged or as illegal vandalism and the work of deviants is a debate that is hotly contested³. Compounding the great deal of variance in the perceived social acceptability of this type of creative activity is the fact that graffiti art can be viewed as a deviant artistic enterprise in more than one manner. First, it can be in a location or on a property where the owner or city officials have not given their permission. Second, it can be viewed as unacceptable by the owners and managers of art galleries where some are not amenable to this type of artistic tradition. The graffiti artists themselves are divided on the issue of what is acceptable and what is not within their chosen art form. However, each expressed concern over the illegality of their work and the prospects of getting caught. In Betty's case, she identifies three distinct types of graffiti art: 1) graffiti art, which for her, is art that is generally limited to painting on public property, newspaper boxes, hydro boxes, and found objects, 2) legitimate graffiti-inspired artworks (commissioned by galleries or businesses) and, 3) tagging (the practice of signing one's tag name or moniker with spray paint), which is not acceptable. Others, for instance, Evoke, see tagging (when not hate or gang motivated) as an entry point for less skilled graffiti artists who have not yet honed their

craft. The debate as to what form graffiti art may take and what is acceptable, and to whom, may continue for many years.

Paradoxically, when graffiti is not the result of a spontaneous release of negative emotion (as previously examined) it can also be viewed by the graffiti artists as a positive contribution to neglected city spaces. The graffiti artists see themselves as the Robin Hood of derelict city spaces, or as vigilante beautifiers; according to Betty, she is “just beautifying the place.” Similarly, Evoke describes an area that he recently “beautified” as a “funny little area cause it’s like the most run-down little nook, there’s actually big rats there. It’s worth it, it’s a worthwhile area to embrace and like, to funkify you know? And make, make new again you know?” Or at another point during the interview, he states “but what I’ve seen myself going towards is painting things which actually benefit architecture and, and make things you know – a lot of boring building need, just anything is better than like, crappy arch – you know building cinderblocks you know? Any kind of marks, like – Grey walls for grey people.”

Patricia, who, throughout the city has stealthily put together various stained glass murals composed of a variety of discarded coloured glass, explains one of her goals as a graffiti artist is to make people happy or at least make them experience an emotional reaction. She elaborates, “if I get really excited about something and I think it’s beautiful then, if I can put it out on the street, in a place where there’s nothing... if you can put something up on the street and people can see it and, it, make, even, you know someone just on their way to work will look at it and, and think it’s nice or, even if they look at it and they hate it at least you’ve made them think.” In the case of Uncle 3, he views his contribution as

artistic innovation where he strives to “break away from the norm and do something exciting, slightly different.”

Other creative avenues that may not be viewed as socially-accepted:

Creativity may be expressed via many different avenues which vary in degree of social-acceptance. Graffiti art represents one of those forms, others include the chosen subject matter of one’s art, lying or bending the truth, certain types of verbal jokes, pranks, subverting rules, social activism, and those involving a greater degree of social non-acceptance and illegality.

Not the art form, but the subject matter

Not only can the art form be contested as is the case with graffiti art, but Betty and Kyle are also concerned with the subject matter of their art. Betty, for instance, often paints lesbian art scenes; “Well maybe subject matter. Like some of my works, I could show you like the subject matter, is kind of interesting, cause it’s like – it’s really my own mindscape, that I’m presenting to the viewer. And it might be stuff that people, wouldn’t want on their walls? But it’s what I feel in my head so.” Similarly, when asked if he had ever used his creativity in a manner that may not be socially accepted Kyle states, “...I don’t – some people, I don’t, people who aren’t into art might consider it, bad like, for, some of my drawings, [are] like nude figures?”

Lying or bending the truth

Josh has employed his creativity on a number of occasions to bend the truth—appearing to uphold the moral standards of his church and his parents while hiding from them the fact that he is bisexual. He explains “there’s always the, um, Like there’s the creativity used in bending the truth?... I’ve been in some situations where I’ve had to be

quite creative in bending the truth (laughs). I dunno. Like it, it's hard cause it's, it's, it could be really I, I'm a church organist. I play, I'm employed as a church organist and therefore I have to be holier than everyone else." Kathleen has also stated that she has been forced to come up with "new creative ways to you know – get around awkward situations." Otis describes twisting the truth and using his humour to escape reprimand, "When I was talking my way out of trouble, a lot of times. I've come up with a lot of – I've come up with a few good excuses, and not so much lie – twisting the truth. I just bend the truth to, however it suits me. An example: 'were you throwing the ball?', no I was dropping it and then catching it. You know, just stuff like that sorta, keeps me out of trouble, keeps the teachers laughing at me as long as they're laughing they aren't going to punish me." These examples help to demonstrate how creative problem-solving can be used to help achieve desired outcomes and avoid various social confrontations. They are situational and practical in nature.

Jokes/put-downs

Truman mentioned writing satirical stories that may be misinterpreted, "Some of the satirical stories I have written weren't exactly politically correct. My band is also meant more as a joke than anything else. The music we compose isn't meant to be taken seriously. I also have a shameless affinity for fart jokes." In Armand's case he describes "like even, if, even just, you know, making jokes about people. They you know, they're usually just harmless. So, people see, people see the inventiveness the, like, the wittiness of it, I don't know. More – more than they become offended by the fact that I'm actually making fun of them."

Mathew explains how his witty comebacks and remarks have the potential to offend or get him in trouble, "I like to be off the wall. I don't like to conform kind of thing? So, I, um, I just want to, just, just kinda, when something pops in your head you just kinda do it, you

don't really think about it. It's gotten me into trouble but it's gotten me, it's done a lot of good things too. [when asked to give an example] Uh, just usually like when, like somebody says something and I'll think of something? And I'll say it and it offends them. I've done it with teachers too, like a. The other day my teacher a, we were just joking around and a, he was drawing a, like neurons on the board, and he said yes, these are, these are like the two neurons in X's brain and I'm like, "yeah, two more than you have" and, and everybody, everybody got a good laugh out of it but, so did the teacher but, I could have gotten into a lot of trouble." As Matthew states, how one's creative output is perceived can lead to very different consequences. His non-conformist and spontaneous, inventive repartee in this case was interpreted by the teacher as humour; however, other times it has lead him into trouble. Peter reminds how the interpretation of behaviour depends on context and perspective, "Some people, I mean a lot of – a lot of people find, singing folk songs and drinking in bars unacceptable socially."

Pranks

Pranks are one outlet for creative endeavours that may be perceived as potentially socially non-acceptable, and certainly not within the boundaries accepted by the school system. Participants were quick to share a wide variety of pranks of various degrees of complexity and legality. When asked about socially non-accepted creativity, Armand shared his thoughts and anecdotes, "pranking people sometimes, like I don't, do it to random people, but, like, I don't know. It's a good, it's a good creative outlet. Yeah. Like uh a few months back, me and my friends, we had this little competition between us. And uh, we had to pull the best like, pranks on each others' lockers. That was, oh it was great fun. Like this is, this is really creative in some points, ah this one guy me and my friend, we unscrewed the

bolts on the side of his locker? So we could like open up – he had the, he had the padlock on it so we couldn't get in. So we unscrew, we took a wrench to it, unscrewed the bolts, uh, and, like f- put flour all over the inside covered all of his books all of his shelves everything, it was just completely covered on the inside with flour. Then we closed it back up - we ah, we didn't put the bolts back on? But when you close it the hinges look, it looks like it's still uh... like fixed? You don't really notice the bolts. Anyway. Then we uh... filled up the cavity inside the locker with like mustard and cheese and put it all over like the locker and barbeque sauce and then we put a like a picture of him... And so that when he came to open it all this stuff jerked out and then, when he took his lock off the whole door fell off'. He later affirmed, "I think pranks are a great way to express your creativity."

Otis recounts one prank, "What was I uh – hm, creativity often gets me into trouble but, I mean, nah... Oh, well again with the fishing line we attached fishing... we got this fishing line and I was in Math class, I think it – we were in the science lab, for whatever reason, for math class and we attached this fishing line we – wound it through all the chairs and all the desks and stuff? In the classroom. So then, the teacher asked one of us to move. Get up, and all the desks and chairs would move and shake. Cause it was all, like cause they were all attached. And, I mean she didn't get it for the longest time and it was so funny cause the entire back half of the classroom was howling. Uh... I mean, it was, it was it just I mean you move a desk and a chair on the other side of the classroom would start to move across the floor? And 'WHAT WAS THAT?' Oh it, it was pretty funny."

Pranks can be humorous, and they can demonstrate one's inventiveness, and problem-solving ability, but they can also go too far and lead into areas that are more than simple hijinks. The police were involved in a prank retold by Otis that also involved Steve,

“just as a prank we go up, in – into the Foodliner. Uh, you know where they put the groceries in the back of the car and stuff. We go up there and we had one of our friends in there packin’ the groceries ‘Yeah we forgot our ticket. Uh, this is our groceries.’ So he packed them in the back. We drove off. We came round, just right around the building we come back. ‘Well you know they aren’t really ours.’ ‘Uh, yeah well – whatever the guy’s just leaving now.’ So had this uh – we had a box of stolen groceries in the trunk and we didn’t know exactly what to do with it. So we drove around, eventually... we got caught for it, yeah. And so the police came by and we got in a bit of trouble for that.”

Evoke painted a mural on the school shed as a prank. After getting suspended from school for swearing, Palooka enacted his revenge on the principal and the school by devising a clever prank, which he retells “I concocted a whole scheme where I broke into the school and uh, pinched a bunch of uh, flags that uh, that he held – held dear. Yeah. It was really good. Quite an evil – evil plan so. I managed to uh, I managed to get a key to the school through dealing with the drama department and all that, over the years, so I had one that, worked on a couple of doors and I knew where – how to get in. So we, a couple friends and I, uh, broke into the school. Well – snuck into the school, we didn’t break in. We didn’t break anything. Um, and he put all these flags of people – different nationalities of – of people who had – gotten to the school. Which was about 30 different flags from all over the world. And uh, and they were all hanging in the cafeteria, up, at the ceiling. Which is an old gym, so it was like a 40 foot ceiling, 50 foot ceiling. And we uh, the key also worked on the storage room, so I got a cherry-picker. And we raised it up and, went around and took all the flags off the poles and left the poles standing. Put everything back where it was, you know, all the chairs were, everything was exactly back where it was, and on Monday morning,

came in and everybody just started freaking out cause they were all gone and nobody knew how they got them down and...Never got caught so that's – that was creative too." Such types of misdirected creativity have the potential to lead to more serious consequences depending on the situation, whether the creative pranksters are ever caught, and the tolerance of the authorities involved.

Creativity as subversion

School regulations can also be the target of one's creative energies; for example, Chase states, "I was in competitions with other people to see who could get the most suspensions." Jimi used the science fair as an excuse for missing class, but actually wound up winning the National Science Fair Competition by inventing a new way of detecting tornadoes; Jimi, "Uh – right, well like I told you, me and my buddy we're, we're at our lockers one morning and uh, they're announcing uh, all those that have uh, ideas for the science fair to – to come down stairs. And we were looking to skip class... so he's like uh, you know, let's go in the science fair you know and we'll get to miss all this class. I'm like, sure." Ironically, in Jimi's case, not wanting to attend the regular classroom led him to a forum which allowed him to exercise his creative problem-solving abilities and actually win the National competition.

Otis discusses his experience with subtle subversion "I've been in art class and I think a lot of people sort of we built, my friend and I we built this huge, metallic sculpture thing, and... they lot, I think a lot of them liked that. And lot of them, cause I mean we got a kick out of just carrying it up and down the hallways making a lot of noise. Cause everybody would sort of look at 'Whoa – what's that?' We got a kick out of that. Um I think, I think people just, I think people just know me for sort of being creative. I don't, I

can't really explain why? But... I think they just, they, they're just 'Otis – what's he gonna come up with to – what's he gonna come up with now.'”

Social activism

Other times creativity may be used to advance various social causes and issues which for some people may be interpreted as socially non-accepted or threatening activities. Thelonus' example highlights how creative problem-solving can be used in order to achieve a certain goal, in this case media attention to an environmental cause; “well I think it's creative because there's so many ways you have to get attention, from the media right. And, all kinds – a lot of it is creativity if you think about it. And uh – I remember one, thing we did, we made a – cause they were shippin' it [waste] all up on trains, and we – we made a train. Out of straw bales. A whole train and we – we put like, Mike Harris on it, and –Uh Mel Lastman, and, And uh, whole bunch of other guys, the main guys who were involved with it. And set it all on fire. Right? And, what – just extreme – really extreme, awesome visuals, you know –That – that really, grabbed people's attention so – yeah. That – I guess that is a creative way, but it's hard to say whether that's... like we – we view that as positive. At the same time...A lot of people would really see it as not socially acceptable for sure – especially up North where I'm from.” Again, how one's creative acts and products are perceived depends largely on the context. Graffiti has also served as a vehicle for advancing a political message. For instance, Uncle 3 states, “whatever you know, political viewpoint I'm hanging to that day”; Betty explains “when the G-8 was happening I made a whole line of G-8 stickers then.”

More serious avenues

In a more serious vein, when he was younger, George used to plan ambushes on people, “We used to get in fights, and I’d plan out a, like a, a strategy? Like we’re gonna wait for them, uh, over here? And they’re gonna come out of that door?” George has been in and out of prison for fighting. Lee who used to deal drugs and steal shared his epiphany “I finally woke up and realized that... crime and drugs and, a lot of my friends, well they’re not my friends anymore really. But they all just wanna go through life, getting’ high, drinkin’, you know, gettin’ all the bitches, all the blondes like – Sure it’s fun for a couple years when you’re young but, I don’t wanna keep that up for, it’s gonna catch up with you, eventually. If you’re sellin’ drugs you can only sell drugs for so long until they catch up to ya. You’re gonna be doin’ jail time for the rest of your life, you know.” George and Lee illustrate the importance of directing creative talents either within the school system or elsewhere where they can be nurtured and guided into prosocial areas.

Less conventionally discussed avenues of creative expression:

Other areas of creative expression that are socially accepted but that tend to be overlooked in creativity scholarship are the creative dimensions involved in sports and teaching. These two areas represent potentially fertile new areas of study and as such, should be given special attention.

Sport as creative activity

It may be surprising to find sport listed as an activity in which one can be creative⁴. However, this underrepresented area of investigation holds important ramifications for the manner in which extra-curricular activities are viewed and supported within the school

system. Moreover, this area of exploration generated rich data that deserves particular attention.

In fact, there appears to be at least three distinct forms in which creativity may be expressed in sport. Two areas which emerged as a result of the interviews are: a) novel manoeuvres/dekes, and b) tactics/planning/strategies. A third possibility mentioned in passing is the invention of entirely new sport games; Jack states “like you can invent a new move or come up with a new sport, it just depends where you apply it [creativity].”

Novel manoeuvres/dekes

Dekes in sport are moves that are designed to deceive the opponent; they are comparable to a magician’s slight of hand. They involve both the choreography of the novel manoeuvre and its execution. Armand explains: “I guess in sports is some way I like to be creative, but it’s in a more limited sense, in that you’re within the confines of the actual sport, the parameters of the field and such, but I find there’s always like different ways to have you know to do trick shots and stuff like that making it a little more interesting”. Like Armand, Chance discussed thinking up “moves in basketball.” Mathew elaborates, “Um, even like when sports, I’ve usually, I usually like to think of new ways of new plays or things like that. I’m always trying to think of like new ways to trick somebody or you know, get around the defences or things like that.” Closely related to novel manoeuvres in organised sport, Uncle 3 explained how he invents new breakdancing moves, “[I] see something beautiful and kinda adapt it? Or uh, mimic it? And just doing something you know, like, not thinking about it trying not to think about it? Work from nowhere.”

Tactics/strategies/play making

Armand, who previously discussed novel manoeuvres, also mentioned tactics and strategies as a second manner in which creativity may be expressed in sport. He states “uh... thinking tactically – I think, it gives me a great – like sports often makes me really really think about how to best play my opponent? And often it, it really, like, you can really use your mind to get around your opponent, instead of just relying on just na - natural attributes. Similarly, Thelonus recalled the psychological game of being a pitcher in high school, “I guess, I was a pitcher, and I’d say – well as far as like – baseball, and a pitcher you know, tryin’ to figure out...How the other person’s thinking and then, and what pitch to throw, kind of thing? Or basketball like what – what track – what way is that guy gonna move or, yeah, sure you could be creative, yeah.” Alternatively, Mathew explains “like even in sports, creative things like cheers and things like that and playing psychological games on the other team and just anything to you know get them off their edges, you know, to gain us an advantage.” Using mental strategies do not appear to be limited to any one sport. The various sports mentioned included rugby, hockey, soccer, baseball, basketball, badminton, and tennis, among others. For instance, using curling as an example, Steve states, “it was sort of like chess on ice. You know ‘cause like you start, with like the empty uh – the empty house all the rings on the ice. And you have to get like your strategy how you wanna get the most rocks into the house like, you know you can throw one down, then the next guy’s just gonna take it out. You know then you can like, use his for like guards and stuff and it’s – it’s a pretty big strategy game actually. I dunno that was sort of creative. And I was the skip on our team which was like, the guy that got the call.”

Two useful thinking tools employed by creative young adults when playing sports and that seem to operate in conjunction with one another were visualisation and proprioception. Steve lends clues to how they are applied in his case while discussing snowboarding and goaltending in ice hockey: “on the way up you’re like let’s go over there or something but once you get to the top of that run, there’s like more than one way to go down it you know like what, where d’you put your turns and, and stuff you know? It’s fun just going like you know real fast. It’s sort of the visualization almost... doesn’t sometimes, if you get that, you don’t really get it till you’ve gone like halfway down sort of thing? And then it’s like, I dunno something clicked inside like that you’ve [seen] from, you know, like TV or or s – you know like a run from another winter or something? And you sort of really get into it, and... sometimes you know you get to the bottom and... it’s like you sort of blanked out a little bit, you weren’t like really thinking of it but – Yeah, and you know like, you made it down to the bottom or, like when things come as like a second nature sort of? Like I was a goalie in hockey for a long time? And like you’d make a save and you sort of really didn’t like think of moving your arm the whole way your arm was just sort of – there, where the puck was. That sort of thing, that little blank space in between like – the action and, like.”

