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Stage-based team development in education and sport: Reflections on structured interventions in post-crisis Ukraine

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Abstract

Team development in educational and athletic contexts has become increasingly complex due to crises such as war, displacement, and psychological disruption. This conceptual essay explores how stage-based models of group development—particularly Tuckman's framework—can be adapted and applied through structured team-building interventions in post-crisis educational and athletic environments, particularly in Ukraine. Drawing on real-world experience from Ukrainian schools, universities, and sports clubs between 2023 and 2024, the study integrates theory with reflective practice.

The essay outlines key stages of team evolution (Forming, Storming, Norming, Performing) and examines the leader's shifting role across these phases. It proposes that emotionally intelligent, trauma-informed, and culturally sensitive facilitation is essential to fostering team cohesion, psychological safety, and collective identity. Using qualitative document analysis and narrative reflection, the article synthesizes lessons learned from the implementation of targeted interventions.

Rather than presenting empirical results, this work offers a conceptual framework for future practice and research. It argues that effective team building is not a set of generic techniques but a dynamic developmental process that must be attuned to context, emotional readiness, and group maturity. The study contributes to educational, sport psychology, and organizational literature by bridging classical models with adaptive strategies for teams operating under uncertainty and transition.

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Any reports and responses or comments on the article can be found at the end of the article.

Plain Language Summary
During times of war, crisis, or displacement, many school and sports teams struggle to stay united, motivated, and emotionally safe. This essay explores how structured team-building activities can help groups grow stronger, especially in Ukraine, where educators and coaches work with students and athletes affected by the war.

Using a well-known model of group development (forming, storing, norming, and forming), the authors showed how teams move through different phases. First, members are unsure and rely on leaders; later, they may face conflicts or misunderstandings. Eventually, with the right support, they begin to trust each other, work together, and solve problems as a real team.

The authors share insights from practical programs used in Ukrainian schools and sports clubs from 2023 to 2024. These included games, discussions, trust-building tasks, and creative challenges, all adapted to the group's needs. Leaders played an important role not by controlling the group, but by helping them grow and step back at the right time.

The study does not rely on statistical data but offers practical reflections and conceptual insights from real-life facilitation. It shows that successful teamwork is not just about doing tasks; it is about feeling safe, being heard, and growing together.

This essay is especially useful for teachers, coaches, and group facilitators working with young people in uncertain or stressful environments. It encourages them to see team building not as a luxury but as a vital form of support, healing, and hope.

Keywords
team development, group dynamics, Tuckman model, team building, interventions, psychological safety, adaptive leadership, trauma-informed pedagogy, sport psychology, post-crisis education.



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Introduction: Rethinking team development in times of disruption

In recent years, team development in both education and sports has faced new challenges due to global instability, war-related disruptions, and the growing need for psychological resilience. Traditional approaches to team building, often based on linear or stage-based models, such as Tuckman's framework, must now be re-evaluated in light of post-crisis realities. In Ukraine, the war fundamentally reshaped educational and sports environments, revealing the importance of flexible, human-centered, and emotionally informed team processes.

Particularly in environments affected by crises, such as post-conflict Ukraine, team building offers an essential mechanism for psychological recovery, social reintegration, and community resilience. Under such conditions, group identity and shared goals become stabilizing forces for both youth and adults, especially in sports-based settings.

As organizations and institutions increasingly seek methods to promote unity, motivation, and retention among group members, team building has emerged as a multidimensional strategy. This supports interpersonal trust, shared responsibility, and a strong sense of belonging. These factors are especially crucial for preventing dropouts among athletes, promoting emotional safety, and cultivating healthy communication climates.

The purpose of this case study was to explore how team-building strategies can be effectively implemented to foster cohesion, prevent psychological disengagement, and optimize group functioning. This study analyzed real-world practices, diagnostic tools, and staged methodologies used in Ukrainian educational and sports institutions to highlight the benefits and challenges of team-based interventions.

This essay offers a reflective and practice-based exploration of stage-based team development in education and sport from 2023 to 2024. Drawing on our experience with structured interventions, we examine how group dynamics evolve across stages, such as formation, storming, norming, and performing, especially when teams face stress, uncertainty, and recovery. The aim is not to test a model, but to show how tailored, context-sensitive team-building practices can support collaboration, psychological safety, and shared goals in post-crisis conditions. Despite extensive theoretical work, there is a lack of synthesis on the application of stage-based models in post-conflict and educationally unstable conditions, particularly in Eastern Europe.

Conceptual foundations: from Tuckman to trauma-informed teamwork

Classical models of group development, such as Bruce Tuckman's "Forming-Storming-Norming-Performing" framework, have long served as a foundation for understanding how teams evolve. These linear stage-based models suggest that teams progress through predictable phases, developing cohesion, structure, and efficiency over time. Such models have been widely applied in educational and sports contexts to support collaborative learning and high-performance coaching.

However, in times of social crisis, forced displacement, or psychological trauma, these stages may unfold in unexpected or fragmented ways. The assumption that teams naturally resolve conflict and achieve productive synergy becomes unrealistic when emotional wounds, instability, and disrupted environments shape interpersonal dynamics. Recent scholarship and practice in trauma-informed education and sports psychology emphasize the need for emotional safety, inclusive participation, and sensitivity to individual and collective stress responses.

Thus, a modern understanding of team development must integrate stage-based thinking into flexible, responsive, and context-aware strategies. Rather than abandoning classical models, we propose adapting them through structured emotionally intelligent interventions that support both performance and recovery. In this light, each "stage" becomes less a step on a ladder and more space for intentional design, reflection, and relationship-building.

This model outlines the sequential phases through which a group evolves into a fully functional team with each stage marked by specific psychological and social (Figure 1).

Understanding how teams evolve over time is essential in designing effective interventions. The classic four-stage model— forming, storm, norming, and forming — offers a valuable lens through which facilitators in both educational and athletic contexts can observe, interpret, and support group development. Each stage presented unique challenges and opportunities.

- **Forming**
  At this early stage, individuals tend to operate cautiously and rely heavily on leadership for guidance. Relationships are tentative and their roles are often unclear. In educational or athletic groups, especially among adolescents, this phase may also reveal anxiety, performance pressure, or silence as defenses.

- **Storming**
  conflicts often emerge when initial boundaries are tested. Team members begin asserting opinions, forming subgroups, or challenging the leader's approach. In post-conflict or high-stress environments (e.g., in war-affected Ukrainian schools), this stage may involve resistance not just to tasks but to the emotional context of teamwork itself.

