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## **Interrelations Between the Psychological Needs for Autonomy and Relatedness in the EFL Context: A Literature Review**

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### **Abstract**

In our time of having a vast variety of learning opportunities in EFL, spanning from group settings to autonomous learning processes, research interests have risen towards the possible effects of interrelations between group connections and autonomy. Deci and Ryan's (2000) self-determination theory (SDT) conceptualized learners' inner need for competence, autonomy, and relatedness, which serve as motivational forces in learning achievements. In the past decade, studies (Agawa & Takeuchi, 2016; Chang, 2010; Fukuda, Pope, & Sakata, 2015; Hu, 2016; Zainuddin & Perera, 2017) have investigated the connections between relatedness to peers within learning groups and autonomy which entails rather individual, self-managed activities that take place outside classroom settings. The article aims to present a theoretical inquiry into how peer- and group-relatedness interact with and affect EFL learners' self-directed learning processes and reveal research findings on the interrelated motivating effects of the two – seemingly distant but complementary – concepts. This paper intends to raise awareness of the niche in research beyond the Asian context (Noels, 2019), and relevance in online EFL instruction.

*Keywords:* motivation, autonomy, relatedness, self-determination theory

## **Interrelations Between the Psychological Needs for Autonomy and Relatedness in the EFL Context: A Literature Review**

Learner autonomy has undeniably been a widely debated topic in English as a Foreign Language (EFL) educational research for many decades. The technological advances and the emergence of digital opportunities that assist language learning have created new research interests and provided reasons for revisiting the concept with new aspects to consider (Benson, 2013; Zimmermann, 2008). In parallel, learning a foreign language is a social activity and as such, it has been common practice to assist language acquisition with peer- and group activities that provide opportunities for the preparation for life-like linguistic and social situations.

Deci and Ryan's (1985; 2000; 2008) self-determination theory (SDT) is an often cited and broadly researched motivational theory which, besides elaborating on several types of motivation, introduces the notions of three innate psychological needs; namely, the individual's needs for autonomy, competence, and relatedness. While the needs for autonomy and competence have been popular research interests, relatedness has received less academic focus (Deci & Ryan, 1985; Sheldon & Filak, 2008). Drawing on the strong relationship between autonomy and intrinsic motivation (Deci & Ryan, 1985), as well as the idea of relatedness having a mediating effect on learning results (Beachboard et al., 2011) and possible impact on the enhancement of learner autonomy (Fukuda et al., 2015), this literary investigation seeks to understand the interrelations between the two psychological needs. As connections to other human beings is a culturally dependent construct (Agawa & Takeuchi, 2016; Chang, 2010; Hu, 2016), another aim of this article is to call attention to the necessity of further studies of relatedness and its effects on learning outcomes in several different cultural contexts beyond the Asian educational settings where the issue has been raised and scrutinized to a greater extent than in other parts of the world (Noels et al., 2019).

### **Self-determination Theory and the Three Psychological Needs**

Self-determination theory (SDT) is a key concept in motivation research and it has gained abundant attention in the field of psychology and education (e.g.,

Bauer & McAdams, 2000; Niemiec & Ryan, 2009; Noels et al., 2019; Sheldon & Filak, 2008; Takeuchi, 2016). Deci and Ryan (2008), the creators of the concept, position SDT as a macro-theory in motivation research, which encompasses “such basic issues as personality development, self-regulation, universal psychological needs, life goals and aspirations, energy and vitality, nonconscious processes, the relations of culture to motivation, and the impact of social environments on motivation, affect, behavior, and well-being” (p. 182). The theory, while focusing on intrinsic and extrinsic motivation in detail and establishing the fundamentals of imperishable motivation (Stone et al., 2009), is distinct from motivation and drive theories in the establishment of self-determination as an ability to make choices. However, beyond capacity, the notion involves *innate psychological needs* that affect human behavior (Deci & Ryan, 1985). Three such inner requests are distinguished: the need for *autonomy* as the ability to self-regulate and make choices, for *competence* that refers to the individual’s capability to have impacts on their own environment in order to achieve the desired circumstances and outcomes, and for *relatedness* which is the connection to others (Deci & Ryan, 2000). Together they serve as wills in individuals to achieve greater accomplishments in their activities (Stone et al., 2009).

