Improving Social Skills using the Social Exchange Framework

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More and more children and youngsters have difficulties with socializing – meeting new people, interacting with them smoothly, making friends and nurturing relationships they have. These children are often uncomfortable to converse with peers; they do not know well how to behave in a relationship, what is desirable and what they should avoid to do. One of the ways how to encourage and help young people to improve their social behaviour is to offer them an opportunity to gain experience without the fear of failure. Therefore, the aim of the project is to develop the method for improving social skills of young people and for learning the appropriate social behaviour within the group.

One mainstream approach in social psychology – the social exchange framework [1, p.24] proposes that actors exchange resources between themselves, bringing benefits to one side, while incurring costs on the another. Difference from economic exchange model is "its emphasis on the social structures within which exchange takes place"

The prototype of the method is devised as a strategic computer game. The user reveals a few personality characteristics, then they describe their dream friend, somebody they would like to meet and relate to. The goal of the game is to befriend this person. That can be achieved by virtual socializing, meeting new people, spending time together doing activities, communicating. In the social exchange framework, the user and their virtual friends represent actors, activities and dialogs are resources. Benefits they share are increase in values of needs and relationship characteristics. The cost is simply the possibility of only one transaction at time. There are two kinds of transactions – negotiated and reciprocal.

Negotiated transactions are discussed before they are made. The user starts this transaction by choosing what activity (e.g. going to the pub, camping, playing sports) and with which people. The system activates one transaction over specified amount of time, the activity and people are chosen randomly. Then it is required a short dialog – an offer and acceptance or decline. After agreeing to take part in the activity, the process (Figure 1) emerges. The effect on every need and relationship property is calculated, influenced by activity parameter (e_n – the effect on needs, e_r - effect on

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relationships), how much the person like the activity (h - hobbies) and random number <-1, 1> representing how successful the activity was.

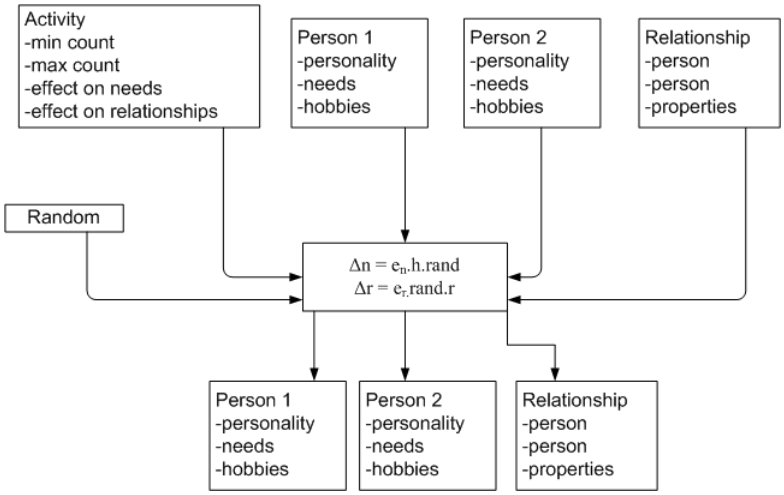

Figure 1. Activity Manager.

In reciprocal transactions, the actor initiates exchanges by performing a beneficial act for another (e.g. having a conversation) without negotiation and without knowing whether the other will reciprocate [1, str.28]. Dialogs are text-based, both the user and the system chooses questions and answers from the oriented weighted graph. They can progress in several directions in order to maximize the positive influence on the relationship.

The preliminary experiment is currently performed, focusing on of how accurately the system resembles the real-world social behaviour. The preliminary experiment is currently performed, focusing on of how accurately the system resembles the real-world social behaviour. In the main experiment, around 15 young people (aged 13-17) is asked to play the game for few hours and they are encouraged to befriend somebody they do not know well. After two weeks, the changes in their confidence and skills will be collected by a questionnaire. We anticipate the users will improve their behaviour in the first days or weeks after meeting a new person and their self-confidence will rise. The game scenarios are targeted at interpersonal interactions leading to gradually developing the relationship – from unknown youngster or an acquaintance to the best friend. We also plan to evaluate the method within an intelligent tutoring system [2].

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References

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[2] Tvarožek, J., Bieliková, M.: Feasibility of a Socially Intelligent Tutor. In: Intelligent Tutoring Systems 2010 (accepted), Pittsburgh, Springer, (2010).