

# Mutual spontaneous help between students in an online learning environment and the role of the feeling of social belonging to a group

Dalila Bebbouchi

*Laboratoire CIREL, équipe Trigone.*

*Université LILLE (France)*

*dalila.bebbouchi.etu@univ-lille.fr*

*Centre de Recherche sur l'Information*

*Scientifique et Technique*

*CERIST(Algérie)*

*dbebbouchi@cerist.dz*

## ABSTRACT

The communication presents a doctoral research currently underway in the context of adult e-education. It's interested in spontaneous mutual helping behaviors between learners engaged in fully online learning. It aims to identify the nature of this mutual help and to examine the influence of the feeling of social belonging on this mutual aid.

In order to give an overview of this thesis work, we were inspired by research carried out on mutual aid behaviors, prosocial behaviors and the feeling of social belonging. The basic psychological needs theory has also provided theoretical support for this research.

For the empirical study, we favored a comprehensive approach integrating a mixed methodology involving various sources of data collection and different methods of analyzing this data: correlation analysis on quantitative data from a survey questionnaire, lexicometric and thematic analysis on qualitative data from interviews and analysis of traces of mutual help on the platform's forums. The results of these analysis shed light on the perception of the feeling of social belonging and its role in helping behavior.

## Keywords

Mutual help, feeling of belonging, distance learning.

## 1. INTRODUCTION

With the evolution of online communication tools, the learner engaged in an e-learning system has multiple possibilities to interact with his teachers, tutors or peers as part of his training. These interactions make it possible to create a socio-emotional climate favorable to transactions between learners (confrontation of their points of view, mutual adjustments,

negotiations) and to break the isolation [1]. The development of interactions between all actors of a device can be realized only if there is commitment between each other. In a context of adult e-education, engaging in a training project and persevering depends on several factors: individual psychological factors influenced by the social environment and the relationship with others, social experience, favorable or unfavorable dispositions training, personal and professional projects [2]. It is in this particular context of adult education and elearning that this search is registered. It aims to describe spontaneous helping behaviors between learners i.e. helping behaviors initiated by the caregiver without having been invited [3] and to examine the feeling of belonging effect on these behaviors. In this perspective, our research aims to answer the following questions:

How do learners help each other? Are their mutual help behaviors linked to a sense of social belonging?

First, we are going to describe the theoretical framework. We will give the definition of our research dimensions, then we will detail the research methodology. Finally, we will present the results and the first conclusions.

## 2. THEORETICAL FRAMEWORK

### 2.1 Mutual help

Mutual help has been the subject of several researches in various fields and on different groups of people. Peer support experiences in primary and general secondary education, described either as "tutoring" or as "monitoring", cover identical practices. These are always mediation situations where a learner helps another learner in his academic, methodological learning and in the organization of his personal work [4]. In the context of e-learning, a helping relationship refers to tutoring where the help consists of psychological support which adopts empathy, active listening and non-judgment [5]. In their review of the literature on the learners e-learning experience, Dieumegard and Durand have shown that in several systems, learners tend to move away from institutionalized exchange spaces to help each other [6]. In addition, other research has also shown the emergence of mutual help networks at a given time in e-learning [7]. The analysis made on the exchanges between learners on the forums revealed, among other things, that these networks could consolidate the learning

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process, recreate a space-time of meeting in order to reduce the "distance" and to overcome technical problems. Furthermore, in the context of work and organizations, helping behavior has been identified as an important form of organizational citizenship [8]. Paillé defines mutual help as a helping behavior which "consists for a person in providing assistance to a colleague to enable him to solve a problem or to avoid the emergence of difficulties encountered in the performance of his work "[9]. This helping includes four dimensions: altruism which is a voluntary actions that help another person with a work problem, peacemaking defines the actions that help to prevent, resolve or mitigate unconstructive interpersonal conflict; cheerleading which means the words and gestures of encouragement and reinforcement of coworkers' accomplishments and professional development and finally courtesy which involves helping others by taking steps to prevent the creation of problems for coworkers [8] .

## 2.2 The feeling of social belonging

Several names for the concept of the feeling of social belonging are used in an undifferentiated way in the research work [10, 11, 1] such as "Affiliation", "relatedness", "Connectedness", "belongingness". This feeling cannot be formed individually [10] , it can only exist if the individual is accepted and recognized by the other or more precisely by the members of the group with whom he wants to be and wishes to share his values [12].

