

## Evaluation the Effectiveness of Therapeutic Creativity Model on Promotion of Autistic Children's Social Flexibility

Reyhaneh Motakhaveri<sup>1\*</sup>, Ali Reza Pirkhaefi<sup>2</sup>

### ABSTRACT

**Background and Objectives:** Children with autism have many problems in social interactions; therefore, it is necessary to identify and strengthen the factors that reduce their problems in this field. Therefore this study was conducted aimed at investigation the effectiveness of therapeutic creativity model on promotion of autistic children's social flexibility. **Methods:** The research design of this study was semi-experimental type as pretest-posttest with control group. Statistical population consisted of all autistic children with of Tehran city in 2016. The studied sample was including 16 children with autism who were selected through convenience sampling method and were categorized randomly into two groups of experiment and control. Social Support Questionnaire (SSQ) was used for data collection and data analyzing was conducted with univariate analysis of covariance and using SPSS-21 software. **Results:** The results showed that therapeutic creativity model have significant effect on promoting autistic children's social flexibility ( $F= 1/09$ ,  $p< 0/05$ ). **Conclusion:** According to the results of this study, therapeutic creativity model can be suggested as an effective method in promoting autistic children's social flexibility.

**Keywords:** *Therapeutic Creativity, Social Flexibility, Autism, Children.*

Pervasive developmental disorder (PDD) is one of the most common diseases in childhood, which is associated with serious deficiencies in adolescence. These disorders include a range of diseases such as autism, Rett syndrome, Asperger syndrome, and non-specific pervasive developmental disorder (Sodock & Kaplan, 2009). Based on TR DSM-IV criteria, autism is the most common disease in pervasive developmental disorder (Emily Haesler, 2011). The prevalence of this disorder in Iran is 6.26 per 10,000 children (Samadi et al., 2012). Some symptoms of this disorder are as following: disorder in social interactions, disorder in communication and speech impairment, disorder in sense and perception processing, and behavioral disorder (Mostofsky et al, 2006).

<sup>1</sup> (M.A in Clinical Psychology, Department of Psychology, Islamic Azad University of Garmsar Branch, Garmsar, Iran)

<sup>2</sup> (Assistance Professor, Department of Psychology, Islamic Azad University of Garmsar Branch, Garmsar, Iran)  
*\*Responding Author*

Received: April 12, 2018; Revision Received: April 19, 2018; Accepted: May 29, 2018

## **Evaluation the Effectiveness of Therapeutic Creativity Model on Promotion of Autistic Children's Social Flexibility**

Children with autism disorder are a group of children who have many problems in both social and behavioral communication; therefore, increasing social skills and social development of children with autism are the main components of treatment interventions for these children. In fact, autism disorder is a type of generalized developmental disorder that begins before 36-month, and its beginning is always before the age of 3. Pervasive developmental disorder is one kind of disorders that confronts families with many challenges. Autism is the most prominent example of developmental disorder from the range of pervasive developmental disorder that disturbs children and their families in special conditions. This disorder involves a variety of symptoms that are generally circumscribed by communication, social, and imaginative disorders. Lack of bilateral eye contact, limitation of social smile, lack of interest and tendency towards human faces, unpleasantness to physical contact, lack of verbal communication, limitation in another perspective and understanding of others' perspective, failing to share pleasure, imperfection and limitations in participatory play are some of these limitations and defects (Asghari Nekah, 2011).

As noted, children with autism have many problems that fall within the context of problems associated with executive actions. The brain is composed of various neural networks. Some of these networks are responsible for coordinating and integrating other networks. Typically, executive actions refer to the function of these coordinated and integrated networks (Brown, 2006). Executive actions are a general concept that refers to the process of mind and ability to control the body, cognition, and excitement to guide the behavior toward the goal (Corbett et al., 2009). These actions are generally referred to as functions such as scheduling, work memory, impulse control, inhibition, flexibility, as well as initiating and directing activities (Stuss et al., 2002).

As mentioned, children with autism have a lot of problems with their social relationships. One of the problems of these children in the area of executive actions and social life is their social flexibility. Social flexibility is a skill that allows the person to adapt to traumatic or life-threatening events in life. In fact, social flexibility is the ability to acquire power after confronting with harsh conditions in dealing with others and overcoming the difficult conditions (McAllister & McKinnon, 2009). LeMonda et al (2012) investigated the relationship between stereotypic movements and executive function in children with autism disorder. The results of this study showed that executive function has the ability to predict stereotypic behaviors. Particularly low scores of executive function predicted a high frequency and longer duration of stereotypic movement in children with autism.

