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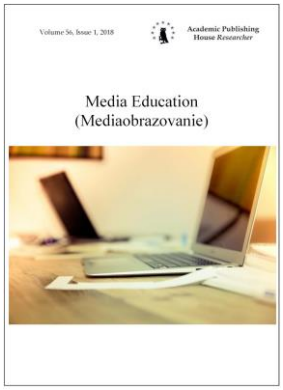

Peculiarities of Perception of Cartoons by Younger and Older Schoolchildren

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Abstract

The problem of determining particularities of the effect of media texts on schoolchildren is relevant due to the active involvement of modern children in the media world. Cartoons are the core product of media consumption in the younger age group, while the mechanisms and methods for determining their developmental potential or psychologically destructive effects on children are under-investigated. The article presents a psychological analysis of animated films on the subject of insomnia: *A Well-Tried Remedy* (*Vernoye sredstvo*) (1982) and Insomnia from the *Mi-Mi-Bear* (*Mi-mi-mishki*) series (2015). The results of a comparative empirical study of the perceptions of the characters of those cartoons by younger and older schoolchildren were described. 44 people participated in the research: young schoolchildren of the second grade (N=21, $\overline{x}$ ==8.4 y/o) and eleventh graders (N=23, $\overline{x}$ = 17.5). It was revealed that cartoons, similar in plot and characters, produce varied psychological effect on younger schoolchildren due to differences in the means of artistic mediation of communicated meanings. Judgment about less critical perception of younger schoolchildren than that of the older ones was empirically substantiated.

Keywords: psychological analysis, semantic assessment, cartoon, schoolchildren.

1. Introduction

Rapid growth of technology and the integration of people into the world of media today prompt anxiety in both academic environment and general public, giving rise, from teachers and parents, to the demand for psychological knowledge about the nature of the effects of media activity on children and the criteria for assessing psychological fruitfulness or destructiveness of media content for preschoolers and younger schoolchildren, who, according to studies, perceive information communicated by means of a media text in an uncritical manner (Kyshtymova, Trofimova, 2018).

Determining the nature of psychic transformations mediated by the media posed a challenge due to the growing involvement of children in the process of consuming media products, which may "inflict a crushing blow on the subconscious of listeners in an attempt to impose certain course of action unto them, manipulate their physical and mental state, and even imprint something in the soul, bypassing an unflustered critical consciousness, so that the listeners themselves were none the wiser" (Patzlaff, 2016: 10).

Children are the audience most susceptive to media. At the same time, according to the Modern Media Research Institute (MOMRI), 67 percent of children under three years of age and 76 % four to seven years old watch television every or almost every day (Total View, 2016). The core media product for children of younger age group are cartoons. They may serve as a means of

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entertainment, development and education, but they are also capable of misleading a child in real life, promote anxiety and aggression. Thus, it was revealed that children 5 to 12 years old, following suit of aggressive behavior of cartoon characters and carrying that over into the relationship with their brothers and sisters, in fact tried to entertain (Ghilzai et al., 2017). Computing technologies experts, aware of the problem associated with the negative effect of animated products on viewers, are developing classification codes containing algorithms for benchmarking images for violent and non-violent behavior in animated films (Khan et al., 2018). The problem of psychological destruction in modern–day cartoons is hotly debated by psychologists and educators (Ghilzai et al., 2017; Njiiri at al., 2018; Rai et al., 2016; Rajashree, 2015).

Academic and social significance of defining the prospects of psychological creation and disruption of media texts intended for children is undeniable. The importance of understanding the mechanisms of psychological effects of animated products has determined the primary objective of our study.

2. Materials and methods

Proceeding from the hypothesis that cartoons with a congenial plot may produce different effect on the audience in the course of perception, depending on particularities of artistic presentation of communicated content, we carried out a comparative analysis of two thematically congenerical cartoons: 1) the Insomnia episode from the *Mi-Mi-Bears* (Animated video, 2016) animated series (directed by A. Mironov) – by virtue of its novelty and active embeddedness in television content (the animated series has been broadcast since 2015 via the Cartoon, Carousel, Tlum HD and Russi – Culture TV channels; the series had been watched 1.7 million times through the YouTube channel alone, not counting the broadcast by television channels and Internet resources); 2) the cartoon *Well-Tried Remedy* (Animated video, 1982) of the 1982, Soyuzmultfilm Film Studio (Director Y. Prytkov) was used as the media text for comparison.

