ASSUMPTIONS FOR OPTIMIZATION OF ANDRAGOGIC INTERACTION: METHODOLOGICAL AND PRACTICAL GROUNDING

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Abstract
The article analyses links between personal (individual) independence (autonomy), interpersonal dependence and andragogic interaction, also optimization of these links by grounding their methodological and practical assumptions. The methodological basis rests on stimulus-response theory, assisting in spotlighting of assumptions for transformation of personal (individual) independence into interpersonal dependence, significance of interpersonal dependence and reliance on optimization of andragogic interaction. Comparative analysis of results in 2001 and 2011 research, revealing positive and negative experience of learners in teamwork and project activity was invoked. Theoretical and empiric insights of the article can be helpful for andragogues/lecturers and administrators of adult education institutions, for all those working with adults and striving for qualitative changes in andragogic interaction.

Keywords: Interpersonal dependence, personal (individual) independence, reliance, andragogic interaction, optimization

Introduction
In modern communicative society it is important to constructively avoid interdependence, to strive both for personal and collective goals, develop more transparent reality of interdependence, based on reliance upon others. According to S. R. Covey (2007), a low level of reliance leads to friction of interpersonal relations, beginning of “double” wickets and conflicts, appearance of unnecessary rivalry. People start employing “I win and others loose” categories. Consequently, interpersonal relations, labour efficiency and results suffer from that.

According to S. R. Covey (2009), the level of reliance nowadays is very low and is treated as the lowest in the history. It refers to all spheres of social life: governments, economy, business, culture, politics, etc. The situation in human relations is even worse. Results of D. Helpern’s research (Covey, 2009) show that only 34 % of Americans are inclined to rely on other persons. In Great Britain it makes only 29 %. However, there are still existing societies, where that level is rather high – in Denmark, Sweden and Norway it amounts to 68 %, in the Netherlands – to 60 %. Distrust of others, friction, rivalry and prejudice induce to avoid any responsibility, fearing for defeats. On the other hand, defeats lead to dependence of losers on winners, lack of self-confidence, inability to take responsibility for one’s own actions and their consequences. Choice of each independent and self-confident person is important for constructive interpersonal dependence and high level of its reliance on each other.

After evaluation of insights of national and foreign researchers (Seiliius et al., 2008; Nagineviciene , 2009; Kvedaravicius, 2006; Adomaitiene et al., 2010, 2013; Zubrickiene et.
al., 2011; Jarvis, 2001; Mezirow, 1978, 1997; Avolio et al., 2002; Covey, 2006, 2007, 2009; Neale et al., 2008 and et. al.) analysis is made of interpersonal dependence as a basic assumption for positive alteration of andragogic interaction.

Methodological and practical grounding was invoked for above analysis. Firstly, it is personal (individual) independence as the major assumption for interpersonal dependence, since it grants high level of self-confidence and confidence in each other (stimulus – response theory). Secondly, self-reception of interacting individuals was invoked (from the viewpoint of comparative analysis), which enabled them to take an external look at themselves and their relations to others, measuring interpersonal dependence, stimulating and suppressive factors.

**Scientific problem:** what are assumptions for optimization of andragogic interactions?

**Aim of the research** is to make analysis of methodological assumptions for optimization of andragogic interaction, grounding them with results of 2001 and 2011 comparative analysis.

**Objectives:**

1. to make analysis of methodological assumptions for optimization of andragogic interaction from the viewpoint of stimulus-response theory;
2. to make analysis of important assumptions and obstacles for optimization of andragogic interaction, appreciating the approach of higher school learners, their positive and negative experience of participation in teamwork;
3. to compare results of 2001 and 2011 research, aimed at disclosure of assumptions that are important for optimization of andragogic interaction.

**Research methods:** analysis of scientific literature, inquiry, comparative analysis.

**Reliance – a significant condition for development of efficiency in andragogic interaction**

People live in social environment and they are closely interrelated. There is a continuous interaction between andragogues and learners in the process of learning. The interaction is realized as “a reciprocal influence of objects that effect each other, i.e. influence each other by combined actions“ (Jovaisa, 2007, p. 254). According to L. Jovaisa (ibid), this effect is double: informative (objects send each other verbal and non-verbal signals) – psychological interaction; practical (objects direct their activity towards each other – they teach each other, assist each other, cooperate in combining their actions) – in andragogy it is treated as andragogic interaction.

