

Assessment of Overexcitabilities in Middle School Children



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Abstract

Dabrowski's Overexcitabilities (OEs) are ways that an individual experience the world and can be understood as channels of information flow. The presence of OEs results in a real difference in the fabric of life and quality of experience for people and those around them. Dabrowski identified five areas of OE-Psychomotor, Sensual, Intellectual, Imaginational, and Emotional. A person may possess none, one, or many of these. If more than one of these channels, or all five, have wide apertures, then the abundance and diversity of feeling, thought, imagery, and sensation will inevitably lead to dissonance, conflict and tension, but at the same time it enriches, expands, and intensifies the individual's mental development {Piechowski, 1979, p. 29}. Dabrowski theorized that the highest levels of development are reached by people who possess high levels of emotional, intellectual, and imaginational overexcitability (OE) (Dabrowski, 1967). The present study aimed at assessing the prevalence and gender differences in overexcitabilities amongst middle school students. The ME Scale I (Chang, 2001) was used to identify patterns of overexcitabilities amongst 56 middle school students studying in a private school. Results reveal a distinct pattern of overexcitabilities amongst the children. A shift in curriculum design is foreseen where OE specific study plans should be devised to assist learners of tomorrow.

Keywords: Overexcitabilities; Dabrowski; Middle School Children.

Introduction

Dabrowski's theory of positive disintegration has been interchangeably defined as a theory of personality development, moral development, and emotional development. His theory roots out of his childhood experiences through World War I and his practice as a Polish psychologist during and after World War II. In his work, he describes having witnessed examples of the "lowest possible inhuman behavior, and acts of the "highest human character" (Mendaglio, 2008). It was after this time that Dabrowski created a theory to interpret wide range of human behavior and growth. The Theory of Positive Disintegration (TPD) is a five-level hierarchical theory of human development. Lower levels of development must be torn down before higher levels can be attained. Dabrowski theorized that the highest levels of development are reached by people who possess high levels of emotional, intellectual, and imaginational overexcitability (OE) (Dabrowski, 1967).

Overexcitabilities (OEs) are inborn, heightened abilities to receive and respond to stimuli. They are expressed in increased sensitivity, awareness, and intensity. Each form of overexcitability points to a higher than average sensitivity of its receptors. As a result a person endowed with different forms of overexcitability reacts with surprise, puzzlement to many things, he collides with things, persons, and events which in turn brings him astonishment and disquietude (Dabrowski, 1964). The presence of OEs results in a real difference in the fabric of life and quality of experience for overexcitable people and those around them. Dabrowski identified five areas of OE-Psychomotor, Sensual, Intellectual, Imaginational, and Emotional. A person may possess none, one, or many of these. If more than one of these channels, or all five, have wide apertures, then the abundance and diversity of feeling, thought, imagery, and sensation will inevitably lead to dissonance, conflict and tension, but at the same time it enriches, expands, and intensifies the individual's mental development {Piechowski, 1979, p. 29}. OEs then, are not only an integral part of one's personality, they also help to shape a person's view of and reaction to the world. Dabrowski said "One who manifests several forms of overexcitability, sees reality in a different, stronger and more multisided manner" (Dabrowski, 1972, p. 7). Experiencing the world in this unique way carries with it great joys and sometimes great frustrations. The joys and

positives of being overexcitable need to be celebrated. Any frustrations or negatives can be positively dealt with and used to help facilitate the child's growth.

The five OEs described this way:

Psychomotor Overexcitability

Psychomotor OE is a heightened excitability of the neuromuscular system. This Psychomotor force includes a "capacity for being active and energetic" (Piechowski, 1991), love of movement for its own sake, surplus of energy demonstrated by rapid speech, jealous enthusiasm, intense physical activity, and a need for action (Dabrowski&Piechowski, 1977; Piechowski, 1979, 1991). When feeling emotionally tense, individuals strong in Psychomotor OE may talk compulsively, act impulsively, misbehave and act out, display nervous habits, show intense drive (tending towards "workaholicism"), compulsively organize, or become quite competitive. They derive great joy from their boundless physical and verbal enthusiasm and activity, but others may find them over-whelming. At home and at school, these children seem never to be still. They thrive on activity and encourage others to "just do something". Mika (2002) suggests strategies for students coping with psychomotor overexcitabilities may benefit from finding appropriate outlets to release energy, learning how to implement various relaxation techniques into their daily routines, as well as physical therapy and sensory integration techniques to help mediate some of their excess psychomotor tendencies.