Virginia describes how while playing soccer she utilises manoeuvres, strategy, and visualization to make a play happen, “Um, well I’m, like, I play sports and stuff too, and I think, um like whenever I’m like playing soccer, like creating plays and stuff, like that’s kind of creative and like, like I’ve been recognized, like, for that, so maybe that’s why people nominated me. I don’t know. Yeah, like, like for setting things up. Like you see like

the whole, I mean... I don't know, pass the ball there, move there, and uh, I don't know. Try to control it."

First recognising and then encouraging creativity in sports represents an exciting new area of potential creative expression at the disposal of teachers and the school system to help students develop to their maximum potential. This is especially crucial for students who may not excel in the regular classroom, but for whom sports represent an expressive avenue more compatible with their talent composition. Sports, it would appear, provide an outlet for a unique form of diverse intelligences and problem-solving propensities. Indeed, sports as an additional option for creative expression may help reduce feelings of alienation from students who shine on the court or playing field, but perhaps not in the classroom. More speculatively, perhaps emotion, which sports are designed to manufacture, play a role as well.

Teaching

When asked to discuss areas where they felt they had been creative, the participants often listed teaching. For example Andrean states, "Well I'm being an instructor for kids at the pool. We have to be creative and make our own lesson plans. And really try to give kids the maximum amount of different types of learning possible? So, visual learners get their bit instead of it being all explanations and, you know. So, we're encouraged to play games and, you know, come up with pictures and diagrams, do races, do puzzles, you know so. In that way I'm kind of pursuing a creative part-time job, I guess." When asked why she was considered creative, Camille responded "maybe cause I like to work with kids a lot, so everything has to be really, um, simple, and bright, and colourful. And I – I don't know maybe it has something to do with that, teaching Sunday School and all that stuff."

Josh has had similar experiences with creativity and teaching where he finds the use of metaphors and improvisation help students learn and make him a more effective teacher: “truly creative, I, I teach swimming and some of the stuff I come up, come up with to teach my lessons is quite creative, you know, just um, you know trying to teach to the different different students and their different learning abilities. I guess you have to be creative to do that, too. Um, a lot of it was, a lot of it, though I find is I sort of take my cues from them and sort of pick up and, pick up whatever they suggest and run, run with it, you know, so. Like I’ll start doing my lesson one way and then some kid will come up with a comment like they have a, a dinosaur at home so then I’ll, ...for instance, like you, instead of like with an adult you might be able to say, just keep your body straight, whereas a, with a child you say ‘Pretend you have a pole stuck from your head down to your feet’ you know, so you can’t move your hips or, like, pretend you’re a pencil.” Otis has also used metaphors as a way to get a message across to his students “I’m a lifeguard and swimming instructor. Uh, I like working with kids and stuff, I always have fun with that. Um, but, I guess, I guess another way I sort of, I show creativity is uh, every now and then I get a like, a kid in swimming class or, sort of, like maybe an attention deficit disorder kid or someone who just doesn’t concentrate very well, I remember this one kid especially. Uh, I had him and, all we did was we played, like we played- like we – we - I made up games and we made up games to play, like ships and submarines and stuff. Where, like to get him to do his front floats and stuff we’d have him be a battleship and you know get him to be a torpedo and, all that kind of stuff and it was a blast cause I remember, we just, we sailed around the little pool.” Both Josh and Otis’s experience in creative teaching involve using metaphors as the root of their creative thinking and as a tool for being more flexible and adaptive, effective teachers.

Kyle has found his creativity useful when teaching, “Well maybe not – as creative as in art, aspect, but maybe more along the lines of sports, I’ve uh, been creative in the fact that I’ve, uh, tried different like one, I coached the volleyball team, ...so in a way I had to be creative cause I had to think up my own drill – like I knew some drills and stuff like that but I had to think of ways to get them to improve.” Steve mentions his experience working as a early childhood educator as an area where he was able to use his creativity, “people say I’m creative, like I work at the day care, and like, sometimes for craft and stuff some of the, the other teachers will say you know like that’s really good you know I hadn’t really thought of it you know, we’re just drawing with crayons on paper but you know we’re all drawing like cool castles or something with like dragons or you know something that a little kid would get into.”

Summary of Findings

Presented at the beginning of this chapter were twenty-six participant profiles. Moreover, the many factors perceived by creative young adults as influencing creativity and the creative growth process were highlighted and examined. These various factors, as delineated by their respective categories and sub-categories, were loosely organised under the five themes: Initial Socialisation, Discovering Creativity, Creativity Expressed, Purposive Honing, and Consequences. Taken together they map the “evolution” (metaphorically speaking) of the creative person for the participants in this study.

Within the first theme, Initial Socialisation, participants provided insights into their early experiences with creativity and creative modes of expression. These early experiences were encountered within the family, where various family members, including, parents, grandparents, and siblings played a role, and outside of the family, where school and peers

provided additional and diverse feedback and development opportunities during this period of early discovery.

As the exploration of creative young adults progresses it leads to the factors grouped under the next theme: Discovering Creativity (and the creative self). Discovering Creativity consists of an internal dialogue with the creative self that may lead to self-discovery and identity. Also influencing the creative self is the environment's response to one's creative offerings. Peers in one's environment may react violently to those who dare to challenge the status quo by being creative. Perhaps surprisingly both a supportive or hostile environment may act as a motivating factor to creative activities. Creative activities appear to be born out of a sense of enjoyment and stimulation, or through an attempt to resolve tension and emotions. At various times, creative endeavours may require other people as well as alone time for their successful completion.

Spanning several phases of personal and creative growth, high school plays an important role in the development of creative young adults. For some participants, high school sets the stage for creativity to take root by offering an environment that fosters and celebrates the creative process and the products of their creative pursuits. On the other hand, for others, the division between traditionally academic and creative activities was well established and essentially antagonistic. The same could largely be said of teachers. Certain individual teachers set the groundwork for creativity to flourish by respecting and pushing students, while others downplayed it by not leaving students with the sense that they were capable young thinkers expected to be creative. High schools also played a key role in their creative development by exposing participants to the various modes of expression present

and valued in our society. As creative individuals gain a better understanding of their creative potential they become more adept at expressing it.

Under the Creativity Expressed theme issues centred on creativity's domain specificity and one's chosen mode of expression. Participants discussed honing their skills and the precision with which they can transform ideas into being. Participants took many years of practice and learning before developing a certain level of proficiency in any given mode of expression, thus, minimising the gap between what they envisage and what they are capable of producing in a visible or tangible form. Over time, as knowledge of their creativity and mastery in an expressive form develop they often became more confident and increasingly willing to push the boundaries and take risks.

Purposive Honing finds young adults as their creative growth and evolution continues and they begin to actively seek out other people's ideas, encouragement, and teaching in order to further their own creative development. Training opportunities and fertile ecologies are often sought out in order to purposively hone their creative skills and abilities. Overwhelmingly, participants discussed other people's ideas and creations as springboards to their own creativity. Springboarding is not limited to creative ideas, but involves motivation and expressive techniques as well. Eventually this leads creative individuals to actively seek out supportive ecologies and/or carry them through from their high school experiences. As training opportunities and supportive ecologies are cultivated, they come to play a larger role in their self-identity and personal associations. Participants seek training opportunities in a variety of combinations and sources from within formal and informal educational circles and from within their communities. They seek out peers and mentors, and/or choose places of work or study that will allow them to devote much of their

energy to their creative dreams and pursuits. They also may weed out individuals that are perceived as hindering their creative growth. At this crossroad important decisions are made whether to more fully commit to their creative talents as a semi-permanent life altering step, or rather choose to downplay their creative ambitions and, for a variety of reasons, pursue a safe career that finds its basis more in perceived future employability than in creativity— it should be pointed out that there is always the possibility to alter one's path.

Last, under the Consequences Theme, the various ramifications of undertaking creative projects were examined. Ultimately, creative activity leads to a variety of products that are, in a variety of ways, evaluated. While many of the products arising from the participants' creative expression tended to be viewed as socially-accepted, others to varying degrees were not. Participants were involved in drawing, painting, photography, playing various forms of music and musical instruments, songwriting, poetry, acting, step-dancing, computer programming, computer graphics, and computer building, directing short films, scientific innovation, general problem-solving, sculpting, woodworking, construction, and so on. In addition, they were also involved in activities that tend to be less traditionally examined. These products may not be what one initially associates with creativity and represent a wide range of often overlooked, marginalised, or controversial forms of creative expression; including, graffiti art, lying (bending the truth), jokes/put-downs, pranks, subversion, social activism, semi-serious crimes, creativity in sport and teaching as creative enterprise.

The “evolution” of the creative person takes place over a number of years and passes through a number of phases. The process begins from the early socialisation and discovery of creative activity, where creative individual first encounter the various possibilities for

creative expression, to a deeper understanding of the benefits and costs of creative activity.

As the development and evolution of creative individuals continues, the consequences of their creative expressions, the networks they seek out and shape, and the training/work opportunities they pursue become increasingly pivotal to the self-identities they form and the lives they are to lead.

In the next chapter, these five themes will be further investigated as they operate over time and in conjunction with one another. The organisation of the creative person via the basic social process “evolving” follows together with the present findings as they relate to the extant literature.

CHAPTER V: DISCUSSION

- *“Creative work evolves over long periods of time.... The creative person works within some historical, societal, and institutional framework.... The creator participates in choosing and shaping the milieu within which the work proceeds, the skills needed for the work, and the definition of the ensemble of tasks.... Such a person has emotions and aesthetic feelings, and social awareness of the relation of his or her work to the world’s work...” (Gruber, 1988, pp. 28-29).*

The above quotation succinctly summarises many of the findings of the present study as they are reflected in the process of “evolving” creativity and organised under the following five themes: Initial Socialisation, Discovering Creativity, Creativity Expressed, Purposive Honing, and Consequences. This process, as captured by these five major themes, finds as its underpinning the interactionist/ecological perspective; this perspective seeks to understand how the creative person shapes, and is shaped by, the situation as well as the unfolding interaction between the individual and the environment over time. In accordance with grounded theory studies, it will be discussed in terms of the overarching basic social process (BSP) “evolving” creativity.

Process is the unit of analysis of the present research and discussion; specifically, the process of “evolving” into a fully creative person or “organism”. In order to accomplish such an analysis, previously discussed and developed themes and categories are woven together into a (grounded) theory. The central core category or (BSP) (Bigus, 1974; Glaser, 1978, 1998)— in this case “evolving”— emerges, is constructed, for its ability to provide scope, movement, and depth to the perceptions and analysis of the data (Glaser, 1978).

Glaser explains:

A process is something which occurs over time and involves change over time. These changes over time ordinarily have breaking points-- discernable

to the extent that stages can be perceived, so they may be treated as theoretical units in themselves, with condition, consequences (which may be another stage), other properties.... BSP's are theoretical reflections and summarizations of the patterned, systematic uniformity flows of social life which people go through, and which can be conceptually "captured" and further understood through the construction of BSP theories.... [sociologists] apply theoretical codes which best illuminate variations in what is going on. Not all persons go through a process in the same manner-- that is to say there is much variation.... BSP's are not only durable and stable but they can account for *change over time* with considerable meaning, fit and workability. (p. 97-101)

Therefore, through the process of theoretical sampling, which includes the extant literature, the theory is refined and elaborated upon, leading to greater and greater conceptual density. The discussion that follows is a tapestry of both the present findings, organised in terms of the BSP "evolving", and the extant creativity literature. Elaborating on the central function of BSPs to grounded theory studies, Bigus (1974) states:

Basic social processes are patterns basic to the organization of social behaviour as it occurs over time. Important properties of basic social processes are that they account for change over time, they may occur under differing specific conditions in regards to time, context, and substantive area, and they account for the most variation in regards to the specific sociological problem at hand. (p. 2)

Recall from the study's initial guiding conceptual framework that the basic social process was originally conceived of as a "cultivating" process where creative individuals worked as active harvesters of their own creativity by seeking training opportunities and supportive ecologies (Spooner, 1999). This is still the case. I still envisage creative development as a function of deliberate action on the part of the novice creator in his or her pursuit of becoming increasingly more adept at his or her craft. However, I now see the cultivating process as much more involved; it is more than cultivation—it is an evolutionary process.

As mirrored by the findings in Chapter IV, the basic social process of "evolving" creativity contains at least five elements: Initial Socialisation, Discovering Creativity, Creativity Expressed, Purposive Honing, and Consequences. This is a heuristic, and at times, recursive and iterative model; these are elements or phases to the evolution of the creative organism. They should not be viewed as steps to be applied in a rigid, linear fashion.

Initial Socialisation

Early encounters with role-models and the creative process played an important initial step in the development of creativity for the participants of this study. Exposure to creative forms of expression typically occurred through contact with family, including a variety of socialising agents, such as parents, siblings, or other extended family figures; or through teachers and peers at school.

Looking at family, for instance, in Thelonius and Briag's case, one or both of their parents were musicians providing access to music and instruments as well as acting as role-models. Perhaps not surprisingly, in a study of 91 of the most creative individuals of our

time representing fields as varied as the sciences, arts, business, and government Csikszentmihalyi (1996) found that in most cases it was the parents who were "...responsible for stimulating and directing the child's interest" (p. 161). For others like Kyle and Jack grandparents provided the early exposure and entry into the creative art world of drawing and painting. Likewise, Howe (1999) found that there is "nothing surprising or controversial about the suggestion that a stimulating early environment is a desirable if not essential early influence in the life of a creative individual" (p. 433). Several participants in the present study found early role-models in their parents and grandparents.

One clear example of the importance of family life is that many of the participants reported encouragement and support by their parents and/or extended family to engage in creative activities. This support was manifested by verbal encouragement, and, more tangibly, by the purchase of supplies, equipment, cameras, musical instruments and lessons, and so on. This is quite consistent with the extant literature on creativity, for instance, Dacey's (1989a) examination of the discriminating characteristics of families of highly creative adolescents found that parents reinforced their children's creativity from an early age by "... provid[ing] a wide range of opportunities (lessons, equipment, contacts, situations) that cultivated [creative] traits ... and their children usually said that they felt strong encouragement from them" (p. 269).

However, this need not always be so. In contrast to the encouragement model, Betty's creative endeavours found their root in rebellion against the strict and structured environment created by her father and grandfather. As well, in Andrean's case, although she received encouragement and equipment from her mother and stepfather, she was also motivated by her grandmother's questioning of her abilities. These unexpected findings are

paradoxical in light of the general conclusion that “the environment in which children grow will have a strong influence on how much of their latent ability will be developed and how much will be wasted” (Dacey & Lennon, 1998, p. 47). Nevertheless, there are examples such as the Brontës who transformed the great resentment they felt from being virtually ignored by their father into their creative writing successes (Dacey & Lennon, 1998). This under-examined area should be further explored to gain a better understanding of the factors that contribute to the resilience and creative drive produced by an upbringing in an apparently unfavourable family context.

For others, siblings played an important role in the initial socialisation process by providing guidance and direction for engaging in creative pursuits, as in Kathleen’s circumstance where her sisters acted as examples to emulate and live up to. Shedding light on the environmental requirements for creative success, Simonton (1988) found “in broad terms, adulthood achievement is dependent on the availability of role models during early, formative years of a person’s life.... these role models can be either impersonal ‘paragons’ who are admired at a distance or personal ‘mentors’...” (p. 412).

Operating in a very different manner, yet no less motivating, the presence of brothers and/or sisters may cause one to carve out a niche for oneself within the family constellation. Evoke’s childhood offers insight into how the presence of siblings can provide the impetus for one’s creative pursuits in an attempt to forge a distinct identity within the family unit; his artistic talents were employed to demonstrate he was unique and different from his brothers and sisters. Similarly Sulloway (1999) found that

...sibling rivalry influences... typically involves the cultivation of family niches that correspond to differences in birth order. That families provide

offspring with a series of niches is a conclusion supported by research in behavioral genetics. One of the most remarkable findings in psychology during the last two decades is the discovery that brothers and sisters raised together are as different in their personalities as people who grow up in separate families (p. 190)

In terms of birth order effects, the present study is as inconclusive as the literature. For instance, of the 26 participants, there were 13 (10M, 3F) firstborns, 7 (4M, 3F) youngest, 1(M) second, 2 (1M, 1F) third, 1(M) fourth, 1(M) only, and 1(M) twin— with some youngest-borns involved in traditional creative areas (i.e., Armand, Briag, Camille, etc.), and one firstborn involved in graffiti art (Betty). While Feist (1999) asserts that firstborns tend to be creative within the status quo, whereas laterborns tend to express their creativity “outside the status quo and through the nonconformist dimension[s]” (p. 159) that was not found to be the case in the present study. Similarly, the debate between birth-order effects has been largely inconclusive; for instance, Hetherington and Parke (1979) have found that first- and only-borns manifest many traits not conducive to creativity, while on the other hand, Simonton (1988) has found that firstborns tended towards greater achievement and independence. Equally puzzling, Runco and Bahleda report no differences among first-born, second-born, and third-born groups. However, as the present research suggests, it may be better to consider “special family position” (Albert, 1980) rather than birth order. Perhaps this occurs as result of divergent root-motivators for engaging in creative endeavours in relation to the presence of siblings; for some they are the examples to follow, for others the pigeonhole to avoid.

In the case of school, a child's early experiences with the educational system may also play a key role in the development and modelling of creative behaviour; as well as providing an arena for its expression. For instance, Kyle recalled how his creative interests started at home but "really took off" once he entered school. For Palooka school provided both an avenue and an audience for his musical talents. Teachers may identify and encourage the special talents of young adults as they nurture their students' talents by providing materials and experiences that foster their development.

Perhaps Mockros and Csikszentmihalyi (1999) sum up the importance of both family and school environment best in stating "...families and early teachers are instrumental for providing opportunities and experiences that introduces talented youth to the field" (p. 183). Discussing early educational models and early training environments, Goetz (1989) states "Torrance, Bloom, Susuki, and Montessori do have something in common... a belief that early environment has a major impact in molding children, possibly even in the area of creativity. (p. 413).