Andragogic interaction takes place in social context, where dominant are social relations of andragogues, learners and other learners by sharing information, experience, ideas and sensations. It leads to transformation of knowledge and those participating in the interaction when qualitative personal (individual) changes take place on the basis of new knowledge, abilities and skills.

Efficiency of andragogic interaction and its development are related to other participants of andragogic interaction (learners and their interrelations, based on reliance). According to S. M. R. Covey (2009), reliance is the base of interrelations. Absence of reliance leads to the breakdown of relations. Reliance on others is very important, however, if self-confidence is missing, it will also be missing in relations with others.

What is reliance? To rely on someone means to believe that he/she is not going to disappoint you and you can rely on him/her (IDV, 2001). But how can you rely on others, if you lack self-confidence?

S. M. R. Covey (ibid) notes that the world of business employs a simple formula, which shows that reliance in specific activity is highly appreciated. According to the author, above formula could also fit for any other sphere of activity, particular. It could also fit for evaluation of activity efficiency (formula 1):
Formula 1 shows that the level of reliance is low, the activity rate is minimal, whereas the input is huge. To the contrary, when the level of reliance is growing, the activity rate is increasing and the input is decreasing. Most people always used to and still treasure reliance, however only some of them understand its true value. Therefore, reliance appears to be a factor, making impact on activity rate and input, i.e. on activity efficiency. When the level of reliance is high, dividends are obtained and results of all activity spheres improve. For example, when learners perform practical assignments in groups or take part in project activity, when the atmosphere of reliance is dominant, their sincere, meaningful and inspiring communication and collaboration is encouraged, partners inventively strive for joint goals, demonstrate their initiative, searching for and introducing innovations, focusing on their work and improvement on activity efficiency. On the other hand, the factor of reliance in any activity enables to experience more joy, brings friends, community, team and group members closer, relations become absolutely transparent and very efficient.

According to S. M. R. Covey (2009), most people “look through” reliance and fail to understand how this factor affects different relations. By invoking a traditional formula, widely employed in the world of labour (formula 2), we can clearly see that due to lack of reliance even employment of a good strategy and its proper implementation does not guarantee good results. To the contrary, high rate of reliance is a multiplier of activity performance. It will be directly proportional to results and their value.

\[
R = S \cdot A (P) \quad \text{(formula 2),}
\]

In which \(R\) – activity (project activity) result; \(S\) – chosen strategy (aim, method); \(A\) – activity performance (realization); \(P\) – reliance.

The final result (formula 2) is affected by the level of reliance. The final result can be poor, if the level of reliance is low and it is better, if that level is high. Therefore, nowadays it is particularly important to know how to develop and uphold relations, based on reliance, relations that are essential in development of interpersonal dependence and optimization of interaction. Table 1 introduces characterization of andragagic interaction with its very low, high and very high level of reliance.

<table>
<thead>
<tr>
<th>Andragagic interaction, based on a very low and low level of reliance</th>
<th>Andragagic interaction, based on a high and very high level of reliance</th>
</tr>
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<tbody>
<tr>
<td>Each interacting individual firstly takes care of himself and his own good image</td>
<td>Friendly relations and mutual assistance</td>
</tr>
<tr>
<td>Continuous rumours, scandal, distribution into different groups, friends and foes</td>
<td>Positive atmosphere, pro-activeness and inventiveness are dominant</td>
</tr>
<tr>
<td>Unwillingness to communicate and cooperate, probable manifestation of fears, dismay or indifference</td>
<td>Meaningful, inspiring and positive communication</td>
</tr>
<tr>
<td>Intrigues, conflicts, rivalry</td>
<td>Mutual understanding, friendship, joy</td>
</tr>
<tr>
<td>Tense and non-joyful relations</td>
<td>Absolutely transparent relations</td>
</tr>
<tr>
<td>Attention is focused on mistakes and failings of those participating in the interaction, taking no notice of positive things</td>
<td>Participants look for positive properties of each other and try to strengthen them; Mistakes are treated as lessons and are soon forgotten</td>
</tr>
<tr>
<td>Inefficient activity, work</td>
<td>Entire attention is focused on activity; Very efficient activity and work</td>
</tr>
<tr>
<td>Wastage of time, defence of positions, decision taking is painful</td>
<td>Very efficient collaboration; Participants inventively strive for joint goals and objectives</td>
</tr>
</tbody>
</table>