Verification of the hypothetical judgment that cartoons produced a different effect on spectators due to both their explicit, substantial specificity, but also implicit – mediated by the artistic means employed, was carried out using the method of immanent analysis of media products, which was constituted of a 'limited' (not going beyond analyzed texts) analysis of their semantic and formal features (Kyshtymova, 2017).

As a methodological basis of the study, a psycho-semiotic approach had been applied, which afforded us to implement the principle of consistency – to study a media text in the unity of its informative and formal features (Kyshtymova, 2008), and also assumed integration of the methods developed within the scope of different disciplines: literature studies, aesthetics, psychology, linguistics – due to the complex nature of media text.

The cartoons under investigation were thematically congenerical: they were dedicated to the subject of 'insomnia'. M. Weissbluth, a researcher of infantile sleep, noted the centuries-old nature of the problem of infant insomnia, the complexity of its solution and the effect of sleep on the development of children: “unhealthy sleep patterns are becoming one of the causes of school-related problems, such as the Attention Deficit Hyperactivity Disorder (ADHD) and educational retardation” (Weissbluth, 2014: 17). The cartoons under consideration communicated a portrayal of insomnia and different ways to deal with it to an infantile spectator. The protagonist of both films was a Little Bear, whose character was familiar to any child from fairy tales as the one endowed with a stereotyped purport of strength and simplicity.

The plots of the cartoons under consideration were akin. The *Well-Tried Remedy* began with an episode in a winter meadow where a forest orchestra played musical instruments. The character – the Little Bear, could not fall into hibernation in any way: “Well I can’t fall asleep for the winter! I keep being distracted on and on!” – he said and went for a walk, to be sure to fall asleep thereafter. Auntie Partridge he met on the way offered the little one to count to a hundred to fall asleep, but that did not help. Then the forest orchestra came to the rescue: a Bunny, a Squirrel, a Mouse and a Beaver. They knew the 'Well-Tried-Remedy' that would help go to sleep, and played the lullaby “Sleep, my joy, fall asleep…”, to the sounds of which the little bear fell asleep sweetly.

The Insomnia episode of the animated series *Mi-Mi-Bears* began in the house of the protagonist – Kesha the Little Bear, who couldn't sleep. A clock, an owl outside the window, a snoring chicken, water dripping from a faucet – all handicapped his sleeping. In the morning, he ran for help to his friend Cloudlet (Tuchka). Learning his problem of insomnia, the Cloudlet asked Kesha about what he was doing the day before. The Little Bear recalled that he had been

playing a video game all day. Then the Cloudlet lead him to a pile of firewood, under which, as he said, a remedy for insomnia was resting. Kesha stacked the firewood, but found no remedy. Then he was mowing grass, planting trees, digging holes, painting a fence, trimming a lawn to find the cure for insomnia. He was watering flowers, washing dishes, but did not find what he is looking for through the end of the day. Kesha decided that he would look for the insomnia cure tomorrow, but the Cloudlet said that if one worked well during the day, then insomnia is not a fear at night.

Thus, both films offer good remedies for insomnia: a lullaby or diligence – meaningfully, those were impeccable. Yet the nature of the presentation of the content in the two cartoons was different, which accounted, according to our hypothesis, for their fundamentally different effect on children.

The immanent analysis algorithm suggested investigation of particularities of the cartoons imagery array, verbal presentation of communicated meanings, their dynamic peculiarities and more, determined by the logic of organization of components of a particular media product.

At the first stage of the proposed study, the imagery array of the cartoons under consideration, the presentation of communication models therein, the dynamic peculiarities of the animated world, were analyzed. At the second stage of the study, the peculiarities of perception of the main characters of the cartoons under analysis by younger and older schoolchildren were determined, the semantics of the characters of the films were compared with the semantics of 'Self' of the audience in order to determine the degree of their identification.

