Tendencies of gifted pupils toward selected aspects of conformist behavior in the context of their relationships with classmates

Eva Machůa*, Ilona Kočarováb, Radka Kopřivovác

aDepartment of School Pedagogy, Faculty of Humanities, Tomas Bata University in Zlín, nám. T. G. Masaryka 1279, 760 01 Zlín, Czech Republic
bDepartment of School Pedagogy, Faculty of Humanities, Tomas Bata University in Zlín, nám. T. G. Masaryka 1279, 760 01 Zlín, Czech Republic
cDepartment of Pedagogical Sciences, Faculty of Humanities, Tomas Bata University in Zlín, nám. T. G. Masaryka 1279, 760 01 Zlín, Czech Republic

Abstract

The aim of the study was to ascertain the degree of conformist behavior of gifted pupils in the adolescent age during the application of different phases of differentiated enriched curriculum. To diagnose the tendency of gifted pupils toward conformist behavior in education, a technique based on the ATER instrument, with the use of the two-factor semantic differential, was applied. We found that most gifted pupils declare non-conformist tendencies in education. By testing the hypothesis, it was verified that the tendency of gifted pupils toward conformism is not affected by the type of school they attend, nor the quality of the relationship of the classmates with the pupils themselves, which the gifted pupil declares, or the quality of relation of the gifted pupil to other pupils. We also found that the need for gifted pupils to have friends in the classroom encourages a greater tendency towards conformist behavior.

* Corresponding author. Tel.: 00420 576 037 462.
E-mail address: e.machu@email.cz

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).
Peer-review under responsibility of Future Academy® Cognitive Trading

Keywords: conformity; nonconformity; giftedness, gifted pupil; differentiated enriched curriculum; inclusive education; the semantic differential.
1. Introduction and theoretical basis of the study

Conformity is the tendency of individuals to adapt their opinions and behavior to others. This is the result of real or merely perceived pressure of a person, group or society (Cialdini & Goldstein, 2004). A certain degree of adaptation is, however, absolutely essential for life or survival and is inherent in both humans and in other forms and animals. From a sociological point of view, a certain degree of conformism is necessary to maintain social order. According to G. Tarde (in Scott, 2006) and his laws of imitation, conformism brings society together, forms a common language, goals and standards in it. However, it depends on to who and what a person is adapting. Exaggerated conformism hampers individuals and society and slows down progress and innovation.

A classic study of conformity from the 1950s of the last century (M. Deutsch, H. Gerard), voiced a presumption with which experts identify until today, namely that the basis of conformity is two needs, the need to be right and the need to be liked (Cialdini & Goldstein, 2004). The need to be right applies to new situations where we are not certain of our opinion or conduct, and turn to other people. We behave like others, we conform to them. The second, from the perspective of our study a more fundamental cause of conformity, is the desire to be liked and accepted by other people. If being liked is be one of the basic human needs, it is not surprising that an individual is subjected to pressures around them on their behavior and thinking. In this sense, a particularly sensitive period for conformity is adolescence, when the social group has the most significant effect on an individual in their life (Newman & Newman, 2012). The members of a group then identify with its objectives, standards and style of communication. Otherwise, the individual is avoided, marginalized and penalized.

The members of a group hold different levels of conformity. The highest level of conformity is internal, when they themselves identify with the demands of the group and are internally convinced about them. The next level is external conformity, or - if formal, which implies outwardly feigned agreement with the demands of the group, but inside a so-called conflict occurs, which is a contradiction between how the individual wants to behave and judge and what is required by the social environment. The next level is so-called nonconformity, which is a manifestation of the independence of opinion and action, even assuming that the individual is part of a social group. The last, lowest level of conformity, so-called anti-conformity, is a degree of deviation so pronounced that it can lead to deviant behavior in relation to the standards of the group. The risk factors that affect conformity include group size, group composition, group cohesion, penalties for failure to comply with standards, and others. (Coon & Mitterer, 2014)

Exceptionally gifted children, who are characterized by their specific features in the cognitive, emotional and social areas (Clark, 2013) are also included among individuals who may differ significantly from others. Giftedness is most often described as the ability of individuals in the selected area appreciated by the socio-cultural environment, which is quantitatively and qualitatively more developed compared to their peers (Heward, 2013). A gifted pupil for the purposes of our research is defined with the help of the definition one-dimensional and demonstrated performance (Porter, 1999), and is conceived in terms of a high level of intellectual abilities in a field.