Source: (Structured by Covey, 2009)

Strong inner values and ability to efficiently motivate each other for proper behaviour, and meaningful goals rather than personal (individual) interests are distinguished features of
those participating in andragogic interaction, based on a high and very high level of reliance (table 1). They observe very high standards of moral and ethic behaviour, which strengthens the team spirit. Dominant in these relations are creativity, constructive thinking and pro-activeness of participants, their active participation in self-dependent gaining of knowledge, mastering of necessary skills and abilities, exploring and independently „discovering“ scientific and true-life verities, searching for new ideas in solution of emerging problems. On the other hand, activity that is based on a high level of reliance makes impact on learners’ independence (autonomy), their free thinking, inventiveness, self-confidence, positive self-evaluation, pro-activeness, communication culture, development and improvement of skills and abilities, i.e. development of a personality.

According to J. Kvedaravicius (2006), developed personal properties, skills and abilities, personal autonomy and self-confidence helps individuals to choose a meaningful trend of activity and value-based position, when striving for a positive communication and cooperation. These properties are also important for intellective activity, for constructive thinking, i.e. ability to foresee and design a mental “picture” of desired result, to proceed towards one’s own essence and development of personality. Development and growth are two different things: growth is not necessarily followed by development. Development is typical only to socio-cultural systems, society, its separate members, institutions, etc. Therefore, a human could be equated to an open socio-cultural system with its own specific developmental philosophy and theses that characterize it: it is impossible to insist on development – assistance in development is the only possible way; development itself is a cyclic (step by step) process; the more developed is the system, the less dependent it is from external factors. It is able to more efficiently employ inner resources (potential); the more challenging are goals, the bigger are possibilities; willingness to become more competent is natural (innate); development is both an increase of one’s own individual goals, opportunities and those of others; the beginning of and opportunities for development lie in humans themselves – they have to make up their mind for that; the first step is to “create contact” with one’s own self and start creating other plans only after that; a human, seeking for the highest level of development has to spare himself and direct one’s own potential towards intellectual, research and vocational activity; development is a change in an ordinary situation and it is always related to unexpected risks, as development is an outbreak into a new state; a developing human must be egoistic, develop his potential alone and strive for maximal level in his vocational activity; people have to “plunge” into development, to stand it as a challenge, retreating from it with an improved potential and maturity (Kvedaravicius, J., 2006, p. 48,49).

Activity philosophy of each person is being shaped in the length of time. He faces continuous challenges, requiring specific endeavours and competence, ambitions, faith and self-confidence.

A learning participant of andragogic interaction is developing as a personality, improving one’s own competences, self-confidence and reliance on others. In that way a base for building of reliance culture in andragogic interaction is created. Andragogic interaction, among participants of which dominant is the culture of high level reliance, provides them with conditions for disclosure of their very best features, take a closer look at individual demands of other interacting participants, to know and understand them better, offer support and assistance for negotiation of personal challenges. Dominant in this andragogic interaction are friendly, mutual assistance based relations, meaningful, inspiring and positive communication and efficient collaboration for the sake of joint goals and results. This andragogic interaction is distinguished for its high collective identity, its participants are inclined to refuse their own personal interests for the sake of the group or the team welfare, to realize and acknowledge interpersonal dependence. It means that continuously developing
participant of andragogic interaction is transforming and influencing alteration of above interaction itself. Each time it becomes more and more efficient, achieving a higher qualitative level.