3. Discussion

Over the past decade, there has been an increase in research into the effect of media on mental and physical health of the younger generation. Professionals focused on studies of the effects of aggressive (Dillon,Bushman, 2017; Zafar, Chaudhary, 2018), sexual (Çetin et al., 2015; Collins et al., 2017) and commercial media content (Kelly et al., 2015) for children and teenagers. Hence, either positive and negative effects of media consumption were distinguished. Resulting from a study carried out on a sample of 200 children aged 5 to 15 years, 31 % of children behaved indecently after watching a cartoon, 34 % became irritable, and 45 % threw things at their parents when they tried to turn TV off (Rai at al., 2016). Academic literature also provided evidence that “the large amount of positive media content, combined with a huge reach and popularity among children and adolescents, gives media immense potential in enriching the lives of children and adolescents” (de Leeuw, Buijzen, 2016: 44). Undoubtedly, positive media content was capable of producing positive effect on spectators (Cingel, Krcmar, 2017; de Leeuw, van der Laan, 2018); however, strict criteria for determining positive or negative potential of media products had not yet been developed. At the same time, professionals used methods such as polling (Cocer at al., 2015; Zafar, Chaudhary, 2018), interviews (Cernikova at al., 2017), experiment (Dillon, Bushman, 2017), as well as analysis of substantive features of content (Habib, Soliman, 2015; Turkmen, 2016; Luisi, 2018).

The most vulnerable audience before the effects of media were children. A number of studies have shown that, from tender age, they were included into the media environment, while the screen time significantly exceeded the one recommended by specialists (Neumann, 2015). Cartoons continued as the core product of media consumption in the younger age group. Academic literature presented evidence that cartoons were one of the strongest factors that influenced modern childhood and took a significant amount of time in children's daily routine (Habib, Soliman, 2015). M.Turkmen (2016), having analyzed 23 animated films that made the highest box-office, came to the shocking conclusion that "good' characters committed 66.6 % of the violent actions and the target of that violence was mostly other 'good' characters (45.9 % of total actions, or 68.9 % of actions perpetrated by good characters” (Turkmen, 2016: 32). Therewith, content analysis was used as the analysis method, the formal features of the animated presentation were not taken into account. In most countries, there is a rating system for the age-related classification of media products, which basically contemplates analysis of its content. In Russia, the age classifier was the basis of the Federal Law No. 436-FZ of October 29, 2010, where the basis for evaluating products designated for children was an analysis of its subject, genre and content.

The approach presented in the article afforded us to analyze both the substantial features of media content, and also its formal artistic peculiarities that determined the nature of its effect on consumers. That complemented the existing models of media products analysis and afforded us a

more detailed analysis of a particular media product that may damage mental and physical health of a child using implicit methods of destructive influence.

4. Results

Analysis of the cartoon imagery array

The characters of both cartoons were anthropomorphic animals, which determined their consanguinity to children and simplified speciation processes. The character of a bear presented in Russian fairy tales is good-natured, while 'one of the most common symbolic meanings of a bear was its strength and stamina' (Orel, 2008: 178). The use of the bear's visualization as the main character of the cartoons was not accidental, since it was not only familiar to children from early childhood through fairy tales and traditional plush toys, but also brought the knowledge that the bears fall into hibernation into the foreground, making seamless association with the subject of sleep in the cartoons under consideration.

In the *Well-Tried Remedy* cartoon by Soyuzmultfilm Studio, conventions for depicting character visualizations were minimal – they were drawn in detail, and their emotional states appeared authentic. For example, anxiety of the Little Bear that he may not grow if he did not hibernate in the winter was communicated by a drop of tears rolling down from his eyes. The idea of the connection of sleep with growth was conveyed to small spectators by means available to them. All cartoon characters demonstrated attention and sympathy for the main character – the media communication of that attitude to the little one was important and met age-specific needs of children: "it is very important to shape ideas about the value of empathy with another, mutual assistance, the ability to forgive and understand someone else in childhood" (Smirnova, Sokolova, 2014: 5).