The above discussion focuses on the micro-ecology of the creative individual's initial exposure into creative activities. At the macro-level, an important aspect of this initial socialisation process that may be easily overlooked is the key, and at times, imperceptible role of culture vis-à-vis this important first encounter. Mead (1959), for instance, states:

So, looking at a number of cultures, we may ask: How is the problem of individual creativity handled? Which individuals, under what conditions, have the opportunity to experience creativity? I use the word experience advisedly, because there are contexts in which the individual may be creative, but because this creativity is unrecognized, unnamed, and unrewarded, the

full experience, which may be crucial from the standpoint of mental health, is missing. (p. 223)

Through her work examining the Arapesh, Samoan and Balinese cultures, Mead (1959) found that what is considered to be creative, and who may engage in the creative process, differs greatly among cultures. Her ethnographic experiences led her to conclude that expressive form is of seminal importance both to cultures and to the avenues they afford and constrain as legitimate areas of creative expression; "...the study of the Arapesh material added to my sense of the importance of form, within which the impulse to make something new could be channelled and given meaning" (p. 227). In a more recent study examining how culture determines in what areas creativity may be expressed, Rudowicz (2003) found that culture "...encouraged and fostered creativity in certain realms of human activity, while discouraging it in others. Thus, depending on the cultural setting, certain individuals will receive more or less encouragement for creative expression" (pp. 281-282).

In the context of an Ontario elementary education, the school system as it is currently configured has been steadily de-emphasising the arts, physical education, and design and technology programs (People for Education, 2005); for instance, 59% of schools reported not having specialist music teachers, only 6% of schools reported having a design and technology teacher—with design and technology courses no longer funded under the new Ontario curriculum, and there has been a steady decline of physical education specialists (27% in the last 17 years) (People for Education, 2005). Our school systems are cultural agents, and the creative areas they either privilege or constrain become important factors to take into account. Consider the concrete cases of Betty (graffiti art), Thelonius (music), and

Evoke (graffiti art) who each described themselves as lacking verbal/language ability, an intelligence privileged by current school curricula. Each did not enjoy school success, yet perhaps under a different system, their experiences would have led to a much different and brighter outcome in terms of their formal education.

Keeping the educational experiences and the broader culture of these creative young adults in mind, Mockros and Csikszentmihalyi's (1999) findings resonate with much importance:

Exceptional development rests on whether: (a) there is a domain appropriate to a child's talent available in the culture (i.e., if the culture is ignorant of mathematics, a math-talented child cannot become a creative mathematician); (b) the domain is accessible (caste, gender, social class, or ethnic origin may prevent some children from being exposed to a given domain); (c) the society supports involvement in the particular domain; and (d) the child is perceived by the representatives of the field as suitable for training in the domain. (p. 182)

In addition, though not directly part of this study, is the fact that although initial socialisation may tend to occur early in one's development, such exposure may take place at any time. Jack intimated this while discussing how his grandfather began painting later in life; in congruence, Torrance (1995b) found that perhaps "less well known is the fact that many older people become highly creative for the first time in their lives.... free to be themselves and be creative for the first time without fear of losing their job or being ridiculed..."(p. 103-104). An equally plausible scenario is that the initial socialisation

process may occur later on, after exposure to other avenues where the “goodness of fit” between the creative modes of expression supported by a given culture and held by the innovator, together with the ensuing societal judgment, are more closely aligned.

The presence of early role-models whether parents, siblings, other family figures, teachers, or peers, plays an important role in creative development. In addition to these early encounters, the very presence of culture also greatly determines if, and how, an individual’s creative propensities are acknowledged and rewarded or constrained. As individuals continue to explore within the world of creativity afforded, they are more apt to discover its rewards, joys, and therapeutic qualities.

Discovering Creativity

Recall how for Andrean, and others, life experiences have helped shape the forms in which their creativity manifests itself. As one experiments within different forms of creative expression and under various motivational impetuses, creative activities may become a source of self-discovery, inner dialogue, and eventually a part of one’s “self”. For example, Chase and Betty use creative activities as a form of self-dialogue leading to self-discovery.

Following one’s entry into the school system for the first time, new atmospheres and social “rules” are encountered. The arrival of school socialisation and formalised school instruction typically holds both positive and negative effects for one’s creativity. On the positive side of the spectrum, as the creative individual interacts with the school system, namely teachers and peers, he or she is given an opportunity to develop further insight into his/her creativity; for example, students may be introduced to new areas of expression. One’s talents may be further developed by receiving feedback and learning additional or new

techniques, styles, and genres during periods specifically set aside for such activity, as was the case with Kyle, Jack, and Palooka.

However, this discovery process may not always be a positive one. A critical case example of how life experiences may negatively affect one's creative growth was poignantly demonstrated by Jimi's account of how he became a bully after facing years of abuse from his peers at school. In his case, he encountered a school environment that was not receptive to his budding creative talents and quickly discovered the diktat of his peers through being bullied.

Similarly, Polaine (1995) provides a first-hand account of how a bullied creative student can respond by becoming the bully, as she states the "humiliated and crushed teenager is a potential crusher and humiliator of her/his peers" (p. 115). Willings and Arseneault (1986) report that creatively gifted students "are particularly vulnerable to the boredom and depression which accompanies isolation during adolescent years and earlier" (p. 10). The jealousy of peers may exert a negative force by creating a hostile environment for outward creative expression. Still, as Jimi's account helps to demonstrate, creative young adults, as they gain confidence, may begin to engage in self-discovery and reflexive thinking leading to the realisation that the negative path in which they are headed may not be the one in which they would ultimately hope to succeed. Jimi's example and research by Torrance (1995a) suggests that courage is an important factor in being successfully creative; he states "the most essential characteristic of the creative person is courage! Whenever a person thinks of an original idea, he or she is usually a minority of one... This is difficult to endure. Very few people can endure the psychological pain..." (p. 119).

Discussing motivations for creativity, Rogers (1959) states that creativity's mainspring appears to be a person's tendency to actualize him or herself, to become all of his or her potentialities. Rogers' caveat does appear to resonate with the current findings that "to the extent that the individual is denying... [or being denied] large areas of his [or her] experience, then his creative formings may be pathological or socially evil, or both" (p. 73-74). To a lesser degree, the graffiti artists' negative experiences with school may help to partially explain their chosen area of expression.

According to Rogers (1959) environments that are best for creativity to flourish are warm, risk-free, and psychologically safe. Yet perhaps surprisingly, although Thelonius preferred such an environment, he was equally motivated to be at his creative best out of spite, when he felt that an audience was not enjoying or accepting his music. For George, Andean, and Patricia wanting to rise to a challenging situation also helped fuel their creative spirit.

Motivation for engaging in creative activities may differ widely from individual to individual and from circumstance to circumstance. Research by Sternberg and Lubart (1999) suggests that creativity may not only necessitate motivation, but may also be a source of it. Several creative young adults reported enjoying the stimulating quality of creative endeavour, enjoying both its challenge and its utility in stamping out feelings of boredom. School systems ought to take heed and undertake to provide not only creative young adults, but all students with stimulating and challenging opportunities for directed learning and growth.

In large measure the participants of this study match what Farley (1991) has coined the Type-T personality which refers to "risk-taking, thrill seeking, stimulation seeking,

excitement seeking and arousal seeking” (1991, p. 371). Particularly important for the school system, Farley argues (1986):

we need to pay close attention to the inordinate stimulation needs, thrill-seeking and risk propensities of Big T children so that they can be directed toward exciting and creative ideas, science, arts, and sports instead of delinquent activities. Environments that do not meet the stimulation needs of these children may inadvertently direct them into socially destructive paths...
(p. 49)

Keeping the graffiti artists from this study in mind, Farley’s caution takes on a more pressing quality. Graffiti art may not be viewed as an overly destructive activity; however such actions may lead to other, less benign areas of creative expression, an unfortunate outcome when the school system could have played a greater role in helping to direct these otherwise talented students to express their creativity in more pro-social spheres. As Farley (1986) warns, Type T personalities can either be constructive or destructive. For example, they may be people who seek stimulation such as artists, scientists, entertainers, or adventurers and daredevils/stunt performers, or, they may be destructive and seek stimulation by becoming criminal masterminds, schemers and con artists, or violent delinquents and criminals.

Based on the 26 interviews carried out during this study, a composite portrait of the creative young adult begins to take shape— a person who holds at least some combination of the following traits: open/flexible, motivated, has a sense of humour, is a risk-taker, seeks stimulation, is original, may be both extraverted and introverted at various times, is sensitive,

independent, curious, enjoys a challenge, holds various perspectives, and is involved in self-discovery. The list of traits of creative people generated by this study is quite similar to one compiled by Davis (1992): aware of their own creativeness; original; independent; enjoy taking risks; energetic; curious; a sense of humour; attracted to complexity or novelty; artistic; open-minded; a need for privacy, or alone time; and, perceptive (for an expanded view of this list that includes sub-topics see p. 17, Table 1.). Although, as is the case with the social judgment of creative acts, traits do not reside in the individual, but rather are socioculturally and contextually negotiated within the interaction between actor and perceiver.

Participants also described the expectations and support of their peers to *be creative* as a validating and motivational influence. Peter, for instance, found it quite motivating to have people expect and ask for new songs from him. It has been found that various extrinsic motivators can support one's sense of competence contributing positively to one's creativity (Collins & Amabile, 1999); Harrington (1975) has also found that explicit instructions "to be creative" were significantly correlated with higher scores on tests of creativity and divergent thinking.

Participants reported creativity as requiring emotion. For instance, Son described positive as well as negative emotions as strong stimuli for engaging in creative endeavours. Congruently, research by Runco and Shaw (1994) suggests creativity may at once lead to anxiety as well as help resolve it. This may help to explain why, for some participants, creativity finds its impetus in a warm, supportive environment, whereas for others, or in certain contexts, it seems to come about as a result of negative mood, spite, or the need to prove a naysayer wrong.

That creative acts often require emotion is consistent with research by Gruber (1988) who describes the creative process and person as involving “emotions and aesthetic feelings and social awareness of the relation of his or her work to the world’s work...” (p. 29). Csikszentmihalyi (1996) and Runco (1999) have found that “...creative individuals are often seen as exceptionally sensitive” (p. 247). In recent research on mood and creativity, Kaufmann (2003) asserts that the relationship of affect to creativity is quite important and calls into question “the popular positive-mood-promotes-creativity hypothesis... where a complex relationship between positive, negative, and neutral moods is prescribed...” (p. 134).

In the present research it was found that creative endeavours may be used by young adults as a form of therapy, as a process to work through confusing and tense times, as well as a manner in which to channel aggression. Evoke used his art to help him make sense of his mother’s serious illness. Patricia and Betty, on the other hand, engage in graffiti art when they are frustrated, upset, or having a bad day. The use of creativity as a coping strategy represents an exciting new insight and potential avenue of research; a young adult’s motivation for engaging in creative pursuits may be for their utility and effectiveness as possible coping strategies— or quite simply out of necessity. Cropley (2001) states:

...fostering creativity can be seen as part of the preparation of children to engage in a process of lifelong flexibility and adaptation... creativity helps people cope with the challenges of life and resulting personal stresses and strains and is thus closely connected to mental health. (p. 136)

Previous research in the counselling field has identified a number of creative arts therapies, such as art, music, dance/movement, drama, and poetry as effective forms of therapy in a counselling or psychotherapy setting (Johnson, 2000). However, according to Johnson, arts therapies are helpful only if “the therapy is conducted in conjunction with other ongoing treatments and therapists” (p. 311). Also discussing the benefits of creative endeavours in a counselling context, Peavy (1979) states that “various creative activities such as dance/movement, drama, painting, etc., can be used in the therapy context to activate creativity in the life of the client. This permits the client to tap their own creative source in coping with problems of everyday living” (p. 70). The present research would suggest creative activities may hold therapeutic benefits without the presence of other treatments and therapists.

Not mentioned in the literature, but no less intriguing, was the finding that in at least a few cases, individuals would purposely re-visit painful memories or even actively seek out harmful relationships in order to generate the powerful emotions and affect perceived as being necessary for generating creative flow. Particularly striking, Andrean discussed mentally re-visiting memories of abuse as dark fuel for her art. As well, Briag suggested that the next time his creativity is at a low point that he will purposefully seek out a “dangerous girl”.

In at least one occurrence, Betty claimed to live the craziest life possible because to her that was perceived as a means of improving her art. Moreover, the very nature of the relationship and direction between creativity and therapy may be called into question. That several participants reported using creativity as a form of therapy while others purposely set out to experience psychologically harmful situations in order to fire their creative endeavours

represents an important and potentially rich area for future research and exploration. More research must examine the relationship between creativity and therapy on the one hand, and on the other, purposely seeking out negative experiences to ignite the emotional spark perceived as vital to creative endeavours.

School

School plays a central role in the lives of children and young adults. High school in particular is seen as an important turning point between discovering one's creativity and actively expressing it. As Spooner (2002) states, "one point that has become abundantly clear...is the profound importance and crucial role schools play in fostering and promoting young adults' creative expression" (p. 324). Teachers, naturally, factor prominently in this regard, both for better and for worse (Diakidoy & Phtiaka, 2002). When creative behaviour is displayed by students, according to Bybee (1980):

Some will think the children are inquisitive, original, unique, and bold. They will see the children as being creative. Others may consider the children neglectful, inattentive, troublesome, even disobedient. Still others will decide some the behaviors are creative and others are disruptive.... Creative behavior is not always well-defined when considered in the context of the teacher's perceptions, the classroom, the curriculum, and the administration.

(p. 7)

As the quotation from Bybee (1980) aptly summarises, the interpretation of creative behaviours is of central concern and of pivotal importance as to whether a student's creativity will be accepted or denied. Finding acceptance must not be overlooked, since as

Torrance (1965) admonishes, “the vigorous creative imaginations which survive early stifling and opposition may become dangerous to society and civilization if they learn to act vigorously without guidance” (p. 11). Although surveys have shown that teachers support creativity in the classroom, when researchers documented their actual practices it was found that they are far more likely to frown upon creative traits or even to actively disapprove of them; for instance, boldness, preference for originality, and so on (Cropley, 2001). Other research has found that certain creative traits can work against school achievement, for instance, unconventionality, independence, and resistance to rules imposed by others, and so on (Davis, 1992).

The present study found that the favourite teachers of creative students were passionate and committed, involved in their respective subject areas and supportive of student endeavours. They willingly pushed their students by treating them as intelligent and with respect, engaging them in conversations, contributing ideas, and suggesting potential new areas of investigation. As George and Virginia relayed, good teachers actually know what they are trying to teach and are passionate about it. Lee found it particularly effective when teachers enjoyed coming to school and spread an enthusiasm for learning. Armand responded most positively when trying to live up to a teacher’s high expectations. One will not soon forget Jimi’s appreciation of Monsieur X’s challenges and riddles. Similarly, Cropley (2001) reminds “teaching and learning methods that emphasize creativity can also have strongly beneficial effects on pupils’ motivation and their self-image” (p. 136).

“Bad” teachers were characterised as not pedagogically sound in their approach to teaching, lacking subject matter knowledge, or not respectful or open to student ideas. For Kathleen, teachers who simply distribute hand-outs and teach in a rote fashion via a textbook

were perceived as especially ineffective. Correspondingly, teachers who do not seek input from their students were not regarded well by Chase. In a previous study examining creative young adults' perceptions of good and bad teachers, Spooner (2002) reported similar findings.

Throughout the course of this research it cannot be overlooked that at least in the case of several participants, and in particular with the graffiti artists, a lack of connection with their school has played a role in the channelling of their creativity into potentially socially non-accepted avenues. For example, Betty, Evoke and Thelonius reported being left unsatisfied with the academic aspect of their high school experience; Betty and Thelonius dropped out before their final year, and Evoke did not enjoy success as measured by a grade point average of 70% or greater. Perhaps their lack of verbal/language ability played a part in their dissatisfaction with the school system since schools tend to emphasize logical-mathematical and verbal modes of communicating (Gamwell, 2002; Short, Kauffman, & Kahn, 2000). The graffiti artists in this study appeared to be much more visually oriented; recall, for instance, how Betty struggled with words and with finding a medium to communicate the visual symbols in her head. As Short, Kauffman, and Kahn state, "there are parts of the world we can never know, and understandings that we can never communicate to others, if all the sign systems are not available" (p. 170). Accordingly, they advocate that

students use sign systems as tools for thinking about a book and for sharing their thinking with others. Within a sign system perspective, literacy is defined broadly as all the ways in which we make and share meaning—including music, art, mathematics, movement, drama, and language. (p. 169)

Not surprisingly given the graffiti artists' poor record of achievement in school, research by Torrance has found that "verbal creativity scores and scores on standardized achievement tests (reading, language, arithmetic)" (p. 203) are more highly correlated than is the case with Figural creativity scores and achievement (Davis, 1992).

Moreover, the participants reported they are often less willing to take a risk on originality in their assignments because they feel it might hamper their chances of getting a better mark. It is telling that in a study of teachers' beliefs about creativity, Diakidoy and Phtiaka (2002) found that the teachers considered "creativity to be unrelated to school achievement" (p. 183). Authentic or performance assessment techniques are important alternatives to standardized testing situations. Schools and teachers must bear in mind

...that the types of tasks requiring creative thinking— solving problems, expressing ideas, and looking at information in multiple contexts and from varied perspectives— are essential tasks for effective mastery.... Authentic assessment is an ally to those promoting creativity in schools. (Starko, 2005, p. 403)

As creative young adults continue to explore and to pursue creative activities and interests, they become active harvesters of their own creativity by seeking out training opportunities and areas of creative expression. Being active harvesters also comprises engaging in independent learning opportunities. The active harvesting process frequently leaves these creative young adults with little time; picture Josh juggling his time with masterful organisational skills often engaging in creative activities and training opportunities both from within and beyond the school. Given the lack of time, there is a constant tension

and tug-of-war between creative pursuits and schoolwork and vice-versa; some students prioritise one at the expense of the other. In Kathleen's case it was her grades that were jeopardised as she favoured her creative pursuits, while Kyle and Steve lamented the fact that school work took away the time they had for creative endeavours.

Participant suggestions for improving high school

The participants of the present study were keen on suggesting many ways in which the school system could facilitate their creative growth. In addition to the teaching styles and teacher profiles previously examined, they also had practical suggestions for encouraging creativity and school-student bonding.

As the main high school involved in this research so ably demonstrated, schools *can* and *should* celebrate student creativity by proudly displaying it. As well, they should continually strive to offer as many extra-curricular activities and events as possible, for instance, holding "battle of the bands" competitions and talent shows, sporting activities and so on. In addition, they should strive to offer the widest possible array of interest groups and clubs, for example, drama, chess, computer, improv, and band— perhaps even consider a graffiti wall where this type of artistic expression would be permitted.

