PERSONALITY DIMENSIONS AT THE
INTERRELATION OF GAME PLAYERS FROM
VIRTUAL SPACE LEVEL

I.Mladin

Ionuț Mladin,
PhD student, West University of Timișoara
Romania

Abstract: Virtual games represent an activity in which those engaged relate and behave analogously with the real social space. The investigation of some players' personality dimensions with a view to their manifestation in cyberspace represents a desideratum of this study. It takes into account that the need of involvement in the virtual game is a type of energetic and actional activation, which might shape characteristics specific to personality. On the other hand, virtual players use social abilities in their activity.

Keywords: interrelation, activism, energetic tension, dependence-independence, integration.

As in the reality given, in the virtual space there is a certain reference to oneself and others, as well as to the subject engaged in this type of activity. We all know, for instance, about the relevance of the social facilitation phenomenon in the physical environment through which the oneself-other (presence of others) report has as effect the performance increase. (Gavreliuc, 2002)

It is supposed that the virtual games users (especially shooters, those attracted by games with war themes) find in the satisfaction of their activity a method of releasing aggressivity, and within the game there are
certain stimuli sets designed for such release, a thing which is found in reality as well. (Fein, Spencer, Brehm, Kassin, 1996)

The interrelation in virtual space is based on anonymous ideas, assuming a new identity (other than the real one), using the nickname for the initial identification. This type of interrelation involves two aspects:

- tendency of separating the virtual identity from the real identity (dissociation)
- assuming some different roles depending on specific subjective interests or activities.

Dissociation is a method of self-knowledge through exploring the dimensions of your own self, though this type of knowledge does not necessarily mean awareness.

Self-knowledge through virtual space is made at the level of integration of the two modes - „to be virtual” and „to be real”. J.Suler suggests five aspects in order to make this adapting integration (Suler, 1996):

- online revealing to the „other” some aspects connected to the real life (work, family, friends, hobbies).
- revealing to the „other” from the reality given some aspects connected to his/her own virtual identity
- meeting in the real space with the virtual „other”
- offline expressing of online behavior through which the subject discovers new aspects of his/her own identity which might be experimented in reality.
- expressing the offline behavior in the virtual reality is another form of experimentation through which the subject confronts with new situations, with the virtual „others” in front of which adopts adapting strategies.
The online/offline integration is hard to achieve since many times the subjects express in the virtual space that type of identity which are afraid to develop in the physical reality due to moral and even legal reasons.

N. Negroponte claims that we live in the postinformational era which assumes a process of individualization. For using it, the information passes from the group to the individual, case in which the information becomes unique or customized. (Negroponte, 1999)

Cyberspace involves exceeding geographical borders, passing from the real and known space to the virtual space in which the social interactions are mediated based on identity similarities, or on the contrary, the negations of „the other” as being different. The virtual reality space is based on physical reality values, but these cannot be transferred in this virtual environment.

Self-defining in the virtual reality and the identity/affiliation to the „other” are mediated by the computer. The future brings forth inherent progresses with a view to the recognition by the computer of the user personality. (Nadolu, 2001) Therefore, the virtual social space has its own delimitation and characteristics, hence the need of scientific analysis thereof.

The interrelating in the virtual space is also characterized by the simulation phenomenon (especially in the virtual game) through which something unreal becomes real, something fake becomes true, and so on.

Interpersonal relations in the virtual space gained weight in contemporary era. Critics is questioning the authenticity of this type of relating without the cultural mark. Virtual interrelation has the following characteristics (Suler, 1996):
- asynchronous communication, whom the type of creative, more organized, more intimate in relationing can face it (disinhibition effect).

- communication through text at the level of which appears the transfer and through which expectancies, desires, anxieties are projected in what the virtual space interlocutor writes; the contratransfer might appear; this type of mutual reporting makes the interrelation significant.

- the virtual space technique did not develop a strategy through which the connection between people (a hello, a hug, and so on) or the fact of making things together, have the same significance as in the physical reality for those who interact at this level.

- telepathy and empathy make the integration of the five senses within the virtual interrelation be less important, or to put it differently, intuition has a significant role in report to „the other” from the virtual space.

The need to establish interhuman relations at the virtual space level is many times a method to overcome the difficulties of integration into society. The future social interrelation shall consider three aspects: social relation with a person physically present, with a person from the virtual space and with persons we meet in the virtual space but in physical reality as well.

The virtual space is not „real” in the meaning of the term itself, but it becomes socialized at the level of interrelationing through games, chats, and so on.
Hypotheses

**Hypothesis 1:** There is a relation between activism and energetic tension in the virtual games users, and this relation does not appear in subjects who do not have this preoccupation.

**Hypothesis 2:** Game users in virtual space differentiate themselves from the subjects who do not have this preoccupation, at the level of the following dimensions of personality relevant to relationing: dependence/independence, integration.

Objectives

- selection of subjects who correspond to the research purpose
- establishing and analysis of personality dimensions in interrelationing, specific to subjects who take part in the study
- statistic interpretation of results obtained

Methodology

1. **Sampling**

The subjects age were between 18-25 years of age, males, and are pupils and students from the urban and rural environment. Both the computer games users (with war and fantasy themes), who spend at least 7 hours in this activity, and those who do not have this preoccupation were in a number of 30 in each group.