Children with autism may want to be alone all day and if they want to communicate, they will fail or they will not be interested in communicating with other people. Typically, a normal child with normal growing is keenly interested in the environment, and the child with autism is more interested to be in an unsocial environment, and is very disturbed by any change in the environment. Larger children with autism often are not interested in social interaction, but because they cannot understand and anticipate the feelings and thoughts of others, they fail

## **Evaluation the Effectiveness of Therapeutic Creativity Model on Promotion of Autistic Children's Social Flexibility**

and make poor communication, and this fact that they cannot understand the thoughts of others, cause them to not find any common topic for interacting and communicating. These people also have difficulty with nonverbal symptoms, and they do not understand the face symptoms of the other people, and these problems prevent them from social growth (Baron-Cohen et al, 2001).

Several treatments have been designed for this disease, including dietary treatments, taking medications (such as Loperidol and Imipramine, taking vitamin B, etc.) and cartoon therapy and planned training experiences (including socializing, intercourse, guided action about 20-25 hours per week, etc.). One of the newest methods for treating this disease is creativity therapy that has recently been investigated and researched. These therapeutic models is presented by Pirkahefi (2009) and has 5 component levels and 16 operational levels, and make the concept of creative self-efficacy and creative adaptation of the model structure and aimed at the mind creativity and personality in individuals. Mentality and personality creativity make people to be more creative and adaptable to personal and social life, such as work, study, and ... (Pirkahefi, 2014).

In the therapeutic creativity model, activation of creativity is aimed at developing creative abilities and skills, self-efficacy beliefs and adaptive / coping capacities. In this model, the internal capabilities of an individual are effectively and integrated. In such a case, one's abilities are organized in a new form rather than being ordinarily served. In this regard, Pirkahefi et al (2017) believe that creativity has a cognitive (intellectual) / emotional (motivational) / personality (behavioral) nature; therefore, in the new model, creativity is a new and open attitude toward itself that with a positive emotion and affection leads to new, effective and effective changes in the person's mind and personality. By analyzing the relevant foundations, the educational model for the creation of mind and personality consists of 5 components; 1) Metacognitive components 2) Linguistic component 3) Motivational component 4) Personality component 5) Body language component (Pirkahefi and Borjali, 2012). In this study, we used metacognitive, motivational and body language components.

Metacognitive component: they are special abilities that cause the dynamics and efficiency of the mind at the level of quantity, variety and quality, which includes: fluidization, flexibility, finding solution, composition, cognitive intellectual development, innovation, decision making, imagination and mind design. Linguistic component: In this component, individuals can use verbal/ language new skills and abilities to design a better interactive/ communicative system in life. Language skills and abilities are: verbal perceptions, improvement and development of verbal perceptions, metaphorical system and interpersonal verbal patterns. The personality component: it is the characteristics that trigger the movement and the metacognitive ability of creativity. This component has important types of trust, audacity and risk. Confidence has a facilitating role in shaping creative ideas, beliefs and attitudes. Motivational component: It enables individuals to create a general dynamic in them. In fact, the training of motivational components led to the emergence of energy for mental and

## **Evaluation the Effectiveness of Therapeutic Creativity Model on Promotion of Autistic Children's Social Flexibility**

practical activities. The motivational component in this area is motivational and perseverance (metacognition) orientation. Body language component: This component plays an important role in facilitating conversations and creating positive feelings in individual and social interactions. Body language means symbols / gestures and movements and physical behaviors that play a role in transferring the inner excitement of an individual to others. This component involves refining and shaping optimal movement behaviors and body language (Pirkhaefi, 2014).

According to studies, children with autism have a lot of problems and finding ways to reduce their problems is very important. Also, in none of the previous studies, the effectiveness of clinical therapeutic creativity model on promoting children's social flexibility with autism has not been investigated. Therefore, this study was conducted to evaluate the effectiveness of therapeutic creativity in promoting children's social flexibility with autism.