- **Norming**
  With guided facilitation, teams begin to overcome earlier disruptions. Trust begins to solidify, interaction

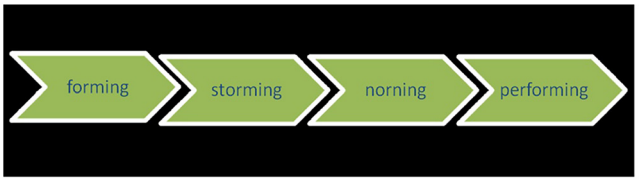

Figure 1. Stages of Team Development According to Tuckman's Model.

norms emerge, and participants develop a stronger sense of group identity. In sports settings, this might manifest as synchronized movements, shared rituals, or peer-led decision-making.

- **Performing**
  In this mature phase, the team becomes largely autonomous, self-motivated, and capable of creative problem-solving. Educators and coaches can step back, allowing participants to lead or innovate within the group. Emotional safety and accountability are typically well-established.

This model not only helps to **structure the flow of interventions** but also allows facilitators to diagnose stagnation or regression. For example, when a group appears "stuck" in the Storming phase, a targeted conflict resolution or reflective dialogue may be introduced. When applied with flexibility and contextual awareness, a stage-based framework becomes a **powerful diagnostic and design tool**.

Structured team-building interventions in education and sport

Structured team building is not a one-size-fits-all tool; it must adapt to a group's **developmental stage, emotional readiness, and social dynamics**. The theory of team evolution, particularly the well-known Tuckman model, offers both **temporal logic** and **practical scaffolding** for intervention planning. Each stage—**Forming, Storming, Norming, Performing**—poses unique emotional and communicative challenges and thus requires differentiated strategies from the leader or facilitator.

Interventions that ignore these nuances risk becoming either mechanical or counterproductive. Conversely, those **attuned to group maturity** can unlock powerful processes of cohesion, identity formation, and shared agency. The leader's role is crucial here, not as a dominant commander but as a **transitional figure** who guides, adapts, and eventually steps back Table 1.

In both education and sports, structured team-building methods can be mapped into categories based on their primary focus and mode of delivery (Table 2).

Each structured method, whether reflective, physical, or creative, is inherently adaptable to age, group size, or cultural background. For example, "mirror movement" techniques employed in aerial sports effectively cultivate mutual responsiveness and attunement, which are crucial for pair and group acrobatics. These methods emphasize embodied trust and intuitive synchronization, which are the core elements of team cohesion in performance-based environments.

Table 1. Stages of Team Development According to Tuckman's Model and the Role of the Leader.

Stage	General characteristic of the stage	Tasks	The role of the leader(coach/trainer/teacher)
Forming	The group meets for the first time Members depend on a formal leader	establishing basic rules of behaviors in the team, clarifying goals, issues giving answers to questions: What? Why? Who? How?'	the coach dominates in determining strategic and tactical goals and objectives, organizes collective discussions during team meetings, trying to explain to each team member his or her tasks, ensuring the formation of collegiality in making joint decisions
Storming	conflicts unwillingness to continue working together disbelief in your own ability to achieve the goal	team members start to get answers to their questions they need to be organized	the coach should pay the most attention to the organization of the work process. Maintaining a comfortable psychological climate, demonstrating achievements and clearly defining specific tasks
Norming	initial conflicts are solved the team achieves identity, a sense of unity and cohesion responsibility of team members	wide exchange of ideas, information, joint analysis of opinions and collective decisions on specific actions to work towards results, support and effective relationships within the team.	creating a positive team microclimate, thus eliminating the need for strict control and step-by-step recommendations, which can already interfere with determining one's own position in a common cause. involve everyone in teamwork, a coach needs to be sociable, have a sense of humor, and be able to organize feedback.
Performing	trust of all team members to each other team members are maximally committed to the common aim and show a creative approach a high level of interdependence the ability to cooperate in relationships	Problem solving The team is highly effective and can respond to any need for change in circumstances	the coach's involvement in building relationships in team is significantly reduced, while reasonable delegation of authority and stimulation of team achievements are necessary

Table 2. Mapping Practice: Typology of Team-Building Strategies.

Type of Intervention	Focus	Examples
Psychoeducational Workshops	Emotional literacy, conflict resolution	"Safe Space Circles", Emotion Cards, Values Game
Kinesthetic Games & Routines	Trust, synchrony, group rhythm	Blindfold Trust Walk, Mirror Movements
Narrative and Role-Based Tasks	Identity, empathy, role flexibility	Forum Theatre, Role Reversal Games
Creative Collaboration	Innovation, group ownership, play	Group Poster Making, Building Together Challenges

Team development is not a linear process but rather a dynamic interplay of structure, emotion, and evolving roles. As Tuckman's framework suggests, leaders must continuously recalibrate their involvement: offering direction in the forming stage, facilitating resolution during storms, nurturing ownership in Norming, and gradually stepping back during Performing (Tuckman & Jensen, 1977). This gradual withdrawal allowed team members to assume increasing levels of autonomy and responsibility.

Contemporary educational and psychological research has further expanded this view by emphasizing the relational and affective dimensions of teamwork. Edmondson (1999) and Salas *et al.* (2015) underscored the importance of psychological safety and shared mental models. The diversity of perspectives when paired with structured communication and role clarity fosters both creativity and conflict resilience (Johnson & Johnson, 2009). Moreover, open dialogue, emotional safety, and deliberate conflict-resolution mechanisms are recognized as essential conditions for sustainable collaboration, especially in educational teams operating under stress or transformation.

Thus, effective teamwork emerges not solely from task-oriented coordination but from the internal architecture of the group: trust, shared purpose, adaptive communication, and a sense of belonging. These conceptual foundations underpin the present study, which aims to implement and evaluate structured team-building interventions in Ukrainian educational and athletic contexts—settings marked by social recovery and institutional reform.

Application and reflection in Ukrainian educational and athletic contexts

The urgency to foster resilient and cohesive teams has become particularly evident in Ukraine since 2022, as educators, coaches, and young athletes have found themselves navigating the conditions of psychological uncertainty, forced relocation, and institutional fragmentation. In this context, structured team building was not a luxury; it was a psychosocial necessity. This section reflects on a series of interventions conducted between 2023 and 2024 in Ukrainian schools, universities, and sports clubs, offering insights into both challenges and breakthroughs in team formation under duress.

The design of the program was informed by Tuckman's four-stage developmental model, with each phase— forming, storm, norming, and forming —framing the structure and goals of the activities. Facilitators consciously adjusted their role according to team maturity, from directive leadership in the early stages to minimal intervention as autonomy and peer regulation emerged. The emphasis on flexible leadership and psychological safety was particularly vital given the emotional volatility among participants.