Gifted pupils who show signs for intellectual giftedness can become marginalized individuals who are not desirable for the group or school class nor their role model. Demonstration of the giftedness of a pupil, however, is one of the preconditions for the successful development of giftedness. If we focus on the school environment, the teacher offers gifted pupils differentiated education and gifted pupils, by accepting the offer of the teacher in the form of enriching the curriculum, develop their potential. Otherwise there is stagnation in the development of the child.

The teacher as an offer for the development of giftedness applies differentiated enriched curriculum that can be implemented using a curriculum modified in its content, process, environment, product and evaluation, whose components are blended together (Tomlinson, 2013). Modifying the content of teaching refers to qualitative changes in the curriculum content. It is the ability of teachers to plan and apply the learning objectives and thereby offer a differentiated approach to gifted pupils through higher goals. A gifted pupil then has the opportunity to work on more challenging tasks towards higher educational goals (Smith, 2006). The modification process is a change in the management of teaching in terms of the use of educational methods and organizational forms, with a focus on strategies that lead to the development of critical and creative thinking. Environmental modification involves both a personality and relational change (good communication among all participants in the educational process, cooperation, etc.) as well as a space-material change (special teaching aids, classrooms, etc.). Modification of the
product is the demand for qualitative or quantitative change in learning outcomes, in which gifted pupils have the opportunity to achieve the highest possible goals in education. Modification of evaluation involves changes in the assessment of learning outcomes, which should be motivating and formative for gifted pupils (Hunt & Seney 2009).

Most of the teacher's instructions within differentiated enriched curriculum may be assigned under the rules of inclusive pedagogy (education) (Riley, 2011). Here children are not divided into two groups (i.e. those who are gifted and those who are not gifted), there is just one heterogeneous group. All actors in the educational process strive to create differentiated conditions for the inclusion of all children in all activities related with education (Nind & col., 2013). Gifted children are not specifically assigned more difficult tasks in advance. Gifted children can choose the assignment, and no "ceiling" in education is determined. Even children who do not exhibit signs of giftedness can also try to fulfill a more difficult task, to the extent that they are able to handle the task. In this way, an undesirable labeling of gifted children is also reduced to a minimum and in addition the conformist pupil behavior during task solution tends toward nonconformity, thus orig inventive and creative thinking.

If we return back to the factors influencing the conformist behavior of pupils during the educational process in the classroom, namely in relation to the typical characteristics of gifted pupils (see Davis, Rimm & Sielge, 2013; Clark, 2013), it appears as a current factor in the composition of the group, where the pupil may be alone in the classroom with their educational needs, or, conversely, to find a group of more like-minded pupils. Another factor may be the importance of quality relationships with their classmates. The aim of the study was to ascertain the degree of conformist behavior of gifted pupils in the adolescent age during the application of the different phases of differentiated enriched curriculum. To diagnose the tendencies of gifted pupils toward conformist behavior in education, the technique of the research based on the ATER instrument is applied, which uses the two-factor semantic differential.

When searching the Academic Search Complete and Xerxes databases and entering key words, we do not find a similarly focused study in relation to giftedness. Studies on the conformity of children in adolescence often focus on conformity related to characteristics of social groups, such as conformity in clothing (Ling, 2008), binge eating and drinking behaviors (Laghi et al., 2012), the importance of having a "cool" mobile phone (Abeele & Roe, 2013), as well as social pathological phenomena influenced by conformity, such as alcohol use (Balsa et al., 2010). All of these cases concerned quantitatively tuned research probes using a questionnaire as a research instrument, in which the scale of the level of agreement with statements was evaluated. The semantic differential was not applied here.