Although equally important (Sheldon & Filak, 2008), the three psychological needs of SDT have received divergent attention. Deci and Ryan (2000) asserted that internally motivated human beings pursue activities of their own interests and maintain the desire to achieve autonomy and competence. Such people, they added, “find [activities] interesting and would do [them] in the absence of operationally separable consequences” (p. 233), as opposed to externally regulated people whose conducts are driven by obvious rewards or attempts to avoid punishment. In addition to these two essential factors, the authors accentuated the salience of a third aspect, *relatedness*; however, they noted that intrinsically motivated activities may not always be carried out among other individuals and, therefore, relatedness operates more as an additional aspect that assists the needs for autonomy and competence. Bauer and McAdams (2000) also distinguished relatedness from the other two needs. Comparing it with Bakan’s (1966, as cited in Bauer and McAdams, 2000) *agency* and *communion*, they established that competence and, to some extent, autonomy are in parallel

with agency as they are driving forces directed towards achieving one's set goals through self-managed, independent activities. Relatedness, however, harmonizes more with the idea of communion as both notions are based on social connections, cherishing others and operating with companions. The above-mentioned differentiations of relatedness from the other two needs might explain why it is a somewhat less investigated topic in academic research. In creating the theory, Deci and Ryan (1985) confirmed the existence of a research niche regarding the psychological need for relatedness within SDT.

Of the three innate psychological needs within SDT, autonomy has gained a greater amount of research focus than the other two aspects, namely competence and relatedness (Sheldon & Filak, 2008). However, studies have proved the importance of all three needs in human beings' motivation and personal development (e.g., Fathali & Okada, 2017; Sheldon & Filak, 2008; Zainuddin & Perera, 2017). Moreover, Otoshi and Haffernan's (2011) investigation resulted in positive effects of competence and relatedness on intrinsic motivation, whereas autonomy did not prove to be effective in this respect. Focusing specifically on relatedness, several research outcomes have drawn attention to this aspect of SDT (e.g., Beachboard et al., 2011; Fathali & Okada, 2017; Fukuda et al., 2015; Pavey et al., 2011; Sheldon & Filak, 2008).

In what follows, the present literature review evaluates the impacts of relatedness on learning outcomes in English as a foreign language (EFL) learning contexts, and its possible relationships with autonomy which, as Deci and Ryan (1985) asserted, holds strong connection with intrinsic motivation and, therefore, successful conduct of activities. The present paper intends to highlight research that scrutinized the two notions in relation to each other as well as to SDT and motivation.

### **Autonomy and Relatedness, and Their Possible Connections**

#### **From EFL Autonomy to Collaboration**

The notion of autonomy has been of interest in educational research for decades. Holec (1981) described the *autonomous learner* as a person who defines their own goals, approaches and processes and is able to assess their development as per their previously set goals. This characterization implies taking responsibility

and employing self-governing actions in learning processes. Littlewood (1996) interpreted autonomy as “a capacity for thinking and acting independently” (p. 428) and, as he added, it requires *ability* manifesting in knowledge and skill, and *willingness*, which refers to motivation and confidence. Benson (2013) emphasized control in learner autonomy and related autonomous learning activities to out-of-class processes that play an important role in EFL learners’ development, whereas in SDT, autonomy is strongly connected to the capability of making *choices* (Deci & Ryan, 1985). Regarding technological advancement that influences learning processes Smith (2008) accentuated the emergence of computer-based learning opportunities which, as he emphasized, *require* autonomy beyond developing it.