**Importance of personal independence and reliance for optimization of andragogic interaction from the viewpoint of stimulus-response theory**

Essentially life achievements of each individual are predetermined by his ability to choose freely rather than his innate properties (genes). However, there is one important thing that predetermines any individual free choice to guide over one’s own life and that is his independence (autonomy). Autonomy (Gr. *autonomia* – independence, self-government, independence, self-sufficiency, right to choose (IDW, 2001). Autonomous means self-governing, self-dependent, independent (IDW, 2001). Independence (autonomy) is not to be understood as sensations and feelings, mood or even thoughts and ideas. It is an ability to realize one’s own essence, properties and role, one’s own relation with the world, perception and awareness of oneself as a personality, one’s own behaviour, actions, thoughts and sensations, wishes and interests. Self-perception is a factor, related to the choice of behaviour and actions (Jovaisa, 2007), an ability to take a look at oneself, to analyse the paradigm of self-perception, which predetermines the efficiency of individual actions (Covey, 2007). It builds human position, behaviour and attitude towards others. It means that a human is free to act in accordance with his self-perception and resist the outside influence. However, it cannot be denied that the process of learning is accompanied by a large number of different stimuli, encouraging or suppressing human behaviour and actions. Knowledge is important for implementation of activity, as it helps to realize what and why to do, whereas skills prompt how to do. A demand, accompanied by human reliance, can be treated as an activity motive. Continuous human development is a spiral process of perfection, gained knowledge influence human transformation – the more we learn the bigger is demand for it and the more rapid is development and perfection.

Activity (actions) starts with a stimulus. A response to it is a natural human reaction. Everything that we see, hear and sense could be treated as a stimulus. Everyone needs a different stimulus and reaction to it remains to be very individual. On the other hand, there is a space between a stimulus and a response. This space contains individual power and an independent (autonomous) individual’s liberty to choose the ways and methods of response to that stimulus, to choose and follow principles and value-based position for realization of the chosen activity and actions (Figure. 1).

According to S. R. Covey (2007), people themselves are choosing their own values and behave in compliance with them, discover themselves, predetermine their future and influence other people and entire society, but only if they are independent (autonomous).

A human needs assistance of other people, if he wants to create something. According to S. R. Covey (2006), he strives for specific goals only supported by others and blames others after failures.
A reliant human mostly depends on social environment and feels good, if surrounded by a joyful and elated atmosphere, however, his mood and behaviour changes together with changing situation. It means that behaviour, actions and activity of dependent people depend on behaviour and vices of other people, dominant emotional atmosphere and emerging instantaneous sensations. They focus their attention on vices, mistakes and problems of other people, noticing no positive moments in them. It results in accusations and reprehension of other people, tense and cloudy relations. These people are affected by external physical, social and psychological stimuli, so they choose a response in compliance with their feelings and sensations, avoid any responsibility.

Only an independent human can freely choose how to behave in a specific situation and what value-based position to follow. Choosing freely and employing all his potential (knowledge, abilities and skills) he can enrich his life with a higher qualitative level. An independent, autonomous and continuously developing personality fears no competition (rivalry), prefers relations that are based on personal responsibility for joint goals, on mutual assistance and support, on “I win, you win” principle. Entire attention is focused on activities, whereas in interpersonal relations dominant are self-confidence and reliance on others. On the other hand, interpersonal relations, based on high level of reliance, contain positive energy, creativeness, inspiring and meaningful collaboration. Partners accept each other the way they are and search for positive features of each other, making every attempt to strengthen them. Mistakes are not given any prominence and treated as lessons for everyone.

An independent person can think and develop positively and analytically, rise from one level of abstract thinking to another (higher). He is also emotionally independent from others, so he can listen to his own inner voice, follow his own value-based position, expectations and demands. Self-esteem and self-confidence of such a person does not depend on attitude of others, on approach to him and on different factors of social environment. His actions are based on general human values, he adequately perceives the reality and knows what he wants. He is indifferent to circumstances, but is inclined to change himself and
change these circumstances. He acknowledges his mistakes, corrects them and learns from them, striving for efficient activity. In other words, an independent person is distinguished by his inner independence and is able to govern over himself, adequately react to a stimulus and freely choose a response, echoing the chosen value-based position rather than instantaneous feelings and sensations.

It is not enough to be independent when holding the position of interpersonal dependence, as independent individuals are not always mature enough and able to think and act collectively. It is possible to build a base for interpersonal dependence only after learning how to communicate and cooperate, after acquired and developed self-confidence and reliance on others. Self-confidence and reliance on others inspire for a positive and meaningful communication and collaboration. Attention is focused on joint activity, joint striving for goals and objectives, mutual relations are based on interpersonal dependence, mutual understanding, friendly relations and support become dominant, which results in building of a laborious and joyful atmosphere, creation of necessary conditions for optimization of andragagic interaction.