Analysis of the verbal component of the cartoon was carried out using the TextAnalizer computer software created for the purpose. Determined for each film was 1) 'Lexical Density', which was carried out using a formula: $k = V / \sqrt{N}$, where V was the volume of vocabulary, i.e. the number of different words in a text, while N was the length of a text, i.e. the numbers of word usage, 2) the "harmonic center" of the text, calculated according to the 'golden section' formula and representing a segment on the linear length of a text, expressing its substantial dominant (Kyshtymova, 2006; 2008).

The Lexical Density ratio afforded to determine the richness of the text with diverse vocabulary. In the content addressed to children, that indicator determined the level of accessibility of verbally communicated information for them. Great lexical diversity of the cartoon, which lasted a short time and was saturated with visual images, was a factor that enhanced information density and caused an exceedance of infantile cognitive resource, which might have caused non-critical thinking. The Lexical Density ratio revealed in the course of the analysis of the cartoons was 4.44 for the Well-Tried Remedy and 6.47 for Insomnia. That suggested that the meanings communicated by the first cartoon would be better understood by children.

Analysis of the "harmonic center" showed that semantic dominant corresponded to the appeal of the Bunny to the Bear in the *Well-Tried Remedy* cartoon: "Wait for us in your lair" – an important motive of the cartoon was mutual assistance and empathy, while the mainstream theme was friendship, which corresponded to the semantic space significant for a very young spectator. In the Insomnia episode of the *Mi-Mi-Bears* animated series, harmonic center was not revealed.

The Insomnia animated film communicated tense condition of the character who couldn't go to asleep through the images of a dark room and a ticking clock, the owl's hoot outside the window, water dripping loudly from a faucet, a chicken snoring. Realism of visualization of insomnia caused 'contamination' of the audience with the anxiety. For the Insomnia cartoon, a 'force majeure' mode of presentation was in evidence: a large number of brief episodes that change fast, the intensity of characters, the frequency of their movements and their rate of speech, which produced a strong emotional effect on a spectator. That was facilitated by the distorted proportions of the bodies of the visualizations of the main characters: a large head on a small body, a mouth line shifted to the side of the face, or a body in the shape of a square. The moving feature of the 'face' of the cubs was the mouth line, which shifted unnaturally to the one side when speaking, which, should one look for a match in real-life mimic expressions, would correspond a 'crooked smile' – P. Ekman stated that "if one side of a face is crooked more than the other, this is a sure sign of false emotion" (Ekman, 2013: 126). It may be assumed that, due to the mimic particularities of the characters of

that cartoon, it was difficult for a child to sense the true nature of the emotions of the main characters, and that complicated the process of understanding the main motive of the cartoon.

Analysis of animated presentation of communication

The world of an animated film is perceived by the small viewer as real, and the model of communication of the characters implemented therein is important as a role model. The analysis showed that in the *Well-Tried Remedy* cartoon, its characters communicated in a benevolent and polite manner. Auntie Partridge gave her advice to the Little Bear to count to a hundred – and he, saying goodbye, went to his house, following her prompt. Having learned about the Little Bear's problem, the bunny demonstrated a reaction of empathy: "The Little Bear needs help!". At the same time, the Little Bear respectfully referred to "You (in plural)" to the Auntie Partridge, and to his peer the bunny in a friendly way of "You (in singular)". The Little Bear often used phrases related to his main problem: "I just can't fall asleep for the winter", "bears should sleep in the winter", "yawn I do, but can't fall asleep", which helped to understand the character's experiences and enhanced the accessibility of information for the little spectator without provoking emotional stress. Furthermore, the understanding of the need to "fall asleep for the winter" marked the pursuit for order, for the implementation of commonly accepted rules.

At the end of the cartoon, the forest orchestra lulled the Little Bear fall asleep to music – a lullaby became a cure for insomnia, in full accordance with the culture model for putting children to sleep. Moreover, classical music by L. Boccherini and V.A. Mozart who, as revealed in the research process, "has a universal relaxing effect, which has a calming effect on children" (Lukyanova, 2018: 65) was organically used the cartoon.