Moreover, teachers should attempt to include open-ended assignments, and various ill-defined problem-solving questions that defy students to come up with innovative responses. Two concrete examples of these types of questions are: a) the egg drop experiment where students are given a certain set of materials and asked to design a delivery system that will safely allow an egg to drop from the highest point possible without breaking, and b) designing and constructing a bridge out of a certain set of materials that has the highest capacity for pay load. Other beneficial activities include, learning by doing,

holding various debates and science fairs, and adding optional quizzes, riddles, and challenges that interested students can solve; here it is of the utmost importance that teachers seek a fine balance between challenging students and not allowing any to feel left behind.

Of singular importance is that teachers and schools continue to recognise that creativity and intelligence may be manifest in many forms, for instance, Gardner's multiple intelligences.

These alternative forms include carpentry, shop class, mechanics, sports, and so on.

Feldhusen (1995) elaborates:

There can and should be abundant opportunities in school, at home, and in community life for youth to encounter, to recognize, to find the problems, weaknesses, and shortcomings of phenomena in the world around them to undertake the proactive behaviors of designing, solving, inventing, or creating new ideas, new solutions, new devices. Youth who are at-risk, or otherwise called underachievers in school or problem cases, can be drawn back into the productive side of the educational process. To do so, we must identify and recognize their talents, offer them opportunities to learn and work in their talent domains, provide them with experiences in working on real problems, or real life, or authentic situations, and encourage them to use their own creative, adaptive abilities in such efforts. (p. 8)

Consistent with the findings of the present study, Feldhusen (1995) suggests the 10 following goals for educational systems:

- a. Provide accelerated and enriched learning experiences for all students

- b. Emphasize very high level conceptual understanding in honors, accelerated, elective courses, and seminars.
- c. Provide group and individual counselling to help students plan optimal academic and extracurricular programs.
- d. Engage students in high level independent study and help them become autonomous learners.
- e. Stress inquiry, creative thinking, problem solving, investigation, report writing, and product development in homework and assignment activity.
- f. Identify and nurture special talents in the artistic, vocational, and intellectual realms.
- g. Organize opportunities for students to work together and opportunities to work with students of different abilities.
- h. Provide opportunities to work with tutors and mentors.
- i. Provide personal and career counselling to help students recognize and develop their own talents.
- j. Help all youth develop personal and career goals. (pp. 8-9)

In addition to the suggestions outlined above and to those previously discussed in Spooner (2002), further suggestions for high school include having students teach a lesson once a month since teaching was seen as a special type of creative endeavour. Another intriguing idea would be to have students engage in a long-term 4 year project that they could build on with each passing year. Granted such a project would be difficult to supervise and to maintain, however, it would teach students about holding and sustaining

long-term goals as well as creating another avenue for students to identify with the school system and their high school. Such projects could take any number of forms, for instance, a long video or film, a collection of smaller writings, a book, a photo essay, or an academic diary, to name but a few possibilities.

Participants discussed gaining insight regarding their creativity on two fronts: from within and from without. From within they experienced the rewards, joys and therapeutic effects of engaging in creative activities. From without, they experienced the sometimes beneficial and sometimes harmful reaction of their environment. Also reviewed under the Discovering Creativity theme were the processes by which young minds express their creative inclinations through a variety of modes of expression and interact with their environment. Parents, peers, and teachers helped participants become more insightful about their creativity and the environments that support its growth. As participants demonstrated interest or early proficiency in certain modes of creative expression they subsequently received reinforcement or resistance. Parents were mostly found to reinforce their children's creative offerings by engaging in activities with them and/or providing supplies and equipment. On the other hand, teachers and peers were perceived as being both helpful and detrimental to their creativity. Ever present is the role of context and perception in judging one's creative actions.

Creativity Expressed

One becomes increasingly self-aware of one's own creativity and talent as it develops. For instance, the participants in this study felt that their creativity was not domain-specific, but by exploring the match between their creativity and various modes of expression they could find one or several modes that best allowed the expression, or

translation, of their creative thoughts into an external mode of expression. As previously examined in Chapter II, an important distinction must be made between the tools people use to *think* creatively and the ones they use to *express* their innovations. Unlike Howard Gardner (1993), who tends to categorize creative individuals by the mode or specific domain in which they express themselves (Root-Bernstein & Root-Bernstein, 1999), research by Root-Bernstein and Root-Bernstein (1999) and Spooner (1999, 2004b) suggests there is an important distinction to be made between the mental tools and skills people use to think creatively and the ones they use to communicate their novel ideas.

For instance, Einstein relied heavily on visualisation, body thinking, and empathy to help generate creative understanding, yet communicated his findings and theories through mathematical formulae (Root-Bernstein & Root-Bernstein, 1999). As well, the experiences of Palooka, who expresses his creativity in both music and mechanics, Jack who sees himself as creative in all aspects of being, but who prefers expressing it via painting or computers, and Thelonius who expresses his creative feelings aurally through music (his saxophone) or visually through painting, also suggests that creativity is not a domain-specific attribute, but rather a general one that may manifest itself in a variety of domains. Furthermore, their examples demonstrate that these domains can be quite disparate, at once spanning the arts, sciences, and humanities. It appears more likely that the underlying thinking tools involved in the creative process are the same regardless of domain or discipline of application (Amabile, 1983, 1990), albeit in varying degrees of emphasis (Root-Bernstein, 1987, 2000; Root-Bernstein & Root-Bernstein, 1999).

Part of discovering and expressing one's creativity is learning what is available in terms of avenues of expression. Certainly culture and environment play a key role; recall for

instance how Jack uses computers for producing graphic art. Such an activity would not be possible in cultures or time periods where computers were not present.

Once one or several potential domains are encountered, one must develop a certain level of proficiency within that domain in order to effectively communicate the creative visions within it. Therefore, it would appear that although not domain-specific *per se*, creativity does require a certain level of skill or proficiency in at least one of the wide array of culturally bound avenues of human communication. This may help to explain the ongoing debate between researchers who find creativity to be domain-specific and those who do not.

Moreover, modes of expression take time and effort to learn and master. Recall how Briag made the distinction between music, which he has been practising for over 15 years and represents a form in which he is capable of effectively translating what he “hears” into a tangible product, with photography which he is just learning and is not yet capable of translating what he “sees”. The situation is similar for Patricia who after many years of practise is capable of sewing the couture she envisages. Honing their skills and the precision with which they can transform ideas into being, through one or several modes of expression— for instance Gardner’s (1993) intelligences— may take place over a long period. It can take many years of practice and learning before one develops a certain level of proficiency in any given mode of expression (and thus) minimising the gap between what one “sees” and what one is capable of producing in a visible or tangible form.

Feldman (1999) lists education and preparation, both formal and informal, as a crucial dimension of creativity. He suggests approximately a decade must be spent mastering a domain before creativity of any great consequence can be produced. This is also congruent

with research by Csikszentmihalyi (1990) and Feldman, Csikszentmihalyi and Gardner (1994) that suggests before one may make creative contributions of any significance, substantial learning within the specific domain must have occurred.

Participants expressed that when they stopped looking for approval and started taking risks their creative growth began to mushroom. Confidence, an increased willingness to risk, and motivation each began to grow as creative endeavours were successfully attempted. This situation was very much in evidence as Josh described his experiences and innovations with photography and photographic methods. Rimm (1988) suggests self confidence must be earned, “you will not earn confidence by doing easy things.... It is only when you take the risk of doing the difficult that you find you can accomplish what you formerly believed you couldn’t” (p. 43). Research by Collins and Amabile (1999) has found that “... evaluation or feedback that is informative or constructive or that recognizes creative accomplishments can also be conducive to creativity” (p. 304). Patricia comes to mind as she discussed finding people with similar creative interests as helping to motivate her creative action, because they also view creative activity as a valuable endeavour. As does Peter discussing the positive reinforcement he felt as a result of people asking him about his new songs. Similarly Collins and Amabile report, “... extrinsic motivators which support one’s sense of competence ... may act in concert with high levels of intrinsic motivation to increase creativity” (p. 305).

Therefore, as discussed, the life experiences of creative young adults play a vital role in how their creativity will be manifest. Through experimentation within different forms of expression, and fuelled by various motivational stimuli, one’s understanding of self, and more precisely of one’s creative self, begins to emerge. As is always the case, these are culturally bound— some avenues of expression are given supremacy at the expense of

others. This understanding continues as one becomes exposed to various creative domains and techniques and one's confidence and proficiency in certain areas becomes more defined. Receiving acknowledgement for creative endeavours helps to legitimise one's creative identity. Over time, and with much effort, creative talent in specific areas continues to develop. Actively promoting this process, creative young adults increasingly seek out opportunities to cultivate their creativity and their communication abilities within their chosen areas of creative expression.

Purposive Honing

As the findings of the present study suggest, creative individuals actively seek environments in order to expand both their creativity and their talent in a particular expressive area, often simultaneously. They actively seek out environments in which to share and hone their skills with like-minded mentors and others. Harrington (1990) states that the "... accounts of the lives of creatively successful people abound in reports of environmental modifications and migrations apparently designed to facilitate subsequent creative activity ..." (p. 161). In the present study, an overwhelming proportion of participants sought out professional and amateur training in many fields. For example, Josh has followed his conservatory in music (piano) and is a member of the city's Little Theatre group, Steve enrolled in art lessons specialising in the comic book genre, and Peter took guitar lessons from an established musician. Seeking specialised and advanced training appears to be a typical process in one's quest for ever-increasing creative accomplishment.

Springboarding is an especially fruitful and multifaceted process. Springboarding may involve one, or more likely a combination of: a) others' ideas, including friends/peers, teachers, and other members of one's community, b) motivational influences of others, c)

skill/training opportunities and d), the eventual formation of micro-ecologies, career and life choices and directions.

The practice of cultivating one's own ideas by springboarding from others' ideas and products is a well-known creativity-generating tool or process. Using other people's ideas as a catalyst to one's own was an oft used technique employed by Andrean, Virginia, and Jack, and is well documented elsewhere (i.e., Spooner, 2002). For instance, Spooner (2002) states "applying other people's ideas as a starting point for one's own creative endeavours appears to be a common, proactive practice among creative young adults" (p. 319). In a less naturally occurring manner, this process is used in the controlled context of brainstorming where it is widely known as piggybacking or hitchhiking on others' ideas (Rickards, 1999). The present study has demonstrated that this process can be further accelerated through incremental scaffolding of ideas generated as a result of interactions with strangers, friends/peers, teachers, and other members to whom one has access. Put simply, the process is about bouncing ideas back and forth.

Another form in which this process may manifest itself occurs when the springboarding of others' ideas and examples actually increases one's motivation to also engage in creative pursuits. There is a generative quality to sharing one's ideas or aesthetic orientations that in turn sparks internal motivation, as Patricia's example of sharing ideas for clothes-making so aptly demonstrates. Feldhusen (1995) states, "interest motivates us to seek learning experiences in a domain, and successful experiences in a domain generate further interest and motivation to continue efforts in that talent area" (p. 7).

Creative young adults seek out like-minded and more knowledgeable peers and others to learn from. The creative individuals from this study frequently sought training

opportunities from both their high school and/or community as well as from peers and official and unofficial mentors. For instance, attending an “arts” high school during some of her high school years has contributed to Betty’s creative formation, the active observation of other’s artistic work and techniques have served as training opportunities for both Evoke and Uncle 3, and Peter has benefited from learning via both official and unofficial mentors. In the case of the present research, role-models have certainly played a key factor in the exposure to, and development of, creativity and modes of expression. Torrance (1983) found that both creative male and females “valued their mentors [for] ‘having taught them how to play the game’” (p. 18). Parnes (1999) writes “[mentoring] can actually provide a type of individual creativity development” (p. 476). For Jack, Steve, and Thelonius significant members of their family either acted as role-models or mentors to their creative development.

Nevertheless, one should keep in mind that the springboarding process does not necessarily involve people, but may simply involve the interaction of creative thinking and an external product/thing. As in the case of Kyle, Peter, and Thelonius’ experience, where learning sources were varied and included television, movies, as well as musical recordings.

Acknowledging and accepting their own creativity, creative young adults typically seek out micro-ecologies which support their growth; these micro-ecologies can eventually become a facet of their identity. One should note that these may include virtual ecologies formed through the Internet, as was demonstrated by Winston. Harrington (1990) describes this process:

... it may be useful to think of creative processes as placing *psychosocial* demands on creatively active individuals and their ecosystems-- demands that

must be met if the creative processes are to flourish. Almost all forms of social creativity place demands on creative agents and ecosystems by requiring certain levels of knowledge, imagination, skills, physical resources, time, work space, communication channels, and access to appropriate audiences. (p. 154)

The process by which springboarding progresses to ecology formation can lead to quite drastic results, as driven creative young adults actively seek out and even create supportive ecologies for themselves. This process may be carried to far-reaching ends. For instance, recall how Betty went as far as weeding out friends and acquaintances that did not support or contribute to the creative springboarding process.

While continuing purposive honing efforts, creative young adults may eventually seek work or study that will allow them to focus their energy on their craft and creative pursuits; others, for a variety of reasons, choose to downplay their creative ambitions and pursue a safe career that is based more on perceived employability than on creativity. According to Dacey and Lennon (1998) families pass on their values; they “define for them what the family believes is important and unimportant” (p. 50).

As these ecologies and training opportunities form, Gruber and Davis (1988) suggest one’s knowledge, purpose, and affect will grow over time causing one to encounter greater and greater deviations from the norm; as deviations and one’s precision of expression are amplified, this may eventually lead to the production of creative products. Purposive honing may begin to resemble self-actualization; that is, identity formation evolves, as creative individuals present their offerings to the field which ultimately judges whether they are “deviant” or creative and added or not, as a welcome innovation (Csikszentmihalyi, 1990).

Creative individuals actively seek environments in order to expand both their creativity and their talent in particular areas of creative expression. This process is greatly accelerated by the springboarding of ideas, motivation, training opportunities and the eventual formation of supportive micro-ecologies. Mentors and role-models also play a key factor in the exposure to, and development of, creativity and modes of expression. Eventually, both by learning ever-more precise techniques which enhance one's precision of expression and through the formation of like-minded clusters (which may include beneficial competition) deviations are amplified to such a degree that a creative product often results. This artefact is subsequently judged by one's field.

Consequences

The expression of creative talent can be manifest in many and diverse avenues. For some it may be channelled within the school system or through the many traditional areas of creative output. For instance, the participants of the present study were involved in: drawing, painting, photography, playing various forms of music and musical instruments, songwriting, poetry, acting, step-dancing, computer programming, computer graphics, and computer building, directing short films, scientific innovation, general problem-solving, sculpting, woodworking, construction, and so on (see participant profiles for a more exhaustive list). However they were also involved with what may be interpreted as alternative, and potentially socially non-accepted, creative activities and products; including, graffiti art, lying (bending the truth), jokes/put-downs, pranks, subversion, social activism, semi-serious crimes, as well as creativity in sport and teaching as creative enterprise.

Recall how people are often labelled as "deviant" because their actions are judged by others as not conforming to how they ought to be (Curra, 1994). According to Heckbert

(2000), “Since innovation can be... psychologically threatening to a culture, innovation is more often negatively labeled in the beginning” (p. 38). Moreover, as Carl Rogers (1959) noted creativity may be applied for “good” or “bad” purpose and that, furthermore, such a valuation may change with time and context. According to Csikszentmihalyi’s (1999) systems view of creativity those in power decide what is accepted and what is deviant; for example, graffiti art, in one context is vandalism, in another, professional art. Betty is a particularly intriguing example. She has been earning money performing in several nightclubs using the same skills and processes that she would use if she were involved in illegal graffiti activities.

Examining the structure of creativity and creative processes it becomes clear that creativity may be channelled through various avenues and applications and by its very nature it will, at times, be judged as socially acceptable or non-acceptable. To speak of creativity without social judgment or social acceptance as terms of reference is not possible (Cropley, 1997); “creativity is heavily dependent upon the presence of a “congenial” environment that recognizes its worth. The societal validation of products does not, however, occur in an economic/political vacuum” (p. 12). Furthermore, depending on whose perspective is engaged, acts of novelty may be judged very differently. Cropley (1997) states, “creativity requires doing things differently from the way they are usually done or even defying the norms of society” (p. 11). He elaborates:

novel ideas are likely to lead to societal change. Indeed, it is precisely this aspect that is frequently emphasized as the most important aspect of creativity as a social phenomenon—change and regeneration... creativity is a threat to the status quo, but is simultaneously seen as a necessary force for

renewal.... *Creative people are simultaneously the destroyers of social order and its saviors....* A creative product must not only be brought into existence, but must also be communicated to other people and accepted by them. This acceptance involves “sociocultural validation” of a product...(p. 11-12, italics in original)

As a concrete example, in Evoke’s case, his artistic graffiti continued to develop out of a lack of connection with school, boredom, and because he had difficulty finding established art galleries accepting of his adopted style. As noted earlier, society needs deviancy/criminality as a source of renewal (Durkheim, 1973). Society will often take new “deviant” art forms and consume and commercialise them thereby legitimising them. Without innovation, even at times outlawed deviations, society would stagnate. A case in point is the fact that graffiti art styles have now come into vogue complete with their own galleries, paint manufacturers producing specialised nozzles and vibrant colours, and high profile contests (Fineman, 2005). Kallen (1973) explains one manner in which the process unfolds:

innovators are not necessarily rebels... Nevertheless, innovators are forced into a combative position. For their novelties enter a social organization most of whose establishments are going concerns and enter as competitors and deprecators of one or another. If they succeed in establishing themselves, they become embodied in the organic flow of the mores. They cause the flow to deviate to a slightly different gradient definable by what they represent.... Innovations are mostly resisted out of motives of self-interest and fear. The

new is quite usually synonymous with the unreasonable, the dangerous, the impossible. (pp. 449-450)

One should also keep in mind that exceptional development is dependent on the ability and presence in the culture of a suitable domain to accommodate an individual's talent; it is also dependent on that avenue being accessible, on society valuing and supporting the given domain, and finally on the gatekeepers of the particular domain perceiving the individual as worthy of training (Mockros & Csikszentmihalyi, 1999). Rudowicz (2003) found that "culture not only influences *what* is expressed, by *whom* it is expressed and *how* it is expressed, but it also determines *what function* this expression serves and what its *consequences* are for an individual and society" (p. 274).