However, publications such as Stopper, 2000; Renzulli, 2004; Montgomery, 2013 mention conformity and peer pressure as factors affecting the development of gifted children.

2. Methodology of research

The aim of the research is to analyze the tendencies of gifted pupils to selected aspects of conformist behavior in the context of their relationships with classmates. Conformist aspects of behavior relate to tackling the tasks in a lesson, where pupils get the opportunity to work in a differentiated manner (in the classroom the differentiated enriched curriculum is applied). Relationships with classmates are viewed from three angles, namely the need of the gifted pupil to have friends in the classroom, the relationship of the gifted pupil to classmates and the relationships of the classmates toward the gifted pupil declared by the gifted pupil.

The research group consists of the group of the so-called group gifted pupils. For the identification of giftedness the Mensa society IQ test is used in this study with a result of more than 130 points, which corresponds to intelligence attained by about 2% of the population. This is a group assigned nonverbal test based on the Stanford-Binet scale and Cattell theory of intelligence, adapted for screening intelligence. Mensa Children brings children from 5 to 14 years together. Current data on the number of its members is from 2014, when there were 956 children (Mensa, © 2014, p. 4). Our investigation was focused only on children within the level of lower secondary education (ISCED 2). The selective research group numbered 105 pupils aged 11 to 16 years (average of 13 years), of which there were 27 girls and 78 boys. From the standpoint of the Czech educational system, 19 pupils belonged to normal elementary schools, 33 in gymnasi ums and 53 in schools with specialized programs for gifted pupils. The children were asked to complete the questionnaires by the head of leisure activities and specialized schools, which are established by Mensa. Data collection took place in May, 2015.

The research technique is based on the principle of the ATER instrument (Chráska, 2007). This concerns the
two-factor semantic differential. The factors of this instrument were designated by the authors as the factors evaluation and energy. The ATER instrument was supplemented by 2 scales in the evaluation factor and 2 scales in the energy factor, namely in the event that it would change its factor structure in the context of its new application. The factor analysis using the Varimax rotation and principal component analysis, however, confirmed the construct validity of the instrument, while maintaining its original factors to which the 4 newly added scales fell in terms of meaning. The energy factor proved to be more significant. It has 7 scales, whose factor values range from 0.817 to 0.459 and explain 26.7% of the variance. The evaluation factor is also saturated with 7 scales, whose factor loadings are in the value range 0.721 to 0.534 and explain 21.5% of the variance of the measured construct. The total explained variance amounts to 48.3%. The reliability of both factors was determined using Cronbach’s alpha, whose value for the energy factor was 0.897 and for the evaluation factor 0.883. The final form of the semantic differential is shown in the table.

Table 1. Semantic differential

| Good       | Bad (h*) | Not demanding | Demanding (e) | Annoying | Pleasant (h) | Dark (h*) | Mild (e*) | Difficult (e) | Ugly (h*) | Seamless (e*) | Sweet (h) | Easy        | Difficult (e) | Mild (e*) | Fast        | Slow (e+) | Smooth      | Bumpy (e+) | Dirty       | Clean (h+) |
|------------|----------|---------------|---------------|----------|--------------|----------|----------|---------------|----------|---------------|----------|------------|---------------|----------|------------|----------|------------|-----------|------------|
| Good       |          |               |               |          |              |          |          |               |          |               |          | Not demanding|               |          |            |          | Smooth      |           | Dirty       |          |
| Annoying   |          |               |               |          |              |          |          |               |          |               |          |            |               |          |            |          |           |           | Clean (h+) |
| Bright     |          |               |               |          |              |          |          |               |          |               |          |            |               |          |            |          |           |           |            |
| Strict     |          |               |               |          |              |          |          |               |          |               |          |            |               |          |            |          |           |           |            |
| Beautiful  |          |               |               |          |              |          |          |               |          |               |          |            |               |          |            |          |           |           |            |
| Problematic|          |               |               |          |              |          |          |               |          |               |          |            |               |          |            |          |           |           |            |
| Sour       |          |               |               |          |              |          |          |               |          |               |          |            |               |          |            |          |           |           |            |
| Light      |          |               |               |          |              |          |          |               |          |               |          |            |               |          |            |          |           |           |            |
| Dishonest  |          |               |               |          |              |          |          |               |          |               |          |            |               |          |            |          |           |           |            |
| Fast       |          |               |               |          |              |          |          |               |          |               |          |            |               |          |            |          |           |           |            |
| Smooth     |          |               |               |          |              |          |          |               |          |               |          |            |               |          |            |          |           |           |            |
| Dirty      |          |               |               |          |              |          |          |               |          |               |          |            |               |          |            |          |           |           |            |