In the Insomnia cartoon, the reason for Kesha The Little Bear having no sleep was his enthusiasm for video games. His friend Cloudlet helped him cope with the problem using a trick – a search for a cure for insomnia, "which was lost somewhere", so as to find it, the Little Bear needed to do a large scope of physical labor. Yet the motive of work was not organic – not associated with creative productive labor. For children of elementary-school age, the concept of labor was at the formative stage, and the attitude to work as a way to fall asleep did not match the level of their actual development. The film demonstrated the ease of labor skills, which distorted the idea of the true nature of physical work. Relations between the characters of the cartoon did not comply with ethical standards, were unceremonious. Kesha woke the Cloudlet up with a loud gong with the first rays of the sun, preventing his friend from getting enough sleep and pursuing only his own interests. The Cloudlet helped the character using cunning, so Kesha did not come to realize the true reason for his insomnia – inactivity, enthusiasm for gadgets. The rational idea of the authors – the 'abandonment of gadgets' in favor of active work outdoors was not communicated to young spectators.

Analysis of dynamic peculiarities

Analysis of the dynamic peculiarities of cartoons was needed to understand the mechanisms of their effect on the audience: their pace and rhythm, frame rate that should not exceed the processing capacity of mind, while exceeding its resources may cause psycho-physiological maladaptation (Pronina, 2003).

The Insomnia cartoon of the *Mi-Mi-Bears* animated series was characterized by increased liveliness, a frequent change in the activities of the main character. At such fast pace, it was difficult for a child to grasp the meaning of what was happening on the screen, to understand its cause-and-effect relationships. The "force-majeure" mode of presentation emerged as a device of manipulative influence, causing non-critical perception of the communicated information.

Action in the *'Well-Tried Remedy* cartoon under comparison was unfolding at a leisurely pace, the repetition of the theme enhanced ease of access to information for a child, bringing awareness processes into the foreground.

Analysis showed that cartoons similar in their subject and visualization of characters had fundamental differences in the artistic presentation of the content, and that, according to the hypothesis under consideration, determined their varied effect on the audience. *The Well-Tried Remedy* cartoon did not contain evidence of destruction, while the friendship motive communicated thereby found its way into the domain the child's immediate menticulture, which determined its developmental potential.

Determination of the perception of cartoons by younger and older schoolchildren

In the course of investigation, peculiarities of the perception of the main characters of the cartoons in question by the audience, were determined. We proceeded from the assumption that

younger schoolchildren perceived the media text less critically, unlike high school students, while the artistic particularities of the films determined the nature of their effect on the audience.

The study involved junior high school students of the second grade (N = 21, average age 8.4 years) and eleventh graders (N = 23, average age 17.5 years) of Secondary School No. 37 in Irkutsk.

To identify the factors that determined the semantics of cartoon characters, as well as comparing their perceptions by younger and older schoolchildren, dedicated semantic differential method was used. Its scales were generated by means of adjectives, which were obtained using the method of free associations in the process of expert assessment of cartoon characters by ten pediatric psychologists studying Master's degree program of Irkutsk State University: 'friend – stranger', 'pleasant – nasty', 'simple – complex', 'fast – slow', 'wet – dry', 'soft – hard', 'native – alien', 'good – evil', 'sharp – dull', 'right – wrong', 'active – passive', 'beloved – hateful', 'cold – hot', 'strong – weak', 'beautiful – ugly', 'tense – relaxed', 'cunning – simple-minded', 'big – small', 'smooth – rough' ,'joyful – sad', 'expensive – cheap', 'good – bad', 'cheerful – dull'.

Prior to watching the cartoon, the subjects were requested to evaluate the 'Self' incentive according to the given scales in order to better identify the degree of identification of the audience with the cartoon characters. After watching each cartoon, the subjects evaluated its character. Mathematical processing of the obtained data was carried out using the SPSS–23 statistical package. To identify the main evaluation markers, the factorial analysis procedure was used, which was carried out using the maximum likelihood method with varimax rotation. To assess the reliability of calculating the elements of the correlation matrix and the possibility of its description using factor analysis, the Kaiser-Meyer-Olkin criterion (KMO) and the Bartlett's test were used. The significance level of group differences was determined using the nonparametric Mann-Whitney U–test.

Based on the data obtained during the assessment of three incentives on twenty-three scales by forty-four schoolchildren, a 3x44x23 matrix was compiled. Data processing showed that the value of the KMO test was 0.855, thus, it could be assessed as 'worthy'. Bartlett's sphericity ratio was quite high, and the significance level corresponding thereto was 0.000, which indicated the reliability of the calculation of the correlation matrix and that the data were acceptable for factorial analysis.