The feeling of social belonging is expressed by two sub-dimensions [11]: the feeling of intimacy and proximity between two or more people expressed by the fact of being attached, united or friend with the other, the second sub-dimension refers to the feeling of acceptance which expresses the fact of being accepted, understood, valued, listened to or even in trust with the other. Acceptance by others leads to a variety of positive emotions (happiness, delight, well-being, calm) while being rejected, excluded or ignored leads to powerful negative feelings such as depression, grief, jealousy and loneliness. The emotions that people experience, which are both positive and negative, are linked to the feeling of belonging [13]. It should be noted that the feeling of social belonging is strongly linked to the need to belong. Indeed, the first is centered on others and the second is linked to the image given to others [14]. This need according to Deci and Ryan is part of the fundamental psychological needs inherent in human nature [15].

## 3. METHODOLOGY

This research is based on a comprehensive approach. It integrates several sources of data collection. Also, it takes into account different levels of analysis to obtain a richer understanding of the feeling of social belonging and its role in helping behavior. The chosen field of study concerns two promotions of the online training Master 2 "Multimedia Pedagogical Engineering" (IPM). This master is provided by the Department of Education Sciences and Adult Education (SEFA) of Lille University. The first promotion was at the beginning of the course and the second at the end of the course. The majority of learners are adults continuing their studies. Teaching is done through an e-learning platform ACCEL (Collaborative Learning and Online Community). ACCEL is an online learning platform for group animation based on organized asynchronous exchanges enriched with documents [16].

Data collection was carried out in three stages: a first stage aimed at examining the field through the administration of a survey questionnaire sent to 114 learners distributed as follows: 62 learners at the end of the course and 52 learners at the beginning of the course. The questionnaire was designed on the basis of psychometric scales validated theoretically and empirically: ESAS scale [11] which measures the feeling of social belonging and the mutual helping scale [8] which measures the helping behavior as defined by Podsakoff and al. [9] .

The second data collection comes from semi directed interviews conducted by VoIP with a panel of 20 volunteer students: 12 students at the end of course and 08 learners at the beginning of course. The interview guide was designed considering the indicators of the feeling of social belonging and mutual help.

Finally, third collection of data was taken from the traces of mutual help between learners on the platform's forums, 1400 contributions were analyzed.

## 4. RESULTS AND ANALYSIS

The correlation analysis conducted on the quantitative results reveals that there are no significant links between mutual help and the feeling of social belonging at the beginning of the course (Table 1). There is a negative correlation between the indicators of mutual help and the feeling of intimacy. On the other hand, for respondents from the promotion at the end of the course, the analysis shows that there is a significant link between the feeling of intimacy (indicator of the feeling of social belonging) and peacemaking (indicator of mutual help) (table 2)

**Table 1: Correlations analysis at the start of the course**

	Acceptance	Intimacy
Altruism	0,121	-0,008
Courtesy	-0,075	-0,333
Peacemaking	0,034	-0,254
cheerleading	0,083	-0,257

\* Significant correlation at level 0.05; \*\* significant correlation at level 0.01

**Table 2: Correlations analysis at the end of the course**

	Acceptance	Intimacy
Altruism	0,134	0,210
Courtesy	0,035	0,310
Peacemaking	0,066	0,508**
cheerleading	0,058	0,136

\* Significant correlation at level 0.05; \*\* significant correlation at level 0.01

Learners who show altruistic behavior and donate their time, feel close to their peers and united with them. These results clearly show the development throughout the formation of socio-emotional relationships between learners.

The qualitative data, resulting from the transcription of 20 interviews, underwent a double analysis. The first is a textual statistical analysis and the second is a qualitative analysis by using the conceptualizing categories approach [17]. The categories were extracted from the literature and represent the different indicators of our two research dimensions.