The intervention activities were intentionally sequenced. In Forming and Storming, exercises focused on emotional grounding, defining team purposes, and establishing norms for respectful communication. These included facilitated dialogues, guided breathing tasks, role mapping, and collaborative decision-making.Later, in Norming and Performing, teams engaged in open-ended simulations and creative problem-solving tasks, allowing for horizontal leadership and an emergent team identity.

To track team progress, facilitators used a tailored diagnostic tool, the Team Development Assessment Test, which evaluates dimensions such as communication, shared goals, conflict management, trust, and initiatives. Based on the test results, teams were informally categorized as high-, medium-, or low-maturity, and support was adapted accordingly. For example, low-maturity teams received shorter, more structured tasks and stronger emotional scaffolding, whereas high-maturity teams operated with greater autonomy and reflective discussion.

Facilitation itself incorporated principles from trauma-informed pedagogy and dialogical learning. Techniques included time-limited discussions, opt-in participation models, and symbolic feedback tools such as "energy meters" and color-based reflection cards. The goal was not only to create efficiency but also to foster emotional expression, group empathy, and restorative presence, which are often missing in conventional team settings.

These practices align with recent empirical findings. For instance, Bruner *et al.* (2021) underscored the role of team building in enhancing cohesion and leadership perception in youth sports. Kwon (2022) found that the impact of such programs significantly increased after two weeks, particularly among adolescents. Similarly, Hackman (2002) and Salas *et al.* (2015) argued that structured team development enhances coordination, communication, and trust, all of which are critical in post-crisis educational contexts.

Mistakes and insights from practice

No intervention unfolded, without any missteps. In fact, many of the most meaningful insights from Ukrainian team-building

programs arose not from flawless execution, but from **moments of tension, failure, or resistance**. These instances provide opportunities to recalibrate, listen more attentively, and revise assumptions about how teams evolve under pressure.

One recurring mistake was **overestimating the group's initial readiness** for open communication. In the early sessions, facilitators invited participants to share goals and feelings openly. However, in several groups, especially those with displaced youth or unfamiliar peer dynamics, this approach was met with silence, discomfort, and even sarcasm. It became clear that psychological safety must be **earned, not assumed**, and that vulnerability must be preceded by gradual trust-building through embodied or non-verbal activities.

Another challenge involves **imposing pre-structured roles too early**, especially in low-maturity teams. For example, assigning "team leaders" or rotating spokespersons sometimes creates artificial hierarchies or reinforces existing power imbalances. A more effective alternative is to allow leadership to emerge naturally during collaborative tasks, allowing influence flow from competence and group feedback rather than external designation.

There were also moments when **facilitators intervened too much**, fearing silence or ambiguity. In retrospect, these spaces were precisely where teams needed time to process, negotiate, or disagree. Resisting the urge to "fill in the gaps" with explanation becoming a discipline in itself. As one facilitator reflected, "Silence is not absence—it's space for emergence."

Perhaps the most difficult yet instructive insight was that **not all teams are ready to perform** in the same cycle. While the Tuckman model offers a valuable developmental map, real-life teams often loop back, regress, or remain in storage for longer than expected. This demanded a shift from linearity to **adaptive pedagogy**—one that tolerates emotional flux and normalizes imperfections as part of growth.

Importantly, **cultural sensitivity** has emerged as a subtle yet powerful factor. In some cases, Western facilitation styles, such as constant eye contact or enthusiastic verbal affirmations, are perceived as artificial or invasive. Local adaptations that drew on Ukrainian communication norms (indirect speech, gesture, metaphor, and silence) proved to be more effective in creating authentic rapport. According to Mezirow's theory of transformative learning (1991), discomfort and dissonance are not only expected but also necessary conditions for deeper group change.

These challenges did not disrupt or enrich the process. They revealed the nuanced human side of collective learning: fragile, uneven, yet profoundly transformative. For facilitators, the key lesson was not to perfect every step but to remain responsive, present, and humble in the face of complexity.

These grounded insights inform the concluding reflections and future pathways for structured team development in post-crisis settings.

Methodology

This study adopts a conceptual and interpretive methodology aimed at integrating existing theoretical models with practical insights from educational and athletic contexts in Ukraine. Rather than collecting new empirical data, this study synthesizes diverse sources to construct a reflective and transferable framework for team building interventions, particularly in post-crisis environments. The selection was based on its relevance to the research aims, consistency with empirical findings, and theoretical coherence.

Conceptual foundation

This study draws primarily on Tuckman's four-stage model of group development (forming, storming, norming, and forming), which remains a cornerstone of team dynamics theory (Tuckman, 1965; Tuckman & Jensen, 1977). This model provides a stage-sensitive lens for team evolution, emphasizing the interplay between task focus and interpersonal relationship.

Additionally, this research integrates principles from trauma-informed pedagogy, dialogical learning, and sports psychology, particularly regarding emotional regulation, adaptive leadership, and collective identity formation.

Analytical strategy

The research applies Qualitative document analysis (QDA) as the primary methodological tool. This involves a structured review and interpretive synthesis of the following:

- theoretical literature on group dynamics, team cohesion, and developmental psychology.
- pedagogical resources utilized in Ukrainian educational and coaching programs (e.g., session plans and diagnostic tools).
- reflective narratives and field notes from team-building interventions conducted during 2023–2024.

This strategy facilitates identification of recurring structures, adaptive challenges, and thematic patterns relevant to team development across various contexts.

Sources and materials

This study was based exclusively on previously published research, pedagogical documentation, and publicly available training materials. No personal data were collected and no direct interaction with the participants occurred. Therefore, ethical approval was not required for this study.

The analytical corpus includes:

- peer-reviewed studies in education, sports psychology, and organizational behavior (e.g., Bruner *et al.*, 2021; Hackman, 2002).
- workshop materials and methodological tools developed by Ukrainian educators and coaches,

- structured evaluation frameworks, such as the **Team Development Assessment Test (TDAT)**, which is referenced illustratively to describe common assessment criteria found in the literature. Adapted by authors from the Team Development Assessment Test (TDAT) Figure 2.

This visual diagram represents five key dimensions of team maturity. At the center is "Team Maturity," surrounded by five interrelated components that support effective group functioning:

1. **Shared Goals** – Do team members work toward a unified objective?
2. **Communication** – Is information exchanged clearly, constructively, and openly?
3. **Conflict Resolution** – How are tensions and disagreements addressed?
4. **Initiative** – Do members take ownership and actively contribute?
5. **Trust** – Is there a shared sense of psychological safety?

This framework is widely used in the evaluation of team processes, and has been adapted across pedagogical and sports-based environments to gauge team development and cohesion.

While this study does not present new empirical fieldwork or statistical measurements, its strengths lie in its synthesis and reflection. Rather than seeking generalizable truths, it offers conceptual scaffolding to understand how structured team development might operate in trauma-affected or transitional environments. The absence of numerical data is intentional and not incidental; it reflects the belief that human dynamics, especially under pressure, are best approached through layered interpretation and context-sensitive analysis.



Figure 2. Team development Assesment Test.

By combining theory, field-based materials, and practitioner insights, this study invites critical engagement rather than definitive conclusions. It acknowledges that every team is shaped by not only psychological patterns but also cultural norms, emotional landscapes, and historical disruptions. Therefore, the findings here should be seen not as fixed outcomes but as a living framework open to adaptation, refinement, and empirical testing in future studies.

Reflections

The following four thematic domains emerged from the interpretive synthesis of the theory, reflective literature, and applied practice. Together, they clarify not only how team-building interventions function in educational and athletic environments but also why they succeed or fail, particularly in transitional or post-crisis contexts. These findings do not offer statistical generalizations but provide a conceptual framework for further empirical testing and adaptation.

Validation of the stage-based team development model

Tuckman's four-stage model of group development— forming, storing, norming, and forming —remains the most frequently cited framework for understanding team dynamics (Tuckman, 1965; Tuckman & Jensen, 1977). Each stage captures a distinct psychological and functional phase: dependence and orientation towards cohesion and cooperative productivity through conflict and role negotiation. The later addition of the adjourning phase expanded its relevance to short-term or project-based teams.

The model's core value lies in its developmental logic and emphasis on the dual structure of task and relationship processes. Empirical studies support the practical validity of this framework; interventions that match a team's current developmental stage are consistently more effective than generic approaches (Bonebright, 2010; Forsyth, 2018). In education and sports, in which teams often form temporarily and under fluctuating conditions, this stage-sensitive orientation offers both clarity and flexibility.

Recent extensions of the model explore variables such as emotional intelligence (Jordan & Troth, 2004) and cultural diversity (van Knippenberg *et al.*, 2013), indicating that the framework remains robust and adaptable to a range of youth, athletic, and cross-cultural settings.

Documented outcomes of Team Development Interventions

Team Development Interventions (TDIs) are structured activities aimed at enhancing group functionality by improving processes and outcomes. A meta-analysis by McEwan *et al.* (2017)

found that TDIs significantly improve both relational dynamics (e.g., trust, cohesion, and communication) and measurable outcomes (e.g., team performance and satisfaction). Salas *et al.* (2008) identified four key components of effective TDIs: team leadership training, mutual performance monitoring, backup behavior, and adaptability.

Duration has emerged as a crucial factor. Longer iterative programs have shown stronger impacts on motivation, cohesion, and retention, especially among youth teams (Bruner *et al.*, 2013). Similarly, Klein *et al.* (2009) reported that interventions incorporating reflective practices outperformed those that were purely task oriented.

Across studies, the most effective TDIs:

- are sustained over time,
- integrate structured reflection and feedback,
- balance task objectives with relational goals,
- and are facilitated by trained, adaptive leaders.

Adaptive leadership as a developmental catalyst

Leadership plays a dynamic and stage-contingent role in team development. Hackman (2002) emphasized the importance of "situational diagnosis": leaders must assess the developmental phase of a team and adjust their behavior accordingly. In the early stages, directive leadership that provides structure and psychological safety is essential; in the later stages, leadership should become facilitative and participatory.

This approach resonates with transformational leadership theory (Bass, 1990), which promotes individualized support, shared vision, and intellectual stimulation. In athletic settings, athlete-centered coaching (Vella *et al.*, 2013) has been shown to enhance intrinsic motivation and team cohesion through a balanced leadership style that emphasizes autonomy alongside structure.

Effective stage-sensitive leadership contributes to:

- greater team adaptability,
- constructive conflict management,
- inclusive and collaborative decision-making,
- and reduced dropout caused by interpersonal breakdowns.

Psychological safety and norm clarity as structural pillars

Psychological safety, defined by Edmondson (1999) as a shared belief that the team environment allows for interpersonal risk-taking, is a foundational prerequisite for effective team functioning. Teams characterized by psychological safety are more likely to

- report difficulties or errors without fear of punishment,
- engage in feedback loops,
- raise questions or challenge norms without risking exclusion.

This is especially vital in educational and trauma-affected settings. Norm clarity, defined as the extent to which behavioral expectations are explicit and shared, has been shown to reinforce the effects of psychological safety (Lenberg & Feldt, 2018). Together, these two elements form the relational infrastructure for a successful team.

Without them, even technically well-structured interventions may fail because of emotional shutdown, confusion, or passive disengagement. However, their presence enables teams to sustain focus, navigate complexity, and maintain cohesion over time (Table 3).

Discussion

The findings of this theoretical inquiry affirm that team building is not a collection of isolated techniques but a dynamic developmental process shaped by both structured frameworks and lived realities. Integrating Tuckman's stage-based model with contemporary theories of adaptive leadership and psychologica safety offers not only a theoretical scaffold, but also a practical compass for educators and coaches operating in unpredictable or transitional contexts.

Table 3. Summary of Theoretical Results.

Core Area	Key Insight	Implication for Practice
Tuckman's model	Teams evolve in distinct stages; interventions must match the stage	Use diagnostic tools and flexible facilitation strategies
Team-building effectiveness	TDIs enhance both relational dynamics and performance	Prioritize long-term, reflective, structured team programs
Adaptive leadership	Leadership must align with developmental stage and team maturity	Train leaders in stage-aware and emotionally intelligent methods
Psychological safety & norms	These factors are foundational for learning, engagement, and trust	Establish emotionally safe environments with clearly shared norms

Reflecting on the convergence of models across organizational, educational, and athletic domains, one cannot help but notice a common thread: human groups, regardless of setting, move through cycles of uncertainty, negotiation, and cohesion. These cycles echo deeper psychological needs for clarity, shared purpose, and belonging. The stage-based paradigm, originally designed for small task groups, resonates in classrooms, sports teams, and even displaced youth collectives. Its strength lies not in prescriptive exactness but in its ability to accommodate the emotional complexity of real groups.

In practical applications, this means that effective facilitation is less about "delivering" a team-building intervention and more about attuning to where the group is developmentally. I have seen how rushing a group into a performance without laying down trust leads to withdrawal or resistance. Conversely, when facilitators honor the storming phase—not fearing its discomfort but guiding through it—the group emerges with deeper cohesion and clearer norms.

This study also foregrounds the critical role of leadership, not as static authority but as a fluid presence responsive to evolving group dynamics. Leaders in both education and sports are often trained to manage outcomes, yet the more lasting impact may come from their capacity to hold space for uncertainty, mediate conflict, and model vulnerability. When leadership is grounded in emotional intelligence and stage awareness, teams do more than function; they transform.

Most importantly, this reflection calls attention to psychological safety as an invisible architecture of all group work. Safety is not provided in environments affected by war, displacement, or systemic disruption. It must be intentionally cultivated, often beginning with the facilitator's tone, posture, and willingness to tolerate the silence. Without this, even the most innovative methods are ineffective. With this, the simplest practices—sharing names, forming circles, and creating shared rituals—can become transformative.

Of course, this inquiry is not without its limitations. Because this was a conceptual review, no statistical methods were employed. It is conceptual, not empirical. It interprets rather than measures. It builds a framework rather than a formula. Perhaps this is precisely what teams—especially those in fragile contexts—most need, not rigid scripts, but adaptable maps. Real-world application of this framework requires iterative learning, local adaptation, and humility.

Looking forward, I see the urgent need for empirical studies rooted in the Ukrainian experience. Longitudinal research can illuminate how trauma-informed, stage-sensitive team building affects student motivation, peer cohesion, or athlete retention. Equally, there is scope to explore how hybrid or virtual environments reconfigure the emotional grammar of teams: what does trust look like when mediated through a screen? These are not merely academic questions. These are the future terrains of collective resilience.

Essentially, a team differs from a group of individuals in its capacity to become more than the sum of its parts. It is not perfection that makes a team—it is process, shared struggle, and quiet moments of recognition when members begin to think in the same language, move in shared rhythm, and imagine futures together. Team building was not a method. It is a form of care.

Conclusion

This study emerged from the intersection of theory and lived education practices. It was born not from controlled experiments, but from real-world observations, reflective inquiry, and an urgent need to reimagine team dynamics under conditions of instability. The exploration of stage-based development models, leadership adaptability, and psychological safety has revealed team building not as a decorative extracurricular element but as a deeply structural and therapeutic process.

In Ukrainian educational and athletic contexts, particularly during times of social disruption, teams are not simply operational units; they become vessels for emotional containment, identity reconstruction, and shared resilience. What begins as a discussion of group roles often unfolds into the process of collective healing. In this sense, team building transcends organizational logic and enters the domain of human restoration.

Throughout this theoretical synthesis, I did not seek to prove a universal formula. Instead, I have traced conceptual pathways that practitioners and researchers can walk, sometimes cautiously, sometimes intuitively, toward creating environments where people not only cooperate but also feel seen, empowered, and safe. This, I believe, is the true measure of a team, not just productivity or cohesion, but also the willingness to remain human in one another's presence.

Future research will undoubtedly provide empirical evidence for this. However, even without large datasets, we already know — from the silent nods of a circle, the hesitant laughter of trust is slowly forming — that something essential happens when people come together with care and structure. This knowledge, although often unquantifiable, remains the beating heart of all meaningful team developments. The conclusions are intended as theoretical propositions to guide future empirical validations.

Ethics and consent

This article is a conceptual and reflective study grounded in the previously published literature and publicly accessible pedagogical resources. It also draws on the non-identifiable methodological documentation created by Ukrainian educators and coaches. No personal data were collected and no direct interactions with human participants took place. Therefore, ethical approval and written informed consent were not required.

Data availability statement

All extended data supporting the findings and theoretical discussion presented in this essay are openly available in Zenodo.

Underlying data

Zenodo: **Structured Team-Building Toolkit (HEAL Project, 2023–2025)**. https://doi.org/10.5281/zenodo.15827334 (Kostrikova, 2025).

This project contains the following underlying data:

- **Team Development Stage Test.pdf** – A structured diagnostic tool for assessing group maturity in sports and educational settings.
- **Teambuilding Algorithms.pdf**: Adaptable scenarios for designing team-building interventions based on Tuckman's and HEAL models.
- **Methods_of_implementing_psychological_and_pedagogical_principles.pdf** – applied techniques for cohesion and psychological safety.
- **The importance of team building.pdf**: Supplementary guidelines used in field testing during the HEAL Erasmus+ project (2023–2025).

Extended data

Zenedo: **Structured Team-Building Toolkit (HEAL Project, 2023–2025)**. https://doi.org/10.5281/zenodo.16363658 (Kostrikova, 2025).

This project contains the following extended data:

- **Supplementary Figure 1** – visual representation of team maturity components.
- **Supplementary Table 1** – description of team development intervention stages and related leadership roles.
- **Questionnaire.pdf** – diagnostic items for assessing team cohesion and readiness.

All data were developed and structured by the authors and were fully available for reuse with appropriate citations.

Data are available under the terms of the Creative Commons Attribution 4.0 International license (CC-BY 4.0).

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?

Katja Upadyaya
University of Helsinki, Fabianinkatu, Helsinki, Finland

This manuscript explores how structured team-building activities can help
Sports groups grow stronger in Ukraine during the war crisis. Below you can find some comments and suggestions to the authors in order to improve the cohesion and clarity of the essay.

1. Please include adequate references in the manuscript, especially when referring to previous well-established frameworks such as the Tuckman's "Forming-Storming-Norming-Performing" model and description of interventions.
2. Various terms are covered in the essay, however, they should also be explained in more detail taking into account the current context. For example, relational and affective dimensions of teamwork, psychological safety, resilience should be explained in more detail. Some examples could also be given to elaborate these terms in the current context.
1. The team facilitation and related techniques should be described in more detail to provide a deeper understanding for the readers.
2. Cultural sensitivity is an important factor in the essay, please elaborate and provide more details.
3. The used frameworks and methods/techniques should be carried along in the essay continuously – this would make the text more cohesive.
4. The importance of this essay should be emphasized more; how to support team building during the times of crisis, promote psychological safety and cohesion are highly relevant for individuals' and groups' resilience.

Is the topic of the essay discussed accurately in the context of the current literature?
Partly

Is the work clearly and cogently presented?
Partly

Is the argument persuasive and supported by appropriate evidence?

Yes

Does the essay contribute to the cultural, historical, social understanding of the field?
Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: psychology, education

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 10 September 2025

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Julien Pellet
Université Bourgogne Europe, Dijon, France

I am grateful to the editor for inviting me to review this manuscript. I approached this task with the intention of providing a thorough and constructive evaluation, in the hope that my comments may help the authors strengthen their work.
This manuscript aims to describe the implementation of a trauma-informed team-building program conducted in Ukraine during a time of crisis. It draws primarily on Tuckman's model of group development and offers reflections based on field notes and practitioner experience.
I sincerely hope that my comments will help the authors improve their work, and that the revised manuscript will meet the standards required for indexing in this journal.

General comments

1. **Document structure and formatting**
   From a practical perspective, I would have appreciated having access to a Word document or at least a version with numbered lines. The current format makes the review process more complex and time-consuming.
2. **Clarification of the study's aim and qualitative nature**
   I would recommend that the authors clarify the main aim of the manuscript. Additionally, I believe it would be helpful to clearly state that the study adopts a qualitative approach, and to specify how this approach is implemented. This would allow readers to engage more critically with the work and better understand its scientific value.
3. **Clarification of the target audience and setting**
   It would also be beneficial to define more precisely the context in which the study is situated. As I understand it, the current manuscript does not make it sufficiently clear whether it focuses on high-performance sport, amateur sport, school-based physical

activity, or another setting. This lack of clarity may limit the practical relevance of the work for its intended audience.

4. **Need for references to support scientific claims**
   Throughout the manuscript, I would recommend supporting all claims—especially those that reference theoretical models or prior findings—with appropriate scientific sources. Doing so would strengthen the manuscript and make it easier for readers to verify and contextualize the arguments presented.
5. **Critical discussion of team-building models**
   As I understand it, the manuscript positions itself as a critique of traditional team-building models. However, I do not perceive the current formulation of this critique as particularly convincing. Instead, the most valuable contribution of the article appears to be the **adaptation** of existing models to the specific Ukrainian context, rather than their rejection or fundamental reassessment. I would therefore suggest reorienting the argument toward the originality and relevance of this context-specific adaptation. Furthermore, I find an inconsistency between the way team-building models are challenged in the introduction and how they are presented in the theoretical framework. It would strengthen the manuscript to address this contradiction.
6. **Need for detailed contextualization of the Ukrainian setting**
   I would strongly encourage the authors to provide a more detailed description of the Ukrainian context in which the study takes place. As the authors rightly suggest, the meaning and relevance of interventions in times of crisis are deeply dependent on context. In this case, that context is likely to evolve in the coming years and may already be unfamiliar to many international readers, whose understanding of Ukraine may be filtered through national media. I believe this contextualization is essential, particularly in light of the qualitative nature of the work and its stated goals.
7. **Use of bold text**
   I would recommend removing all instances of bold text in the manuscript. In academic writing, this formatting may be interpreted as an attempt to emphasize ideas rather than to support them with evidence, and it may detract from the perceived scientific rigor of the work.
8. **Opacity of the methodology**
   Finally, I do not feel that the current version of the manuscript provides sufficient methodological transparency. As a result, I find it difficult to evaluate the trustworthiness of the findings or the robustness of the analytic process. I would suggest that the authors expand and clarify the methodological section in order to make the study's procedures and rationale more accessible to readers.

Point by point comments
Introduction
p. 4, §1

- I understand that the war context may challenge traditional approaches to team building. However, the first five paragraphs of the manuscript do not provide a clear rationale or explanation as to *how* or *why* this is the case. I would recommend that the authors clarify how the war context disrupts or reshapes established models.
- Following this, I do not perceive that the final sentence of the paragraph responds to a clearly stated problem. I believe the manuscript would be strengthened by articulating more explicitly *why* new ways of conceptualizing or supporting team processes are necessary in this particular context.

Sentence 1
- I would recommend that the authors support the claims made in the first sentence with appropriate scientific references.

Sentence 2
- I suggest providing references that support the claim regarding the linearity of stage-based models.
- A citation of Tuckman's foundational work would also be appropriate and expected here.

p. 4, §2
Sentence 1
- Please consider providing scientific evidence to substantiate the claims made in this sentence.

Sentence 2
- I would encourage the authors to either offer supporting references or explain the rationale behind the claim, in order to help the reader better understand its basis.

p. 4, §3
Sentences 1, 2, and 3
- I would recommend that the authors provide scientific references for each of the claims made in these opening sentences. Doing so would add credibility and allow the reader to engage more deeply with the argument.

p. 5, §4 and §5
- At this stage, I find the aim of the study somewhat unclear. As a reader, I am unsure whether the authors seek to:
    1. Test the effectiveness of their implementation strategy in a war context;
    2. Re-examine the applicability of Tuckman's stages in crisis-affected environments;
    3. Evaluate the role of team-building techniques in helping teams recover from war-related experiences;
    4. Or provide general guidelines for implementing trauma-informed team-building approaches during or after crisis.

I would recommend clarifying the study's aims, separating them from its methods and expected outcomes, so that the contribution becomes more readily apparent.
- Although I am not a specialist in war or military studies, I believe it would be helpful for the authors to define what is meant by "crisis" and/or "post-crisis" in this manuscript. These distinctions may influence the interpretation and application of the work and should be explained for clarity.

Conceptual foundations: From Tuckman to trauma-informed teamwork
p. 4, §6
Sentence 1
- As mentioned earlier, I would recommend citing Tuckman's original work to ground this section in the established literature.

Last sentence
- The claim made in the final sentence would benefit from a scientific reference to support its validity.

p. 4, §7
Sentence 2
- From my understanding of Tuckman's model, not all teams successfully move through the proposed stages. Some disband during the "storming" phase, while others remain stuck and fail to reach the "performing" stage. I would recommend that the authors nuance this part of the manuscript by acknowledging that these stages are not always resolved, and that the war context may introduce additional psychological constraints that create further difficulties or lead to alternative group dynamics.

Last sentence
- Following my previous comment, I would recommend bridging the nuance here and clarifying how the war context may influence group progression differently.
- As elsewhere, I would also suggest supporting the claim with relevant scientific references.

p. 4, §8
- The current formulation seems to imply that existing team-building literature promotes a rigid, one-size-fits-all application of concepts. However, many sources in the literature emphasize the importance of adaptation to context and the central role of practitioners in tailoring interventions for each unique team. I would therefore recommend reframing the critique: rather than portraying the literature as rigid, the authors could highlight how their context (e.g., the Ukrainian post-crisis setting) has been underexplored and thus requires tailored approaches grounded in trauma-informed principles.
- At this stage in the manuscript, I also perceive a gap: there does not appear to be a clear and explicit justification for integrating trauma-management dimensions into team support strategies. Although this idea is implicitly present throughout the manuscript, I would recommend making it more explicit, perhaps by referencing recent literature on trauma and group functioning.

p. 4, §9–10
- Once again, I would strongly suggest that the authors support each section of the model with scientific references. Doing so from the outset would allow readers to critically evaluate the interpretation of Tuckman's stages and help advance the scholarly conversation.