### **METHODS**

In this research, a semi-experimental design, from pretest-posttest type with control group were used. The statistical population of the study consisted of all autistic children in Tehran in 2016. Among them, 16 people were selected from autistic children of Shahidan Farazdaq School based on entry criteria for the study and through convenience sampling and were randomly categorized into two experimental (8 people) and control (8 people). Entry criteria were developing autism disorder based on the diagnosis of pediatric psychologist, being able to read and write, satisfaction of the parents for participating their children in psychotherapy sessions, not using other psychotherapy services and counseling, and also having good physical condition to attend training sessions. At the beginning, the examiner participated in the course of the clinical therapeutic creativity model under the supervision of the corresponding teacher (Dr. Pirkhaefi) and learned all the necessary techniques and methods and, by combining and using existing resources, organized a course for autistic children. After the random allocation of the subjects to the experimental and control group and performing pre-tests for the experimental and control group, the social flexibility test was taken from the patients and a new educational program for creativity was performed for the experimental group.

The training period was presented as weekly sessions on Tuesday and Thursday with total 10 sessions. Creativity training was held in workshop meetings. The role played by the subjects was in the form of activities, assignments and exercises performed at the workshop or at home. Post-tests at the end of training were carried out for both groups. In the educational program, the metacognitive components of creativity were limited to 23 hours of workplace training due to the educational ability, but other components of creativity included motivational components and body language for maximizing the efficiency and flexibility in subjects was developed to more than 23 hours of workshop activity, including conducting and practicing workshop activities in the home for autistic children. The summary of the meetings was as follows; Session 1: introducing, meeting with the therapist, a general overview of the

## **Evaluation the Effectiveness of Therapeutic Creativity Model on Promotion of Autistic Children's Social Flexibility**

clinical pattern of therapeutic creativity, the categorization and goals of the course, reviewing the structure of the sessions, rules and regulations, familiarity of the members with each other, the goals and methods of treatment, the rules and problems of the group, hours and how to work at home, a description of social flexibility. Session 2: Teaching of metacognition component in the first step, fluidity and flexibility, showing the effect of beliefs on feelings and behaviors, and providing homework. Session 3: Teaching the second step (mental design and thinking and perception improvement), reviewing the previous assignment and teaching the process of thinking, perception, and mental design improvement and doing homework. Session 4: From the metacognitive component to teaching the third step of finding solution, reviewing tasks of the previous session, training of other cognitive and social components, doing homework. Session 5: Practical exercises for teaching and better understanding of the metacognitive component, reviewing the tasks of the previous session, teaching other cognitive components, teaching and better understanding the metacognitive components, cognitive errors and false beliefs and doing homework. Session 6: Teaching components of the body language of the therapeutic creativity, including motion behaviors and body language (people who had difficulty communicating and presenting information to others in motion behaviors were asked to play a more active role in the meetings) and doing homework. Session 7: Teaching motivational components and providing homework. Session 8: more emphasis on motivational factors and reviewing the exercises of the previous session. Session 9: a general review of creativity methods. Session 10: getting feedback, taking social flexibilities tests and saying goodbye.

**Social Support Questionnaire (SSQ):** This questionnaire was developed by Fleming et al (1982) and in this research it was used for assessing social flexibility. The social support questionnaire has two forms including 6 and 25 questions in which its long form was used. This questionnaire has 5 sub-scale of general perceived support, friends, family, classmates and general opinion about the importance of social support. Scoring this scale is as "yes" and "no" with a score range between 0 - 25. Higher scores indicate higher social support, or, in other words, higher social flexibility. Fleming et al (1982) using re-run method reported the validity coefficient of this scale equal to 0.70. In internal normization, Hooman and Livarjani (2008) by performing this questionnaire on 535 students showed that this scale has a good validity and reliability. In this study, factor analysis method was used to assess the validity of the scale. The results of the research indicated that the questions had internal coordination, and there was no significant difference between total score of boys and girls. Also, Cronbach's alpha coefficient was 0.81.

To analyze the data, the descriptive indices of mean and standard deviation and at the inferential level, univariate covariance analysis (ANCOVA) were used. Data were analyzed by SPSS-21 software.