Comparative analysis of 2001 and 2011 research results on positive and negative experience in teamwork of higher school students

Methodology and organization of 2001 and 2011 research

Above research aimed at analysis of positive and negative teamwork experience in project activity Klaipeda State College and Klaipeda University students. Attempts were made to evaluate important assumptions and obstacles for optimization of andragagic interaction. Similar research were accomplished also in 2001 and 2011.

In the 2001 research 176 learners of higher schools were questioned, in 2011 the number of respondents amounted to 179. “The Sun” method was employed. Its essence: respondents were asked to complete five times the sentence in the middle of “The Sun”, doing it differently each time and writing their endings in “rays”. The respondents were offered two propositions: “I like working in a team, because ...”, “When working in a team I am concerned about ...”. They could choose between both variants of a corresponding sentence (proposition). Following goals were raised in the chosen assignment:

- blank “rays” cause respondents a motivating concern and they discover more opportunities than without it. That corresponds to the law of gestalt Psychology about incomplete gestalts (figures, entirety), causing in the organism willingness to complete them. Very persuasive were contemplations of N. M. Grenstad (1996, p.121). When forming incomplete sentences the respondents found it easier to find answers rather than reply to given questions;
- the respondents were “made to” clear for themselves what one proposition or another means to them, which one of them is more significant;
- usually such assignments evoke both ideas and sensations (feelings). It is related to experience after going deeper into what a specific proposition means in different contexts and situations.

The propositions are included into the context of activity and it concerns the learners themselves. It is a kind of the process stimulating information, evoking specific situations for the respondents. When completing the sentences (propositions), they seem to be landing in a specific situation and experience sensations that emerge in it. In that case replies of the respondents correspond to their feelings and sensations, they are exhaustive and sincere.

Comparative analysis of 2001 and 2011 research results

To find out the attitude of learners towards their positive teamwork experience in project activity the sentence “I like working in a team, as ...” was placed in the centre of “the
Sun”. Respondents were asked to complete it in rays, pointing to five different factors, positively influencing the teamwork in projects. A comparative analysis of 2001 and 2011 research results was performed.

The research results (Figure 2) showed that respondents point to three basic factors, stimulating the teamwork: opportunity for discussions, consultations, sharing ideas and experience (32% in 2011) and (21% in 2001), safety, self-confidence and reliance on others (28% in 2011), communication (sense of belonging), sincere and friendly relations, mutual support and assistance (25% in 2001, 21% in 2011). On the basis of above research results similarities could be easily traced and an assumption could be made that learners, taking part in projects, are inclined to believe they are tied with communication links and realize themselves as team members rather than group members, understanding the importance of mutual dependence. They treasure this kind of communication, opportunity to discuss, possibility to learn tolerance in the process of communication, self-regulation, tolerance, criticism, an argued presentation of one’s own position. According to R. Zelvys (1995), manifestation of empathy is typical to this kind of communication when we are able to empathize with the unseen of others, share their emotions and sight of environment and one’s own self. It is related to understanding, respect of other person and willingness to help him. It is assumable that such relations are based on “let’s win together” principle, any kind of rivalry and competition is rejected, whereas communication tends to graduate into efficient collaboration, satisfying demands of all participants. Thinking on the basis of “let’s win together” philosophy is a kind of communication rather than competition and fighting. This philosophy maintains that success of one single person does not deprive others of opportunities and there is the third alternative existing – a joint way of autonomous, independent, authentic and highly self-confident individuals (Adomaitiene J. et al., 2013).

Very noticeable is difference between 2001 (7%) and 2011 (28%) research results, when speaking about respondents’ exceptional factor – safety, self-confidence and reliance on others (Figure 2). It is possible to maintain that learners nowadays are more inclined to notice the significance of reliance and its importance in teamwork. Probably, the respondents link it to sincere, meaningful and inspiring communication and cooperation of those participating in andragogic interaction, to dominant friendly relations and mutual assistance. According to J. Adomaitiene et al., (2010, 2013), participants of andragogic interaction, based on a high level of reliance, are distinguished by a strong inner value-based position and ability to efficiently motivate each other, their behaviour is focused on meaningful goals rather than personal interests. They observe very high standards of moral and ethic behaviour, which strengthens the team spirit and such andragogic interaction results in mature collective identity, when its participants are inclined to refuse their personal interests for the sake of team welfare, to realize and acknowledge interpersonal dependence.