A statistical textual analysis of the frequencies of the words used in the 19 transcribed interviews was conducted using the Iramuteq lexical analysis software. This free software studies groups of significant words and proposes groupings. Three major classes

emerge from the first analyses (Figure 1): A class characterized by the forms "diploma", "career", "professional" which reflects the professional trajectory of the learners as well as their motivation for training. A second class characterized by the forms "group", "phase", "integration" reflects the group organization aspect. The third class is rather related to the moods and feelings of the learners, there are forms related to the dimension of mutual help and the dimension of belonging. This analysis reveals that mutual help takes place in a small working groups.

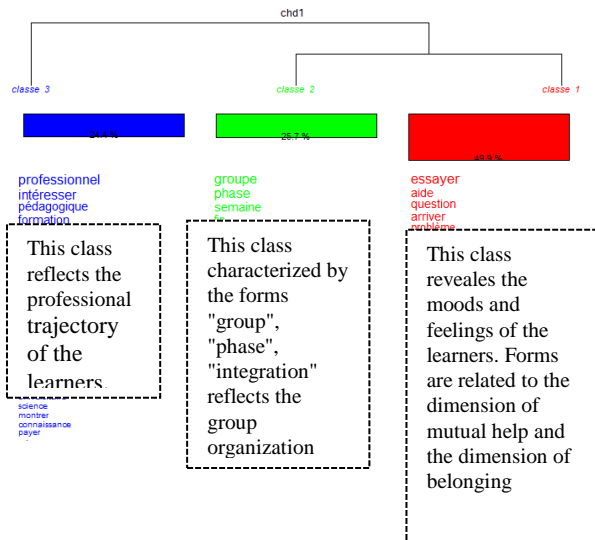


Figure 1. Descending hierarchical classification

A qualitative analysis highlights two group profiles, groups where, understanding and empathy prevail, and groups with difficulties related to both conflicts and agitations between the members of the working group. Given the results, the feeling of belonging is strong mainly in working groups where, understanding and empathy reign. We find in these groups, essentially, altruistic and cheerleading behaviors.

The table of data and variables (Figure 2) shows the results of qualitative analysis. It highlights two group profiles, groups where, understanding and empathy prevail, and groups which have experienced difficulties related either to conflicts and agitations between the members of the working group or abundance of one of the members group. Feeling of belonging is strong mainly in working groups where, understanding and empathy reign. We find in these groups, essentially, altruistic and cheerleading behaviors.

	Entraide			SAS			Groupe (entente/compréhension)	Groupe (conflit/agitation)
	Altruiste	Conciliation	Courtoisie	Réconfort	Acceptation	Intimité		
E1	x			x	x			x
E2				x	x			x
E3	x		x		x		x	
E4	x			x	x			x
E5								x
E6	x		x		x		x	
E7		x		x	x	x	x	
E8	x			x	x	x	x	
E9	x			x	x		x	x
E10		x			x			x
E11	x	x		x	x		x	
E13	x	x		x	x		x	
E14	x	x		x				x
E15	x			x	x			x
E16	x	x		x	x	x	x	
E17	x			x	x			x
E18	x			x	x	x	x	
E19	x			x	x			x
E20	x		x		x	x	x	

Figure 2. Data table and variables

Traces analysis of mutual help on the platform's forums is still in progress. 1400 contributions on the thematic forums of the promotion at the beginning of the course were browsed in order to identify those, which describe mutual helping behavior between learners. The first results reveal a weak tendency of learners to provide help to their peers. Requests for help are rather directed towards tutors. The rare helps provided spontaneously by peers categorized as altruistic behaviors mainly concern the organization of the platform such as access to a space, production depot, access to documents. It seems that requests for help are made through non-formal networks [7] or via communication tools other than those present on the platform.

## 5. CONCLUSION

The mutual help behaviors as we have apprehended them are found in the small working groups, the latter are divided into two groups. Groups in which there is a stable climate of understanding and empathy and groups that have broken up because of the abundance of one of their members, or in which the work has been carried out in anguish and agitation. In the first groups, there is a strong feeling of social belonging (acceptance and intimacy). Learners feel understood and supported and help each other all the time. These behaviors are present at the end of the training course. It seems that the fact of having shared several activities collectively during the whole training favored the development of interpersonal, intimate and regular relationships. However, the feeling of social belonging is low in the groups that have experienced unrest situations or that have broken up due of their member's abandonment. In view of the results, it seems that a third dimension on group dynamics is at the origin of the feeling of social belonging development and the appearance or not of mutual help behaviors.