**Evaluation the Effectiveness of Therapeutic Creativity Model on Promotion of Autistic Children's Social Flexibility**

**RESULTS**

In the descriptive information section, in each group, there were 2 girls and 6 boys randomly and their average age was 12 years. The obtained results of the research variables are as follows:

**Table 1: Descriptive indices of social flexibility in two control and experimental groups**

Variable	Stage	Experiment		Control	
		Mean	Std. Deviation	Mean	Std. Deviation
Social flexibility	Pre-test	3.08	0.41	3.04	0.43
	Post-test	4	0.31	3.03	0.13

The above table shows the mean and standard deviation of social flexibility in the control and experimental group. Based on the results, the mean and standard deviation of the experimental group in the social flexibility pre-test was  $3.08 \pm 0.41$  and in the post-test, it was  $4 \pm 0.31$ , indicating that the post-test scores of the experimental group had significant changes compared to their pre-test scores, while by comparing the means of control group it could be seen that no change have been occurred in the control group.

The use of ANCOVA test requires reviewing the pre-assumptions that can be used in case of confirmation of pre-assumptions; therefore, we first consider these pre-assumptions.

**Table 2: Shapiro Wilk test to check the normality of scores distribution**

Variable	Group	Value	Significance (P)
Pre-test	Experiment	0.911	0.362
	Control	0.984	0.652
Post-test	Experiment	0.937	0.415
	Control	0.966	0.510

One of the pre-assumptions for performing univariate covariance analysis is the normal distribution of scores. To evaluate the normal distribution of scores in post-test in experimental and control groups, Shapiro Wilk test was used. Based on the results, the significance level of all variables in both groups is higher than 0.5 ( $p > 0.05$ ), which shows that the distribution of social flexibility scores in the post-test stage in both control and control groups is normal.

**Table 3: Leven test results to examine the consistency of variances**

Variable	Degree of freedom equal to 1	Degree of freedom equal to 2	F	Significance (P)
social flexibility	1	14	0.150	0.442

Another pre-assumption is performing homogeneous covariance analysis of the variance between experimental and control groups in research variables. Table 3 shows the results of

## Evaluation the Effectiveness of Therapeutic Creativity Model on Promotion of Autistic Children's Social Flexibility

the Leven test for the homogeneity of the variance among the groups. The F-value for social flexibility is not significant ( $p > 0.05$ ), hence the pre-assumption of equality of variances is confirmed.

*Table 4: The results of multivariate analysis of variance to examine the effect of the test on the social flexibility component*

Variable	Source of change	Degree of freedom	Mean squares	F coefficient	Significance	Eta square	Statistical power
Social flexibility	Groups	1	0.180	1.09	0.021	0.019	0.177

The above table shows the results of univariate covariance analysis to examine the effect of the test on social flexibility. Based on the results, there was a significant difference between the experimental and control groups in social flexibility ( $F = 1.09$  and  $p < 0.021$ ). According to the results of Table 1 and the comparison of the mean of the experimental and control group in the social flexibility variable, it is observed that in the post-test and in comparison with the pre-test, the mean of the experimental group was increased in social flexibility, while no significant changes were observed in the control group. Therefore, the research hypothesis is confirmed and it is concluded that therapeutic creativity increases the social flexibility of children with autism.

## DISCUSSION

The purpose of this study was to investigate the effectiveness of therapeutic creativity on promoting the social flexibility of children with autism. The results of data analysis showed that there is a significant difference between the control and experimental groups in the post-test, which suggests that the clinical model of therapeutic creativity has been effective and has been able to increase social flexibility in children with autism. The result of this research is in line with the results of the researches by Zarabi Moghadam and Amin Yazdi (2015), Soltani (2015), Saeidi et al. (2012), Yaghoublou and Janipour (2015), Nishabouri Mohammadi and Soltani Koohanbani (2015).

Sajadi and Pirkhaefi (2017) in the study of the effectiveness of therapeutic creativity on promoting the motivation and academic performance of first-grade male students of high school showed that therapeutic creativity increases and improves students' motivation and academic performance. Autistic children in an uncontrollable position employ a severe but unsuccessful cognitive activity. They search for the right information, store it and analyze it. They also consider different assumptions and test them to disambiguate from the position, but due to the uncontrollability of the events for them, their cognitive efforts do not fulfill the desired goals (which are well-grounded solutions). The therapeutic creativity model teaches these children how to understand the difficult situation and make them as a controllable situation. In a research conducted by Pirkhaefi et al (2017), they concluded that the clinical

## **Evaluation the Effectiveness of Therapeutic Creativity Model on Promotion of Autistic Children's Social Flexibility**

model of therapeutic creativity can reduce physical complaints, anxiety and social function disorders in individuals under treatment.