It is equally important to note that creative behaviours not acceptable within one context may be acceptable within another. Finally, the importance of creativity, and for that matter, deviance is illustrated by Linton (1973) who states:

Discovery and invention are the obvious starting points for any study of cultural growth and change, since it is only by these processes that new elements can be added to the total content of man's [human's] culture. Although developed cultural traits can be transmitted from one culture to another and most cultures owe the bulk of their content to this process, every culture element can ultimately be traced to a discovery or invention or to a more or less complex combination of various discoveries and inventions, which arose at a particular time and place. (p. 451)

In sum, creative products arise as a result of at least a considerable amount of social influence; for instance, teachers, mentors, parents, peers, and the socio-political, and cultural context. Moreover, the manner in which one's creative offerings are received by one's social community as well as how an individual responds to his or her ecosystem, as the present research has demonstrated, are pivotal factors in determining the avenues in which an individual's creativity will be manifest.

CHAPTER VI: CONCLUSION

“...no distinction between “good” and “bad” creativity. One man [person] may be discovering a way of relieving pain, whereas another is devising a new and more subtle form of torture for political prisoners. Both these actions seem to me creative, even though their social value is very different... Galileo and Copernicus made creative discoveries which in their own day were evaluated as blasphemous and wicked, and in our day as basic and constructive” -- (Rogers, 1959, p. 71)

Previously presented as a grounded theory analysis involving the process of “evolving” creativity and organised under the five themes: Initial Socialisation, Discovering Creativity, Creativity Expressed, Purposive Honing, and Consequences, this concluding chapter regroups the findings in terms of the initial research questions guiding this study. Also presented is a grounded theory process model for the “evolution” of the creative person. In addition, the methodological implications of adopting a constructivist perspective together with the newer relational views of research validity are also examined; as are the implications the findings hold for educational policy and practice as well as the potential implications the study holds for the future study of young adults and creativity.

Research questions

The research question answers, taken on their own and not as they operate in conjunction with one another, do not do justice to the dynamic and fluid nature of “real” life, nor to qualitative methodologies and data— I would not want to give the impression of a fixed reality where the researcher, with great resolve, is able simply to enter a setting and find complete answers to pre-determined questions. This would not accurately reflect the dynamic, multiple, and polyvocal realities of the participants involved in shaping the findings of this study.

However, if the research questions are taken as guides to potential pathways to be explored by researcher and participants via guided conversations of an incomplete and open nature, then the present study may offer partial answers to each of the questions as posed—questions which were developed based on the researcher’s area of interest, previous experience, and the extant literature. It should be kept in mind that these questions were formulated before entering the field and making contact with the 26 unique individuals who comprised the well-spring of insight that permitted and enriched this study.

As well, the reader should recall that the purpose of the present study was to better understand the many factors that have contributed to the processes that lead young adults to channel their creativity in various fields and degrees of social acceptance. Creative young adults representing a wide range of schooling experiences were given the opportunity to offer their constructive voice. Their contributions are reflected in more than these partial answers, but also give rise to a grounded theory, a putative model of an individual’s creative “evolution”, as well as to a variety of implications for theory and practice.

Therefore, the following answers to the 6 research questions guiding this study are presented as brief and partial responses to the initial questions that helped provide a modicum of direction to the 26 “guided conversations” which comprised this study. Keep in mind, these answers overlap with one another, and to a degree, were previously presented as they dynamically operate with one another in the grounded theory they helped to generate. They are presented here for clarity and convenience.

1. *How has perceived support (or lack thereof) from family, peer, or teachers/school acted as a contributing factor in the schooling experiences of creative young adults?*

Family

Generally participants reported receiving much encouragement and support from their parents and/or extended family to engage in creative activities. This support was manifested by verbal encouragement, and, more tangibly, by the purchase of supplies, equipment, cameras, musical instruments and lessons, and so on. How this family support specifically affected their schooling experiences *per se* did not generally arise throughout the course of the interviews. Nevertheless, in at least one case, a grandmother's questioning of a participant's abilities at school did motivate her to apply herself. She subsequently earned an A+, thus proving her grandmother wrong.

As well, one area in which family did exert a considerable influence over school experiences was in the choice of future career. As much as parents in this study have—in the young adults' perspective—supported their creative endeavours, several pushed their children to choose the “right” career. It appears this pressure is born out of the perception and concern that creative careers do not lead to stable, financially comfortable employment opportunities. Parental pressure held significant consequences for the future selection of university programs; several participants were encouraged to forgo careers in art or music for careers in biology and economics. For a variety of reasons some participants chose to downplay their creative ambitions and pursue a safe career that was based more on perceived employability than on creativity. According to Dacey and Lennon (1998) families pass on their values; they “define for them what the family believes is important and unimportant” (p. 50).

Peers

Peers provided encouragement for some participants, as they found people with similar creative interests helped to motivate their creative endeavours by viewing creative activity as a valuable endeavour. Participants also described the expectations and support of their peers to *be creative* as a validating and motivational influence; for instance, having peers ask for more of their creative products was perceived as a motivating factor. Collins and Amabile (1999) report, "... extrinsic motivators which support one's sense of competence ... may act in concert with high levels of intrinsic motivation to increase creativity" (p. 305).

However, in one critical case a participant was subjected to years of bullying by school peers who were not receptive to his budding creative talents. After several years of bullying, he became a bully himself jeopardising his school success. The jealousy of peers may exert a negative force by creating a hostile environment for outward creative expression. Still, as this particular account helps to demonstrate, creative young adults, as they gain confidence, may come to realise that becoming a bully is not the answer. In this case, he stopped being a bully and found like-minded peers who applied themselves to success in both school and creative endeavours. Polaine (1995) provides a first-hand account of how a bullied creative student can respond by becoming the bully, as she states the "humiliated and crushed teenager is a potential crusher and humiliator of her/his peers" (p. 115). As well, Torrance (1995a) suggests that courage is an important factor in being successfully creative.

Teachers/School

Teachers may identify and encourage the special talents of young adults as they nurture their students' talents by providing materials and experiences that foster their development. In the case of school, a child's early experiences with the educational system may also play a key role in the development and modelling of creative behaviour, as well as providing an arena for its expression. Perhaps Mockros and Csikszentmihalyi (1999) sum up the importance of both family and school environment best in stating "...families and early teachers are instrumental for providing opportunities and experiences that introduces talented youth to the field" (p. 183).

The favourite teachers of creative students were passionate and committed, involved in their respective subject areas, and supportive of student endeavours. They willingly pushed their students by treating them respectfully as intelligent beings, engaging them in conversations, contributing ideas, and suggesting potential new areas of investigation. Research by Torrance (1981b) and Sosniak (1985) suggests that certain "special" teachers have played an important role in the future careers of highly creative individuals by enabling and keeping alive their creative spark. This is consistent with research by Renzulli (1992) who states:

teachers who foster creativity tended to allow students greater choice in the selection of topics, welcomed unorthodox views, rewarded divergent thinking, expressed enthusiasm for teaching, [and] interacted with their students outside of class ... (p. 178)

“Bad” teachers were characterised as not pedagogically sound in their approach to teaching, lacking subject matter knowledge, or not respectful of, or open to, student ideas. Correspondingly, teachers who do not seek input from their students were not well regarded.

Throughout the course of this research it cannot be overlooked that in the case of several participants, and in particular with the graffiti artists, a lack of connection with their school has played a role in the channelling of their creativity into potentially socially non-accepted avenues. Perhaps their lack of verbal/language ability played a part in their dissatisfaction with the school system, since schools tend to emphasize logical-mathematical and verbal modes of communicating (Gamwell, 2002; Short, Kauffman, & Kahn, 2000). These students sought other arenas in which to express the talents which were often downplayed at school. Graffiti art may not be viewed as an exceptionally destructive activity; however such actions may lead to other, less benign areas of creative expression, an unfortunate outcome when the school system could have played a greater role in helping to direct these otherwise talented students to express their creativity in more pro-social spheres.

Another area that was not anticipated was the very nature, or culture, of what the school system itself supports or not. In the context of an Ontario elementary education, the school system as it is currently configured has been steadily de-emphasising the arts, physical education, and design and technology programs (People for Education, 2005). As previously discussed, our school systems are cultural agents, and the creative areas they either privilege or constrain become important factors to take into account. Tellingly, participants reported they are often less willing to take risks on originality in their assignments because they feel it might hamper their chances of getting a better mark. It is noteworthy that in a study of teachers’ beliefs about creativity, Diakidoy and Phtiaka (2002)

found that the teachers considered “creativity to be unrelated to school achievement” (p. 183).

Keeping the educational experiences and the broader culture of these creative young adults in mind, the importance of Mockros and Csikszentmihalyi’s (1999) findings that exceptional development is very much dependent on whether the given culture recognises the chosen domain, that the young adult is perceived as suitable for training, and that such a domain is accessible and supported, becomes clear.

2. *In what avenues have creative young adults sought to express and hone their creativity?*

The participants in the present study were involved in a wide variety of creative activities and production. While many of the products arising from their creative expression tended to be viewed as socially-accepted, others to varying degrees were not. For example, participants were involved in drawing, painting, photography, playing various forms of music and musical instruments, songwriting, poetry, acting, step-dancing, computer programming, computer graphics and assembly, directing short films, scientific innovation, general problem-solving, sculpting, woodworking, construction, as well as sports and teaching as creative enterprise.

In addition to these products, participants were also involved in creative activities that that may not be viewed as socially-accepted; for example, graffiti art, lying (bending the truth), jokes/put-downs, pranks, subversion, social activism, and semi-serious crimes. People are often labelled as “deviant” because their actions are judged by others as not conforming to how they ought to be (Curra, 1994). As Heckbert (2000) states, “since

innovation can be... psychologically threatening to a culture, innovation is more often negatively labeled in the beginning” (p. 38). According to Csikszentmihalyi’s (1999) systems view of creativity, those in power decide what is accepted and what is deviant; for example, graffiti art in one context is vandalism, in another, professional art⁵. Examining the structure of creativity and creative processes it becomes clear that creativity may be channelled through various avenues and applications and by its very nature it will, at times, be judged as either socially acceptable or non-acceptable.

3. *What are the effects, if any, of seeking out training opportunities and supportive ecologies on deviancy/creativity? (including role-models)*

Role-models have certainly played a key factor in the exposure to, and development of, creativity and modes of expression. Creative young adults are active shapers of their own environment. They will seek out peers, training opportunities, and mentors to help them further their creative aspirations. For some, significant members of their family have acted as role-models or mentors to their creative development, for others the interacting with peers and the experiences of attending an arts high school have acted as a positive force in helping to teach and expose them to new technique and avenues contributing to their creative identity.

In addition to family, peers, and teachers/school, this study found that participants also located support from various role-models outside of these three main areas. Role-models can help individuals envision the type of creative person they wish to become. Mentors also help to encourage and to push young adults to apply themselves to their craft. Participants benefited from learning via both official and unofficial mentors. Similarly,

other studies have found that creative role-models and mentors provide support and influence and play an important role in the development and emulation of creativity (Parnes, 1999; Prentky, 1989; Simonton, 1978, 1984; Torrance, 1983).

Driven creative young adults actively seek out and even create supportive ecologies for themselves. This process may even include virtual ecologies formed through the Internet. Describing the process, Harrington (1990) states “Almost all forms of social creativity place demands on creative agents and ecosystems by requiring certain levels of knowledge, imagination, skills, physical resources, time, work space, communication channels, and access to appropriate audiences” (p. 154). This process may be carried to far-reaching ends. For instance, one participant went to the length of weeding out friends and acquaintances that did not support or contribute to her creative growth.

Creative individuals actively seek receptive environments in order to expand both their creativity and their talent in particular areas of creative expression. This process contributes ideas, motivation, training opportunities, and to the eventual formation of supportive micro-ecologies and identities. Eventually, both by learning ever-more precise techniques which enhance one’s precision of expression and by the formation of like-minded clusters (which may include beneficial competition), deviations are amplified to such a degree that a creative product often results.

As these ecologies and training opportunities form, Gruber and Davis (1988) suggest one’s knowledge, purpose, and affect will grow over time. This, in turn, causes one to encounter greater and greater deviations from the norm; as deviations and one’s precision of expression are amplified, this may eventually lead to the production of creative products. As this process progresses it may lead to self-actualization; that is, identity formation evolves,

as creative individuals present their offerings to the field which ultimately judges whether they are “deviant” or creative and added, as a welcome innovation, or not (Csikszentmihalyi, 1990).

4. *What factors are perceived by participants as contributing to their choice of expressing creativity in either socially accepted or socially non-accepted ways?*

Creativity can be employed for socially positive or socially negative outcomes. Creative people can use their creative minds to generate “positive” as well as “negative” ideas that may be channelled to good or sinister outcomes. Therefore, it is largely where, when, and how one chooses to apply one’s creative thinking that determines the nature of one’s creative offerings as well as how they are perceived. As Carl Rogers (1959) noted, creativity may be applied for “good” or “bad” purpose and, furthermore, such a valuation may change with time and context. Moreover, to speak of creativity without social judgment or social acceptance as terms of reference is not possible (Cropley, 1997); “creativity is heavily dependent upon the presence of a ‘congenial’ environment that recognizes its worth. The societal validation of products does not, however, occur in an economic/political vacuum” (p. 12).

Although there may be several factors as to why one would choose to align one’s creative production to a given point along the spectrum “socially accepted/socially non-accepted”, it cannot be overlooked that in the case of the participants in the present study, the non-graffiti artists tended to transform their emotions, good and bad, into a force that fuels their socially accepted creative endeavours, whereas the graffiti artists tended to adopt a less socially-accepted, “outsider” form of expression. They chose to go outside of the school

structure to share their creativity and to seek mentors and learning opportunities. Perhaps this occurs as a result of their negative experiences within a school system that downplays their visual/symbolic thinking talents by privileging logical-mathematical and verbal modes of communicating instead (Gamwell, 2002; Short, Kauffman, & Kahn, 2000). It would appear that in the case of the graffiti artists, a lack of connection with their school has played a role in the channelling of their creativity into potentially socially non-accepted avenues.

5. *What are some possible relationships, if any, between channelled creativity and degree of proficiency (or lack thereof) in any particular mode of expression?*

It seems creativity, although not domain-specific per se, *does*, however, require a certain level of skill or proficiency in a given mode of expression. This may help to explain the ongoing debate between researchers who find creativity to be domain-specific and those who do not. Creative young adults must develop a certain level of proficiency within one of the expressive domains in order to effectively communicate their creative visions to the external world. The ability to express oneself in certain domains largely determines the outlets within which creative young adults choose to apply their creativity. For instance, lacking language mastery impedes one's attempts to communicate creative ideas via certain modes of expression; for several participants that is precisely why they channelled their creativity into musical or artistic domains. Again, perhaps their lack of verbal/language ability played a part in their dissatisfaction with a school system that emphasises language arts, mathematics, and sciences (Gamwell, 2002; Short, Kauffman, & Kahn, 2000).

Participants' creative expressions have included visual, musical, verbal, and tactile avenues. Additionally, the present research has demonstrated the importance of possessing

the ability to match creative goals with the proper tools and appropriate domain in order to effectively translate and communicate one's ideas to others. Moving from an initial idea to a tangible creative product requires a translation of those ideas into an avenue for external communication. To achieve a creative product requires skill and much practice in one or more modes of expression.

Honing their skills and the precision with which they can transform ideas into being, through one or several modes of expression, for instance Gardner's (1993) intelligences, may take place over a long period. It can take many years of practice and learning before one develops a certain level of proficiency in any given mode of expression (thus) minimising the gap between what one "sees" and what one is capable of producing in a visible or tangible form. Once one has creative ideas and the proficiency in a mode of expression, it can still be a struggle to translate the ideas in his/her mind to external creative expression.

6. *What have been the perceived consequences of expressing their creativity in socially accepted or socially non-accepted avenues?*

As noted, although participants were involved in a number of creative endeavours, for the most part these were of a socially-accepted nature. Graffiti art was the socially non-accepted activity most frequently reported. As well, a few participants did partake in pranks where the police were involved; however, no formal charges were laid. Nevertheless, the possibility of a criminal record is a constant reality when engaging in (creative) activities that are illegal.

One of the effects of engaging in creative activities of any sort was the resulting perceived lack of time, creating a constraint where either homework or creative endeavours may suffer. Some participants did not view the regular school assignments as areas where they could risk being innovative since often no specific marks for creativity were allotted.

As well, creative endeavours were found as a useful form of therapy to work through confusing and tense times. Several participants perceived their creativity as a self-therapeutic tool useful for working through emotions and difficult times.

Another consequence of engaging in creative activities was the finding that young adults face various pressures to commit to a career path that may be at odds with their creative passions as they balance employability concerns with creative aspirations. The pressure to choose can result in a struggle to reconcile their creative and educational/employment options. Additionally, one participant's situation demonstrates in a graphic manner the difficulties of maintaining one's chosen career path in the arts when faced with great familial pressures to do otherwise. In his case he feels like he is not meeting his parent's, or his extended family's expectations and he is being tacitly compared to his sister who has followed the more traditional route. It becomes evident that choosing to follow through with one's creative and perhaps less conformist calling is not without hardships, financial and psychological. One may be filled with much inner doubt as one chooses to take "a road less traveled."

Contribution to theory: The "evolution" of the creative person

The interactionist model of creative behaviour upon which the present "evolution" model was initially based, follows from Woodman & Schoenfeldt (1989) and represents an attempt to integrate:

diverse perspectives, each of which captures variables of some explanatory power. Combining personality, cognitive, and social psychology explanations of individual differences in creative behavior could serve to improve our ability to understand creative persons, processes, and products.
(p. 80)

The Woodman and Schoenfeldt model is particularly noteworthy in its ability to examine potential relationships between situation and organism, as well as in its ability to integrate disparate findings from each of the four strands of creativity study (person, process, product and press) into an overall framework. It does not, however, specifically account for the processes by which individual creativity is developed and how this occurs over time. To the extent that the present “evolution” model, itself based on the continuation of a grounded theory study undertaken by the present author, is successful, it will specifically account for this process as well as integrate aspects of explanatory power from each of the four strands of creativity research.

The “evolution” process model of the creative person contains the five following elements: *Initial Socialisation*, *Discovering Creativity*, *Creativity Expressed*, *Purposive Honing*, and *Consequences* and may be graphically represented (see Figure 4). Explored within *Initial Socialisation* are early socialisation conditions including: biographical variables, gender, siblings, birth order, the presence of early role-models, enrichment opportunities, early educational experiences, and cultural affordances and constraints. It should be pointed out that although one’s initial socialisation into creative articulation typically occurs early in one’s life, as was intimated as result of this study, it may actually

occur at any time as a result of various factors, for instance, being exposed to a new culture, or to new attitudes towards creativity, or other factors.

As one moves to *Discovering Creativity*, the development and discovery of one's creative self is progressively achieved. This discovery may take place from both within (internal psychological discovery, both as enjoyment and therapy) and from without (interaction with environment, both positive and negative). Included are such factors as internal and external motivation, personality and affective traits, as well as one's initial attempts at expressing one's creativity via one or a variety of avenues (i.e., the multiple intelligences) and an awareness of one's needs for creative expression (i.e., other people, alone time, courage etc.). School systems may play a pivotal role by reacting in various ways to one's early creative offerings.

The third element in the evolution process, *Creativity Expressed*, involves one's increasing awareness of one's creativity as well as the environmental reactions to one's creative expressions. Creative offerings may be either initially accepted or rejected. If they are rejected (i.e., creative endeavours that are visual/symbolically-based within the Ontario school system, or the creative offerings of a bullied young adult) then one must either make adjustments to one's chosen mode of delivery, seek an alternative environment (including cultural milieu), transform one's environment, or attempt to cease being creative. Examples of factors explored within this element are one's persistence, motivation, confidence and awareness of creativity, educational experiences, peers, and so on.

The fourth element, *Purposive Honing*, occurs when creative actions have been expressed, and a supportive (though perhaps initially unsupportive) ecology has been found, which leads to the channelling and honing of one's creativity. Various intervening

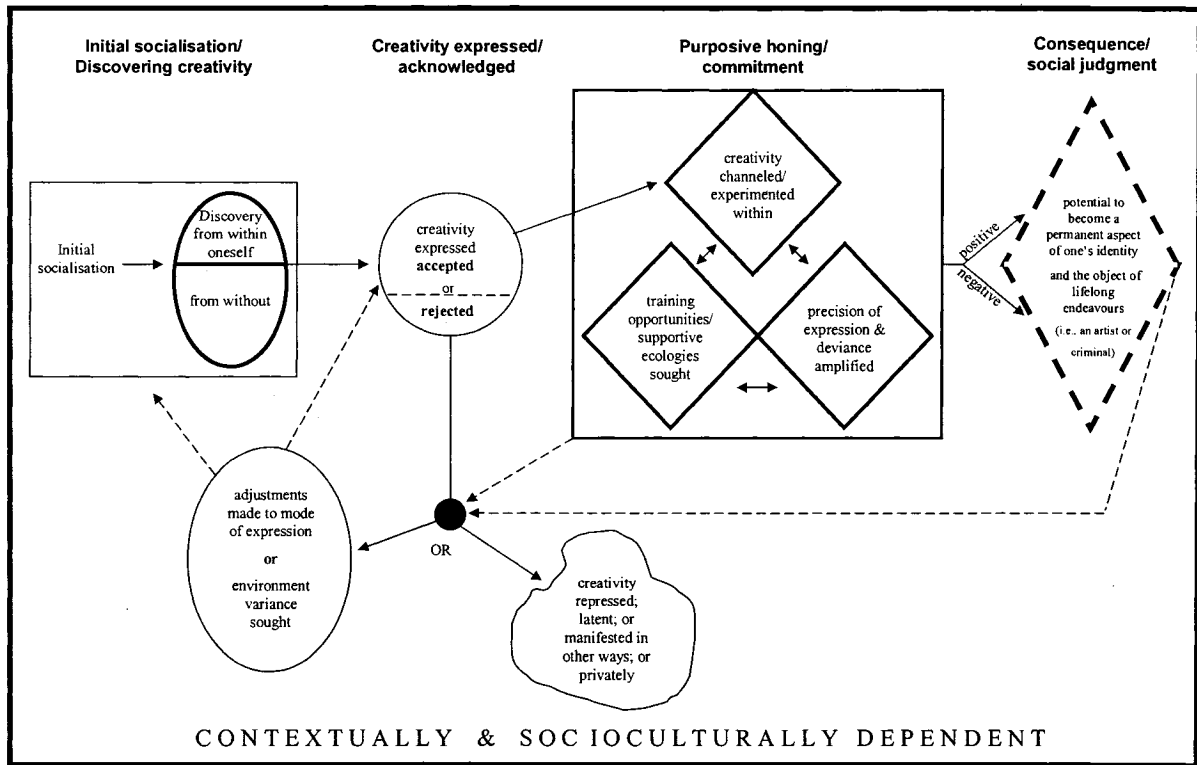
conditions include actively seeking increasingly higher level training opportunities and supportive ecologies. Through this process, communities of like-minded individuals develop and evolve. Protected in safe solidarity, or spurred by motivating competition, individuals may encourage and push each other's creative interests forward. Buoyed by group interaction, each member offers unique contributions which result in a dynamic, synergistic exchange of creative thought and growth. Moreover, as one's precision of expression and one's opportunities for specialisation are increased, one's deviance (shifting further away from the statistical norm) may also be amplified.

Finally, creative behaviour leads to products and *Consequences* depending on the culture, the spirit of the times, and one's chosen arena of expression (graffiti art in schools may lead to a suspension, yet among fellow artists in other locations, kudos). These expressions may be viewed as creative or "deviant" offerings. That is, they may be perceived as positive and socially accepted, or negative and socially non-accepted, depending on the field, context, culture, and the *Zeitgeist*.

Implications for methodology: Research as praxis

Over the last few years, as the legitimacy of qualitative research continues to assert itself, "...new emerging criteria...[are increasingly] relational, that is, they recognize and validate relationships between the inquirer and those participating in the inquiry" (Lincoln, 1995, p. 278). Since the state and society invest considerable amounts of money, time, resources, and hope into our training and practice as scholars and researchers, we ought to be putting our knowledge and positions of privilege to concrete use. Our findings ought to be put into practice/action. It is a time for renewed vision of our role in society— for a new

Figure 4: The “evolution” of the creative person: An environmental process model



[dashed lines indicate circular feedback loops]

INITIAL SOCIALISATION

Stimulating Environment

- creative role models
- sibling effect
- enrichment opportunities
- special equipment (i.e., musical instruments, art supplies, etc.,)

DISCOVERING CREATIVITY:

From Within

- imagination
- curiosity
- open-mindedness
- coping mechanism
- enjoyment

From Without

- creativity must be expressed via one or a variety of avenues (i.e., multiple intelligences)
- knowledge of one's needs for creative expression (i.e., other people, alone time, etc.)
- school
- cultural influences

CREATIVITY EXPRESSED

- creative tools/skills
- confidence
- motivations
- vehicle of expression
- willingness to risk

PURPOSIVE HONING

- initiate opportunities for specialised training
- mentors
- exposure to others, like-minded individuals
- springboarding

CONSEQUENCES

- sociocultural valuations
- spirit of the times
- context
- creativity/deviance

theory of action— that compels us to act at the local community level in concrete, tangible ways.

The real proof of the pudding is not in the description, but rather the taste.

Far too much time and far too many resources are expended defending our truth claims, when we ought to be demonstrating how well they *fit* and *work*. For in the end, by one paradigm or another, there is no ultimate foundation on which to base knowledge claims; they each require an act of faith on behalf of the reader. As Smith and Deemer (2000) so aptly state:

as finite beings, all we can do is construct social and educational worlds... constructed realities for which we are morally responsible.... there may be little more to say than this about judgment, criteria, and validity.... Our individual judgments inevitably must be moved into a public space where they are placed in concert with the judgments of others. (p. 891)

Therefore, yes, let us be transparent in the steps and procedures taken to arrive at our findings, but more importantly, let us translate them into concrete, positive community results. Newer perspectives on how we ought to judge the merit of our craft must acknowledge our service to the general public. Something seems to be amiss when careers, and tenure even, can be achieved by publishing in scholarly journals that all too often cater to an elite and limited readership without ever changing anything in the communities we study. Popularisations and community-based action projects must be taken into account and rewarded when determining questions of validity, funding, promotion, and tenure. As Guba and Lincoln (2005) state,

whatever the source of the problem to which inquirers were responding, the shift toward connecting research, policy analysis, evaluation, and/or social deconstruction...with action has come to characterize much new-paradigmatic inquiry work, both at the theoretical and at the practice and praxis-oriented levels. (p. 2001)

As previously reviewed, ontological, epistemological, and methodological choices have far-reaching effects on how validity is viewed; these effects greatly shape the role and responsibility of the researcher as well as what constitutes valid, “good” research.

According to the constructivist perspective adopted and supported in the present study, validity is a function of the researcher’s active participation and effort in translating his/her research and position of privilege into tangible, positive contributions to the communities involved. Given the realities of my current position as a doctoral candidate, I feel I have, to the best of my ability, engendered local, positive change by: a) starting a weekly open-stage coffeehouse night where all forms of creative expression would be welcome, b) speaking at length with the Coordinator for the City of X’s Community Pride Program about creating spaces for graffiti artists to paint and display murals, c) addressing a school-wide assembly about my own educational experiences, and d) offering remuneration in the form of a \$20 record store gift certificate or in some cases \$20 to participants as a token of appreciation.

It is commonly repeated that we measure our success as researchers by whether or not we have added to a body of knowledge, however incrementally. But in a fully engaged academy, it should also be commonplace for scholars to find ways to translate knowledge and power into real action and real change, however small. Eventually these small ripples

can have a significant impact; it only takes a committed few to make a positive difference. The public who places its money and trust with us ought to see what it is we do. We must ask ourselves if we have contributed to positive change and if we have brought greater awareness to our communities of research; ultimately, our vocation ought to be that of community-engaged agents of change in the public interest. In such a role, we are limited only by our imagination.

Implications for educational policy and practice

In addition to the concrete suggestions volunteered by the participants (documented in Chapter V; for a complementary discussion please see Spooner, 2002), there are several areas in which schools systems can enhance the likelihood that students will experience creative growth and acceptance. First, in light of the Gardner's (1993) theory of multiple intelligences (i.e., Visual/Spatial, Musical, Verbal, Logical/Mathematical, Interpersonal, Intrapersonal, and Bodily/Kinesthetic) our educational systems ought to be more welcoming of diverse modes of expression. Moreover, as Short, Kauffman, and Kahn (2000) state, "there are parts of the world we can never know, and understandings that we can never communicate to others, if all the sign systems are not available" (p. 170). Accordingly, school systems ought not to privilege one sign system, or way of knowing, over another. Each should be accommodated via the domains that represent the multiple intelligences. Students ought to be engaged cognitively and emotionally, allowed to follow their passions and interests at their own pace and, wherever possible, at their own control (Gamwell, 2002). Too many students who do not easily fit into the pre-determined mold the system attempts to ascribe to them are left to find guidance outside of school where their talents may be directed to less pro-social avenues. I have heard it said that the previous suggestions made by the

participants themselves and the changes I am advocating presently are unrealistic; however, in any great societal improvement the impossible *was* made *possible*, for instance, universal health care, the fall of the Berlin Wall, or public education itself.

Implications for future research

Grounded theory models are not proven or disproved; rather additional data simply inform the theory and as theoretical sampling expands, new categories are constructed and old ones are better understood. This study is no exception. Future research should continue to explore the “evolution” processes by which young adults come to be creative. Integrative models seeking to explain both the potential relationships between individual and environment and the disparate findings generated as a result of research in each of the four strands of creativity study (person, process, product and press) compel an exploration of these complex processes with a view to connecting them into a robust overall framework.

Of interest should also be the characteristics and interactions that lead some creative young adults to overcome seemingly negative home and family situations. What makes some individuals resilient and capable of overcoming lack of home or school support, is an important question to explore.

As well, the use of creativity as a coping strategy represents an exciting new insight and potential avenue of research; a young adult’s motivation for engaging in creative pursuits may be for their utility and effectiveness as possible coping strategies— or quite simply out of necessity. Previous research has identified a number of creative arts therapies, such as art, music, dance/movement, drama, and poetry as effective forms of therapy in a counselling or psychotherapy setting (Johnson, 2000). However, according to Johnson, arts

therapies are helpful only if “the therapy is conducted in conjunction with other ongoing treatments and therapists” (p. 311). The present research would suggest creative activities may hold therapeutic benefits without the presence of other treatments and therapists.

Not mentioned in the literature, but no less intriguing, was the finding that in at least a few cases, individuals would purposely re-visit painful memories or even actively seek out harmful relationships in order to generate the powerful emotions and affect perceived as being necessary for generating creative flow. The nature of the relationship and direction between creativity and therapy may be called into question. That several participants reported using creativity as a form of therapy while others purposely set out to experience psychologically harmful situations in order to fire their creative endeavours represents an important and potentially rich area for future research and exploration. More research must examine the relationship between creativity and therapy on the one hand, and on the other, the seeking out of negative experiences to ignite the emotional spark perceived as vital to creative endeavours.

Finally, the relationship between creativity and deviance must be further explored. We must understand to a greater degree the processes that lead one’s creative offerings to be perceived as positive and socially accepted, or “deviant” and non-accepted.

Delimitations

Naturally as Wolcott (2001) aptly points out, this study “...occurred in a particular place, at a particular time, under particular circumstances... [and] that certain factors render the study atypical... [and] that limited generalization is warranted” (p. 38). As previously discussed, “the reader should note that trustworthiness is a matter of concern for the

consumer of inquirer reports” (Lincoln & Guba, 1985, p. 328)— contrary to the traditional positivist position which holds the researcher as guarantor of validity.

It is my hope that I have provided the reader, to the best of my ability, a transparent and authentic account of the process by which individuals evolve into creative persons. In the end, there may be little more to state, other than it is now up to you to decide if it may be applicable to your particular situation and context.

Conclusion

In sum, the present study has identified several categories germane to creative endeavours which loosely operate in conjunction with one another through an “evolving” process. Identified elements to the “evolving” process include, Initial Socialisation, Discovering Creativity, Creativity Expressed, Purposive Honing, and Consequences; however, future research should expand sampling in order to refine our understanding of the many aspects and nature of creative development.

The present study has not only added the informative voice of creative and creative-marginalised young adults to creativity research, but has also proposed an environmental process model for its cultivation and evolution. As well, this study helps lend credence to the view that creative products arise as a result of a considerable amount of social influence. With this in mind, the relationship between a student and one’s school and social community is transformed into one where considerable reciprocal responsibility emerges for the successful completion of creative endeavours. If we are to acknowledge such a responsibility, then continued efforts to include the informative voice of creative and marginalised-creative young adults must be sustained.

Research must continue in order to inform our understanding of creative environments, as well as to inform our school systems, thus allowing them to better serve the creative and potentially creative students who operate within its halls. For ultimately, the promise of great innovation, and perhaps more importantly, of a healthy, pro-social, and self-actualising society is at stake.

Footnotes

- 1 Based on the concept of photon - particle collisions, Werner Heisenberg proposed a theory in 1927 known as the uncertainty principle. It argued that since we have to use light to identify the location or motion of an electron, the photon of light will influence the electron's motion and position. The uncertainty principle says the more certain we are about a particle's position, the less certain we are about its momentum, and vice versa.
[<http://www.sciencejoywagon.com/physicszone/lesson/10modern/uncertain/index.htm>]

In other words, the more one accurately measures the direction of a particle the less one will be able to measure the speed of a particle and vice-versa.

- 2 physical principle enunciated by Niels Bohr in 1928 stating that certain physical concepts are complementary. If two concepts are complementary, an experiment that clearly illustrates one concept will obscure the other complementary one. For example, an experiment that illustrates the particle properties of light will not show any of the wave properties of light. This principle also implies that only certain kinds of information can be gained in a particular experiment. Some other information that is equally important cannot be measured simultaneously and is lost.
[<http://www.bartleby.org/65/co/complem-prin.html>]

Stated differently, the very act of measuring a particle determines its state (particle or wave) reality.

- 3 For two years, I have collected graffiti-related articles and letters to the editor from a variety of local publications, including, the large media newspapers and smaller community newspapers and alternative weekly publications. A headline from the Ottawa Citizen reads "Graffiti is valid commentary; it should be encouraged", the article continues by stating "It's been called the work of deviants, vandals and miscreants...But where one person sees vandalism that has to be stamped out, another sees artistic expression that has to be embraced and protected..." (Adam, 2001, D3). An alternative headline from the Ottawa Citizen reads "Cullen seeks 1.5M to attack graffiti", the article goes on to state "While acknowledging that he considers some graffiti art, Mr. Cullen said, for the most part, graffiti is not art." (Campbell, 2002, p. F13). In Newswest, a local community paper, the headline reads "City plans to manage graffiti" the article states "earlier this summer, the City of Ottawa approved \$50 000 'zero tolerance' pilot project as part of a larger graffiti management program.... 'People think it's a victimless crime but it's vandalism pure

and simple' (Hanson, 2002, p. 1, 3). One letter to the editor that appeared in the Ottawa Citizen read:

...general condemnation of graffiti is ignorant. It ignores the esthetic and sometimes political value of graffiti. Graffiti has long had a place in art, from the Dadaists of the 1920s, through Basquiat, right on to today's urban culture. I look upon graffiti as as [sic] indicator of a vibrant and creative population. (Pepper, 2002, D5).

An article that ran in the national edition of the Globe and Mail has a headline that reads "Graffiti explosion seen as both art and urban blight" (Galloway, 2003, A19).

- 4 Sport was mentioned more frequently as an outlet for creativity in the small city high school than it was in the larger urban city high school of one of my previous studies (Spooner, 1999). One possible explanation is that sports, in the smaller city, appeared to be highly valued as evidenced in the school by the number and variety of sports offered, as well as the participation rates they attracted. Another reason for the popularity of extra-curricular sporting events may be simply as a result of the lack of other competing activities to choose from in a smaller city.
- 5 Banksy is a perfect example of this. In a recent article in *Wired* magazine (August, 2005), it is reported that one of Banksy's vandalism pieces "Early Man Goes to Market" surreptitiously put up at the British Museum was at first removed only to later be added to the British Museum's permanent collection. For more details about his many projects and activities go to (<http://www.banksy.co.uk>).

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Appendix A

Short Biographical Questionnaire

Instructions: If you would like to participate, please complete the following questionnaire. You are **NOT** required to answer any question you do not want to (there are no consequences for withdrawing or skipping any questions). All answers will be kept confidential.

1. Name: _____

2. Date of Birth (YY/MM/DD): _____

3. Please check, I am: Male Female

4. In my home I live with: _____

5. I am the _____ (1,2,3,4,5, etc) child and I have _____ sister/s and _____ brother/s.

6. Regardless of my actual ordinal position, I see myself as the *first, middle, youngest* or *only* child. (Please circle one of the following: *first, middle, youngest* or *only*).