Note: The letter h indicates the scale belonging to the evaluation factor, the letter e indicates the range belonging to the energy factor. The superscript * indicates a reverse scale, the superscript + denotes a scale, which was added to the original ATER instrument.

The semantic differential was used within our investigation to diagnose tendencies of gifted pupils toward conformist behavior within the application of the differentiated enriched curriculum. This issue was divided into 5 consecutive areas based on the theoretical foundations, namely content, process, environment, product and evaluation. For each of them one statement pertaining to the solution of the task in the lesson was created. The statement described the conformist behavior of a pupil who, as part of the work on a task in the lesson, intentionally tried to behave the same or similar to other classmates to blend in with the rest of the class, which in practice leads to the fact that the teacher refuses to offer the differentiated enriched curriculum. Statements were deliberately drafted so as to avoid labeling gifted pupils (in the sense of higher expectations from their approach to the solution of the task in all the presented examples). The statements were the following:

1. Content: If I get to choose a task assignment from multiple options, I choose the one that most classmates choose.
2. Process: I watch the work on tasks of other classmates and I try to do as they do.
3. Environment: When solving tasks solution, I adapt to my classmates in the choice of teaching aids.
4. **Product**: I accept the task solution, which most of my classmates agreed on, even when I came up with a different solution.

5. **Evaluation**: If I get a significantly different evaluation than most classmates, I externally belittle its importance.

In addition, sufficient reliability was confirmed within the individual statements, both in the energy factor ($\alpha = 0.798$ to 0.845) and in the evaluation factor ($\alpha = 0.623$ to 0.846).

Pupils within five batteries of the semantic differential had the task of putting a cross on each scale between two antonyms. The proximity of one of the crosses to the antonyms expresses their feeling that they would behave that way in their classroom. On the scales under the factor energy they subjectively expressed their level of mental exertion (activity) required for the stated behavior. The more energy they associated with a particular example of conformist behavior, the more difficult such behavior seemed to them. If they internally associated certain behaviors with a high level of energy, we assume that for them it was problematic, giving them a certain inner conflict, and that they were not prone to such behavior. With the increasing rate of energy associated with a specific example of conformist behavior their tendency toward conformity therefore decreased. On the scales under the factor of evaluation, gifted pupils subjectively expressed the level of positivity of conformist behavior during the solving of tasks in the classroom. The more positively they evaluated a certain example of conformist behavior, the greater the tendency to conform they expressed.

## 3. Research results

### 3.1. Descriptive analysis

In order to analyze the tendencies of gifted pupils to conform, it was necessary to find a specific construct that would testify about the overall level of the tendencies towards conformity, namely for all 5 examples of conformist behavior and for both factors of the semantic differential. For the purposes of the analysis, it proved useful to express the degree of conformity as the difference between the average rate of evaluation and the average rate of energy for all examined examples of conformist behavior. Correlation analysis in fact showed a relatively high degree of continuity between these two factors ($r_{p} = -0.623; p < 0.01$). The correlation coefficient expresses the relationship as follows: if a certain behavior is associated with high levels of energy, it is also associated with a negative evaluation. Conversely, if the conformist behavior is considered as non-energy intensive, it is also positively evaluated. If we subtract the values of the factors of evaluation and energy from each other, we get a simplified, but for our purposes, practical definition of the degree of conformity, which can potentially have values ranging from -6 to 6. This scale can be interpreted as follows:

- The negative values indicate a tendency toward anti-conformist behavior, because the preponderance of low values in the evaluation factor, and conversely high levels of the energy factor.
- Values around 0 are nonconformist. Both of the observed factors are about average.
- Values approaching plus suggest a tendency toward conformist behavior. In the evaluation factor, high values predominate and in the factor energy low ones, in contrast.

The overall results achieved are shown in the table:

<table>
<thead>
<tr>
<th>Area</th>
<th>Average</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content:</td>
<td>1.18</td>
<td>1.58</td>
<td>-4.29</td>
<td>5.14</td>
</tr>
<tr>
<td>Process:</td>
<td>0.85</td>
<td>1.87</td>
<td>-4.29</td>
<td>5.43</td>
</tr>
<tr>
<td>Environment:</td>
<td>0.76</td>
<td>1.87</td>
<td>-4.29</td>
<td>6.00</td>
</tr>
<tr>
<td>Product:</td>
<td>0.24</td>
<td>2.21</td>
<td>-6.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Evaluation:</td>
<td>-0.14</td>
<td>1.99</td>
<td>-5.14</td>
<td>6.00</td>
</tr>
<tr>
<td>Overall</td>
<td>0.60</td>
<td>1.40</td>
<td>-2.57</td>
<td>5.09</td>
</tr>
</tbody>
</table>
Based on the results it is apparent that the majority of gifted pupils declare nonconformist tendencies. The averages of 4 out of 5 of the monitored areas are around zero. Only in the area designated as content, the value is slightly tilted to values falling more under conformist tendencies. However, considering the spread of the overall results that range from -2.57 to 5.09, in our group there are also pupils declaring tendencies for anti-conformist behavior and conformist behavior. Anti-conformist tendencies are very weak though. If students move away from the average, it is rather on the side of conformist behavior. Interestingly, the tendency toward conformist behavior decreases from content through process, environment and product, up until evaluation.

3.2. Relationship analysis

In the context of relationship analysis, we focused on the analysis of the degree of the tendency toward conformity in the context of the relationships of gifted pupils with classmates. First and foremost, we wanted to know whether the degree of tendency to conformity relates to how important it is for gifted pupils to have friends in the classroom. We assumed based on the theory that the importance of friends in a social group is an important factor which causes a higher tendency toward conformist behavior. We defined hypothesis H1 as: Gifted pupils for whom it is important to have friends in class, show a higher degree of conformity than gifted pupils for whom friendship is less important. Camaraderie in the classroom was declared as unimportant or of little importance by 31 gifted pupils, while 74 pupils labeled it as important and very important. The averages of both groups were compared again, using an independent t-test for equality of means. The observed relationship was established (t = 2.681; p = 0.009). Gifted pupils for whom it is important to have friends in the class, declare a higher average rate of conformity (\( \bar{x} = 0.810 \)), while the group of pupils for whom it is not essential to have in friends in class have a lower degree of conformity (\( \bar{x} = 0.029 \)).

Based on the theory, we also presumed that the tendency of gifted pupils to conform depends on their relationship to classmates. We defined hypothesis H2 as: Gifted pupils who declare a positive relationship with their classmates exhibit a higher degree of conformity in comparison with gifted pupils who declare a negative relationship towards classmates. For purposes of comparison, we again created two groups on the basis of the opinion of pupils, the first group (n = 31; \( \bar{x} = 0.462 \)) expressed its relationship to classmates as largely negative and the second group (n = 74; \( \bar{x} = 0.629 \)) as largely positive. The T-test did not prove the observed relationship to be statistically significant (t = -0.556; p = 0.579).