## 6. REFERENCES

- Jézégou, A. (2010). Créer de la présence à distance en e-learning. *Cadre théorique, définition, et dimensions clés. Distances et savoirs*, 8 (2), 257-274. <http://www.cairn.info/revue-distances-et-savoirs-2010-2-page-257.htm>
- Gaussel, M. (2011). Se former tout au long de sa vie d'adulte. Dossier d'actualité Veille et Analyse, 61. <http://veille-et-analyses.ens-lyon.fr/DA/detailsDossier.php?parent=accueil&dossier=61&lang=fr>
- Ros, J., Grossen, M. (2016). L'entraide en institution pour personnes en situation de handicap mental : d'une recherche-action à un modèle d'analyse. *Les Cahiers Internationaux de Psychologie Sociale*, 110, 137-158.
- Bédouret, T. (2003). Autour des mots "Tutorat", "Monitorat" en éducation. *Recherche et formation*, 43. <http://ife.ens-lyon.fr/publications/editionelectronique/recherche-et-formation/RR043-08.pdf>
- Rodet, J. (2011). Formes et modalités de l'aide apportée par le tuteur. C. Depover, B. De Lièvre, D., J. J. Quintin, et A. Jaillet (Eds.). *Le tutorat en formation à distance* (p. 159-170). Bruxelles, De Boeck Supérieur.
- Dieumegard, G., Durand, M. (2005). L'expérience des apprenants en e-formation : revue de littérature. *Savoirs*, 1(7), 93-109. <http://www.cairn.info/revue-savoirs-2005-1-page-93.htm>

- [7] Foucault, B., Metzger, J. M., Pignorel, E., Vaylet, A. (2002). Les réseaux d'entraide entre apprenants dans la e-formation : nécessité et efficacité ? *Education permanente*, 152. <https://halshs.archives-ouvertes.fr/edutice-00000309/document>
- [8] Podsakoff, P. M., & MacKenzie, S. B. (1994). Organizational Citizenship Behaviors and Sales Unit Effectiveness. *Journal of Marketing Research*, 31, 351-363.
- [9] Paillé, P. (2007). La citoyenneté dans les organisations. Validation française des échelles de mesure de Podsakoff et MacKenzie (1994). *Les Cahiers Internationaux de Psychologie Sociale*, 74 (2), 59-66. <http://www.cairn.info/revue-les-cahiers-internationaux-de-psychologie-sociale-2007-2-page-59.htm>
- [10] Goodenow, C. (1993). The Psychological Sense of School Membership among Adolescents : Scale Development and Educational Correlates. *Psychology in the Schools*, 30(1), 79-90.
- [11] Richer, S., Vallerand, R. (1998). Construction et validation de l'Echelle du sentiment d'appartenance sociale (ESAS). *Revue Européenne de Psychologie Appliquée*, 48(2), 129 – 137.
- [12] Francard, M., Blanchet, P. (2003). Sentiment d'appartenance. In G.Jucquois & G.Ferréol(Eds.), *Dictionnaire d'interculturalité* (p. 18-25).Paris : Armand Colin.
- [13] Baumeister, R. F., Leary, M. R. (1995). The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation. *Psychological Bulletin*, 117(3).pp. 497-529.
- [14] Sanquirgo, N., Oberlé, D. et Chekroun, P. (2012). L'échelle de besoin d'appartenance : validation française et rôle dans les réactions à la déviance. *L'Année psychologique*, 112(1), 85-113. doi:10.4074/S0003503312001042.
- [15] Deci, E. L., Ryan, M. L. (1985). Intrinsic motivation and self-determination in human behavior. Springer Link. <http://link.springer.com/book/10.1007%2F978-1-4899-2271-7>
- [16] Delache, D., D'Halluin, C., Fichez, E., Hoogstoel, F., Leclercq, G., et al.(2006). *Environnements numériques et pratiques collaboratives d'apprentissage* [Compte-Rendu de fin de recherche de l'opération PCDAI]. <http://www.univ-lille3.fr/fr/recherche/equipes-recherche/geriico>
- [17] Paillé, P., Mucchielli, A. (2012). *L'analyse qualitative en sciences humaines et sociales*. Paris, Armand Colin.