![Figure 2. Factors that make positive influence on teamwork in projects (%)](image-url)
According to learners (2011 research), other important factors in teamwork (Figure 2) are: possibility for starting new acquaintances, find new friends (15% in 2011, 6% in 2001); interesting, creative, freely chosen activity, based on wishes and abilities (9% in 2011, 7% in 2001). Willingness to find new friends and experience affinity points to demand for changes, “protection” from monotony, for new experience, sensations, etc. On the other hand, active participation in interaction and chosen activity “infects” with energy, initiative can “inspire” other (more passive) participants, whereas interesting, inventive and freely chosen activity and sincere, friendly relations can create a favourable seedbed for positive emotions, possibly influencing personal satisfaction, sense of affinity, stimulation of self-confidence and reliance on others. According to A. Savaneviciene et al. (2005), the more greater satisfaction is experienced by interacting participants, the concentrated and coordinated this interaction is, which will undoubtedly influence further transition from interaction of separate members to andragogic interaction, where the membership is based on the philosophy of interpersonal dependence.

When comparing yearly research results (Figure 2) it is evident that half of learners (6%) in 2001 have chosen opportunity to start new contacts, find new friends as a factor, making significant impact on positive teamwork experience and improvement of interpersonal dependence. 15% (2011) of respondents acknowledged significance of this factor. Above results show that nowadays friendship, links and relations are highly treasured, demand for changes, new experience and new sensations is increasing.

A minor part of respondents (4% in 2011 and 5% in 2001) noted that psychological climate is an important factor, stimulating positive teamwork (pic. 2). K. Lewin (Savaneviciene et al., 2005) characterizes general state and mood of interacting participants. He thinks that they experience satisfaction and enthusiastically strive for joint goals, if atmosphere around the team is favourable. If psychological climate is unfavourable, participants of the interaction will stay together only under compulsion, unwillingly belonging to the team, continuously experiencing tension and stress. According to J. Kasiulis et al., (2004), positive interrelations, benevolent mutual position and attention, respectful approach to each other, mutual understanding, group cohesion, a sense of affinity, dependence and safety, emotional welfare, etc. appear to be among most important factors of a favourable psychological climate. Therefore, approach of learners to the issue (psychological climate) did not change in the last decade (2001 and 2011 research results). A small group of respondents acknowledge the significance of psychological climate and attach it to factors that stimulate team activity.

To find out the approach of the higher school learners to negative teamwork experience in project activity and factors that suppress it, the centre of “The Sun” was supplemented with “When working in a team I am concerned about ...” sentence. Learners were asked to complete it in rays, pointing to five different factors, making negative impact on the teamwork in projects. A comparative analysis, comparing 2001 and 2011 research results, was performed.

The research results show that competition (rivalry), dominating intolerance, distrust of others as well as their benevolence (23% in 2001 and only 5% in 2011), supervision and control of others (23% in 2001 and 3% in 2011), restriction of initiative and creative liberty (15% in 2002 and 1% in 2012) and fear of a public speaking (15% in 2001 and 1% in 2011) were treated by learners as making the most negative impact on the teamwork in projects (Figure 3). These results are justified by Covey’s (2006) propositions that competition (rivalry) in andragogic interaction is inexpedient, as it raises only several winners, leaving others in a losing position, initiative and leadership are given to others, leaving no chance for cooperation. Competition (rivalry) is based on risks and fear, so interrelations start experiencing tension and mistrust. Competition leads to avoidance of any responsibility and
fear of defeat. Therefore, it negatively affects mutual relations, as their success depends on taken responsibility for one’s own self and others. On the other hand, it stimulates dependence of losers on winners. A dependent human is not able to take care of his own demands and he cannot take responsibility for his own actions and their consequences, probability of his activeness decreases significantly and he starts avoiding any initiative and risks.