Children with autism have less flexibility, they can hardly forget their initial learning, they insist on their previous learning, and this insistence damage to their adaption with the new conditions. The clinical model of therapeutic creativity helps to create multiple solutions, including alternatives to difficult situations in children with autism, and examines new situations and problems at different levels, and provides options and alternative ideas. In this regard, Pirkhaefi and Borjali (2012) in the study of the clinical applications of the therapeutic model of creativity among the students concluded that stimulating the components of creativity facilitates mental health, self-efficacy and adaptive methods.

The lack of skills in expressing and recognizing emotional states is one of the most prominent characteristics of these children and is probably one of the main obstacles to establishing a sincere relationship with others and building social relationships. Therapeutic creativity helps autistic children to organize emotions and identify emotional states, and they can be more effective in interacting with others. Children with autism often have a very different experience from the world than others, so it is not surprising that other people's actions and reactions often turn out to be a mystery to them. These children have poor social interaction and therefore often seem that they are unable to learn how to interact with others. In fact, children through the game establish close emotional relationships that, through these relationships, test and simulate themselves against others. Hence, therapeutic creativity helps them to find a common ground, where they can play through creativity and gain social experiences.

In general, it can be concluded that therapeutic creativity by providing strategies and strengthening the mental and cognitive bases of children with autism causes social flexibility of these children. In general, the data and results of this research should be followed with caution. Due to some limitations, including time limits, there was no possibility to follow-up. Due to the frequency and severity of the problems of autistic children, the attention of authorities is important. Therefore, the intervention based on the clinical model of therapeutic creativity can be an important step in providing social flexibility and social support for this group. Therefore, it is suggested that policymakers and planners, as well as physicians, counselors, psychologists and other health professionals, are advised to apply this therapeutic approach with knowledge of the research results in order to see the happiness and improve the quality of life of autistic children as well as their families.

### ***Acknowledgments***

At the end of the study, the researcher would like to thank and appreciate all the participating children in the research, their families, the officials of Shahidan Farzadqi School, and other teachers and friends who helped us in this research.



## Evaluation the Effectiveness of Therapeutic Creativity Model on Promotion of Autistic Children's Social Flexibility

*Conflict of Interest:* None declared.

### REFERENCES

- Asghari Nekah, Seyyed Mohsen. 2011. The effect of toy game therapy intervention on communication skills of autistic children. *Magazine of Principles of Mental Health*, 13 (49): 42-57.
- Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, I. (2001). The “Reading the Mind in the Eyes” Test revised version: a study with normal adults, and adults with Asperger syndrome or high-functioning autism. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 42(2), 241-251.
- Brown, T. E. (2006). Executive functions and attention deficit hyperactivity disorder: Implications of two conflicting views. *International Journal of Disability, Development and Education*, 53(1), 35-46.
- Brown, T. E. (2006). Executive functions and attention deficit hyperactivity disorder: Implications of two conflicting views. *International Journal of Disability, Development and Education*, 53(1), 35-46.
- Corbett, B. A., Constantine, L. J., Hendren, R., Rocke, D., & Ozonoff, S. (2009). Examining executive functioning in children with autism spectrum disorder, attention deficit hyperactivity disorder and typical development. *Psychiatry research*, 166(2), 210-222.
- Corbett, B. A., Constantine, L. J., Hendren, R., Rocke, D., & Ozonoff, S. (2009). Examining executive functioning in children with autism spectrum disorder, attention deficit hyperactivity disorder and typical development. *Psychiatry research*, 166(2), 210-222.
- Dennis, J. P., & Vander Wal, J. S. (2010). The cognitive flexibility inventory: Instrument development and estimates of reliability and validity. *Cognitive therapy and research*, 34(3), 241-253.
- Emily Haesler BN, P. (2011). Music therapy for autistic spectrum disorder. *International Journal of Child Health and Human Development*, 4(2), 241.
- Fleming, R., Baum, A., Gisriel, M. M., & Gatchel, R. J. (1982). Mediating influences of social support on stress at Three Mile Island. *Journal of Human stress*, 8(3), 14-23.
- Gerald, G. (1999). *Short termplay therapy*. Newyork: Allynbucon
- Hooman, H.A., and Livarjani, S. 2008. Investigating the validity, reliability and normization of social support questionnaire (SSQ) for high school students. *Quarterly Journal of Education and Evaluation*, 1 (1): 167-142.
- LeMonda, B. C., Holtzer, R., & Goldman, S. (2012). Relationship between executive functions and motor stereotypies in children with autistic disorder. *Research in autism spectrum disorders*, 6(3), 1099-1106.
- LeMonda, B. C., Holtzer, R., & Goldman, S. (2012). Relationship between executive functions and motor stereotypies in children with autistic disorder. *Research in autism spectrum disorders*, 6(3), 1099-1106.