With respect to the estimates of magnitude of values of each factor, we singled out the five factors that explained the varimax rotation field of 63.076 % of the total dispersion of the variables. We called the first factor 'the factor of kindness', it included the scales of 'good – evil' (0.840), 'good – bad' (0.827), 'right – wrong' (0.756), 'pleasant – nasty' (with a large factor load) 0.666), 'beautiful – ugly' (0.661), 'friend – stranger' (0.656), 'cheerful – dejected' (0.656), 'joyful – sad' (0.645). The second factor - 'emotional consanguinity' amounted to: scales 'native – alien' (0.723), 'smooth – rough' (0.705), 'beloved – hated' (0.678), 'expensive – cheap' (0.666). The third factor was indicated by the 'tension factor', it includes the scales 'sharp – dull' (0.669), 'intense – relaxed' (0.632), 'large – small' (0.610). The fourth 'activity factor' included the scales 'active – passive' (0.852), 'fast – slow' (0.768). The fifth factor – 'simplicity' was composed of the scales 'simple – complex' (0.726) and 'soft – hard' (0.653).

Thus, the attitude to the cartoon characters was determined based on the assessment of their 'kindness', 'emotional consanguinity', 'tension', 'activity' and 'simplicity'. The most loaded were the factors of kindness and emotional consanguinity, which met the basic needs of children.

To identify the specifics of perception of cartoon characters by younger schoolchildren, their semantic ratings were compared with those of high school students. It was revealed that the semantics of the image of Kesha from the Insomnia cartoon among older and younger schoolchildren has statistically significant differences by 3 factors: 'kindness' ($p = 0.000$), 'emotional consanguinity' ($p = 0.010$) and 'tension' ($p = 0.013$).

Younger schoolchildren evaluated Kesha The Little Bear as kinder ($F1 = 0.366$), emotionally close ($F2 = 0.116$), and tense ($F3 = 0.550$), unlike high school students: $F1 = -1.095$, $F2 = -0.480$, $F3 = -0.163$. As one may see, younger schoolchildren perceived the character of Insomnia in a much more complimentary and uncritical manner. The perception of high school students was more adequate – their assessment of Kesha was more consistent with the results of an expert analysis of that image.

Comparison of the semantics of The Little Bear from the *Well-Tried Remedy* cartoon in the groups of younger and older schoolchildren revealed significant differences in terms of 'tension'

factor (F3 = 0.619 and –0.933 at p=0.000) only. The playful, artistically mediated nature of the action communicated in the cartoon was obvious to high school students, so the images of animated characters were perceived by them as relaxed.

The image of The Little Bear was rated highly by all factors in both groups, while only the assessment of high school students could be considered as the result of their conscious perception of the media image. Younger schoolchildren rated the main characters of the two cartoons without significant differences (p≥0.05) by three factors –in their perception, both characters: Kesha and The Little Bear were kind (F1 = 0.366 and 0.464, respectively), emotionally close (F2 = 0.116 and 0.097) and stressed (F3 = 0.55 and 0.61). At the same time, they rated Kesha as the more active one (F4 = 0.592) than The Little Bear (F4 = –0.332), and less simple: F5 = 0.051 than the character of the 'True remedy for insomnia' (F5 = 0.67).

The absence of significant differences in the perception of the character of the *Well-Tried Remedy* by younger and older schoolchildren according to the criteria of kindness and emotional consanguinity, as well as the significantly higher rating of the visualization of Kesha from Insomnia by younger schoolchildren, afforded us to conclude that the cartoon visualization of The Little Bear was liked by the children intrinsically, regardless of the nature of his presentation.