Lack of reliance in teamwork causes different troubles: anger, disputes, disagreement with opinion of others, standing in different positions, choosing different friends and foes, attention is focused not on work, but on mistakes and failings of other team members, taking no notice of positive things, wasting time, defending one’s own position, tense and mean relations become dominant. In that case work becomes a minor thing and team members are not inclined to communicate and cooperate.

The 2001 and 2011 research results (Figure 3) show that those presently participating in project activity are facing less rivalry, are more self-confident and rely more on others, concentrate their energy and attention on joint activity and goals. Consequently, it is possible to assume that in the last decade learners managed to build and develop their independence, to ground their activity on self-confidence and reliance on others, on value-based position and feelings.

Comparison of 2001 and 2011 research results (Figure 3) show that respondents’ opinion distributed similarly and they were had been telling about their dislike of teamwork: emerging conflicts, difference in approach, unwillingness to seek for compromises (8 % in 2001 and 9 % in 2011); disagreements regarding different workload and distribution of responsibility (8 % in 2001 and 6 % in 2011). Therefore, only a small part of respondents attached conflicts and different misunderstandings to team work obstacles, i. e. factors, negatively influencing mutual relations. It means that ten years of participation in project activity, i. e. communication and collaboration of learners does not result in prominence of disagreements and conflicts. Instead, attempts are made to build friendly relations, based on mutual assistance and support. According to respondents, different disagreements can seriously threaten their mutual relations. Those not seeking for a compromise usually ground their relations on anger, continuous fighting, manipulations, which leads to dissociation from others, passiveness, lack of initiative, avoidance of responsibility, wastage of time on gossips when defending one’s own position. Such andragogic interaction is characterized by tense relations, inefficient activity and poor labour results. On the other hand, it is to be noted that
interpersonal dependence is not typical to mutual relations, where dominant are conflicts and unwillingness to seek for a compromise, though interpersonal dependence is is the essential assumption for optimization of andragogic interaction. Presumably, after evaluation of damage of different disagreements to the teamwork respondents (a decade ago and nowadays) are inclined to avoid conflict situations, to seek for compromises and ground mutual relations on mutual assistance and understanding.

In 2001 learners, project participators were maintaining that lack of self-confidence, low self-esteem, fear of becoming an odd man in the team, unappreciated and outcast were obstacles in the teamwork (8 %), whereas in 2011 this factor, influencing the repression of interpersonal dependence was mentioned only by 3 % of respondents. On the basis of research it is possible to maintain that presently only a minor part of learners are inclined to link a lack of self-confidence and reliance on others to the negative experience in the teamwork. Presumably, respondents nowadays are more self-confident and relying on others than it was a decade ago and try to avoid any disagreements and conflict situations in mutual relations. Relations became more transparent, based on partnership, mutual understanding and assistance, which means that more and more participants of andragogic interaction prefer interpersonal dependence in communication and cooperation, as interpersonal dependence remains to be the major assumption in optimization of andragogic interaction.

In summary, each independent individual is free to choose how to react and respond to a stimulus, situations and different circumstances. An independent, highly self-confident individual is a self-perceiving personality, strong enough to decide how to react to different events, how to choose a response in accordance with one’s own value-based position, which helps to define good and evil. He can act freely and resist an outside influence. To the contrary, a dependent individual is more affected by external physical, social and psychological stimuli, accordingly, his mood, emotions and behaviour are changing, he is not able to adequately react to a stimulus and freely choose a response, since he is following instantaneous sensations rather than a strong value-based position.

Personal independence is characterized by his inner freedom, whereas interpersonal dependence – by his choice, which could be made only by an independent individual. Thus, efficient communication and cooperation depends on independence of interacting participants and their pro-activeness, on choice of correct principles, corresponding to the value-based position, on trust in one’s own abilities in planning and realization. Only then he is able to choose an interpersonal dependence, strive for meaningful, stable and productive relations with others. Personal independence provides with opportunities for starting new and meaningful relations, productive work, service to other people, learning and perfection.