Sensual Overexcitability

Sensual OE is expressed as a heightened experience of sensual pleasure or displeasure emanating from sight, smell, touch, taste, and hearing (Dabrowski&Piechowski, 1977; Piechowski, 1979, 1991). Those with Sensual OE have a far more expansive experience from their sensual input than the average person. They have an increased and early appreciation of aesthetic pleasures such as music, language, and art, and derive endless delight from tastes, smells, textures, sounds, and sights. But because of this increased sensitivity, they may also feel overstimulated or uncomfortable with sensory input. Gifted children sometimes have difficulty with sorting out all they hear, feel, or smell. Their sensitivity makes them easily distractible. When emotionally tense, some individuals high in sensual OE may overeat, go on buying sprees, or seek the physical sensation of being the center of attraction (Dabrowski&Piechowski, 1977; Piechowski, 1979, 1991). Others may withdraw from stimulation. Sensually overexcitable children may find clothing tags, classroom noise, or smells from the cafeteria so distracting that school-work becomes secondary. These children may also become so absorbed in their love of a particular piece of art or music that the outside world ceases to exist.

Intellectual Overexcitability

Intellectual OE is demonstrated by a marked need to seek understanding and truth, to gain knowledge, and to analyze and synthesize (Dabrowski&Piechowski, 1977; Piechowski, 1979,1991). Those high in Intellectual OE

have incredibly active minds. They are intensely curious, often avid readers, and usually keen observers. They are able to concentrate, engage in prolonged intellectual effort, and be tenacious in problem solving when they choose. Other characteristics may include relishing elaborate planning and having remarkably detailed visual recall. People with Intellectual OE frequently love theory, thinking about thinking, and moral thinking. This focus on moral thinking often translates into strong concerns about moral and ethical issues-fairness on the playground, lack of respect for children or war. Intellectually overexcitable people are also quite independent of thought and sometimes appear critical of and impatient with others who cannot withstand their intellectual pace. This intellectual intensity seems to cause the greatest difficulty at school and home when children become so excited about learning and thinking that they interrupt or blurt out answers at inappropriate times or are too honest about or critical of others' ideas. Piirto, Beach, Rogers, and Fraas (2000) reported that higher levels of intellectual OEs were found in gifted adolescents in comparison with adolescents who attended vocational schools. Number of other studies also suggests the same that gifted individuals score higher on Intellectual OE as compared to Average individuals. Bouchet and Falk (2001) studied gender differences between college students who were gifted and those who were not. Results showed that gifted students had higher scores on intellectual and emotional OEs when compared to the non-gifted group. There were also gender differences identified among the gifted group. Males scored higher on intellectual

Imaginational Overexcitability

Imaginational OE reflects a heightened play of the imagination with rich association of images and impressions, frequent use of image and metaphor, facility for invention and fantasy, detailed visualization, and elaborate dreams (Dabrowski&Piechowski, 1977; Piechowski, 1979, 1991). Often children high in Imaginational OE mix truth with fiction, create their own private worlds with imaginary companions and dramatizations to escape boredom. They find it difficult to stay tuned into a classroom where creativity and imagination are secondary to learning rigid academic curriculum. They may write stories or draw instead of doing seat work or participating in class discussions, or they may have difficulty completing tasks when some incredible idea sends them off on an imaginative ride. Tieso (2007) further examined the OE patterns among gifted and non-gifted students. Results showed that there were significant differences between these two groups of students on all OEs. Post-hoc analysis further indicated the mean imaginational OE scores represent a majority of the difference.

Emotional Overexcitability

Emotional OE is reflected in heightened, intense feelings, extremes of complex emotions, identification with others' feelings, and strong affective expression (Piechowski, 1991). Other manifestations include concern with death and depression

(Piechowski, 1979). Emotionally overexcitable people have extraordinary capacity for relationships. They show deep emotional bond with people, places, and things (Dabrowski & Piechowski, 1977). They have compassion, empathy, and sensitivity in relationships. This sensitivity may lead to interpersonal conflict about the depth, or lack of depth, in a relationship. Those with strong Emotional OE are acutely aware of their own feelings, of how they are growing and changing, and often carry on inner dialogs and practice self-judgment (Piechowski, 1979, 1991). Children high in Emotional OE, are often accused of "overreacting." Their compassion and worry for others, their concentration on relationships, and the passion of their feelings may inhibit with everyday tasks like homework or doing the dishes because those tasks seem meaningless compared with the needs of humanity. Emotional function and emotional cognition were found to be negatively correlated with personal maladjustment, social maladjustment and emotional maladjustment, by Chang (2003). While EOE was positively correlated with the three kinds of maladjustment and negatively correlated with emotional cognition. This study indicated that level of emotional development and EOE could predict psychological adjustment significantly, which can further help us enhancing the capabilities of children which already present in them.