7. My estimated average grade throughout high school was/is _____%.

8. I completed high school? _____

9. Please define creativity in your own words (there are no right or wrong answers here!):

10. Please compose a list and briefly describe approximately ten “things” that encourage you to express your creativity (in either a positive or negative way). Just to remind you, no one but me and my research committee will see this form.

Appendix B

Name: _____

Description of Questions to be Asked

1. What characteristics do you see in yourself that contribute to your creativity?
2. What have you accomplished that you consider creative? Do you have any examples/samples of your creative endeavours?
3. What avenues have you sought to express your creativity? Why there?
4. Have you ever used your creativity in ways that may not have been viewed as socially-accepted? Explain.
5. What environments have encouraged your creative behaviour. Keep in mind that creativity may be expressed and viewed as socially accepted, or socially non-accepted behaviour depending on one's perspective; but either way, it all counts for the purposes of this study? How?
6. What conditions have blocked, stifled, or inhibited your creative ability?
7. What environments have you sought out as an outlet for your creative behaviour? Are they the same environments whether you are using your creativity in way that you would say is socially positive, accepted behaviour, or in ways that could be viewed as socially non-accepted?
8. In what ways (if any) have family, peers, or teachers/school had an effect on your creativity? Let's go through them one by one. Were they helpful or did they make it harder for you to be creative? Explain.
9. Who or what has helped (encouraged) you to pursue your creativity in either, what you would say are positive socially accepted, or socially non -accepted endeavours?
10. Can you tell me about your schooling experiences?
11. Why do you think you tend to channel your creativity in one way or another?
12. As with all the questions, only discuss if you wish to: Have you ever experienced any psychological issues?
13. Just curious? Have you ever won any awards or distinctions in or out of school?
14. Is there anything else you would like to add?

Appendix C

Peer Nomination Form

Hi, my name is Marc Spooner (a former student here). I am currently conducting a study on creativity for my Ph.D. (Education) at the University of Ottawa. Your principal, Mr. Terry Hughes, has granted me permission to seek your knowledgeable insight; **your participation is completely voluntary**. If you are willing, I would be very grateful if you could take a few minutes to nominate any of your fellow students, enrolled in at least one OAC course at this school, you feel have demonstrated their creativity through their actions and products. Keep in mind that creativity may be expressed and viewed as socially accepted, or socially non-accepted behaviour depending on one's perspective; but either way, any type of creativity counts for the purposes of this study. Once completed (or even if you have left it blank) simply seal the form in the self-addressed envelope provided and return it to your teacher or the office. **All replies are anonymous and confidential.**

Guidelines: creative qualities considered for this particular study are having:

- lots of ideas
- many different ideas
- unique ideas
- curiosity
- problem-solving ability
- inventiveness

*** Reminder: these qualities may be expressed in wide areas, including: fine arts, crafts, literature, music, performance arts, math-science, sports or other.

The following peers (you may nominate as many or as few as you wish) have displayed such creativity (first name, last name):

Example: Marc Spooner

Appendix D

Nomination Form (Teacher)

Hi, my name is Marc Spooner (a former student here). I am currently conducting a study on creativity for my Ph.D. (Education) at the University of Ottawa. Your principal, Mr. Terry Hughes, has granted me permission to seek your knowledgeable insight; **your participation is completely voluntary**. If you are willing, I would be very grateful if you could take a few minutes to nominate students, enrolled in at least one OAC course, you feel have demonstrated their creativity through their actions and products. Keep in mind that creativity may be expressed and viewed as socially accepted, or socially non-accepted behaviour depending on one's perspective; but either way, any type of creativity counts for the purposes of this study. Once completed (or even if you have left it blank) simply seal the form in the self-addressed envelope provided and return it to the drop off box in the office. **All replies are anonymous and confidential.**

Guidelines: creative qualities considered for this particular study are having:

- lots of ideas
- many different ideas
- unique ideas
- curiosity
- problem-solving ability
- inventiveness

*** Reminder: these qualities may be expressed in wide areas, including: fine arts, crafts, literature, music, performance arts, math-science, sports or other.

The following students (you may nominate as many or as few as you wish) have displayed such creativity (first name, last name):

Example: Marc Spooner _____

Appendix E

Morning/afternoon announcement

Reminder to all OAC students and teachers, if you have not yet filled out a nomination form for Marc Spooner's creativity study please do so and return them to the office before Wednesday, April 24. Extra nomination forms for OAC students are available in the library.

Thank you

Appendix F

Instructions for teachers

Thank you very much for your time. As a teacher, I truly understand the pressures and demands that are placed upon you.

***Please take a few minutes to have your OAC students complete the nomination forms enclosed in the envelopes provided. Once they are finished, simply have them seal the form in the envelope provided and hand them in to you. There will be a drop off box to return the completed forms (sealed in the envelopes) in the main office.

NOTE: ALL forms, **even blank ones**, must still be sealed by the students and returned to you. **Only one nomination form per student.**

Thanks again.

Sincerely,

Marc Spooner

Appendix G

Marc Spooner's Creativity Study

Hi, my name is Marc Spooner (a former student here). As you may know, I am currently conducting a study on creativity for my Ph.D. (Education) at the University of Ottawa. I would like to speak to you about your creativity and your experiences during high school.

If you would like to hear more about my study and maybe be interviewed, at the school, during your spare time, please fill out the information sheet below. I will contact you to tell you more about it.

Name: _____

Date of Birth (YY/MM/DD): _____

Telephone Number: _____

E-mail: _____

Estimated grade
average throughout high
school: _____ %

PLEASE NOTE: BY FILLING IN THIS FORM, YOU ARE UNDER NO OBLIGATION-- YOU WILL NOT BE ASKED TO TAKE PART IN ANY STUDY WHATSOEVER UNTIL IT HAS BEEN EXPLAINED TO YOU AND YOU HAVE CONSENTED TO TAKE PART (If you are not 18 years old, you and your parents, will need to provide consent).

ALL INFORMATION WILL BE KEPT STRICTLY PRIVATE AND CONFIDENTIAL.

Once you have completed this form, please seal it in the envelope provided and return it to the drop off box in the main office by Wednesday, May 1.

Appendix H

Consent Form

Principal Investigator: **Marc Spooner, Ph.D. (Cand.)**
Telephone number: (613) 761-7470
E-mail address:

Supervisor: **Dr. Cynthia Morawski**
Telephone number: (613) 652-5800 x. 4109
E-mail address: cmorawski@uottawa.ca

Affiliation: Faculty of Education, University of Ottawa

I, _____, agree to participate in the research conducted by Marc Spooner, as part of his Doctoral studies in the Faculty of Education at the University of Ottawa. The project is under the supervision of Dr. Cynthia Morawski.

The purpose of the study is to gain insight into the environments young adults find conducive to creative endeavours and to examine how family, peer, and school experiences may act, or have contributed to the channelling of their creative talent into either socially accepted or socially non-accepted avenues.

Many bright and creative young adults are placed in positions where their creative talents are not being fully realized due to various environmental factors. This research has the potential to help inform our understanding of the nature of creative environments and our ability to implement curriculum designs and school-based initiatives that are optimal for developing and directing creative and potentially creative students reach their full creative potential.

If I agree to participate, my participation will consist essentially of attending one (1 hour) interview session during which time I will be asked several question regarding my thoughts about my creative experiences. The session will be scheduled at a mutually convenient time. At the time of the interview, I will also be asked to fill out a brief (15 minute) biographical questionnaire. After the interview, I may also be contacted by telephone for a brief (10 minute) follow-up if any clarifications are required. I understand that the contents will be used only for the purposes of gaining better insight into the nature of the creative process and creative environments in the context of doctoral research.

Appendix H (continued)

I understand that since this activity deals with very personal information that will be examining my creativity in terms of my family, peer, and school experiences, it may cause me some emotional discomfort which may, at times, be difficult. I have received assurance from the researcher that every effort will be made to minimize these occurrences by knowing that I do not have to answer any questions I do feel fully comfortable in doing so. I am free to withdraw from the project at any time, before or during an interview, refuse to participate and refuse to answer questions without any consequence whatsoever and that I am in control, to a large degree of the interview process. If I would like to continue discussing this matter further with a professional counselor, this may be arranged.

I have received assurance from the researcher that the information I will share will remain strictly confidential. All personal information will be viewed solely by the researcher and his committee, no other individuals will be permitted to view any personal information obtained through the course of this research. Anonymity will be assured by the use of pseudonyms and the removal of any details which could possible reveal your identity.

Tape recordings of interviews and other data collected will be kept in a secure, locked cabinet that only the principal researcher has access to for a period of 7 years after which it will be destroyed.

Any information about my rights as a research participant may be addressed to Catherine Lesage, Protocol Officer for Ethics in Research, 30 Stewart Street, Room 301, (613) 562-5387 or clesage@uottawa.ca .

There are two copies of the consent form, one of which I may keep.

If I have any questions about the conduct of the research project, I may contact the researcher, Marc Spooner at 613-761-7470, or his supervisor, Dr. Cynthia Morawski, at 613-562-5800 x. 4109, or by mail at the Faculty of Education, University of Ottawa, 145 Jean-Jacques Lussier Drive, PO Box 450 STN 'A', Ottawa, Ontario, Canada, K1N 6N5.

Researcher's signature:

Date:

Research Subject's signature:

Date:

Appendix I

Table 6. The personality characteristics that, in the participant's view, contribute to their creativity (for characteristics information presented by theme see Appendix J):

Andreas

- “pretty well insatiable desire to better myself”,
- “in my art I try to become, more fully aware of who I am”
- “I’m a pre- I’m a perfectionist, I think.”
- “Oh. I think new challenges uh help to pursue creativity”

Armand

- “I’m like pretty quick-witted, I can come up with things like, really quick on the responses and ideas”
- “uhh, I think that helps me, I don’t know like, background of arts and sciences and like general, like, all-roundedness, it allows me to think of uh, different situations”
- “I think, well like, a sense of humour really helps.”
- “just general, like urge to be creative, just ah, just the need to express myself in different manners and like, like, I like to see people react to things in, like not necessarily in a negative way like I usually want to entertain people.”
- “I don’t know, like, play around with variants and uh, try different experiments – try different ways of approaching things. And so you realize you use your mind as in how to, to like, get round a challenge.”

Betty

- “well, my drive? My drive is one thing like,”
- “if I don’t paint, I’ll find myself getting really, antsy?”
- “well I’m pretty – pretty open and spontaneous”
- “and so I’ll be doing a lot of networking with people, and I’ll go to galleries, on my own, and like, just kind of get things rolling for myself”

Briag

- “trying to be, trying to be different from other people”
- “people, related person, so I’ll always love, meeting and hanging out with people and so maybe that pushes me into their creativity or their lack of creativity.”
- “because I like, I like things to be changed”
- “have a really bad self-confidence. So I was always asking questions. Really internally. And that, I guess, encouraged my creativity like or like the expression, of the creativity because knowing that I’m like, I mean the – in the past year it’s art, I, I can feel that more when I play the drums for example like (clears throat) because I, I ask myself a lot of questions? And I’m so, my, so many feelings that I won’t let out. Like, and when I’m drums I don’t – just don’t care at all right so everything, comes out”

Camille

- “I’m a pretty approachable person, and I’m a people person.”
- “I love to be on council and to organize different events”

-“um, I guess I like to put a different spin on things, sometimes.”

-“I’m kind of crazy? Like, well I’m quiet but like if you know me, you know that I’m kind of crazy.”

-“I don’t feel it’s necessary to do (laughs) stuff that other people tell me. I’ve been pretty good for, uh holding my own? Holding my ground. I mean, peer pressure and stuff like – I don’t really succumb to peer pressure”

Chase

-“I’ve never felt like I fit in, with everybody.”

-“spend more time with myself, and, just, be able to discover what kind of creative stuff I have inside me”

-“I just take everything so seriously.... I just suffer, I suffer so much. Pity me.”

-“I feel uncomfortable wherever I go. Doesn’t matter. I can really only talk to my Mum. Uh, without, feeling any discomfort”

-“but people have hurt it [his creativity] because, uhm, a lot of times I’m afraid to uh explore new avenues like uh, I don’t like to go into say acting in a school play here, or something like I used to do it in public school but, in high school I’m just, I’m just too withdrawn from everybody, and I’d be too nervous. Because of the way they are and the way they treat me.”

Note: Chase has been prescribed various medications including Paxil, Dexedrin, and Ritalin.

Evoke

-“I s’pose being, like the youngest kid, being the youngest kid I’ve always, every young – every young child always seems to have like, some need to be like, bigger than they are you know and have some kind of “look at me I’m crazier than the rest of you. Not like my brother and sister or something like that, and that was maybe the beginning for me”

-“right away drawing was an easy thing and I just continued from drawing, onwards you know and drawing seemed like the natural way to go for me you know I – I mean I, I could act and I could whatever skateboard and sort of get out my energy through most, you know things I put my mind to I was good at it but drawing was just like because I had such an extreme kind of like in people’s faces and being like sort of center of attention. But drawing was seemed to be like the great way to like balance it out and be by myself and be more insular or introverted I guess”.

George

- “I’m enthusiastic”

-“energetic”

-“I try my best”

-“I enjoy a challenge”

-“I can just look at something and uh... I can see where it’s gonna go like I can see the end product? Like all the steps I have to take to get to it like, say for instance, um, to figure out uh, what code [computer language] I’d have to use. I could visualize it in my head.”

Jack

-“like, I’ll visualize things, sometimes? Like I’ll just have this idea, or this picture in my head, and like, I’ll see that”

-“I like to draw and paint, and like I think kinda creatively I guess it’s just a different way of thinking of things.”

-“I guess just coming up with like different ideas than other people, it’s like, just kinda new and interesting things, you know.”

Jimi

-“I’m a curious guy”

-“I have a... thirst for knowledge, I guess.”

-“I like to learn I like to know new things so I’m always looking to - to know new things”

-“I bought tons and tons of books and, started reading up and educating myself”

-“I dunno as far as music goes anyway. I always feel like a need to do new things and try new things...and always sort of learning more”

Josh

-“I don’t personally see myself as creative. I, I can, I can see how other people can see me as creative, because I do a lot of music and acting and drama. And that sort so I guess am creative. I guess my main creative output is my piano. That is and there, I’m actually sort of starting to venture into the um, like truly creative stuff”

-“from my experience I can pick up, I, I realize how to act sad”

-“I’ve more grown into becoming creative.... I’ve been taking more risks these past couple years.”

Kyle

-“I would say my ability to come up with ideas.

-“I dunno I think to myself I’m always thinking of something”

-“trying to do something. Um, well I’ve always, I’m always looking to do something either better or faster you could say.”

Kathleen

-“I don’t, I don’t just like follow what other people or, I just, I do my own thing”

Lee

-“I’ve seen a lot of different things and like”

-“had a taste of all sorts of different cultures and stuff so I, I dunno I find I, I’ve seen a lot more and experienced a lot more so. I’ve hung out with like, crackheads and alcoholics and stuff like that and like I’ve hung out with smart people in my life and so I dunno I see how these different people think and stuff? I dunno it just gives me a broader range

-“to ask me a question? Like I – just don’t think of an answer I think like – Of ten possible answers.”

-“kinda play with each one a bit.”

-“read lots of books. Like whenever I was in jails and stuff, cause that’s all you really get to do. But I guess, reading a lot of books though, probably contributed to my creativity too.

Cause I dunno you read like 500 books. It’s a lot of information happening in your brain too, so. You got like all these different ideas and craziness from the books in your head I guess.”

Mathew

- “I like to, I like to be off the wall.”
- “I don’t like to conform kind of thing”
- “I just kinda, when something pops in your head you just kinda do it, you don’t really think about it”
- “I mean I’m not afraid to go with new ideas”
- “I’m not really afraid to, like a, I like to go up on stage and announce stuff”
- “I’ve always liked to uh, take things apart to look at them”
- “I always had different ideas and I kinda always thought maybe mine worked better.”

Otis

- “I’m an outgoing per – it really, I think it really helps, uh towards creativity. You get, to sort of meet new people, learn new ideas and as you learn these new ideas you become more creative, you sort of add to your knowledge”
- “I think sort of like a willingness to independently learn? Like to learn things on my own instead of like, coming here and learning.”
- “I suppose it wouldn’t be so much that I’m more creative than them it’s just that I have a wider base of experience. I – I travelled a lot when I was uh young. And I think that helped – with my creativity, I sort of, again saw new things, broadened my horizons and what not”

Patricia

- “I’m impulsive,”
- “uhh, excitable um, ummm what’s the word for it uh, not thoughtful, but I give a lot of thought to things, like I think a lot”
- “if something interests me I’ll go out like I’ll –look into it, and I’ll – I’d want to learn more about it.”
- “curious, definitely.”

Palooka

- “imagination”
- “tenacity.”
- “uhh, what else. A love of words.”
- “I was never shy”

Peter

- “I like to be around people a lot. I’m a social person.”
- “shutting themselves off. To me that’s important when I’m actually, writing music, for instance. But, what I think is more important to me, is uh collecting stories, like people’s life stories, just talking with people, and gaining insight into what I value.”
- “and being exposed to a whole bunch of different ways of living? And uh, trying to sort of, understand the bridges and the gaps and all this that can come, up from it”
- “oh I’m a very curious person, yeah. And I’ve been curious also, especially since leaving a c- a Catholic upbringing, when I was about 17, and going to university across the country.”

Son

-“um definitely my two, two extremes. Of my personality [introverted and extraverted]”

-“Well I’m a people-person that’s for sure. I... absolutely love people”

-“exchange of ideas, and emotions, and uh... that’s definitely, at the root of, of my creative and, maybe creativity itself”

-“Um, I, I’m definitely like I love to ex- like I’m very curious.”

-“I love to experience things”

-“I’ll... um... I love throwing myself, into situations, that I would never, ever be in let’s say or that I would rarely ever put myself in”

“but yeah, definitely just sort of play around, try to get a bit of a taste of everything.”

Steve

-“I guess being spontaneous sometimes I’m spontaneous I don’t really worry about the consequences”

-“I guess originality too like – just being able to come up, sometimes with things that other people aren’t thinking of or things that are just original to you.”

-“And not being worried I guess really about what other people sometimes are gonna think of your idea”

Thelonius

-“I’d have to say it’s probably due to, sensitivity. That’s – that’s – that’s the number one thing. Sensitive to bad things, sensitive to good things.”

-“but, it – being sensitive also involves I think a lot of suffering.”