Mutual relations, based on a joint choice and reliance of independent interacting participants would respond to their trust in each other, when each participant resolves to step over his own vices and to be open and willing to listen, consult, share ideas and experience, jointly search for a mutually acceptable decision for the sake of positive results in joint activity. Thus, a high level of reliance on each other, when initial consequences are unclear, but there is a strong belief that joint attempts will give good results, that positive and meaningful communication and cooperation will be very efficient in striving for joint goals and objectives. This characterization of interrelations in a teamwork is typical for andragogic interaction, based on high level of reliance, interpersonal dependence of its independent participants. This interpersonal dependence is the major assumption for optimization of andragogic interaction.

**Conclusion**

Personal (individual) independence is not to be understood as sensations and feelings, mood or even thoughts and ideas. It is an ability to realize one’s own essence, properties and
role, one’s own relation with the world. Personal (individual) independence is an important factor in choosing one’s own activity, behaviour and actions, an opportunity to freely act in accordance with his self-perception and resist the outside influence.

Personal (individual) independence is characterized by the inner freedom of an individual, whereas interpersonal dependence – by his choice, which could be made only by an independent individual. Therefore, efficiency of andragogic interaction depends on personal independence of its participants, on their self-confidence and reliance on others, also on relations that are based on interpersonal dependence.

Each person requires a specific stimulus and the response to that stimulus is very individual, as there is a space between a stimulus and a response. This space hides liberty and power in choice of that response. The scope of that space is directly proportional to the level of personal independence. It can change, providing individuals with a freedom in choosing the response.

An independent, self-confident human is a self-perceiving personality, knowing how to react to events, freely choose the response, following one’s own value-based position and resisting the outside influence. To the contrary, a dependent individual is more affected by external physical, social and psychological stimuli, accordingly, his mood, emotions and behaviour are changing, he is not able to adequately react to a stimulus and freely choose a response, since he is following instantaneous sensations rather than a strong value-based position.

Rational social measures, employed in development of efficiency in andragogic interaction vary often fail to offer good results, as they are based on forthright “stimulus – response” links. These links reject the essential law of human self-education and transformation: an externally improved and perfected personality assimilates this influence initially (subject to already formed internal powers), only after that it starts changing, also changing the character of andragogic interaction and the level of its quality.

Independent participants of andragogic interaction, based on a high and very high level of reliance are characterized by firm internal value-based position and ability to efficiently motivate each other for achievement of meaningful goals rather than personal interests. Very high standards of moral and ethic behaviour are observed, which undoubtedly strengthens the team spirit. Dominant in these relations is interpersonal dependence, which remains to be the major assumption for optimization of andragogic interaction.

On the basis of comparative analysis of performed research it was found that:

• presently respondents face less competition (rivalry) and are more self-confident and relying on others, their energy and attention are focused on joint activity and goals. It could mean that in the last decade learners improved and developed their personal (individual) independence and ground their activity on self-confidence and reliance on others, following their value-based position rather than feelings and sensations;

• after evaluation of damage, done to teamwork (both previously and nowadays) respondents are inclined to avoid conflict situations, search for compromises, ground their relations on mutual assistance and understanding;

• both earlier and nowadays following factors, stimulating positive teamwork are distinguished by respondents: opportunity for discussions, consultations, sharing ideas and experience, communication (sense of affinity), sincere friendly relations, mutual support and assistance. On the basis of that it is possible to maintain that learners prefer being related by communication links, perceiving themselves as a team members rather than a group members, understanding the importance of interpersonal dependence, treasuring partnership and communication. These relations are based on “let’s win together” principle and philosophy, which maintains that success of one single person does not deprive others of their
opportunities and possibilities, that there is also the third alternative – a collective way of autonomous, independent and self-confident people;

- comparison of 2001 and 2011 research results (related to safety, self-confidence and reliance on others) shows that differences are very big. Almost one third of present learners (less than 10 % in 2001) are more inclined to notice importance and significance of these factors in teamwork, which they relate to sincere, meaningful and inspiring communication and cooperation, to mutual assistance of those participating in andragogic interaction;
- presently only the very minor part of learners, participating in project activity, experienced a lack of self-confidence and reliance on others. It could be explained by the fact that nowadays respondents are more self-confident and relying on others than those in previous decade. Relations became more transparent, based on partnership, mutual understanding and assistance, which means that in modern communication and collaboration priority belongs to interpersonal dependence. It is the major assumption for optimization of andragogic interaction.

References: