

## Conceptual Article

# Group Dynamics in the Language Classroom: A Theoretical and Empirical Overview

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## ABSTRACT

This conceptual paper reviews and synthesizes the historical trajectory of group dynamics theory and research in language learning and teaching, covering both whole-class and small-group work contexts. Drawing on diverse theoretical frameworks—including cognitive and sociocultural theories of language acquisition, neuroscience, positive psychology, self-determination theory, learner engagement, emotional contagion, flow theory, and directed motivational currents—the paper first establishes a rationale for the crucial role of cultivating positive group dynamics among language learners. The subsequent section offers precise definitions and essential characteristics of three core concepts: group, group dynamics, and group work dynamics. Following this, I delineate and explain the key features identified in the literature that constitute positive group dynamics. These features include a cooperative classroom goal structure, supportive physical classroom characteristics, strong group cohesiveness, clear group norms, effective teacher and learner leadership, supportive and confirming communication, and nonverbal immediacy. The core of the paper summarizes the wide array of empirical studies—utilizing various research methodologies—that have investigated group-related phenomena with language learners and teachers. This research overview is strategically organized into two distinct sections: studies operating primarily within a motivational perspective and those examining a learner engagement perspective. Based on the conclusions reached from this comprehensive review, the paper concludes by offering specific suggestions for future research directions in the field.

**Keywords:** group dynamics, group work dynamics, L2 motivation, learner engagement, research methodology

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## INTRODUCTION

Evolutionary anthropologists attribute human survival and extraordinary success to two critical adaptations: an ability for complex language use and a unique capacity for social cooperation (Harari, 2015). Challenging the classic mantra of ‘survival of the fittest,’ which claims that aggression and competition were the drivers of evolution, Hare and Woods (2020) argue that the greatest survival advantage belonged to those best able to communicate, cooperate, and build relationships. Empathy—the ability to understand the emotions, hopes, and goals of others—is the key to this collaboration, allowing us to accomplish remarkable feats when working together as a group.

This evolutionary principle has clear parallels in education. It is unsurprising that cooperative learning, where students work in small groups toward a common goal, is a popular pedagogy. In general education, numerous studies show that students in cooperative classrooms academically outperform those in competitive ones (Aronson & Patnoe; Johnson & Johnson, 2019). Within language education, cooperative learning, a key component of modern methods like CLT (Communicative Language Teaching) and TBLT (Task-Based Language Teaching), offers many documented benefits (Jacobs & Kimura, 2024), including:

- Linguistic: Increased opportunities to listen and produce the target language for true communicative purposes.
- Cognitive: Enhanced comprehension as students help one another.
- Affective: Lower anxiety, higher intrinsic motivation, increased self-esteem and self-confidence, and greater enjoyment of language learning.
- Social: Better student-student and teacher-student relationships and the development of collaborative skills applicable to real-life situations.

For language teachers and learners, there is no better feeling than being part of a cooperative classroom group that has a positive socio-emotional climate. In such an atmosphere, learners are unafraid, joyful, highly motivated, energized, interested, and

engaged through interactions with the teacher and with each other. A positive socio-emotional energy, which can be both observed and felt, exists in the classroom space, both within the whole class and in smaller work groups. Ultimately, the positive group dynamics that are part of this classroom have been co-created by the teacher and the students, but how? What conditions foster these dynamics? How do the group and the individual influence one another? How does a classroom group change and why? Most importantly, what positive outcomes—especially for language learning—do they generate? Conversely, why do some classroom groups fail to develop this synergy? These questions are central to the study of group dynamics, the focus of this special issue.

This paper provides a theoretical and empirical overview of group dynamics in second language (L2) education. It begins by outlining a rationale for this field of study, and then defines the core concepts of group, group dynamics, and group work dynamics. The paper then proceeds to describe key features from the literature that foster positive classroom and group dynamics and concludes by reviewing relevant empirical studies conducted in L2 classrooms.

## **A RATIONALE FOR THE STUDY OF L2 GROUP DYNAMICS**

There are many important reasons for studying group dynamics in language learning contexts. First, most language learning occurs in groups, usually within a formal educational context with a teacher (or teachers in a co-teaching setting) and a group of learners. It is also essential to acknowledge that while individuals shape the group, the group itself develops a unique identity that influences each individual learner. Language learning itself, furthermore, is fundamentally a social process that necessitates activation of language knowledge through interaction with others. This is supported by second language acquisition (SLA) research from both cognitivist and sociocultural perspectives. For cognitivists, interaction between the teacher and the students as well as between learners in goal-oriented tasks, can provide both the input and output conditions necessary for L2 development to take place (Krashen, 1985;

Long, 1996; Schmidt, 2001; Swain, 1995). Sociocultural theory (Lantolf & Poehner, 2008; Vygotsky, 1978), meanwhile, which sees learning and individual cognition as being a socially mediated process, argues that social interaction provides the opportunity for supportive scaffolding that enables the transfer of language knowledge and skills. Informed by these complementary theoretical positions, language teaching methodology worldwide is now dominated by a communicative, cooperative, task-based, and project-based approach where learners are repeatedly asked to interact in groups of all sizes (pairs, groups, and whole class).

While we may have a built-in evolutionary capacity for social cooperation and while cooperative and group-based language learning can provide linguistic, cognitive, affective, and social benefits, language teachers are well-aware that all of these are dependent on a well-functioning group with a positive socio-emotional and motivational climate. A group can easily become dysfunctional with negative dynamics that can seriously impede engagement and learning. Creating positive emotions and motivational engagement in group contexts are therefore critical and an important part of group dynamics and of language learning. As a group of prominent SLA scholars have stated as part of their 'transdisciplinary' SLA framework, "the more they [L2 learners] experience emotionally and motivationally positive evaluations of their anticipated and real interactions, the more effort they will make to participate in them and affiliate with others" (The Douglas Fir Group, 2016, p. 28). Indeed, based on research from the field of neuroscience (e.g., Okon-Singer et al., 2015), emotion and cognition are inextricably linked during the process of learning. The more positive the emotions, the greater the cognitive attention and working memory capacity. The opposite, however, can also occur if experiencing negative emotions. Because language learners are always operating with a deficiency in knowledge and ability in the target language, they can have sensitive 'language egos' (Brown & Lee, 2015), in which they can be particularly susceptible to experiencing fear and language use anxiety (MacIntyre, 2017). For this reason, it is very important to provide them with a positive and supportive social group environment.

The increasing realization of the importance of positive affect in language learning has led to the rise of a positive psychology movement within the field (MacIntyre & Ayers-Glassey, 2022). At the heart of positive psychology is the promotion of learners' and teachers' overall well-being by creating conditions that will include positive emotions (P), engagement (E), positive relationships (R), meaningfulness (M), and accomplishment (A), which are commonly referred to as the PERMA model (Seligman, 2011). Crucially, in addition to promoting well-being, these inter-related elements contribute to optimal states of language learning and development in which supportive relationships between learners and between teachers and learners play a key role.

From a motivational perspective, furthermore, the social context and supportive social relationships are inherently significant. Simply from a humanistic standpoint, we have a psychological and motivational need to belong and to be part of positive social interactions (Baumeister & Leary, 1995; Maslow, 1970). This is particularly the case with language learning motivation. As Ushioda (2003) has argued, while a language learner's motivation is ultimately conditioned within the self, it is "one which needs supportive interpersonal interactions and an optimal learning environment in order to grow in positive ways" (p. 10). Likewise, in the self-determination theory (SDT) model of language learning motivation (Mercer, 2019; Noels et al., 2019), L2 learners' motivational drives are dependent on a social environment that satisfies three inter-related psychological needs: the need to feel competent, to have a sense of autonomy, and the need to belong and to feel a sense of social connectedness with others (which is referred to as 'relatedness'). Indeed, in both a whole class group setting and when learners work together in small groups, social connectedness provides a feeling of being valued and of being supported that is essential for learning success.

In the SDT model of L2 motivation, moreover, it is argued that the satisfaction of the three needs of competence, autonomy, and relatedness act as motivational antecedents to learner engagement (Mercer, 2019). Indeed, the concept of engagement has recently been receiving a lot of attention and focus in our field (Hiver, Al-Hoorie, & Mercer, 2021). This is not surprising since engagement represents active

learning behavior and what Dörnyei (2020) calls “a kind of ‘motivation plus’ with the ‘plus’ element referring to the behavioral outworking of motivation” (p. 57). Engagement is clearly important since without it there is no meaningful learning (Hiver, Mercer, & Al-Hoorie, 2021). From a language learning perspective, furthermore, it is critical for learners to be actively engaged when interacting and using the language in small group-oriented tasks in order to optimize opportunities for L2 development. For this reason, L2 scholars (Philp & Duchesne, 2016; Svalberg, 2009), when considering the different dimensions of engagement in L2 interactive tasks, add social engagement to cognitive (mental attention and effort), affective (enthusiasm, interest, enjoyment), and behavioral (active participation) characteristics. As examples of social engagement and based on the work of L2 researchers who have investigated it in relation to interactive tasks (Moranski & Toth, 2016; Sato & Bellinger, 2012; Storch, 2002), Philp and Duchesne (2016) conclude that L2 learning will “likely be more effective... when they [learners] are socially engaged, that is when they listen to one another, draw from one another’s expertise and ideas, and provide feedback to one another” (p. 57). Engagement, along with its cognitive, affective, behavioral, and social dimensions, can therefore act as a key indicator of a positive and active group dynamic.

Another good reason for studying group dynamics is the fascinating phenomenon of emotional contagion. First reported by social psychologists Hatfield et al. (1994), emotional contagion can simply be described as the unspoken transfer of feelings from one to another. More specifically, they explain it as “the tendency to automatically mimic and synchronize facial expressions, vocalizations, postures, and movements with those of another person and, consequently, to converge emotionally” (p. 5). The process is further characterized by an integration of emotion, cognition, and motivation, which culminates in the synchronization of a group's attentional focus, emotional responses, and behavioral actions. Interestingly, they posit that this process is often automatic and unconscious (but also sometimes conscious). In studies of organizational groups, Barsade and her colleagues (Barsade, 2002; Barsade et al., 2018) confirmed these findings and also identified key influencing factors, such as social and task interdependence and incidences of group conflict.

Processes of contagion have clear relevance in language learning when learners either work in small group tasks or in longer-term group projects. From a motivational standpoint, contagion is an integral part of the psychological state of group flow (Csikszentmihalyi, 1990; Sawyer, 2015) when learners collectively experience high levels of interest, enjoyment, focused attention, challenge-skill balance, and a sense of control in group-related tasks (Piniel & Albert, 2019). Similarly, Muir (2022) argues that emotional contagion takes place when groups of L2 learners experience a directed motivational current (DMC) while working on a group project, referred to as a 'group DMC'. A DMC can be understood as a prolonged period of intense drive and energy dedicated to a highly valued goal or vision, characterized by enhanced performance and productivity (Dörnyei et al., 2016). Furthermore, processes of contagion can extend to a group's goals and vision. The spread of goals is known as 'goal contagion' (Aarts & Custers, 2012), while the collective adoption of a vision is called 'group vision' (Dörnyei & Kubanyiova, 2014); both are highly relevant to group-based learning. Clearly, reaching greater understandings of the different conditions that can lead to processes of contagion and to states of group flow and group DMCs should remain an important aim in the study of group dynamics in language classrooms.

A final reason to focus on L2 group dynamics is the significant gap in the literature. Although widely considered “one of the most – if not the most – useful subdisciplines... for language teachers” (Dörnyei & Murphey, 2003, p. 1), the field remains relatively under-researched. Nonetheless, a modest body of published work provides a foundation to build upon, as the empirical studies section of this review will outline. Further investigation is particularly urgent given the rise of group-based learning in virtual environments, increasing digital isolation (as opposed to physical face-to-face interactions), and future, if not present, use of AI chatbots in educational classrooms.

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## DEFINING GROUP, GROUP DYNAMICS, AND GROUP WORK DYNAMICS

What precisely is a group? While most definitions agree a group contains at least two or more members—though some argue a ‘group’ proper begins at three, distinguishing it from a two-person ‘dyad’—a more complete definition lies in a synthesis of psychological, social, and communicative characteristics.

Fundamentally, a group begins with a shared identity and social connection. From a psychological perspective, a group exists when individuals "perceive themselves to be members of the same social category" (Brown & Pehrson, 2019, p. 2). This internal identity is complemented by the social relations that connect the group members to one another (Forsyth, 2019). Through these social relations, a group is also a complex and dynamic interactive system (Arrow, McGrath, & Berdahl, 2000). This interactivity is governed by the following key characteristics:

- Influence: Members mutually influence one another's thoughts and behaviors (Shaw, 1981).
- Interdependence: Members rely on each other to achieve shared goals (Frey & Konieczka, 2010).
- Communication: Interaction, whether face-to-face or digital, is essential. (Frey & Konieczka, 2010).

For Barnlund (1968), communication is particularly important in groups because as groups grow in number beyond two individuals, so do complexity and uncertainty. A primary purpose of group communication, therefore, is to reduce this uncertainty—the feeling of not knowing what will happen or what others will do. According to this view, effective communication is the key to reducing uncertainty and fostering a positive group dynamic.

Being such a multidimensional concept, group theorists have identified other features that characterize developed groups, such as accountability (Ehrman &

Dörnyei, 1998), structure, including group norms (Sherif & Sherif, 1956), differentiated member roles (Hackman & Katz, 2010), and time—a group is together for a reasonable amount of time (Ehrman & Dörnyei, 1998).

The study of these interactive forces is known as group dynamics, a term that was first coined by the social psychologist Kurt Lewin (1951). In its broadest sense, group dynamics is the scientific study of the actions, processes, and changes that occur in social groups (Forsyth, 2019). From an educational psychology perspective, this definition becomes more specific in which the classroom itself is viewed as the social group. Among L2 educational L2 scholars, for instance, group dynamics refers to the “processes, relationships, and interactions between the learners as well as with the teacher” (Williams et al., 2015, p. 31) and to how “these inter-relations affect their formation, performance, and dissolution” (Murphey et al., 2012, p. 250). Reflecting a complex dynamics systems theory (CDST) perspective, Nitta and Nakata (2021) also emphasize that language classrooms “are complex and dynamic spaces, where various agents and elements continuously interact with, and co-adapt to, one another” (p. 174). Indeed, as we will discover later in this review, L2 scholars interested in researching group dynamics are increasingly adopting CDST perspectives.

Crucially, these classroom dynamics are not just abstract processes. They create a tangible psychological and socio-emotional climate that can be felt by both the learners and the teacher. As Dörnyei and Murphey (2003) argue, “it is largely the dynamics of the learner group... that determine the climate of the classroom” (p. 4). From this perspective, therefore, group dynamics can also refer to the “psychological climate of the learning context” (Dörnyei & Muir, 2019, p. 720) or to the classroom environment (Fraser & Walberg, 1991).

The concept of climate allows us to make a vital distinction between the group dynamics that exist at the whole-class level and that can exist at a more micro-level when learners work together in group work tasks and projects. The latter is particularly important in language education in which learners are frequently asked to interact in pairs and small groups. To address this, Poupore (2016, 2018), adopting a small group

communication perspective (Beebe & Masterson, 2016), introduced the term 'group work dynamics' (GWD), defining it as "the socio-emotional climate that exists within a small work group and the degree to which it exhibits a genuine sense of warmth, trust, cheerfulness, and accomplishment" (2018, p. 351). Importantly, Poupore (2016) distinguishes GWD from the related concept of group cohesiveness, which is often described as the "closeness and 'we' feeling of a group" (Dörnyei & Murphey, 2003, p. 62). While cohesiveness is a vital part of a positive group dynamic, GWD is a broader concept. It includes not only that 'gelling force' but also a shared sense of purpose, goal-directedness, and accomplishment that may not always be present in a small work group that is merely cohesive.

## FEATURES OF POSITIVE GROUP DYNAMICS

Before reviewing specific empirical studies, this section first identifies key features from the literature that promote positive group dynamics. These features can be divided into the following six overall conditions which will be discussed in turn:

- Cooperative classroom goal structure and the physical environment
- Group cohesiveness
- Group norms
- Leadership
- Supportive and confirming communication
- Nonverbal immediacy

## Cooperative Classroom Goal Structure and the Physical Environment

There are three types of classroom goal structures which describe how students' goals relate to those of their classmates (Dörnyei & Ushioda, 2021; Johnson & Johnson, 2009):

- Cooperative: Students work together toward a shared goal.
- Competitive: Students focus on how they perform in comparison to other students.
- Individualistic: Students focus on their own individual learning goals.

As mentioned in the introduction, cooperative classrooms have been shown to significantly outperform competitive and individualistic ones and lead to significant linguistic, cognitive, affective and social benefits in both mainstream and L2 educational contexts. As Johnson and Johnson (2019, p. 65) point out, research into the benefits of cooperative learning have “considerable generalizability” based on over 1200 studies conducted in different decades and settings with a variety of participants (e.g., class, age, gender, and culture) and researchers. From a language learning perspective, the motivational power underpinning these benefits was recognized early by Dörnyei (1994, 1997), who incorporated the cooperative learning goal structure into his theory of L2 motivation as a critical 'group-specific component' alongside group cohesiveness, group norms, and goal-orientedness. This perspective has been reinforced over time, with Dörnyei and Ushioda (2021) more recently asserting that cooperative learning “has been shown to generate a powerful motivational system to energize learning” (p. 31).

Since cooperative classrooms depend on interaction and positive intermember relations, the physical environment is a critical factor. Indeed, the classroom setting evokes emotional and cognitive responses that can significantly impact group dynamics, motivation, and engagement (Dörnyei, 2001; Dörnyei & Murphey, 2003; Williams et al., 2015). Reviewing research on this topic, Murphey et al. (2022, p. 288) highlight several physical features that promote positive group dynamics:

- Seating arrangements that allow students to face one another (e.g., semi-circles) foster better eye contact, communication, cooperation, and intimacy compared to traditional rows (Sommer, 1969; Wannarka & Ruhl, 2008).
- Visually appealing spaces enhance group member performance (Cabanac, 2006).
- Ambient features like furnishings, decorations, lighting, and music can generate positive emotions, leading to stronger group cohesion, improved communication, and greater productivity (Augustin et al., 2009).

### Group Cohesiveness

Group cohesiveness is in many ways the most important condition for positive group dynamics (Forsyth, 2019). It is the bond that unites a group, making its members feel close and connected. Beyond just a feeling of unity, a cohesive group is focused on shared goals and committed to the group task or to the group's purpose (Dörnyei & Murphey, 2003; Williams et al., 2015). The foundation of this bond, according to Dörnyei and Muir (2019), ultimately lies in the quality of relationships between members, which must be built on trust and mutual support. Facilitating this process is the psychological shift from attraction to acceptance:

- Attraction: is the initial liking of others based on shared interests and/or physical attraction. While it can give a group a positive start, it often is not enough to sustain long term.
- Acceptance: is the practice of respecting and valuing group members despite any likes or dislikes or “conflicting values and imperfections” (p. 722).

Because acceptance takes time to develop, group cohesion is a dynamic process. Indeed, groups often pass through a ‘storming stage’ marked by “conflict, doubt, hesitancy, and stress,” before reaching a level of true cohesiveness and efficiency (Murphey et al., 2022, p. 286).

Several practical strategies can help foster acceptance and cohesion in the L2 classroom (Dörnyei & Murphey, 2003; Fukada et al., 2022). Some of the key methods include<sup>1</sup>:

- Promote proximity and interaction: Create opportunities for students to sit near and interact with as many different classmates as possible. This is vital for building relationships but presents a challenge in virtual environments where proximity is lost and nonverbal cues are harder to read.
- Encourage vulnerability and resonance: Foster a safe environment where students feel they can reveal weaknesses (vulnerability) and share in each other's emotions (resonance).
- Find similarities: Use activities that help the teacher and students learn about one another and discover common points of reference.
- Ensure a safe environment: Cultivate a supportive atmosphere where members feel comfortable and supported during times of difficulty.

While cohesion is valuable, it is important to be aware that an overemphasis on unity can lead to 'groupthink' (Dörnyei & Murphey, 2003). This occurs when the desire for harmony overrides realistic appraisal of alternatives, causing members to avoid challenging the group's ideas and opinions. Edmondson (2012), moreover, in reference to organizational teams, argues that 'productive conflict' acts as a key source of innovation and creativity. Groupthink, therefore, can stifle creativity and critical thinking, leading to a "norm of mediocrity" (Williams et al., 2015, p. 40). To prevent this, educators must actively encourage critical thinking and ensure all members have a chance to express themselves.

Establishing clear rules and expectations is essential for maintaining this healthy balance. This leads to the importance of the next critical element: group norms.

## Group Norms

A positive classroom environment is dependent on the establishment of group norms, the shared rules and routines that guide behavior and prevent dysfunction. These standards are crucial for the facilitation of both academic and socio-emotional learning (Evertson & Weinstein, 2006). For norms to be successful, teachers must implement an explicit “norm-building procedure” early on (Dörnyei & Malderez, 1999, p. 161). This involves thoroughly discussing the rules, their justifications, and the consequences for violating them, often formalizing them in a written code of conduct or learning contract.

One particularly vital norm in L2 learning contexts that has been highlighted by Dörnyei and Muir (2019) is tolerance. L2 learners are prone to be sensitive and to experience anxiety when receiving and producing the target language. For this reason, an established norm of tolerance ensures students feel safe, reassuring them that errors are a natural and welcome part of the learning process rather than a source of embarrassment.

While often applied to the entire class, group norms are arguably even more critical for small group work. Clear norms are essential for fostering supportive communication and positively influencing student motivation and engagement. Ehrman and Dörnyei (1998, p. 264) suggest several norms to facilitate cooperative group work, such as:

- Encourage others and praise helpful ideas.
- Share opinions and take turns.
- Ask for help and solicit ideas from others.
- Respect different opinions and be patient.
- Be brief and avoid dominating the discussion.
- Ensure everyone participates.

## Leadership

A cooperative and cohesive classroom with well-established norms is dependent on effective leadership. This begins with the teacher as the group leader whose presence needs to be “continuously and strongly felt” (Dörnyei & Malderez, 1999, p. 165). Teacher leadership styles are often separated into three types: democratic, autocratic, and laissez-faire. While the teacher must initially establish a strong presence as the group leader, the most effective leadership style for fostering positive group dynamics is democratic (Williams et al., 2015). A democratic style works best because it “encourages the group to take responsibility and contribute to group decisions,” (Williams et al., p. 35) making learners feel empowered and respected. At the same time, it provides the necessary direction and structure that a laissez-faire approach lacks. Unlike an autocratic style, meanwhile, which can “cripple learner engagement, creativity, and investment,” (p. 35) democratic leadership ensures students are actively involved in the development of the class and in their own learning. Most importantly, it leads to better relationships between students and between the teacher and their students (Dörnyei & Murphey, 2003).

Mercer and Dörnyei (2020), in their argument that a positive classroom dynamic and culture is essential for greater L2 learner engagement, also stress the importance of democratic leadership or what they term “autonomy-supportive leadership” (p. 74). Specifically, this needs to be characterized by a ‘lead by example’ principle in which teachers act as a model through behaviors and actions that promote the values of positive group dynamics such as trust, empathy, and acceptance. In doing so, teachers will also establish a strong rapport with students. Specific principles and actions to promote a good rapport with students include (p. 54-59, 62-66):

- Be passionate about teaching.
- Listen actively and be approachable and empathetic.
- Believe in the potential of every learner.
- Support learner autonomy.

- Be responsive to learner individuality and provide thoughtful feedback.
- Handle discipline relationally by addressing issues respectfully and privately.

Students also need to assume leadership roles in the L2 classroom, particularly when interacting in goal-oriented group work. Here, insights from the field of small group communication are particularly relevant. Operating within what is known as a functional approach to leadership, Beebe and Masterson (2016) focus specifically on the type of communicative behaviors that leaders can assume to facilitate effective small group functioning. The central tenet within this perspective is that leadership behaviors can be performed not only by those who possess leadership traits (e.g., intelligence, enthusiasm, dominance, and self-confidence), known as the trait perspective, but also by any group member in order to maximize group effectiveness. Effective leadership behaviors are separated into two categories: task-oriented leadership and group maintenance-oriented leadership. Task leadership involves communication aimed at accomplishing group goals. These include initiating and generating ideas, proposing procedural changes, coordinating and summarizing the group's contributions, and providing elaborations on ideas. Group maintenance (also called group building) describes communication that fosters a positive group climate and healthy relationships among members. Key maintenance behaviors include:

- Releasing tension: Using humor or suggesting a break to re-energize the group during stressful or difficult moments.
- Gatekeeping: Managing the flow of conversation to ensure all members are involved and have a chance to contribute.
- Encouraging: Offering praise and support to boost morale and build members' self-confidence.
- Mediating: Stepping in to help resolve conflicts or disagreements between members.

It is important to point out that both task and maintenance-oriented leadership are interrelated and that behaviors in each domain may contribute to task accomplishment and a positive group climate. Ultimately, both types of leadership are essential to small group cohesiveness and effectiveness.

Another type of leadership that has been discussed is emergent leadership. Unlike assigned leaders appointed through a vote or by a teacher, emergent leaders arise naturally and informally from a group's communication patterns (Williams et al., 2015). Research in this area primarily focuses on identifying the qualities of those most likely to become leaders in groups without a formal appointment. Key qualities include active participation, task-related ability, consideration for others, effective listening, and a commitment to the group's assigned goals (Beebe & Masterson, 2016). Notably, groups that foster emergent leadership often demonstrate higher levels of achievement (Forsyth, 2019). This dynamic is particularly relevant in L2 classrooms, where students frequently collaborate on goal-oriented tasks and projects. It raises key pedagogical questions:

- Should teachers assign student leaders, or should they allow leadership to emerge organically?
- How does language proficiency impact this process?

As the section on empirical studies will show, L2 scholars have begun to explore these important issues.

### **Supportive and Confirming Communication**

The way group members communicate and how they respond to each other is also critical for a positive socio-emotional climate. The field of small group communication has identified two particularly influential communicative behaviors in this regard (Beebe & Masterson, 2016):

- Supportive rather than defensive communication.

- Confirming rather than disconfirming communication.

Supportive communication focuses on making people feel safe and valued. This involves using descriptive 'I' language instead of evaluative 'you' language, focusing on problem-solving rather than control, and showing empathy instead of emotional detachment. It is also important to avoid communicative behaviors that convey a sense of superiority, manipulation, or definite certainty since these tend to generate defensive responses and in turn harm the group's overall trustworthiness.

Confirming communication, meanwhile, makes people value themselves more, as opposed to disconfirming responses that make them feel devalued. Confirming behaviors include directly acknowledging a speaker, agreeing with their content, offering support, or asking clarifying questions to show you're engaged. In contrast, disconfirming actions like interrupting, giving irrelevant responses, or failing to acknowledge someone's comment can make group members feel insecure and defensive, which ultimately harms the group's socio-emotional dynamic and effectiveness.

Acting to support these two types of behaviors is active listening which is essential for building strong interpersonal relationships and a positive group climate. Effective listening involves quieting one's own thoughts, focusing on understanding both the content and feelings behind a message, and empathizing with the speaker's perspective.

### **Nonverbal Immediacy**

Group climate is also significantly influenced by group members' nonverbal communication, including body posture, gestures, facial expressions, eye contact, silence, and a variety of nonverbal vocal behaviors such as laughter, yawning, sighing, and other non-linguistic sounds. Non-verbal messages, unlike verbal ones, are continuous and always present in oral communication. Nonverbal communication is especially relevant to small group communication or group work since only one person

speaks at a time. While the speaker is speaking both verbally and nonverbally, the rest of the group members will constantly be emitting nonverbal messages that will influence group process and dynamics. It is also estimated that nonverbal messages serve primarily an affective and relational function while verbal ones serve a content function (Richmond et al, 2012). According to a study by Mehrabian (1972), 93 percent of emotions are communicated nonverbally in cases where there is an inconsistency between the verbal and nonverbal messages. In such instances, people trust the nonverbal signals more to interpret true emotions.

Richmond et al. (2012) refer to the emotional and relational effects of nonverbal messages as creating a sense of ‘immediacy’ or the “degree of perceived physical or psychological closeness between people” (p. 263). They report the following positive effects of nonverbal immediacy:

- Increased liking, affiliation, and affect
- More responsiveness and understanding
- Increased solidarity between participants
- Decreased anxiety
- More production of language and improved perceptions of communicative competence.

The latter result is especially significant to L2 contexts since production of language is a significant contributor to language development.

Some examples of nonverbal immediacy and non-immediacy behaviors can include the following: leaning toward another vs. leaning away; more gestures vs. fewer gestures; relaxed body position vs. a tense one; eye contact and mutual gaze vs. limited or averted gaze; and short pauses and few silences vs. lengthy pauses and more silences.

Thus, just as supportive and confirming verbal communication can contribute to positive group dynamics, non-verbal communication, through the display of immediacy behaviors, can be just as or perhaps even more influential.

## **EMPIRICAL STUDIES: GROUP DYNAMICS AND MOTIVATION**

In the L2 classroom context, studies on group dynamics have overwhelmingly been framed within a motivational perspective. This is unsurprising, given that positive group dynamics and motivation are mutually influential. As Dörnyei and Muir (2019) argue, "when we discuss the learning behavior of groups of learners, motivational psychology and group dynamics converge" (p. 729). Therefore, this section will describe key studies from within this motivational perspective in relation to the following group concepts: (a) cohesiveness, norms, and formation (b) classroom climate, (c) teacher-student relationships and peer influence, (d) group work dynamics and task motivation, (e) group work dynamics and student leadership, and (f) group DMCs and project-based learning.

The subsequent section will examine group dynamics research centered on learner engagement, which has recently become a popular area of focus in language learning psychology. Although often used interchangeably with motivation, engagement, associated with action, is distinct because it represents the behavioral manifestation of internal motives (Dörnyei, 2020). This distinction warrants separating the empirical overview into two focused sections: one for motivation, and the other for engagement.

### **Group Cohesiveness, Norms, and Formation**

The first major L2 study to incorporate a group dynamics variable was conducted by Clément et al. (1994). In a large-scale questionnaire study with 11<sup>th</sup> grade Hungarian English learners ( $N = 301$ ), they found that group cohesiveness was linked to learner's overall L2 motivation and improved language scores. As mentioned previously, this

foundational work prompted the inclusion of group variables in Dörnyei's subsequent theories of L2 motivation, including his L2 Motivational Self System (1994, 2009). Subsequent research has reinforced these findings. For instance, Chang (2010) investigated how group cohesiveness and group norms influence individual motivation among 152 Taiwanese university English learners. Using both questionnaires and interviews, Chang found significant correlations between these group variables and the learners' motivation represented in self-efficacy and autonomy. The interviews further revealed that students considered their class group a critical factor in their learning and motivation; being in a motivated, cohesive group increased their own motivation, while the opposite was true for less motivated, fragmented groups. In another questionnaire study by Koga (2010) with Japanese first-year university students taking a mandatory English course ( $N = 88$ ), the aim was to examine the interplay of psychological and motivational variables over the course of a semester and to see how these changed over time and how they may be interrelated. One of the variables was 'group cooperativeness' which they equated with group cohesiveness. The study found that as levels of language anxiety and communication apprehension decreased and as motivation remained constant, group cooperativeness increased. Based on this, Koga (2010) concluded that group cohesion is a key factor in both lowering anxiety and maintaining stable motivation levels in the English classroom in Japan.

In another large-scale, year-long study of first-year Japanese university students ( $N = 1,149$ ) taking English classes, Sasaki et al. (2017) investigated how motivational variables influenced the growth of English reading proficiency. A key factor they identified was a classroom norm termed 'normative career aspirations.' The results showed that this norm was a significant predictor of reading proficiency growth. Specifically, being in a class with high normative career aspirations boosted students' motivation to study—even for those with low initial motivation—and led to greater improvements in their reading skills.

In a year-long study, Leeming (2014) investigated the group work formation preferences of 81 Japanese university science majors in English classes. Specifically, he wanted to learn their views regarding who should form the groups and how (random teacher-selection vs. student self-selection), how long they should work together (one week vs. whole semester), and why they would prefer to choose their own group members. Questionnaire and interview data revealed that students preferred to select their own groups and to change them at least once in a 14-week semester. While friendship was the primary reason for self-selection—leading to better flowing conversations—Leeming cautions that it could also result in social loafing.

In a similar study, Hassaskah and Mozaffari (2015) compared group formation methods with 32 Iranian university English literature students separated into two classes. They investigated whether student-selected groups or teacher-assigned groups (based on learning styles) produced better group dynamics and outcomes in creative writing. While student self-reports showed no clear advantage for either method regarding group dynamics, the results of the written assignments were clear: teacher-assigned groups were more task-oriented and earned significantly higher scores.

### **Classroom Climate**

Some L2 studies have highlighted the important influence of classroom climate. In a focus group interview study, Eddy-U (2015) wanted to find out what motivates or demotivates Chinese university students in Macau ( $N = 25$ ) to participate or not participate in group tasks during English classes. While some individual difference variables such as interest and self-confidence emerged as determinants, it was being in a class with a good climate and having good groupmates (e.g., talkative, motivated) that were most significant in terms of both motivation and willingness to communicate (WTC). If such factors were absent, meanwhile, students reported becoming demotivated.

Similarly, Joe, Hiver, and Al-Hoorie (2017), in a large-scale questionnaire study, explored the relationships between classroom social climate, self-determined motivation, WTC, and L2 achievement with secondary school English learners in Korea ( $N = 381$ ). Classroom climate was measured based on an amalgamation of teacher emotional support, teacher academic support, and classroom mutual respect. Using structural equation modelling, self-determined motivation, reflected in the psychological needs of autonomy, competence, and relatedness, was predicted by a positive classroom climate, and that these together then contributed positively to WTC and L2 achievement.

Adopting a complexity perspective that views classroom climate as a complex, dynamic, and emergent phenomenon, Nitta and Nakata (2021) set out to identify the patterns of classroom climate that emerged in two different high school English classrooms in Japan that were taught by the same teacher using the same curriculum. Using several different types of data that included student self-report questionnaires, focus group interviews, teacher reflections, and video-recorded observations, they utilized a 'retrodictive' approach based on the following chronological steps: (1) identify the classroom climate outcomes, (2) identify the patterns in each, and (3) explore the reasons for the patterns. Interestingly, it was the class with a lower overall English proficiency level that developed a more positive classroom climate and better cohesion over time. The most significant factor in this development was attributed to more time spent together and having more positive experiences as a group outside the English classroom (e.g., other classes and extracurricular activities).

### **Teacher-Student Relationships and Peer Influence**

It was mentioned in the previous section that teacher role modeling as the group leader in the establishment of positive teacher-student relations is critical for a good group dynamic and for student motivation and engagement. A case study of a middle school English teacher in Sweden by Henry and Thorsen (2018) demonstrated how a teacher's interpersonal interactions affected student motivation over time. Using an

ethnographic approach and based on 15 hours of classroom observation and interviews with both the teacher and the students, the researchers distinguished between the effects in 'emerging' versus 'mature' relationships. In emerging relationships, formed early on, simple positive actions from the teacher, like a word of encouragement or a supportive gesture, could have an immediate and significant effect on student motivation. In more mature relationships, developed later, the impact of these interactions was less direct and more subtle. Instead of providing an immediate effect, they contributed to a more sustained and resilient form of motivation.

Similarly, in Sampson's (2016) CDST study on classroom language learning motivation with his own students at a Japanese university, teacher-learner relations, peer interactions, and class climate emerged as significant factors in the learners' dynamically changing motivation. Adopting a practitioner-research approach, Sampson provides an in-depth and longitudinal examination of classroom dynamics over a period of one year with the same group of students based on various sources of data, including his own reflective teacher journal, classroom observation notes, student journals, and in-depth interviews with students. Supporting a CDST perspective, key findings indicated that learner motivation is fluid and is both personalized and co-formed through interactions with the teacher and peers and by the overall classroom climate. The teacher's engaging style and supportive communication, for instance, were instrumental for creating a positive socio-emotional climate. Through peer interactions in cooperative activities, furthermore, students could develop a sense of group cohesion that positively influenced their motivation. However, Sampson noted that these peer dynamics could also sometimes produce negative outcomes as students could also demotivate each other. Ultimately, the study shows that learner motivation is a product of multiple and interacting elements, particularly in relation to the teacher's influence and the classroom's social fabric.

In another in-depth practitioner-research study, Pinner (2017, 2019) used narrative enquiry and autoethnography in his own classroom of Japanese university English learners. His goal was to explore the relationship between two key concepts: social

authentication and teacher-student motivational synergy. Much like Sampson (2016), he collected multiple sources of data including teaching journals, classroom observations, audio-recordings of classes, student work, and interviews with students. The study is centered on the concept of social authentication defined as “the process of groups mutually authenticating and validating learning” (Pinner, 2017, p. x). Based on his findings, Pinner argues that this process begins with the teacher's own authenticity—being genuine, self-aware, passionate, and personally present with students. This in turn fosters trust with the students and encourages them to take risks, to engage, and to see the value of what they are doing together in the classroom. This successful, mutual validation is what creates social authentication, ultimately leading to motivational synergy, a state in which the teacher's and students' motivation and enthusiasm create a powerful, reinforcing cycle.

An influential study by King (2013) highlighted how peers can have a negative emotional and motivational impact, often leading to a collective mode of silence in Japanese university English classrooms. To investigate the extent of this silence and identify its causes, King conducted extensive research collecting 48 hours of classroom audio-recordings with over 900 students and their teachers at different universities. He developed and used an observational tool called the ‘classroom oral participation scheme’ (COPS), alongside student interviews and stimulated recall sessions. The results confirmed that silence is a predominant feature: students initiated less than one percent of all talk, and over 20 percent of class time had no oral participation from anyone, including the teacher. In interviews, students frequently cited interpersonal factors, particularly the fear of negative evaluation from peers, as a primary reason for their anxiety and reluctance to speak. Reflecting a CDST perspective, the study also revealed that silence is a product of multiple interacting factors, including cultural norms, educational practices, learner psychological factors, and the social dynamics within classrooms. King also concluded that silence had become an ‘attractor state’ in Japanese university classrooms, reflecting a stable and persistent pattern that is difficult to change. This foundational research later led to the

development of a cognitive-behavioral model to explain the social anxiety of silent L2 learners (King, 2014; King & Smith, 2017).

Influenced by King's findings and drawing on theories of near-peer role models (Murphey & Arao, 2001) and the ideal L2 self (Dörnyei, 2009), Murphey et al. (2014) introduced the concept of the 'ideal L2 classmate' to foster positive group dynamics and motivation in Japanese university English classes. Their action research study was conducted in two phases over one semester. In the first phase at the beginning of the semester, 449 students were asked to describe the ideal classmates they would want to learn with. These anonymous responses were discussed in class and then coded by the researchers into a list of 16 'ideal classmate' descriptors, such as "help each other learn" and "take risks with English." In the second phase near the end of the semester, 341 students rated these descriptors on a survey, evaluating their importance for learning, whether their classmates exhibited these behaviors, and whether they themselves exhibited these behaviors. The analysis revealed a powerful correlation between students' perceptions of their classmates' actions and their own self-reported actions ( $r = .829$ ). This finding suggests that when students believed their peers were acting as ideal classmates, they were highly likely to act that way themselves. The researchers termed this phenomenon "reciprocal idealizing," (p. 52) which functioned to create a sense of collective agency and emotional contagion that led to a more supportive and collaborative learning environment and to greater motivation and engagement. Follow-up studies by the researchers have since confirmed that this 'ideal classmates priming' is an effective pedagogical tool for boosting student motivation and 'prosocial engagement' in L2 contexts (Fukuda et al., 2021, 2022).

In another study highlighting the positive influence of peers on group dynamics, Sampson (2024) investigated the role of gratitude in small group interaction with Japanese university English learners. Adopting a qualitative and micro-analytic design known as a 'small-lens' study (Ushioda, 2016), Sampson examined the moment-by-moment interactions of the learners performing interactive tasks. Through video

recordings, stimulated recall interviews, and learner journals, the results indicated that gratitude, expressed both verbally and nonverbally, emerged as a significant theme within the interactions. This emergence, moreover, was both a dynamic and collaborative process in which gratitude was built across several conversational turns involving different group members. Most importantly, gratitude served an important social function within the group by creating greater interpersonal bonds and group cohesion.

### **Group Work Dynamics and Task Motivation**

When an L2 learner participates in small-group communicative tasks, their motivation, engagement, and performance will inevitably be influenced by their peers and the resulting social dynamics. One of the first studies to measure this impact was conducted by Dörnyei and Kormos (2000; see also Dörnyei, 2002) with 46 English learners at a Hungarian secondary school. Based on an interactive argumentation task, the study's findings showed that a partner's positive task attitude was highly correlated with the other partner's linguistic output, including their quantity of language and number of speaking turns. This motivational transfer was especially significant for learners who began with low task attitudes. In other words, a high level of task motivation in one student led to a stronger performance from their peers.

L2 learners' task motivation and performance is also influenced by the efficient social functioning of the work group as a whole. To explore this, Poupore (2016) developed a scale for measuring group work dynamics (GWD), defined as "a social climate in which there is a genuine sense of warmth, trust, cheerfulness, and accomplishment within the group" (p. 724). The scale assesses a range of verbal behaviors (e.g., providing leadership direction, contributing ideas, offering help) and nonverbal cues (e.g., smiling, eye contact, head-nods, gestures) that shape a group's social environment. The study involved 10 high-intermediate Korean university students taking a 20-week English conversation course. For each of the 15 speaking tasks that were part of the course, two work groups were audio-video recorded for a

total of 30 recordings. Based on the application of the GWD scale and the use of task motivation questionnaires, the results showed that positive GWD was significantly correlated with higher overall task motivation ( $r = .583$ ) and its components, including task enjoyment ( $r = .632$ ), reported effort ( $r = .380$ ), result assessment ( $r = .408$ ), and task relevance ( $r = .424$ ). Furthermore, groups with better GWD produced significantly more language. Interestingly, when the indicators were separated, it was the nonverbal behaviors that proved to be significantly associated with the task motivation measures. This finding highlights the crucial, and perhaps underestimated, role of nonverbal communication in fostering a productive and motivated L2 work group.

In a follow-up CDST study using retrodictive qualitative modelling, Poupore (2018) further highlighted the importance of GWD by comparing two groups from his original research: one with a high GWD and one with a low GWD. The study's most revealing finding came from the contrasting behavior of a single participant, 'Mina', who was a member of both groups. In the high-GWD group, Mina thrived. She took on a leadership role, accounting for 40% of the group's positive GWD contributions through her ideas, encouragement, and positive nonverbal cues like laughter and gestures of excitement. In the low-GWD group, however, Mina's behavior changed dramatically. Her positive contributions plummeted to just 13%, and she offered no leadership and few ideas. Instead, her negative behaviors—such as making critical remarks, refusing to share, and sighing—outweighed her positive ones. Mina's case vividly demonstrates how the social dynamics that emerge within a group can profoundly influence an individual L2 learner's task motivation, emotional state, and behavioral performance.

A recent study by Tanaka (2022) also underscores the critical role of social dynamics in group work. The participants were Japanese university English learners ( $N = 200$ ) taking English courses based on project-based learning. Students were assigned to the same group for the duration of one semester and undertook two group projects. Tanaka's findings, derived from questionnaires, revealed that the group work environment—defined by perceived cohesion and engagement—significantly

influenced students' overall L2 motivation. In other words, students in highly cohesive and engaged groups reported more enjoyment and were less likely to feel unmotivated. Conversely, those in groups with a weaker group environment showed the opposite pattern. Because L2 motivation was also significantly associated with academic achievement, Tanaka concluded that a positive group environment indirectly enhances L2 learning gains, regardless of proficiency level.

### **Group Work Dynamics and Student Leadership**

The presence of a leader in group work is an important factor for success and for positive group dynamics, but the specific impact of leadership on GWD can vary by learning environment. Hiromori (2024) explored this relationship by comparing face-to-face (F2F) and online synchronous classes. The participants for the study involved 144 university English learners in Japan who worked in groups of 3 to perform a picture-description task. The learners were assigned to one of four conditions: with and without an assigned leader in the F2F condition and the same for the online condition. The assigned leaders, who were selected based on their English proficiency, motivation, and perceived leadership ability, received written leadership guidelines on how to promote positive group dynamics prior to the task. Using Poupore's (2016, 2018) scale to measure GWD from audio-video recordings, the study focused only on verbal indicators to ensure a fair comparison between the F2F and online modes. The results revealed two key findings. First, GWD scores were significantly higher in the F2F conditions compared to the online conditions. Second, assigning a leader had a positive effect on GWD in both environments, but this effect was especially pronounced in the online setting.

Building on these findings, Mitsugi et al. (2024) conducted a similar study to investigate how assigned versus emergent leadership impacts GWD, task motivation, and linguistic performance in an online setting. Japanese English learners at university who participated in the study were divided into assigned leader groups ( $N = 24$ ) and emergent leader groups ( $N = 21$ ) and asked to perform a picture description task in

groups of three. Using a multi-faceted approach, the researchers collected data through audio-video recordings, questionnaires, interviews, and the groups' written work from the picture-description task. GWD was measured using Poupore's (2016, 2018) scale, but due to the online setting, certain nonverbal indicators were removed from the analysis. The results showed that while having any leader—whether assigned or emergent—positively affected task performance, the assigned leader groups produced significantly higher GWD scores. Interestingly, there were no significant differences in motivation or linguistic output between the two conditions. However, the groups displayed different motivational patterns: emergent leader groups showed gradually increasing motivation, whereas assigned leader groups reached a motivational peak early and sustained it throughout the task. This study reinforces Hiromori's (2024) conclusion that formally assigning leaders can be highly beneficial for the social functioning of L2 learning groups.

### **Group DMCs and Project-Based Learning**

Unlike a classroom task, projects require students to work together in a small group over an extended period. In outlining their theory of directed motivational currents (DMCs), Dörnyei et al. (2016) proposed that DMCs at a group level could best be materialized through the use of well-designed group projects. Since the concept of DMCs is relatively new, research into DMCs, especially group DMCs, is scarce. Two key studies in particular, however, demonstrate how well-designed projects can successfully generate powerful group DMC experiences for L2 learners.

Muir (2020) conducted her investigation in a five-week business English class at an Australian university. The course was team-taught by two instructors with experience in project-based learning. The entire class of 16 students, from various nationalities, worked together on a single project that involved organizing and running a charity fundraising event. To capture both student and teacher perspectives, data were collected through student diaries, teacher journals, and interviews. The analysis revealed a clear group DMC experience, characterized by:

- A significant investment of time and effort.
- The project goal being constantly on everyone's minds.
- A shared feeling that the experience was special and unique.
- A sense of having surpassed their initial expectations.
- A collective desire to repeat the experience.

This deep engagement, moreover, produced numerous positive outcomes, including less absenteeism, higher group productivity, reduced anxiety, increased confidence, and notable improvements in English speaking, listening, and vocabulary skills.

Adding nuance to these findings, a practitioner-research study by Poupore (2024) examined group DMCs with high-intermediate English learners of various nationalities in an intensive English program at an American university. Drawing on the group DMC framework from Dörnyei et al. (2016), Poupore designed a 15-week course that culminated in an eight-week play performance project. The 15 students were divided into three groups of five, with each group tasked with adapting a story or film covered earlier in the course into a 30-minute play to be performed for a live audience in one of the university's theaters. Data collection consisted of student project journals, also functioning as a DMC questionnaire, that were completed at four different times during the project, and project conferences-interviews with individual students that were conducted twice. While the results were mixed for two of the groups, one group demonstrated consistently high and sustained group DMC levels throughout the project. Using a CDST perspective through retrodictive qualitative modelling, the study aimed to identify the combination of interacting elements that contributed to this group's success. The analysis showed that the group's powerful group DMC experience resulted from facilitating elements successfully overriding debilitating ones. In relation to key facilitators, the group's success was driven by a dynamic interplay of factors, including positive emotions, self-concordant goals/vision, a strong sense of competence, autonomy, and relatedness, supportive group dynamics, key project characteristics, teacher encouragement and support, and positive outcomes in

the form of language-related gains and personal growth. These positive forces were strong enough to mitigate against the challenges that the group experienced such as individual fears and anxieties, internal group tensions, and other distractions. In essence, this study shows that a group DMC is not automatic but emerges when a project's design and the group's internal dynamics create a positive feedback loop that is resilient enough to overcome any potential obstacles.

## **EMPIRICAL STUDIES: GROUP DYNAMICS AND LEARNER ENGAGEMENT**

As previously noted, L2 scholars investigating learner engagement conceptualize it as a construct with four interrelated dimensions: cognitive, affective, behavioral, and social (Philp & Duchesne, 2016). A significant body of research demonstrates that social engagement, which relates to the quality of interpersonal dynamics, is a critical foundation for the other forms of engagement.

Much of the research on social engagement in L2 contexts builds on the landmark study by Storch (2002). Operating within a sociocultural perspective (Vygotsky, 1978), Storch examined the interaction patterns of 10 adult pairs of English learners performing in a variety of dyadic tasks across a full semester at an Australian university. Based on a framework developed by Damon & Phelps (1989), four different patterns emerged from the data: collaborative, dominant/dominant, dominant/passive, and expert/novice. These patterns were defined by the degree of equality and mutuality that were present in the interaction. High equality refers to the equal distribution of turns, contributions, and the degree of control over the task. High mutuality, meanwhile, refers to “the level of engagement with each other’s contribution... [or] interactions that are rich in reciprocal feedback and a sharing of ideas” (p. 127). Thus, the collaborative interaction pattern was distinguished by both high equality and high mutuality, the expert/novice pattern by low equality and high mutuality, the dominant/dominant pattern by high equality and low mutuality, and the dominant/passive pattern by both

low equality and low mutuality. Crucially, Storch found that the patterns rich in mutuality (collaborative and expert/novice) resulted in significantly more instances of L2 development, defined in the Vygotskian sense as the transfer of knowledge from one learner to the other. The Storch study is significant, therefore, because it demonstrated how high levels of positive social engagement, particularly in the form of mutuality, can lead to better opportunities for language learning.

Subsequent research in different contexts has consistently reinforced the importance of mutuality. Sato and Ballinger (2012), for instance, working with elementary school French immersion students in Canada, identified collaborative interaction patterns, i.e., mutuality, as a key factor in peer interaction that led to greater occurrences of language awareness and to more effective corrective feedback, important conditions for L2 development. Similarly, Moranski and Toth (2016), in an analysis of peer interaction patterns with Spanish learners in an American high school, found that groups with greater mutuality scored higher in a grammar assessment task. Sato (2017), meanwhile, in a comparison of two focus groups of five English learners each performing a set of communicative tasks in a secondary school in Chile, explored the relationship between collaborative interaction mindset, interaction behaviors, and L2 development. Sato observed that while one group displayed high levels of collaborative behavior through positive interdependence and cohesion, the other displayed a lack of collaboration and trust. The behaviors in both groups, moreover, were predicted by the interactional mindsets revealed in the pre-task interviews. Most significantly, the group that displayed both a strong interaction mindset and collaborative behaviors, produced more corrective feedback and language-related collaborations. While both groups reported similar vocabulary gains, furthermore, only the collaborative group significantly improved their use of past tense verbs.

Researchers have also explored how social engagement interacts with and influences cognitive and affective engagement. Baralt et al. (2016) compared face-to-face (FTF) and online pairs of adult Spanish learners. Both classroom groups performed the same set of interactive tasks. The resulting interaction data and post-

task questionnaires were coded for three types of engagement: cognitive, affective, and social. Results showed that while the FTF group scored highly for all three types of engagement, the online group either scored much lower or did not display any forms of engagement at all. The most significant difference was in relation to different levels of collaborative support and being able to work together in a cohesive manner. This resulted in a high level of social engagement, which in turn fostered greater affective engagement (e.g., interest and enjoyment) and cognitive engagement in the form of greater attention and noticing of language features. The authors conclude that these dimensions are highly interdependent.

Sato et al. (2025) also confirmed this interdependence with secondary school English learners in Chile. Based on small groups performing a decision-making task, data collection was varied and included video-recordings, an interaction mindset questionnaire, stimulated recall using idiodynamic software (MacIntyre & Legatto, 2011), and retrospective interviews. The affective dimension was based on interaction mindset and idiodynamic engagement, the social dimension on Poupore's (2016, 2018) GWD measuring instrument, including both verbal and non-verbal elements, and the cognitive dimension on L2 use, specifically the number of words, speaking turns, and language-related episodes. Using network analysis, their statistical model revealed significant correlations between verbal GWD and the number of words and turns taken and between non-verbal GWD and number of turns. Qualitatively, they observed that the moments of highest engagement occurred during a process of 'group synchronicity', where learners exchanged turns smoothly, contributed ideas, offered help, complimented each other, and shared nonverbal cues like smiling and eye contact.

The positive effects of social dynamics are also evident in longer-term projects and are influenced by the overall class climate. Based on learner diaries, engagement questionnaires, and interaction recordings, Aubrey (2022) found that sustained engagement in a five-week group project with Japanese university English learners was driven by a sense of relatedness and group cohesion. Similarly, Sulis and Philp

(2021), in a study with French learners at a British university and using classroom observations, recordings, and interviews, identified a supportive peer group that provides mutual aid and encouragement as one of three key factors, alongside task design and teacher support, for creating a positive classroom environment that fosters high engagement during interactive tasks.

Like the motivational studies on group dynamics that investigated the role of student leadership in group work, some task engagement-focused studies have also given insight into the role of leadership. Indeed, the specific role of student leadership as a social variable has been shown to be a powerful predictor of engagement. In two studies with Japanese university English learners using questionnaires, an English proficiency test, and video recordings, Leeming (2019, 2024) found that emergent leadership – not language proficiency or extraversion – best predicted behavioral engagement. Groups with strong leaders also encouraged mutuality and had smoother conversational flow, including reduced silences. Interestingly, Leeming (2019) also noted a negative association between strong leadership and fewer language-related episodes. In addition, Leeming (2024) demonstrated that leadership was highly context dependent. While leadership roles were stable in randomly assigned fixed groups during the first semester, they were significantly disrupted when students were allowed to self-select their fixed groups in the second semester. For instance, in reference to a specific case where a student was an influential leader in the first term, Leeming highlights how their loss of leadership in the second term led to much lower levels of engagement.

Based on this review of engagement-related studies, it is clear that social dynamics are not just a peripheral aspect of group work but a key driver of engagement and learning. The evidence consistently shows that positive social engagement, characterized by mutuality, group cohesion, and effective leadership, is deeply intertwined with learners' behavioral, affective, and cognitive involvement, including language development.

## CONCLUSION AND FUTURE DIRECTIONS

This overview has established the critical role of group dynamics—a significant social variable—in shaping the L2 classroom experience. The evidence clearly shows that positive group dynamics can enhance motivation, affect, and cognition, leading to better language development and to other positive psychological outcomes for both learners and teachers. While a modest body of research in different contexts and with different L2 learners has been conducted on this topic, it has been heavily concentrated in university settings, particularly in Japan. To achieve a more comprehensive understanding, future research must expand to include primary and secondary school contexts and diverse geographical regions.

The empirical review revealed a variety of research designs that have been used to investigate group dynamics, each offering unique insights and opportunities for future work. Researchers have employed traditional quantitative methods, such as large-scale questionnaires and the use of inferential statistics. More complex statistical tools like structural equation modeling (SEM) have also been applied, though sparingly. As Fukada et al. (2019) argue, SEM represents a particularly useful tool to "untangle causal relationships among multiple variables" (p. 314) and warrants greater use.

Alongside these quantitative tools, researchers have developed robust observational instruments. Key examples include Storch's (2002) equality-mutuality framework, King's (2013) COPS, and Poupore's (2016, 2018) GWD instrument that includes the measurement of both verbal and nonverbal behaviors. Highlighting the versatility of the latter instrument, Muir (2022) suggests that in addition to its use with shorter-term group work tasks, it could also be adapted to understand longer-term phenomena such as group DMCs in project-based work. While these tools are invaluable, their application must be context-sensitive, as behaviors interpreted positively in one specific situation, culture, or age group may be seen differently in another.

Another promising but underutilized quantitative tool, although it can also be used in more qualitative designs, is social network analysis (SNA) and its use of specialized computer software. Both Mercer (2015) and Fukada et al. (2019) have advocated for SNA as a useful technology that can help visualize classroom group structures, map communication flows, and understand how social connections influence behavior and learning outcomes.

Many of the recent studies have been framed within a CDST perspective, utilizing qualitative and mixed-methods designs like narrative inquiry, autoethnography, retrodictive qualitative modelling, idiodynamics, 'small lens', and practitioner or action research. By triangulating multiple data sources, these studies excel at identifying the key interacting elements that shape a group's trajectory, including specific task or project characteristics, teacher-student relationships, learner-internal psychological variables, learner engagement, and group dynamic factors related to cohesion, supportive communication, nonverbal cues, and leadership. As another promising type of CDST-aligned research, particularly for pedagogical interventions and for investigating group DMCs, Muir (2021) recommends the use of formative experiments (Reinking & Bradley, 2004), also referred to as design or teaching experiments. As she suggests, formative experiments are ideal for pedagogical interventions because they help answer not only if an intervention works but also how and why it succeeds or fails, allowing for adaptive, evidence-based teaching.

While the existing research provides a solid foundation, the study of L2 group dynamics remains under-represented in applied linguistics. Future investigations should pursue several key avenues:

- Deepening existing research: Core concepts like group cohesion, group norms, classroom climate, teacher and peer influence, GWD, group DMCs, learner engagement in group tasks, and leadership require further validation across different contexts. Additionally, new dimensions such as followership (Murphey et al., 2022) should be explored to understand how follower roles influence group processes.

- Exploring under-researched variables: There is a pressing need to understand the development of negative group dynamics, a topic that has received far less attention than its positive counterpart. Other neglected areas include the influence of non-verbal language (Gregersen & MacIntyre, 2017), the physical environment (Falout, 2014), and virtual learning environments (Molinillo et al., 2018). The latter is especially urgent given the rise of online synchronous learning and the challenges it poses for establishing social presence and the inability to accurately perceive and respond to nonverbal cues.
- Investigating novel phenomena: Fascinating group-related psychological variables like group flow (Piniel & Albert, 2019), emotional contagion (Muir, 2022), and momentum (Dörnyei, 2020) offer rich territory for new research. Furthermore, with the integration of artificial intelligence, understanding how AI chatbots function as co-agents alongside teachers and learners will be a critical area of inquiry.

Ultimately, positive group dynamics are fundamental not only for language learning but also for human flourishing. They fulfill a deep-seated need for belonging and a sense of relatedness that is essential for our physical and mental wellbeing. They also enable us to achieve extraordinary outcomes together. However, as evolutionary anthropologists Hare and Woods (2020) caution, the same instinct that fosters in-group cooperation and bonding can also fuel out-group hostility, aggression, and dehumanization towards outsiders. By better understanding this duality, we can cultivate the empathy and collaborative skills needed to address our world's most pressing challenges. In this sense, fostering positive group dynamics is more important than ever.

## Authors' Contributions

GP drafted the manuscript. GP read and approved the final manuscript.

## Declaration of GenAI and AI-Assisted Technologies

AI-assisted tools were utilized exclusively for the purpose of improving language, grammar, and style. The author reviewed and edited the manuscript and takes full responsibility for the final content.

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<sup>1</sup> In relation to vulnerability, proximity, resonance, similarity, and feeling safe, Fukada et al. (2022, p. 230) make reference to Brafman and Brafman (2010), who describe these as bonding or “click accelerators.”