Although autonomous learning is often considered to be an individual activity, it can be influenced by cultural contexts (Littlewood, 1999; Oxford, 2003; Schmenk, 2005), and it might be triggered by a source other than the learner. Littlewood (1999) differentiated between *reactive* and *proactive* autonomy; the first being prompted by an outside source, such as the teacher, while the latter – often but not exclusively followed by the first – is initiated and controlled by the learner. The author drew parallel with Flannery’s (1994, as cited in Littlewood, 1999) *cooperative* and *collaborative* learning strategies, with regard to 1) setting initial objectives, making decisions and determining learning directions, and 2) the “continuum extending from ‘individualism’ to ‘collectivism’” (p. 79). This line of thought subsumes both personal identity and social belonging under the notion of autonomy.

To conclude, although autonomy and autonomous learning are often considered as solitary activities conducted by the individual, they may be affected by social contacts and peers. Therefore, there is reason behind scrutinizing the interrelated effects of autonomy and relatedness in order to find connections beneficial to language learning processes.

### **Autonomy and Relatedness**

Autonomy and relatedness, the two seemingly distant concepts are drawn closer to one another in Bowlby’s (1979, as cited in Deci & Ryan, 2000) *attachment theory*. It concerns the initial learning processes of infants through their connections with their mothers and confirms the importance of relatedness as an aspect of

building autonomy, depending on the different outcomes of the existence or absence of an autonomy-supportive environment. Drawing on this concept, the following sub-chapter seeks interrelations between the two psychological needs in support of learning processes.

In order to sustain their fundamental physical commitment, individuals operate on the *organismic-dialectical* perspective; that is, a “part of the adaptive design of the human organism to engage interesting activities, to exercise capacities, to pursue connectedness in social groups, and to integrate intrapsychic and interpersonal experiences into a relative unity” (Deci & Ryan, 2000, p. 229). Thus, intrinsically motivated individuals develop specific practices and approaches in order to fulfil their objectives in which their affiliation to their surroundings, groups, organizations, or certain individuals play a crucial role in improving their self-directed activities. Furthermore, fulfilling the need for relatedness – along with the need for competence – carries the potential of increasing intrinsic motivation (Otoshi & Haffernan, 2011). This viewpoint, as Deci and Ryan (2000) claimed, is in opposition with the commonly conceptualized idea of autonomous processes as independent self-governing activities conducted in isolation from social groups. In fact, they added, an individual’s inclination to build relatedness may serve as an attempt to contribute to their well-being in self-managed activities.

Beachboard et al. (2011) examined cohorts, by which they meant “formal learning communities” (p. 854) in academic settings, with special focus on relatedness. The authors directed their interest to the effects of relatedness on learning outcomes and on students’ motivations towards fulfilling their future professions. In addition, by introducing “higher order thinking assignments” (p. 857), the study intended to explore learners’ critical thinking as a construct that affects cohort participation. The results of 1,852 US college students’ self-report records revealed weak linear connections between participation in educational cohorts and learning accomplishments; however, further regression analyses revealed a *mediating effect* between group participation and academic achievement. The findings highlighted the importance of SDT in educational contexts, drawing special attention to relatedness as a *mediator* between group membership and learning processes. More importantly, the use of higher order ranking assignments, which are directed to the development of learners’ critical

thinking, proved to be a beneficial approach both in group-level and in individual learning processes. As a result, Beachboard et al. (2011) justified the need for institutional-level attention to the benefits of relatedness in the development of learning groups as well as in the enhancement of autonomous learning.

Relatedness, besides facilitating the development of *prosocial behavior* (Pavey et al., 2011), positively affects out-of-class learning (Fathali & Okada, 2017) and increases intrinsic motivation (Otoshi & Haffernan, 2011). As foreign language learning occurs both in group settings and in individual development, in the following chapter the two innate psychological needs of SDT, autonomy and relatedness, and their interrelations are viewed with the prospect of finding possible pedagogical implications based on research outcomes.

### **Interrelations of Autonomy and Relatedness in EFL Learning**

Owing to the communicative application of a language, its acquisition generally involves social activities and, in preparation for life-like situations, learners often rely on practice with their peers. The context of EFL classrooms, therefore, often serves as a representation of EFL communicational scenes in which learners gain opportunities for improving their linguistic skills with the help of peer-practices or group tasks. Consequently, such exercises require co-operation and collaboration from the members of learning groups as well as careful considerations and planning by the instructor. Parallel to their group-learning efforts, language learners also perform outside-class activities for their linguistic development (Benson, 2013; Zimmermann, 2008). Although only a few EFL studies have viewed the aspects of relatedness and autonomy in their interconnections, some research findings indicate a possible interactivity of the two notions.

Chang's (2010) mixed-methods study was directed to the relationships between classroom climate and learner motivation in EFL learning among Taiwanese students. The researcher was interested to see whether group coherence and relationships between group members affected the learners' motivation and autonomy. In the first phase of the study, the hypothesis that group connections have an effect on individual learning motivation and autonomy was tested in a four-section questionnaire study, focusing on the learners' *beliefs and behaviors, self-efficacy, group cohesiveness, and group norms,*

among two junior and two senior groups in a two-year university program. The survey study was followed by a qualitative investigation through semi-structured interviews with three selected participants from each previously surveyed group, one with affirmative, one with neutral and one with unaffirmative perspective on their group cohesiveness.

The findings revealed that group cohesiveness and group norms correlated to a weak-to-moderate degree with the participants' self-efficacy and autonomous behavior. Another, rather thought-provoking result of the study was that the junior groups confirmed more cohesiveness than the senior ones. Chang (2010) attributed these findings partly to the fact that the first-year students had received more lessons than their fellow second-year students, specifically eight hours and three hours respectively; and partly to a possible lack of cohesiveness in these particular senior groups. Concerning the latter, the researcher presumed that moulding this group into a cohesive cohort had not been successful in the first year of their studies. Despite this revelation of age differences, no significant correlation was found between the two age groups regarding second-language motivation; therefore, the author suggests the consideration of other factors contributing to second-language motivation. In fact, the interview studies revealed a stronger influence of group cohesion on L2 learning before the participants' university studies; their retrospective memories of EFL learning preceding their university years suggest that groups may shape their self-governed learning to a higher degree when they are younger, as opposed to older learners' developed autonomy being self-directed and less prone to the influences of a group.

In an attempt to verify the validity of self-determination theory, Agawa and Takeuchi (2016) administered a questionnaire in a Japanese EFL context, containing items from several aspects of SDT, specifically *intrinsic*, *identified*, *introjected*, and *external* motivation as well as *amotivation*, and the three components of psychological needs, i.e., *autonomy*, *competence* and *relatedness*. As the authors explained, relatedness was examined merely from the aspect of the learners' relations to their learning peers, excluding all other influencers, such as parents or teachers. They found a significant connection only between relatedness to their peers and *identified* motivation regarding their personal development, which the authors attribute, in part, to the various EFL proficiency levels of the



respondents. The authors place their results in comparison with previous findings of Hiromori (2006b, as cited in Agawa & Takeuchi, 2016), who encountered contradicting connections between relatedness and internal motivation after receiving negatively correlating results, proving that if the latter already existed within a learner, there is little need for relatedness to the learner group. Regarding autonomy and motivation, the outcomes of Agawa and Takeuchi's (2016) study suggest a negative relationship, whereby an autonomy-promoting atmosphere might demotivate learners. The authors noted the necessity to conduct further studies directed on "interplay between relatedness and autonomy" (p. 29), which they reason with the fact that East Asian learners' attitude towards the importance of others follows certain cultural tendencies that may differ from, for instance, people living in Western cultural settings.