Comparison of the semantic assessment of 'Self' by younger schoolchildren with their assessment of cartoon characters showed significant (p≤0.05) differences by two factors: 'activity' and 'simplicity'. Children perceived The Little Bear from the Soviet cartoon as more passive (F4 = –0.332) than 'Self' (F4 = 0.4) and Kesha (F4 = 0.592). Significant differences were also found by the factor of 'simplicity': children rated themselves (F5 = –0.403) and Kesha (F5 = –0.051) as more complicated than The Little Bear from the *Well-Tried Remedy* cartoon (F5 = 0.670). At the same time, there were no significant differences in the semantics of the children's 'Selves' and the visualization of Kesha by three important factors: younger schoolchildren regarded themselves as kind, emotionally close and tense (p≥0.05).

Interestingly, the semantics of cartoon characters and 'Self' had significant differences by all five factors for high school students: identification with the characters was not expressed (Table 1).

Table 1. Comparative evaluation of the semantics of cartoon characters with the rating of 'Self' in high school students

Incentive/ Factor	F 1	F 2	F 3	F 4	F 5
Self	–0,356	0,840	–0,001	–0,359	–0,782
Kesha	–1,095	–0,480	–0,163	0,285	0,121
The Little Bear	0,203	0,006	–0,934	–0,528	0,371

For high school students, The Little Bear from the *Well-Tried Remedy* cartoon was kinder than 'Self' and than Kesha. The character of the *Well-Tried Remedy* was perceived by them as emotionally congenial, unlike Kesha, but Kesha was much more active than 'Self' and than The Little Bear from the cartoons being compared. Both characters, according to the evaluation of senior school students, were simple, while the youngsters rated themselves as quite complex.

During the study, the subjects answered the question of which cartoon they liked best. In the group of high school students, the *Well-Tried Remedy* was singled out by 70 % of respondents, the Insomnia episode from the *Mi-Mi-Bears* animated series took a liking – 13 %, the remaining 17 % refrained from answering. Younger schoolchildren liked the Insomnia cartoon from the *Mi-Mi-Bears* animated series (76 % of children) better, while 19 % mentioned the *Well-Tried Remedy*, one person refrained from answering.

Thus, an analysis of the results of the study showed that younger schoolchildren, unlike older ones, did not perceive cartoon characters critically, their assessment corresponded to stereotypical ideas about the nature of the anthropomorphic animal traditional for the Russian culture, – a bear. Moreover, they were more likely to identify themselves with the visualization of the Insomnia cartoon character, where manipulation techniques were used, – the image of Kesha seemed more attractive and consanguine to children. The data obtained determined the importance of the formation of psychological media competence in children and their parents – the ability to understand not only informative, but also formal features of cartoons, and evaluate the information communicated by those critically.

5. Conclusion

In the course of immanent analysis, fundamental differences in the presentation of the subject of struggle against insomnia in the two cartoons under investigation, were revealed. The *Well-Tried Remedy,* focusing on the peculiarities of infantile perception, communicated values of friendship, mutual assistance and sympathy using vehicles available for the understanding of children. The positive emotional background of the cartoon was supported by appropriate selection of classical music. Insomnia was characterized by the use of means that did not correspond to the age-related peculiarities of children's perception, in particular, the 'force majeure' presentation mode, large 'vocabulary' and the speed of its playback that exceeded the resource of children's comprehension; alarming emotional background of the character's night wakefulness was not appropriate for the age-related characteristics of the target audience of a children's cartoon.

Investigation of the semantic assessment of the images of 'Self', The Little Bear and Kesha demonstrated that the younger perceived the cartoon characters in the same way as themselves, on a larger number of factors and scales. Therewith, the differences in the assessment of two cartoon characters were minimal – the ability to discriminate was not developed in younger schoolchildren. Older school students gave a fundamentally different assessment to the characters of both cartoons and of themselves – their identification with bears suffering from insomnia was not expressed in any of the factors.

A higher rating of the Insomnia cartoon by younger schoolchildren also indicated that, due to uncritical perception, children could not 'retrieve' the negative connotations, what high school students did quite successfully, those who rated the *Well-Tried Remedy* film highly, which showed quite good developmental potential in the process of expert analysis. Manipulative techniques, which, as the analysis had shown, were used in Insomnia, affected younger schoolchildren, as different from the older ones.

The results of the study indicated that the theme of a cartoon, as well as its plot alone, cannot determine the psychological potential of a film. To reveal it, analysis of both the content of a media text and peculiarities of its artistic presentation, was needed.

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