The last hypothesis was formulated oppositely in relation to the previous one in the following form, H3: Gifted pupils who declare the relationship of classmates to themselves as positive, exhibit a higher degree of conformity in comparison with gifted pupils who declare the relationship of classmates to themselves as negative. 31 gifted pupils expressed the relationship of their classmates to themselves as largely negative (\( \bar{x} = 0.515 \)), while 74 as positive (\( \bar{x} = 0.607 \)). The comparison of the two groups in terms of the tendency to conform, using the t-test led to the rejection of our hypothesis (t = -0.303; p = 0.762).

Although in the case of the three aforementioned parts of the analysis, the gifted pupils were divided into numerically equal groups, 31 to 74, they were not the same pupils. Therefore the overall averages for the compared groups also varies.

4. Summary and discussion

The aim of the research was to analyze the tendencies of gifted pupils to selected aspects of conformist behavior in the context of their relationships with classmates. The conformist tendencies of gifted pupils were monitored using the semantic differential, specifically the adapted and validated ATER instrument.

Using the chosen technique, we found a tendency of individuals toward conformism, which is determined by the difference between the energy and evaluation factors. So we did not look into a real, applied degree of conformity. Therefore, it would be possible to consider follow-up research that would be based on in-depth interviews with gifted pupils and the observation of teaching.

The research involved a total of 105 gifted pupils between the ages of 11 and 16. We do not know their exact number in the basic sample, however we believe that the results for this group are relatively generalizable. Data was
collected throughout the Czech Republic. All registered organizations for gifted pupils were contacted and all gifted pupils who demonstrated a willingness to participate were given the opportunity to be involved in the inquiry.

We found that most gifted pupils declare non-conformist tendencies in education. The result could be influenced by the chosen definition of giftedness and strategies for data collection. The research was participated in by children whose giftedness was identified using the IQ test, their giftedness was externally demonstrated. All addressed children are members of society uniting these individuals, moreover, most of them attend school, which this society established for them, therefore we expect that the rate of conformity for these pupils is lower, leading to more autonomy.

By testing the hypothesis, variables associated with the classmates of gifted children were found. As is neatly summarized in the table, a significant creator of conformity in gifted children is their need to have friends in class. These children then display a higher tendency to be conf ormist. Conversely relationships with their classmates, according to our results have a significant impact on their tendency to conform.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1:</strong> Gifted pupils for whom it is important to have friends in class, show a higher degree of conformity than gifted pupils for whom friendship is less important.</td>
<td>The hypothesis has been confirmed.</td>
</tr>
<tr>
<td><strong>H2:</strong> Gifted pupils who declare a positive relationship with their classmates exhibit a higher degree of conformity in comparison with gifted pupils who declare a negative relationship towards classmates.</td>
<td>The hypothesis has not been confirmed.</td>
</tr>
<tr>
<td><strong>H3:</strong> Gifted pupils who declare the relationship of classmates to themselves as positive, exhibit a higher degree of conformity in comparison with gifted pupils who declare the relationship of classmates to themselves as negative.</td>
<td>The hypothesis has not been confirmed.</td>
</tr>
</tbody>
</table>

Finally, we recognize that the operationalization of concepts related to the variables that were used in the hypotheses (the importance of having friends, relationships with their classmates), were considerably simplified. The concepts were evaluated by the gifted children only from their own subjective point of view.

5. Conclusion

In the course of schooling, gifted pupils are usually offered differentiated enriched curriculum by their teachers. One of the barriers to the acceptance of these offers by gifted pupils, which we verified in the present study, may be their conformist behavior which is influenced by classmates and the need to belong to this group, and be conformist with it. The teacher should give out their instructions to tasks with regard to the rules of inclusive education, which offer the maximum inclusion of all pupils and in the group, and then the tendency of pupils to conform, which in many cases can lead to stagnation in the development of giftedness, is reduced.

Acknowledgements

Thanks to Bc. Mrs. Radka Kopřivová for data collection. The publication has been produced with the support of the project IGA at FHS TBU in Zlín.

References

Adolescence, 21, 3, 559 – 561.