Confirming research findings on SDT and relatedness within the theory, Fukuda et al. (2015) found relatedness to be a crucial element of a learning group "to not only sense more autonomy, but also to internalize their motivation to learn" (p. 226). Studying relatedness within the guided-autonomy syllabus (GAS), an SDT-based working method aiming to enhance autonomy in the EFL classrooms in Japan, the authors hoped to find out the extent to which relatedness played an important role in the development of learner autonomy. GAS, as they explained, contains three phases according to the controlling agents of autonomous learning; first, educators introduce tools and techniques for the projection and arrangement of learning targets, a process which is followed by students' self-directed planning and realization of their set goals with constant supervision from the educators' side; and finally, learners conduct the previously learnt preparational and operational steps by themselves.

Following their 2011 (Fukuda et al., as cited in Fukuda et al., 2015) research which had lacked adequate proof of GAS supporting the learners' need for relatedness, Fukuda et al. (2015) introduced *class journal writing* (in order to enhance student-teacher relationships) and *peer advising sessions* (for boosting learning group relationships) to the GAS program and conducted a study on 45 GAS course participants using two control groups progressing in a more traditional, instructor-oriented manner. Their ambition to investigate the importance of relatedness drove them to adopt Williams et al.'s (1996, as cited in Fukuda et al., 2015) *Learning Climate Questionnaire* (LCQ) and refined it to be

appropriate in the EFL context. Their findings on the positive effects of GAS on motivation included significant results in the supportive nature of GAS on the learners' need for relatedness and its enhancing effects on autonomy. They concluded that "relatedness has the potential to internalize intrinsic forms of motivation" (p. 230); moreover, "[t]he GAS course was perceived as more autonomy-supportive than the two control groups" (p. 231).

In a study directed on the influences of EFL learners' inner needs for competence, autonomy and relatedness on developing autonomous motivation, Hu (2016) pointed out the importance of internal motivation in both in-class and outside-class EFL learning, emphasizing the prominence of Deci and Ryan's (2000) findings in the construction of SDT. With one hypothesis targeting relatedness, Hu (2016) aimed to find out whether peer relationships in the learning environment would have positive effects on learners' progression towards self-augmented motivation and self-managed learning practices, and whether the outcomes of these developments would result in greater accomplishment in EFL learning.

The large-scale case study, administered on 353 college students, contained five steps. After detecting the learners' needs with the help of a questionnaire, a *need-satisfying intervention scheme* was constructed and applied in their EFL instruction using a target group and a control group. This was followed by the analyses of pre- and post- proficiency tests, data gathered from learners' questionnaires and interviews as well as from teachers' observation journals. Finally the advantages and drawbacks of the implemented scheme were examined and reconsidered (Hu, 2016). In view of the outcomes of the research, which were increased autonomous motivation, more self-directed learning and greater accomplishments in the target group's EFL proficiency, the author concluded that "basic need satisfaction strengthened learners' autonomous motivation and facilitated controlled motivation to move gradually to autonomous one" (p. 408). With regard to relatedness, the classroom observation journals revealed gradual improvement of group relations and learners' devotion to learning in the target group, as opposed to the control groups' static state of uninvolved activity concerning peer co-operation. Moreover, as their motivation became more autonomous, out of the three basic needs of SDT autonomy and relatedness proved to be stronger inner desires than that of competence. Hu

(2016) also pointed out certain cultural aspects of the findings. On the one hand, as he explained, while the nature of Chinese education is generally teacher-centered with rule-obeying learner behavior, an autonomy-supportive environment enhanced the students' desire to manage their learning. On the other hand, "China's collectivistic culture" (p. 409) reinforces the need for peer-relatedness. He suggested that further studies be conducted in other cultures, in different contexts and for a longer period of time, in order to gain deeper understanding and more generalizable results.