Forming
- I would recommend adding references to support the additional claims made, especially those relating to educational and athletic settings.

Storming
- On what empirical evidence or observation is the idea based that emotional resistance is inherent in the teamwork process itself? Certain readers may want to explore this further in their own research, and references would offer direction.

Norming
- As with the previous stages, references would enhance the credibility of the claims presented here.

Performing
- Claims about performance also require evidential support. For example, research by Bruner et al. 2017 has shown that some teams may appear to have reached the performing stage, yet still lack emotional safety. Similarly, other studies have demonstrated that teams can perform well despite exhibiting hierarchical structures or toxic intra-team dynamics (e.g., cohesion chapter in Cox, 2005). I believe integrating such examples would add important nuance.

Structured team-building interventions in education and sport
p.5, §4
Sentence 1
- I would recommend providing a scientific reference to support the claim made in this sentence.

Sentence 2
- I suggest either referencing a relevant source regarding the theory of group development or modifying the sentence. As I understand it, Tuckman's model is not typically framed as a formal theory in the literature.

Sentence 3
- I would recommend removing the term *"the leader"* and retaining *"facilitators"* instead. From my perspective, this term better reflects the type of group processes generally described in recent leadership literature. In fact, the person formally in charge of guiding the group is not necessarily the one recognized as a leader (see, for instance, the work of Fransen, Haslam, and Boen on shared and informal leadership).

p.5, §5
- I would encourage the authors to support the claims made in this paragraph with scientific references.

p.5, §§6–7
- I would respectfully note that the content of this paragraph appears to contrast with the implicit statements made earlier in the introduction regarding the perceived rigidity of team-building models. I would suggest revisiting the introduction and introducing greater nuance, so that the argument remains consistent throughout the manuscript.
- As elsewhere, I would recommend supporting the claims with appropriate scientific references.

Tables 1 & 2
- I would recommend providing scientific references to support the claims made in these tables.

p.6, §1
Last sentence
- A minor correction: I believe *"allows"* would be more appropriate than *"allowed"* here.

p.6, §2
Last sentence
- I would suggest providing scientific references to support the claim presented in the final sentence of this paragraph.

p.6, §3
First sentence
- I would recommend supporting the claim with scientific evidence.

Application and reflection in Ukrainian educational and athletic contexts
General comment on the section

- As I understand it, this section was expected to describe the Ukrainian context in which the study was conducted. However, it currently seems to focus more on the way the intervention was implemented than on the broader socio-political or psychological context. I would respectfully suggest moving the content from the section title down to the subheading *"Mistakes and insights from practice"* into the Methodology section instead, as it appears to be more related to procedures than to contextual framing.

p.6, §4

- I would encourage the authors to pay attention to verb tense consistency throughout the manuscript. At times, the text is written in the present tense—as if describing general truths—and at other times in the past tense, as if the crisis has already ended. While I recognize that this is addressed in some parts of the paper, I believe it would benefit from being clarified more explicitly, in line with my earlier comments.

p.6, §5

- Recent and semi-recent literature includes a number of team-building techniques grounded in cohesion theory (e.g., Carron), as well as more recent developments based on social identity theory. However, these alternative frameworks are not discussed in the current manuscript. I would suggest clarifying why the authors chose to base their intervention on Tuckman's model rather than on other existing frameworks.

p.6, §6

- There appears to be a missing space between *"."* and *"L"* at the beginning of a sentence.
- Since this paragraph contains content related to methodology, I would appreciate a clearer explanation of why the specific activities were selected to correspond to each of Tuckman's stages. More specifically, I would be interested in understanding how a guided breathing exercise supports emotional grounding, helps define team purposes, and contributes to establishing norms for respectful communication. I would not mind if these justifications were included in an annex (e.g., with a short description, a rationale, and the associated Tuckman stage).

p.6, §7

- I would recommend providing scientific references to support the use of the tool described here. After conducting a search on Google Scholar, I was unable to find a publication that allows me to assess the reliability of this tool. As a result, it is difficult to determine how the tool functions or whether it offers a coherent framework for team development.

p.6, §8

- **I would recommend including references to support both the claims and the theoretical/methodological frameworks described in this paragraph.**

p.6, §10

- I find it somewhat inconsistent to cite Bruner et al. (2021) in support of increased cohesion, while the intervention presented does not appear to be grounded in any theoretical framework aimed at fostering cohesion—such as Carron et al.'s work, for instance (see for example Martin et al., 2009). I do not find this reference particularly convincing in this

context.
- Regarding the reference to Kwon (2022), it is unclear to me what the claimed impact refers to—impact of what, on what? I would recommend clarifying this point.
- I would also suggest adding references to support the idea that coordination, communication, and trust are critical components in post-crisis educational settings. Additionally, it remains unclear whether the intervention is designed for amateur sports teams or for school-based athletic groups, which are quite different contexts. Clarifying this distinction would help strengthen the relevance of the work.

Mistakes and insights from practice
- As I understand it, this section primarily presents a reflective account of how the intervention was implemented. From my perspective, it would be more appropriate to place this content in the Results section—or perhaps in the Discussion—depending on how the authors choose to structure their reflective analysis. I do not believe this type of content belongs in the Introduction.
- In addition, I would recommend that the authors allocate more space to the specificities of the Ukrainian context, especially those related to the war (e.g., readiness, cultural characteristics). This would, in my opinion, add greater value than general reflections that could apply to almost any context.

Methodology
p.7, §9
- It is unclear to me whether this manuscript presents an empirical study, a reflective essay, or a field-based intervention report. If this is indeed a qualitative study, I would recommend that the authors explicitly state the epistemological and ontological positioning of their work (see Herbison et al., 2022; Tamminen & Poucher, 2020). In that case, it would also be necessary to describe the context in detail and ensure transparency regarding the researchers' roles and the individuals who contributed to the process.
- If the manuscript is better understood as a reflective essay, then this should be clearly stated. In that case, the expectations in terms of methodological rigor would be different, and the manuscript should not be presented as if it adhered to formal methodological standards typically expected in empirical research.

Conceptual Foundation
p.7, §11
- I would recommend including references to support the theoretical influences claimed by the authors in this section. Moreover, I believe it would be helpful to briefly justify the use of these particular theoretical frameworks. At this stage of the manuscript, I understand the relevance of integrating trauma-related concepts, but the rationale behind the inclusion of the other frameworks remains unclear.

Analytical Strategy
p.7, §12
- I would recommend that the authors provide scientific references for the tool they describe as "QDA". In addition, I would appreciate a brief explanation of how this tool differs from others, to help readers understand why it was chosen.

p.7, §16

- I strongly suggest that the authors clearly position their qualitative analysis within an established and named methodology from the literature. Doing so helps readers understand how data were processed and interpreted. In my view, as long as the epistemological, ontological, and contextual coherence of the approach is preserved, a wide range of qualitative strategies can be used—but they need to be explicitly named and justified to ensure transparency and scientific clarity.

Sources and Materials
p.7, §17

- I am not entirely convinced by the assertion that "reflective narratives and field notes from team-building interventions conducted during 2023–2024" do not constitute personal or sensitive data. In my view, notes taken by individuals often contain implicit, subjective, or personal information. At the very least, I would expect that consent was obtained from the individuals whose reflections or notes were used. Additionally, I did not find any indication of whether these notes are accessible or available for consultation.

p.7, §19

- The claim that three different strands of literature were included in the analysis is, to me, somewhat confusing. The introduction includes very few references, does not clearly articulate the added value of engaging with three bodies of literature, and these perspectives are not clearly reflected in the analytical or reflective sections of the manuscript. I believe this claim would be more convincing if the authors developed a logical and well-referenced discussion of recent theoretical advances in relation to the study's aim.

p.7, §20

- I would recommend that the authors provide more information on how and why the tools mentioned were developed by Ukrainian educators and coaches. This would help readers assess their relevance, originality, and possible limitations.

p.8, §1

- The TDAT tool should be referenced appropriately in order for readers to assess its reliability. If the tool was developed specifically as part of this study, then a clear and well-structured rationale should be provided to support its scientific relevance. Based on the current description, it appears to resemble a field follow-up tool more than an instrument designed to evaluate group dynamics with documented evidence of validity.

p.8, §§2–7

- I am not sure that Figure 2 adds substantial value beyond what is already stated in the text. I would recommend placing this figure in an annex instead.
- Regarding the following sentence: *"This framework is widely used in the evaluation of team processes, and has been adapted across pedagogical and sports-based environments to gauge team development and cohesion."* – I am unable to assess the reliability of the tool based on the information provided. As this sentence does not include references, it cannot be taken as evidence. I would suggest including references to studies that have used the tool in such contexts, and that describe its adaptation for evaluating team processes and cohesion.

p.8, §8
Sentence 3

- As I understand it, this argument may constitute a straw man. It seems to me that the distinction between tools and aims is not clearly maintained. Quantitative data do not inherently preclude layered interpretation or context-sensitive analysis. They are simply tools which, if used thoughtfully, can provide real depth to the understanding of human interactions in specific environments. Conversely, poorly used tools—whether qualitative or quantitative—are unlikely to yield meaningful insights. I would recommend reconsidering the framing of this argument.

p.8, §10

- In light of earlier statements made in the manuscript, this paragraph appears unnecessary. More broadly, I note that no formal methodology is described regarding how data were analyzed to support the reflections presented.
- Without clear data and without methodological transparency, it becomes very difficult for readers to assess the quality of the work or to understand how the authors' context, positioning, and data are connected. Unlike in quantitative research, qualitative inquiry requires maximum transparency regarding procedures and interpretive logic. At its current stage, the manuscript does not provide sufficient information to make such an assessment. I am not claiming that the work lacks rigor, but I do believe that, as it stands, the manuscript does not provide evidence that would demonstrate its rigor to readers.

Reflections

- In my view, the most valuable contribution of this manuscript lies in its attempt to adapt established team development methods to a war or pre-crisis context—a topic that I find both original and important. However, this section does not seem to reflect that contribution. It consists mainly of a brief overview of the literature, with little or no indication of how the cited sources contributed to the authors' reflections.
- I would recommend shifting the focus: rather than revisiting whether Tuckman's model or leadership theories are useful in general, the authors could emphasize what the data and field experience reveal about team functioning and development in post-crisis or wartime Ukrainian contexts.
- In my opinion, this entire section would be better positioned in the Introduction, as it provides background rather than interpretive synthesis.

p.8, §11
Sentence 1

- I would suggest that the authors be careful with their terminology when describing the methodology. For instance, the use of the word *"thematic"* could be interpreted as referring to Braun and Clarke's thematic analysis framework, which may or may not correspond to the authors' intended approach.

Validation of the stage-based team development model

- I would respectfully suggest that the term *"validation"* may be inappropriate in this context. Tuckman's model is already widely recognized and accepted in both academic literature and applied sport interventions. As such, claiming that the model is "validated" through a non-transparent synthesis of the literature seems problematic.
- In my opinion, the three paragraphs currently under this heading do not add new insight and could be omitted. If the content is retained, it might be better integrated into the Introduction as part of the theoretical background.

Documented outcomes of Team Development Interventions
p.8, §15

- I would recommend that the authors adopt a consistent terminology when referring to the improvement of group dynamics. Terms such as *team-building* and *team development intervention* may carry distinct conceptual and practical implications, and it would strengthen the manuscript to select one term and apply it consistently throughout the text.
- More broadly, I find it difficult to identify the added value of this section. As I understand it, similar analyses have already been conducted and published in previous papers. I would suggest clarifying what this particular contribution adds to the existing literature.

Adaptive leadership as a developmental catalyst

- In my view, similar concerns apply to this section as to the previous one. The discussion on leadership does not appear to offer novel insights compared to what has already been developed in the literature (see Steffens et al., 2020). I would also suggest integrating more recent references to ensure that the discussion remains current and grounded in the latest research developments.

Discussion
p.9, §21

- The claims presented in this paragraph do not appear to be directly supported by either the reflection section or by the data and methodology described earlier in the manuscript.
- More broadly, I do not perceive that the discussion includes clear processes of comparison, theoretical questioning, or in-depth analysis of how the team development processes were adapted to a crisis context. To me, this section reads more like a repetition or summary of earlier content, rather than a genuine discussion of implications, limitations, or directions for future work.

Thank you again for the opportunity to review this manuscript. I wish the authors the best of luck with the revision process.

Is the topic of the essay discussed accurately in the context of the current literature?
No

Is the work clearly and cogently presented?
No

Is the argument persuasive and supported by appropriate evidence?
No

Does the essay contribute to the cultural, historical, social understanding of the field?
No

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: My areas of expertise include group dynamics in sport, qualitative methodologies, and the study of emotions.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to state that I do not consider it to be of an acceptable scientific standard, for reasons outlined above.