2. Tests applied

   **Heymans Wiersma Test**

   The three temperamental and fundamental properties investigated are: sensibility, activism, repercursiveness, with a stress on interpreting the activism

   **16 PF (Raymond Cattel) Test**

   The personality factors subject to interpretation are: energetic tension, dependence/independence, integration.
Result interpretation

**HYPOTHESIS 1:** There is a relation between activism and energetic tension manifested by virtual games users, and this relation does not appear in subjects who do not have this preoccupation.

Activism was investigated by applying the Heymans Wiërsma test and represents a necessity to act “due to one's own will” and without the influence of some exterior impulses, which are nothing but pretexts for action. The active has as dominating part the need to act, and the inactive acts against the will, and not being pleased with the fact that he/she must put effort.

The energetic tension was investigated by applying the 16 PF test, and it represents recreation, peacefulness, apathy, content, calm, lack of frustration (low energetic tension) or tension, frustration, irritation, overexcitability, agitation, anxiety, dissatisfaction due to an excess of energy insufficiently released.

**Table 1.**
Activism – energetic tension relation
(experimental group – virtual gamers):

<table>
<thead>
<tr>
<th>Correlation coefficient</th>
<th>Threshold of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>( r = -0.419 )</td>
<td>( p = 0.021, p &lt; 0.05 )</td>
</tr>
</tbody>
</table>

The correlation coefficient (Pearson Bravais) shows us a reverse correlation between activism and energetic tension (\( r = 0.419 \)) in the case of virtual players at a threshold of significance \( p = 0.021 \) lower than 0.5.
Table 2.
Activism – energetic tension relation (control group – subject who do not have preoccupation connected to virtual games)

<table>
<thead>
<tr>
<th>Correlation coefficient</th>
<th>Threshold of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>$r = .167$</td>
<td>$P = .378, p &gt; .05$</td>
</tr>
</tbody>
</table>

Correlation coefficient ($r = .167$) is not statistically significant in the case of control group, the threshold of significance ($p = .378$) being higher than .05, which means that this subjects manifest a relation between activism dimensions and energetic tension.

The virtual games users have a slightly pronounced activism (not in a significant mode) than the subjects from the control lot. The statistic average of the two groups show a medium level of activism in both situations.

Table 3.
Averages obtained by the two samplings at the activism level

<table>
<thead>
<tr>
<th>Sampling</th>
<th>No. of subjects</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average</th>
<th>Deviation from standard</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual games users</td>
<td>N = 30</td>
<td>2</td>
<td>9</td>
<td>$m = 6.70$</td>
<td>$\sigma = 2.01$</td>
<td>active</td>
</tr>
<tr>
<td>Control lot</td>
<td>N = 30</td>
<td>0</td>
<td>10</td>
<td>$m = 6.23$</td>
<td>$\sigma = 2.82$</td>
<td>active</td>
</tr>
</tbody>
</table>

Only in the case of experimental group, the activism – energetic tension relation is significant. Activism is connected to the basic preoccupation of those subjects (virtual game), the need to act is interiorized and contains unconscious elements. The reverse correlation between activism and energetic tension has the following significance: as activism increases, the energetic tension decreases, and as activism
decreases the energetic tension increases. Thus, there is a relation between the two psychological dimensions investigated within this hypothesis, and this relation is significant in virtual players.

The energetic tension at a high level assumes the accumulation of psychic energy and the need to release it. At the level of virtual players group, the energetic tension I at a medium level, and at the control group level, the energetic tension is at a medium towards high level.

**Table 4.**
Averages obtained by the two sampling at the energetic tension level

<table>
<thead>
<tr>
<th>Sampling</th>
<th>No. of subjects</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average (m)</th>
<th>Deviation from standard (σ)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual games users</td>
<td>N = 30</td>
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</tbody>
</table>

From an intergroup analysis point of view, both subject groups investigated present an accumulation of energetic tension, which assumes methods of releasing it. The control group presents an energetic tension slightly pronounced, and implicitly it might be about a higher need of release.

As we have shown, at virtual games users there is a reverse correlation between activism and energetic tension, and this fact can be connected to the method of energetic release through activity/preoccupation, namely virtual games.

**HYPOTHESIS 2:** Virtual games users differentiate themselves from the subjects who do not have this preoccupation at the level of the
following personality dimensions of connected to interrelation: dependence/independence, integration.

The dependence/independence and integration personality factors were assessed based on the application of *16 PF* test on the two samplings.

The dependence/independence factor shows social dependence, attachment for the group, for taking group decisions, tendency to comply with the majority (low grade) or, on the contrary, social independence, lack of need to dominate the others, whose support and approval have no importance (high grade).