## Evaluation the Effectiveness of Therapeutic Creativity Model on Promotion of Autistic Children's Social Flexibility

- Lopez, B. R., Lincoln, A. J., Ozonoff, S., & Lai, Z. (2005). Examining the relationship between executive functions and restricted, repetitive symptoms of autistic disorder. *Journal of autism and developmental disorders*, 35(4), 445-460.
- McAllister, M., & McKinnon, J. (2009). The importance of teaching and learning resilience in the health disciplines: a critical review of the literature. *Nurse education today*, 29(4), 371-379.
- Mostofsky, S. H., Dubey, P., Jerath, V. K., Jansiewicz, E. M., Goldberg, M. C., & Denckla, M. B. (2006). Developmental dyspraxia is not limited to imitation in children with autism spectrum disorders. *Journal of the International Neuropsychological Society*, 12(3), 314-326.
- Ozonoff, S., & McEvoy, R. E. (1994). A longitudinal study of executive function and theory of mind development in autism. *Development and psychopathology*, 6(3), 415-431.
- Pirkhaefi, A., and Borjali, A. 2012. Clinical Applications of Therapeutic Creativity Model among Students: (A New Approach to Clinical Mental Health Therapy). *Clinical Psychology Studies*, 2 (7): 85-104.
- Pirkhaefi, A., Gudini, A. A., and Hosseini, A. 2017. Effectiveness of clinical model of therapeutic creativity on physical symptoms, anxiety, depression and social function of students. *Journal of Clinical Psychology and Personality: Accepted and under print*.
- Pirkhaefi, Alireza. 2014. *A Treatise on Therapeutic Creativity (An Evolutionary Approach to Mental Health)*. Tehran: Ketabe Mehraban Publications.
- Sajadi Monzah, H. R., and Pirkhaefi, A. 2017. The Effectiveness of Therapeutic Creativity Model on Students' Motivation and Academic Performance. *Journal of Research in Virtual and Academic Learning*, 4 (4): 39-48.
- Samadi, S. A., Mahmoodizadeh, A., & McConkey, R. (2012). A national study of the prevalence of autism among five-year-old children in Iran. *Autism*, 16(1), 5-14.
- Shareh, H., Farmani, A., & Soltani, E. (2014). Investigating the Reliability and Validity of the Cognitive Flexibility Inventory (CFI-I) among Iranian University Students. *Practice in Clinical Psychology*, 2(1), 43-50.
- Sodock, B., & Kaplan, B. (2009). Pocket handbook of clinical psychiatry. *Arjmand J. (Persian translator). 4th ed. Tehran: Arjmand Publication*, 397-402.
- South, M., Ozonoff, S., & McMahon, W. M. (2007). The relationship between executive functioning, central coherence, and repetitive behaviors in the high-functioning autism spectrum. *Autism*, 11(5), 437-451.
- Stuss, D. T., Binns, M. A., Murphy, K. J., & Alexander, M. P. (2002). Dissociation within the anterior attentional system: Effects of task complexity and irrelevant information on reaction time speed and accuracy. *Neuropsychology*, 16(4), 500.

**How to cite this article:** Motakhaveri R & Ali R P (2018). Evaluation the Effectiveness of Therapeutic Creativity Model on Promotion of Autistic Children's Social Flexibility. *International Journal of Indian Psychology*, Vol. 6, (2), DIP: 18.01.035/20180602, DOI: 10.25215/0602.035