In a more recent study involving digital means within EFL instruction, Zainuddin and Perera (2017) studied the three basic human needs of SDT within the flipped classroom pedagogical model, which involves watching preliminary videos followed by on-site classroom discussions. The mixed-methods study, involving 61 Indonesian undergraduate EFL learners, proved that higher levels of success in the three needs of the SDT resulted in more intrinsic motivation. The first, individual phase of the flipped-class approach enhanced their autonomous learning behavior, whereas the second, classroom-based activity strengthened their relatedness. The learners reported positively on the development of their independent learning processes through the individual video-watching activity while they embraced the learning opportunities provided by peer discussions. In this experiment, the approach was positively confirmed along the SDT needs; nevertheless, the authors warned that the novelty of the method would call for further investigation with larger samples for more generalizability within the educational context. Concerning SDT in current contexts, Akbari et al. (2015) studied the three psychological needs in a learning group operating on the social network platform, Facebook, compared to face-to-face classroom settings. They found that all three needs were present to a higher degree among members of the online group than in the control groups learning in a traditional, face-to-face format. Moreover, relatedness proved to have the strongest effect on learning outcomes.

The examples of research above focusing on relatedness, autonomy and their motivating effects on EFL learning are meaningful initiations of inquiry into the manifestation of the SDT. However, it is noticeable that the concept has received more attention in East Asian settings, even though learners' group connections and levels of autonomy are likely to change in different cultural

backgrounds (Agawa & Takeuchi, 2016; Chang, 2010; Hu, 2016; Schmenk, 2005). In order to broaden general perceptions on the phenomena, studies in various other cultural settings would widen the horizon in the topic and could better support educational development.

### Conclusion

This literary study aimed to find interrelated effects between the psychological needs of autonomy and relatedness, two constructs within Deci and Ryan's (1985) self-determination theory (SDT). It first viewed the theory and the three inner needs of individuals for autonomy, competence, and relatedness. Although the theory was initially a psychological concept, SDT has been linked to educational settings and it was found that the three innate desires affected learning outcomes (Fathali & Okada, 2017; Hu, 2016; Zanuuddin & Perera, 2017).

A narrower focus of this review looked at whether relatedness to peers within learning groups affected learning outcomes and learner autonomy. The findings suggest both affirmative results and a niche for further investigation in several different contexts and cultures (Agawa & Takeuchi, 2016; Chang, 2010; Hu, 2016). Firstly, although autonomous activities are controlled and driven by the individual (Benson, 2013), collaborative practices positively affect their development (Littlewood, 1999). Secondly, autonomy and relatedness often go hand in hand as needs and drives move towards intrinsic motivation (Fukuda et al., 2015; Ootoshi & Haffernan, 2011). Promoting them, as a result, leads to higher academic achievements (Beachboard et al., 2011). Additionally, contexts related to SDT and aspects of motivational and psychological needs can be studied as new platforms such as digital learning options and social network connections emerge (Akbari et al., 2015). These newly surfacing research territories might have the potential to provide further insights into learner-group collaborations, how relatedness among learning peers evolves and to what extent it affects learning outcomes and autonomous, self-managed learning processes.

Finally, as Noels et al. (2019) pointed out, research on SDT in EFL contexts should go beyond Asian territories as such inner desires and efforts to fulfill them are culturally dependent variables (Agawa & Takeuchi, 2016; Chang, 2010; Hu, 2016). Relatedness is a notion that has received less research focus (Deci &

Ryan, 1985; Sheldon & Filak, 2008), nevertheless research has proved that it can have a beneficial impact on learning achievements (Beachboard et al., 2011; Fathali & Okada, 2017; Fukuda et al., 2015; Pavey et al., 2011; Sheldon & Filak, 2008) and even enhance learner autonomy and self-regulation (e.g., Fukuda et al., 2015; Hu, 2016). The present literary investigation is in agreement with Agawa and Takeuchi (2016) in that more investigations should be conducted about the possible connections between learner autonomy and group relatedness and the positive learning outcomes that derive from the interrelations of the two psychological needs.

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