**Table 5.**

Averages obtained by the two sampling at the dependence / independence level:

<table>
<thead>
<tr>
<th>Sampling</th>
<th>No. of subjects</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average</th>
<th>Deviation from standard</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual games users</td>
<td>N = 30</td>
<td>5</td>
<td>18</td>
<td>M = 12.40</td>
<td>σ = 3.28</td>
<td>High level</td>
</tr>
<tr>
<td>Control lot</td>
<td>N = 30</td>
<td>4</td>
<td>19</td>
<td>M = 11.13</td>
<td>σ = 3.66</td>
<td>Medium level</td>
</tr>
</tbody>
</table>

The statistic average of virtual players show that these are placed at a high level (12.40) of dependence/independence, which means a social independence, opinion separated against the rest of the society, and the subjects from the control lot are placed at a medium level (11.13) of dependence/independence. The minimum level of responses (high social dependence) is 5 for virtual players, respectively 4 for the control lot subjects; maximum level (18, respectively 19) show a pronounced independence against the social environment.
Table 6.
Differences at the dependence/independence level between the two sampling:

<table>
<thead>
<tr>
<th>Sampling</th>
<th>No. of subjects</th>
<th>Average</th>
<th>Deviation from standard</th>
<th>Student test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual games users</td>
<td>N = 30</td>
<td>m = 12.40</td>
<td>σ = 3.28</td>
<td>t(58) = 1.40, p=.164, p&gt;.05</td>
</tr>
<tr>
<td>Control lot</td>
<td>N = 30</td>
<td>m = 11.13</td>
<td>σ = 3.66</td>
<td></td>
</tr>
</tbody>
</table>

The (Student) t test shows the fact that there is no significant statistic differences between the two samplings at the level of dependence/independence personality factor, a fact also highlighted by the following graphic:

**Graphic 1.** Differences at the dependence/independence level between the two samplings.

The integration factor expresses the lack of self-control, negligence against the social aspects (non-adjustment), action based on impulses (low grade) or, on the contrary, self-control, formalism and conformism, but at the same time, conceited personalities who care about their social reputation (high grade).
Table 7.

Averages obtained by the two samplings at the integration level

<table>
<thead>
<tr>
<th>Sampling</th>
<th>No. of subjects</th>
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<td>M = 11.13</td>
<td>σ = 3.66</td>
<td>Medium level</td>
</tr>
</tbody>
</table>

The statistic average of the two groups (8.73, 8.40) of subjects investigated within the study, show a low level of dependence/independence, which means a certain social non-adjustment and action based on impulses. The maximum level of responses (16, 15) represent social adjustment, and the minimum level (5, 4) social non-adjustment.

Table 8.

Differences at the integration level between the two samplings:

<table>
<thead>
<tr>
<th>Sampling</th>
<th>No. of subjects</th>
<th>Average</th>
<th>Deviation from standard</th>
<th>Student test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual games users</td>
<td>N = 30</td>
<td>m = 8.73</td>
<td>σ = 2.42</td>
<td>t(58) = .461, p=.647, p&gt;.05</td>
</tr>
<tr>
<td>Control lot</td>
<td>N = 30</td>
<td>m = 8.40</td>
<td>σ = 2.13</td>
<td></td>
</tr>
</tbody>
</table>

The (Student) t test shows the fact that between the virtual players and the control lot subjects there are significant statistic differences at the level of dependence/independence personality factor. (see the graphic below).
Graphic 2. Differences at the integration level between the two samplings

After processing the statistic data, results the fact that this hypothesis is invalidated. Both the virtual games users and the control lot subjects manifest social independence, non-conformism towards social rules, need for self-determination and actions made based on impulses. Though there are no significant statistic differences between the two groups investigated, in the case of virtual players there is still a slight tendency to accentuate the tendencies from above. Moreover, virtual players manifest conformism towards the rules of the virtual group from which they belong to, this being a condition of affiliation to this group.

Within the virtual group, the interrelationing takes place also based on rules (as in the social environment), though there are methods specific to the virtual space such as: the virtual player builds a new identity and hides the real social identity. Through the new identity, the virtual player satisfies some social needs such as those connected to esteem and status, obtaining a new hierarchic position following some habits connected to a certain virtual game. These aspects become complementary to the social reality: social dissatisfaction are / can be
compensated by satisfactions at the interrelating level in a virtual group, and is these become the predominant preoccupation of the subjects, they belong to the dependence towards the virtual space. Within or group of virtual players, this part was not produced as they manifest similarity with the subjects from the control group.

The weak social adjustment of the two samplings investigated, non-conformism, separation from the rest of the society, can be explained by the fact that the subjects are at the teenage period, in full affirmation, search of self identity and establishment of personality autonomy.

Conclusions

All in all, the virtual space players are dominated by the need to „act” (activism), being based on a psycho-energetic tension. This need to „act” appears in these subjects in the form of separation from the physical reality and immersion in the dream world of the virtual reality. Nevertheless, the subjects are integrated in the social environment, and this thing is explained by the fact that a virtual community is functioning primarily based on the social rules given. It is possible that those engaged in such a community to valuate in a first stage „as if” this would be an authentic social community. But we know that the virtual space dependence (of virtual games mainly) leads in time to the negation of reality, and implicitly of the social environment.

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