These OEs have been also called sensitivities and intensities (Piechowski, 1991). Piechowski (1999) said, "the difference in intensity, sensitivity, and acuity is not only greater than normal, it is also a difference in the very quality of experiencing". The presence of the OEs contributes to what is called developmental potential. Developmental potential contributes to adult creativity, and includes, besides OE, the presence of intelligence, talents, abilities, and development. One of the emerging ideas about academically talented students has been that they possess higher OE – that they are more sensitive and intense than students who do not have high scores on IQ or achievement tests (O'Connor, 2002; Piechowski & Colangelo, 1984; Pyryt, 2008; Schiever, 1985; Silverman, 1993; Silverman & Ellsworth, 1981).

Gallagher (1986) investigated the possibility of a significant difference in OEs when comparing groups of children high and low on creativity, gifted children, and children who are not gifted. Her participants were 24 sixth-grade students attending the same school; 12 children were in the school's program for gifted students, and 12 were selected randomly. There were no significant correlations found between the scores on Torrance Tests of Creative Thinking and OEQ data. When participants were split into high- and low-creativity groups using Verbal Subtest scores, the scores of the highly creative group were higher on imaginal OE. When the Figural Subtest scores were used to create high- and low-creativity groups, the highly creative group scored higher on psychomotor OE. When comparing gifted students and students not identified as gifted, significant differences were found on intellectual, imaginal, and emotional OEs in favor

of the gifted group. No differences were found on the other OEs. From a gender viewpoint, recent studies found that academically gifted males had stronger intellectual or imaginal OEs than their female counterparts, whereas gifted females had stronger sensual and emotional OEs than their male counterparts (Bouchet & Falk, 2001; Chang, 2001; Huang, 2005; Lin, 2003; Tieso, 2007a; Treat, 2006).

Chang (2011) explored Pearson correlation to understand the relationships between OEs (The ME II Scale), creativity, and personality. The results showed that all of the OEs correlated significantly with creative thinking styles. Except for Psycho OE, and Physical OE, the other OEs also correlated significantly with creativity. Psycho OE and Empathetic OE correlated negatively with personal maladjustment, while Physical OE, Perfectionism creativity OE, Imaginal OE, and Emotional OE correlated positively with personal maladjustment.

Aim of The Study

The present research aimed at exploring patterns of overexcitabilities in middle school children. This would help in generating a data base of OE patterns amongst middle school children in India as research until now has majorly been done only in North America, China and European countries, and there was dearth of empirical research in India. The present study would initiate a shift in focus of teachers, parents and counselors to view and analyze childhood behavior from the OE perspective (which clearly states that children are endowed with inherent potentials that influence their range of interests and motivations). A shift in curriculum design is foreseen where OE specific study plans could be devised to assist the future learners.

Hypotheses

1. Males would be significantly higher on Psychomotor Overexcitability as compared to females.
2. Females would be significantly higher on Sensual Overexcitability as compared to males.
3. Males would be significantly higher on Intellectual Overexcitability as compared to females.
4. Males would be significantly higher on Imaginal Overexcitability as compared to females.
5. Females would be significantly higher on Emotional Overexcitability as compared to males.

Method and Procedure

Sample for the present study comprised of 56 students from private schools of Patiala. The participants were 3rd to 5th grade middle school students, age ranging between 8-11 years. Consent for psychological assessment was duly taken from the principal and parents prior to the testing phase. The ME scale by Chang (2001) was used to map the overexcitability profiles of the students. After computation of results a session on sharing the results with teachers was done to make them aware of the nature and usefulness of profiling overexcitabilities in children.

Measures

The Me Scale I -Chang (2001): The scale includes 60 items. It contains five subscales of

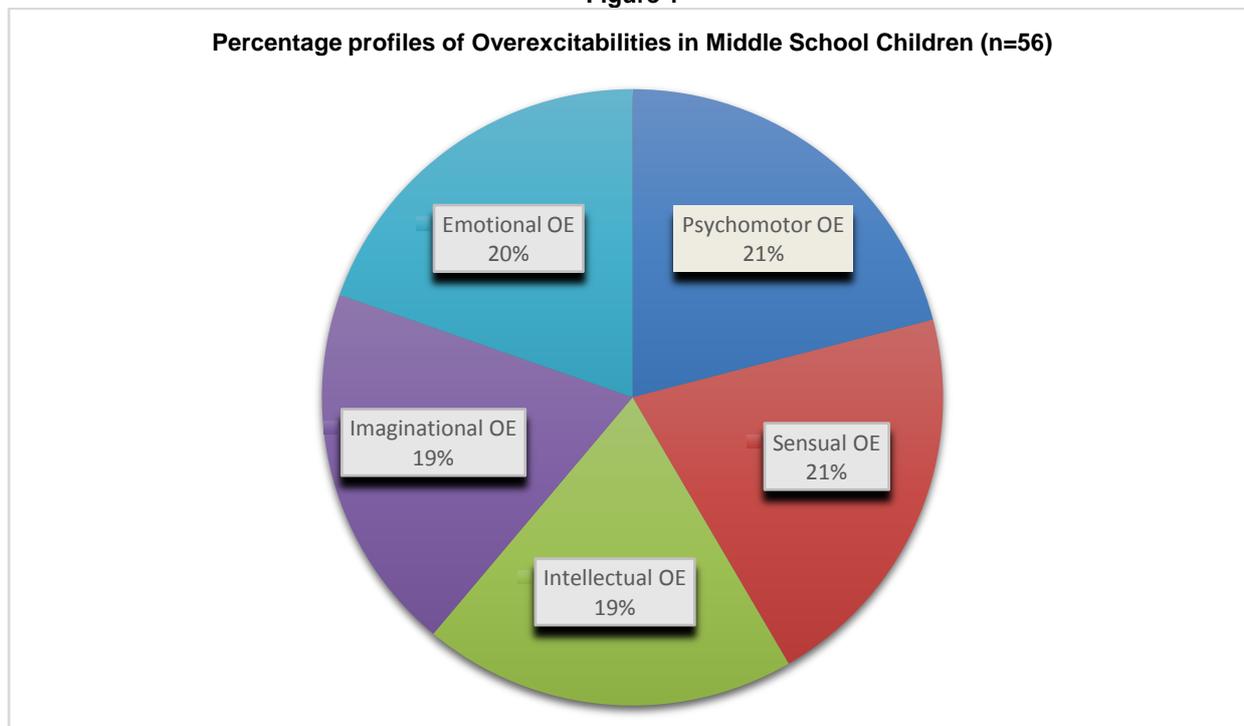
psychomotor, sensual, intellectual, imaginal, and emotional OE. There were 12 items in each subscale. The scoring was based on Likert's seven-point scale ranging from strongly disagrees to strongly agree. Scores on each subscale ranged from 7-84. The higher the scores, the stronger the OEs. The internal consistency of the five subscales is .710 to .810, and the total internal consistency is .913. The

percentile rank norms were constructed separately for elementary, junior high, and senior high school students. Test-retest reliability is .629 to .812 (Chang, 2001).

Result and Discussion

To assess the pattern of OE'S among middle school children' percentages for the five OE's were computed for the total sample:

Figure 1



As shown in Figure.1 There is a presence of 21% of psychomotor overexcitability in the total sample ; 21% of Sensual OE ; 19% of Intellectual OE; 19% of Imaginational OE and 20% of Emotional OE.

In order to test the first hypothesis that 'Males would be significantly higher on Psychomotor Overexcitability as compared to females' the scores of both male and female students on 'The ME Scale I' were subjected to t-test analysis. The results of the analysis have been summarized in Table no. 1:

Table no.1

t value for Gender Differences on Psychomotor Overexcitability

Dimensions	Gender	Mean	S.D.	t-test
Psychomotor OE	Females	51.92	11.30	0.90
	Males	54.28	7.42	

*p<.05; **p<.0

As shown in table no.1 the t-value of 0.90 for gender differences on psychomotor overexcitability did not reach the 0.05 level of significance. A closer look at the mean values of females (m=51.92) and males(m=54.28) though reveals that male students were higher on Psychomotor OE. A study of 42 graduate students by Lysy and Piechowski (1983) reported that males had higher psychomotor OE scores than females. Males were higher in expressing their developmental potential in psychomuscular activities. They get restless and feel the need of

letting out their anxiety and frustration in physical means like some game or running or other physical works.

In order to test the second hypothesis that 'Females would be significantly higher on Sensual Overexcitability as compared to males' the scores of both male and female students on 'The ME Scale I' were subjected to t-test analysis. The results of the analysis have been summarized in Table no. 2.

Table 2

Dimensions	Gender	Mean	S.D.	t-test
Sensual OE	Females	53.64	11.30	1.05
	Males	50.28	12.03	

As shown in table no.2 the t-value of 1.05 for gender differences on sensual overexcitability did not reach the 0.05 level of significance. A closer look at the mean values of females(m=53.64) and males(m=50.28) though reveals that female students were higher on Sensual OE. Recent studies found that gifted females had stronger sensual overexcitability than their male counterparts (Bouchet & Falk, 2001; Chang, 2001; Huang, 2005; Lin, 2003; Tieso, 2007a; Treat, 2006). In reference with the supportive studies the difference in means values of our study supports out hypothesis.

In order to test the third hypothesis that 'Males would be significantly higher on Intellectual

Overexcitability as compared to females' the scores of both male and female students on 'The ME Scale I' were subjected to t-test analysis. The results of the analysis have been summarized in Table no. 3:

Table 3

Dimensions	Gender	Mean	S.D.	t-test
Intellectual OE	Females	45.28	9.72	2.57*
	Males	52.53	10.91	

As shown in the table the t-value of 2.57 for gender differences on Intellectual Overexcitability came out significant at 0.05. We also compared the mean values of females and males which point out difference in males and females on Intellectual OE. The mean value of males at 52.53 came out higher than the females i.e. 45.28 on the Psychomotor OE which predicted that males are more overexcitable on Intellectual development than the females. In a study, Gifted and talented men revealed more significant intellectual than their female counterparts, whereas females showed more significant sensual and emotional OEs than males (Sandal-Miller, 1988).

In order to test the fourth hypothesis that 'Males would be significantly higher on Imaginational Overexcitability as compared to females' the scores of both male and female students on 'The ME Scale I' were subjected to t-test analysis. The results of the analysis have been summarized in Table no. 4:

Table 4

Dimensions	Gender	Mean	S.D.	t-test
Imaginational OE	Females	45	13.53	2.04*
	Males	51.92	11.30	

*p<.05; **p<.0

As shown in the table the t-value of 2.04 for gender differences on Imaginational Overexcitability came out significant at 0.05 level which means our hypothesis is proved. The mean value of males at 51.92 also came out higher than the females i.e. 45 on the Imaginational OE which predicted that males are more overexcitable on Imaginational development than the females. Study on Gifted sample came out as, Gifted and talented men imaginational OEs than their female counterparts, whereas females showed more significant sensual and emotional OEs than males (Sandal-Miller, 1988). In another study Ackerman's study (1997) analyzed the combined data from 13 prior investigations found that females had higher imaginational OE scores than males. So researches contradicting the results of gender difference on Imaginational OE were found. More detailed and extensive researches can be done to look more into this issue.

In order to test the fifth hypothesis that 'Females would be significantly higher on Emotional Overexcitability as compared to males' the scores of both male and female students on 'The ME Scale I' were subjected to t-test analysis. The results of the analysis have been summarized in Table no. 5:

Table:5

Dimensions	Gender	Mean	S.D.	t-test
Emotional OE	Females	50.17	13.29	0.34
	Males	48.85	14.91	

*p<.05; **p<.0

As shown in table no.5 the t-value of 0.34 for gender differences on emotional overexcitability did not reach the 0.05 level of significance. A closer look at the mean values of females(m=50.17) and males(m=48.85) though reveals that female students were higher on Emotional OE. Tieso (2007) found that emotional OE discriminated among males and females. She reported that females had the highest emotional OE scores. Bouchet and Falk (2001) reported gender differences in all areas of OE: males scored higher on intellectual, psychomotor, and imaginational OE, whereas females were higher on emotional and sensual OE.

Conclusion

Results show that overexcitabilities are varyingly spread amongst the student population with clear cut gender differences. Since each child has a unique combination of OE's a standard method of teaching for all students does not provide a perfect platform for the student to reach his best potential. Curriculum teaching methods should cater to the unique psychological diversity amongst the vast student population of students so that each child may use his inherent potentials optimally.

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