-“I’m stubborn in a way. If I set my mind on – on doing something like... if I have like, a painting – or – or if there’s some – something I w- a particular, there’s something I want to get out, or I want to hear in my sound or, or, see in a painting or some some – something I wanna express I’ll – I’ll keep at it, for days until, I get it just to sound right, or to look right, I guess, so.”

Truman

-“I have an active imagination”

-“an overwhelming joy for life, story, and art. I also have a strong belief in the power of all three.”

-“I like to express myself in various forms, and possess certain natural talents to effectively articulate these expressions.”

-“I am a hard worker”

-“a reflective thinker”

-“a relentless goofball”

-“but most importantly, I am driven by a desire to leave an impact.”

Uncle 3

-“just seems like the most basic, you know, survival instinct. Creating, you know”

-“just tryin’ to you know, break away from the norm and do something exciting”

Virginia

-“I’m a perfectionist.”

-“I guess I just want to do, like, the best job that I can, so then I kind of go, like, above and beyond like what’s expected”

-“try and make it, like, stand out.”

-“um, a, I don’t know, like sometimes I just see what I want to do in my head and that, that’s what I try aim for.”

-“I guess I’m fairly confident, if I do have, like an idea or whatever, like, I’m not afraid to like express it”

-“use it, try something new.”

Winston

-“kind of look at it from the other side. So, I dunno just, just to kinda get the other side of the coin”

-“I’m not, I’m not really a conformist when it comes to thinking of ideas”

-“... so a lot of them are pretty crazy.”

Appendix J

Table 7. Why participants felt they were creative presented by theme

Personality characteristic	Participant quotation
Self-improvement	-“pretty well insatiable desire to better myself” (Andrean)
Self-discovery	-“in my art I try to become, more fully aware of who I am” (Andrean)
Perfectionist	<p>-“I’m a pre- I’m a perfectionist, I think.” (Andrean)</p> <p>-“I try my best” (George)</p> <p>-“trying to do something. Um, well I’ve always, I’m always looking to do something either better or faster you could say.” (Kyle)</p> <p>-“I’m a perfectionist.” (Virginia)</p> <p>-“I guess I just want to do, like, the best job that I can, so then I kind of go, like, above and beyond like what’s expected” (Virginia)</p> <p>-“try and make it, like, stand out.” (Virginia)</p>
Play/sense of humour	<p>-“I don’t know, like, play around with variants and uh, try different experiments – try different ways of approaching things. And so you realize you use your mind as in how to, to like, get round a challenge.” (Armand)</p> <p>-“I think, well like, a sense of humour really helps.” (Armand)</p> <p>-“Kinda play with each one a bit.” (Lee)</p> <p>- “but yeah, definitely just sort of play around, try to get a bit of a taste of everything.” (Son)</p> <p>-“a relentless goofball” (Truman)</p>
Motivated/enthusiastic	<p>-“Well, my drive? My drive is one thing like,” (Betty)</p> <p>- “I’m enthusiastic” (George)</p> <p>-“energetic” (George)</p> <p>-“I am a hard worker” (Truman)</p> <p>-“But most importantly, I am driven by a desire to leave an impact.” (Truman)</p>

Open/flexible	<p>-“Well I’m pretty – pretty open and spontaneous” (Betty)</p> <p>-“use it, try something new.” (Virginia)</p> <p>-“to ask me a question? Like I – just don’t think of an answer I think like – Of ten possible answers.” (Lee)</p>
Spontaneous/risk-taker	<p>-“Well I’m pretty – pretty open and spontaneous” (Betty)</p> <p>-“I just kinda, when something pops in your head you just kinda do it, you don’t really think about it” (Mathew)</p> <p>-“I’m impulsive,” (Patricia)</p> <p>-“I’ll... um... I love throwing myself, into situations, that I would never, ever be in let’s say or that I would rarely ever put myself in” (Son)</p> <p>-“I guess being spontaneous sometimes I’m spontaneous I don’t really worry about the consequences” (Steve)</p> <p>-“I’ve more grown into becoming creative.... I’ve been taking more risks these past couple years.” (Josh)</p>

Originality/imagination	<p>-“trying to be, trying to be different from other people” (Briag)</p> <p>-“Um, I guess I like to put a different spin on things, sometimes.” (Camille)</p> <p>-“I like to draw and paint, and like I think kinda creatively I guess it’s just a different way of thinking of things.” (Jack)</p> <p>-“I like to, I like to be off the wall.” (Mathew)</p> <p>-“I always had different ideas and I kinda always thought maybe mine worked better.” (Mathew)</p> <p>-“Imagination” (Palooka)</p> <p>-“I guess originality too like – just being able to come up, sometimes with things that other people aren’t thinking of or things that are just original to you.” (Steve)</p> <p>-“I have an active imagination” (Truman)</p> <p>-“just tryin’ to you know, break away from the norm and do something exciting” (Uncle 3)</p> <p>-“kind of look at it from the other side. So, I dunno just, just to kinda get the other side of the coin” (Winston)</p>
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<p>Social/extraverted/out going</p>	<p>-“And so I’ll be doing a lot of networking with people, and I’ll go to galleries, on my own, and like, just kind of get things rolling for myself” (Betty)</p> <p>-“people, related person, so I’ll always love, meeting and hanging out with people and so maybe that pushes me into their creativity or their lack of creativity.” (Briag)</p> <p>-“I’m a pretty approachable person, and I’m a people person.” (Camille)</p> <p>-“I’m an outgoing per – it really, I think it really helps, uh towards creativity. You get, to sort of meet new people, learn new ideas and as you learn these new ideas you become more creative, you sort of add to your knowledge” (Otis)</p> <p>-“I was never shy” (Palooka)</p> <p>-“I like to be around people a lot. I’m a social person.” (Peter)</p> <p>-“Um definitely my two, two extremes. Of my personality [introverted and extraverted]” (Son)</p> <p>-“Well I’m a people-person that’s for sure. I absolutely love people” (Son)</p>
<p>Introspective/reflexive</p>	<p>-“have a really bad self-confidence. So I was always asking questions. Really internally. And that, I guess, encouraged my creativity like or like the expression, of the creativity because knowing that I’m like, I mean the – in the past year it’s art, I, I can feel that more when I play the drums for example like (clears throat) because I, I ask myself a lot of questions? And I’m so, my, so many feelings that I won’t let out. Like, and when I’m drums I don’t – just don’t care at all right so everything, comes out” (Briag)</p> <p>-“I dunno I think to myself I’m always thinking of something” (Kyle)</p> <p>-“uhh, excitable um, ummm what’s the word for it uh, not thoughtful, but I give a lot of thought to things, like I think a lot” (Patricia)</p> <p>-“a reflective thinker” (Truman)</p>

Need to be creative	<p>-“Just general, like urge to be creative, just ah, just the need to express myself in different manners and like, like, I like to see people react to things in, like not necessarily in a negative way like I usually want to entertain people.” (Armand)</p> <p>-“if I don’t paint, I’ll find myself getting really, antsy?” (Betty)</p> <p>-“Just seems like the most basic, you know, survival instinct. Creating, you know” (Uncle 3)</p>
Need change	<p>-“Because I like, I like things to be changed” (Briag)</p>
Leadership	<p>-“I love to be on council and to organize different events” (Camille)</p> <p>-“I mean I’m not afraid to go with new ideas” (Mathew)</p> <p>-“I’m not really afraid to, like a, I like to go up on stage and announce stuff” (Mathew)</p>

<p>Different perspective/experience</p>	<p>-“I’ve seen a lot of different things and like” (Lee)</p> <p>-“had a taste of all sorts of different cultures and stuff so I, I dunno I find I, I’ve seen a lot more and experienced a lot more so. I’ve hung out with like, crackheads and alcoholics and stuff like that and like I’ve hung out with smart people in my life and so I dunno I see how these different people think and stuff? I dunno it just gives me a broader range” (Lee)</p> <p>-“I suppose it wouldn’t be so much that I’m more creative than them it’s just that I have a wider base of experience. I – I travelled a lot when I was uh young. And I think that helped – with my creativity, I sort of, again saw new things, broadened my horizons and what not” (Otis)</p> <p>-“And being exposed to a whole bunch of different ways of living? And uh, trying to sort of, understand the bridges and the gaps and all this that can come, up from it” (Peter)</p> <p>-“exchange of ideas, and emotions, and uh... that’s definitely, at the root of, of my creative and, maybe creativity itself” (Son)</p> <p>-“I love to experience things” (Son)</p> <p>-“Uhh, I think that helps me, I don’t know like, background of arts and sciences and like general, like, all-roundedness, it allows me to think of uh, different situations” (Armand)</p> <p>-“what I think is more important to me, is uh collecting stories, like people’s life stories, just talking with people, and gaining insight into what I value.” (Peter)</p>
<p>Crazy</p>	<p>-“I’m kind of crazy? Like, well I’m quiet but like if you know me, you know that I’m kind of crazy.” (Camille)</p> <p>-“I s’pose being, like the youngest kid, being the youngest kid I’ve always, every young – every young child always seems to have like, some need to be like, bigger than they are you know and have some kind of “look at me I’m crazier than the rest of you. Not like my brother and sister or something like that, and that was maybe the beginning for me” (Evoke)</p> <p>-“... so a lot of them are pretty crazy.” (Winston)</p>

Independent learner	<p>-“I like to learn I like to know new things so I’m always looking to - to know new things” (Jimi)</p> <p>-“I bought tons and tons of books and, started reading up and educating myself” (Jimi)</p> <p>-“read lots of books. Like whenever I was in jails and stuff, cause that’s all you really get to do. But I guess, reading a lot of books though, probably contributed to my creativity too. Cause I dunno you read like 500 books. It’s a lot of information happening in your brain too, so. You got like all these different ideas and craziness from the books in your head I guess.” (Lee)</p> <p>-“I think sort of like a willingness to independently learn? Like to learn things on my own instead of like, coming here and learning.” (Otis)</p> <p>-“if something interests me I’ll go out like I’ll –look into it, and I’ll – I’d want to learn more about it.” (Patricia)</p>
Sensitive/empathetic	<p>-“I’d have to say it’s probably due to, sensitivity. That’s – that’s – that’s the number one thing. Sensitive to bad things, sensitive to good things.” (Thelonius)</p> <p>-“an overwhelming joy for life, story, and art. I also have a strong belief in the power of all three.” (Truman)</p> <p>-“from my experience I can pick up, I, I realize how to act sad” (Josh)</p>
Introverted/withdrawn/outsider	<p>-“spend more time with myself, and, just, be able to discover what kind of creative stuff I have inside me” (Chase)</p> <p>-“I feel uncomfortable wherever I go. Doesn’t matter. I can really only talk to my Mum. Uh, without, feeling any discomfort” (Chase)</p> <p>-“But people have hurt it [his creativity] because, uhm, a lot of times I’m afraid to uh explore new avenues like uh, I don’t like to go into say acting in a school play here, or something like I used to do it in public school but, in high school I’m just, I’m just too withdrawn from everybody, and I’d be too nervous. Because of the way they are and the way they treat me.” (Chase)</p> <p>-“I’ve never felt like I fit in, with everybody.” (Chase)</p>

Natural talent	<p>-“right away drawing was an easy thing and I just continued from drawing, onwards you know and drawing seemed like the natural way to go for me you know I – I mean I, I could act and I could whatever skateboard and sort of get out my energy through most, you know things I put my mind to I was good at it but drawing was just like because I had such an extreme kind of like in people’s faces and being like sort of center of attention. But drawing was seemed to be like the great way to like balance it out and be by myself and be more ins- insular or introverted I guess”. (Evoke)</p> <p>-“I like to express myself in various forms, and possess certain natural talents to effectively articulate these expressions.” (Truman)</p>
Visualisation	<p>-“I can just look at something and uh... I can see where it’s gonna go like I can see the end product? Like all the steps I have to take to get to it like, say for instance, um, to figure out uh, what code [computer language] I’d have to use. I could visualize it in my head.” (George)</p> <p>-“Like, I’ll visualize things, sometimes? Like I’ll just have this idea, or this picture in my head, and like, I’ll see that” (Jack)</p> <p>-“Um, a, I don’t know, like sometimes I just see what I want to do in my head and that, that’s what I try aim for.” (Virginia)</p>
Curious	<p>-“I’m a curious guy” (Jimi)</p> <p>-“I have a thirst for knowledge, I guess.” (Jimi)</p> <p>-“I dunno as far as music goes anyway. I always feel like a need to do new things and try new things and always sort of learning more” (Jimi)</p> <p>-“I’ve always liked to uh, take things apart to look at them” (Mathew)</p> <p>-“curious, definitely.” (Patricia)</p> <p>-“Oh I’m a very curious person, yeah. And I’ve been curious also, especially since leaving a c- a Catholic upbringing, when I was about 17, and going to university across the country.” (Peter)</p> <p>-“Um, I, I’m definitely like I love to ex- like I’m very curious.” (Son)</p>

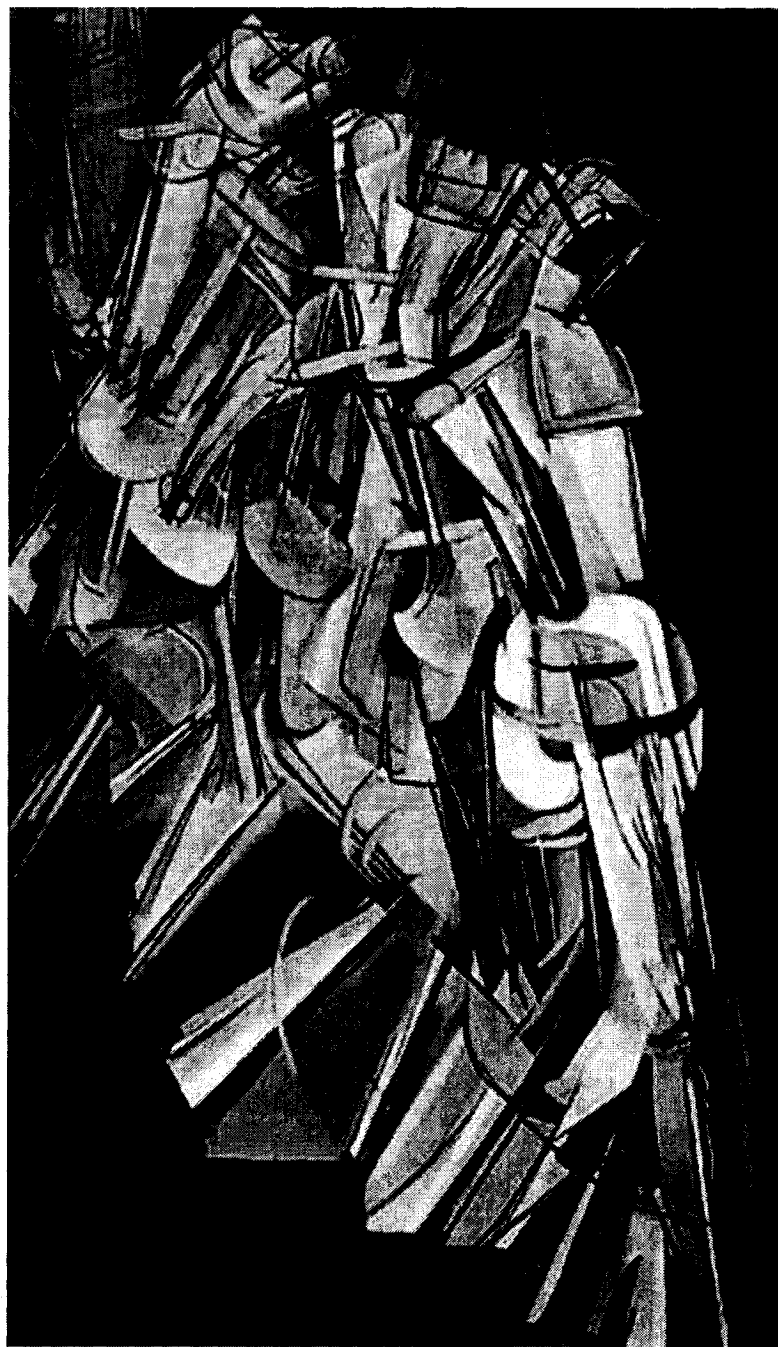
Many ideas	<p>-“I’m like pretty quick-witted, I can come up with things like, really quick on the responses and ideas” (Armand)</p> <p>-“I guess just coming up with like different ideas than other people, it’s like, just kinda new and interesting things, you know.” (Jack)</p> <p>-“I would say my ability to come up with ideas. (Kyle)</p>
Passionate	<p>-“Uhh, what else. A love of words.” (Palooka)</p>
Confident/ unconcern for social approval	<p>-“I don’t feel it’s necessary to do stuff that other people tell me. I’ve been pretty good for, uh holding my own? Holding my ground. I mean, peer pressure and stuff like I don’t really succumb to peer pressure” (Camille)</p> <p>- “I don’t, I don’t just like follow what other people or, I just, I do my own thing” (Kathleen)</p> <p>-“I don’t like to conform kind of thing” (Mathew)</p> <p>-“And not being worried I guess really about what other people sometimes are gonna think of your idea” (Steve)</p> <p>-“I guess I’m fairly confident, if I do have, like an idea or whatever, like, I’m not afraid to like express it” (Virginia)</p> <p>-“I’m not, I’m not really a conformist when it comes to thinking of ideas” (Winston)</p>
Suffering	<p>-“I just take everything so seriously.... I just suffer, I suffer so much. Pity me.” (Chase)</p> <p>-“But, it – being sensitive also involves I think a lot of suffering.” (Thelonius)</p>

Motivated/enjoys a challenge	<p>-“Tenacity.” (Palooka)</p> <p>-“I’m stubborn in a way. If I set my mind on – on doing something like... if I have like, a painting – or – or if there’s some – something I w- a particular, there’s something I want to get out, or I want to hear in my sound or, or, see in a painting or some some – something I wanna express I’ll – I’ll keep at it, for days until, I get it just to sound right, or to look right, I guess, so.” (Thelonius)</p> <p>-“I enjoy a challenge” (George)</p> <p>-“Oh. I think new challenges uh help to pursue creativity” (Andrean)</p>
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Appendix K

Duchamp, Marcel

Nude Descending a Staircase, No. 2 (1912). Oil on canvas 146 x 89 cm
Philadelphia Museum of Art



<http://www.beatmuseum.org/duchamp/images/m-nude2.jpg>
[Downloaded 2005/05/31]: