

Are Team Building Interventions Still Relevant?

Luqman Tifa Perwira ¹

¹Fakultas Psikologi,
Universitas Ahmad Dahlan, Yogyakarta
Email: luqman.perwira@psy.uad.ac.id

I Gde Dhika Widarnandana ²

²Program Studi Psikologi,
Universitas Dhyana Pura, Bali
Email: gdedhika@undhirabali.ac.id

Correspondence:

Luqman Tifa Perwira

Fakultas Psikologi, Universitas Ahmad Dahlan, Yogyakarta
Email: luqman.perwira@psy.uad.ac.id

Abstract

Team building intervention is one form of intervention that is very popular in the world of organizational development practice. But unfortunately, empirically reported results often show inconsistency. This is because team building does not yet have a widely agreed theoretical construct. The inconsistency of the theoretical constructs that underlie the preparation of the modules used makes it difficult for researchers to evaluate the effectiveness of this intervention. This article attempts to offer a theoretical study of the formulation of team building and team training based on previously written articles. The formulation of the development intervention team described in this article is expected to be the theoretical basis for team development interventions in the next practical realm so that they can be more accountable in terms of concepts and methods to be able to provide more consistent results. Furthermore, it is necessary to prove empirically whether this formulation can be proven to improve various components of the team effectiveness indicators in field studies.

Keyword: Team Building, Team Training, Teamwork, Task Work, Training.

Abstrak

Intervensi team building merupakan salah satu bentuk intervensi yang sangat populer dalam dunia praktek pengembangan organisasi. Namun sayangnya, secara empiris hasil yang dilaporkan kerap menunjukkan ketidakkonsistenan. Hal tersebut disebabkan team building belum memiliki konstruk teoritik yang disepakati secara meluas. Ketidakkonsistenan konstruk teoritik yang melandasi penyusunan modul yang digunakan menyebabkan sulit bagi peneliti untuk mengevaluasi efektivitas intervensi ini. Artikel ini berusaha untuk menawarkan studi teoritis mengenai rumusan team building dan team training yang didasarkan pada artikel-artikel yang telah dituliskan sebelumnya. Rumusan team development intervention yang dipaparkan dalam artikel ini diharapkan dapat menjadi dasar teoritik bagi intervensi-intervensi pengembangan tim di ranah praktis berikutnya agar dapat lebih dipertanggungjawabkan secara konsep maupun metode sehingga mampu memberikan hasil yang lebih konsisten. Selanjutnya, perlu pembuktian secara empiris apakah rumusan ini dapat terbukti meningkatkan berbagai komponen indikator efektivitas tim dalam studi lapangan.

Kata Kunci: Team Building, Team Training, Teamwork, Task Work, Training.

Copyright (c) Psikostudia: Jurnal Psikologi

Received 09/09/2022

Revised 28/09/2022

Accepted 17/10/2022



BACKGROUND

Organizations' dependence on effective work teams increases with the uncertainty and rapid changes in the business environment (Johnson et al., 2021; Salas et al., 2015; Santos et al., 2021). As a result, interventions aimed at improving work-team effectiveness are gaining more attention from organizational practitioners. *Team building has become an increasingly popular form of intervention used in Industrial and Organizational Psychology (PIO)* (Traylor, 2021; Kozlowski, 2018;). Although it is commonly used to build group cohesiveness (Beauchamp et al., 2017; Sidiq & Abdullah, 2022) many internal and external organizational development practitioners use team-building interventions to solve various other organizational concerns at the group level. The concerns include issues ranging from the relationship between individuals in the team, formation of new team solidity, to adjustment of new roles in the team (Cummings & Worley, 2014).

Unfortunately, the popularity of this intervention is not supported by consistent results from research reports, both regarding the effectiveness of its influence on team performance and the consistency of the theoretical constructs used to develop the interventions. Buller & Dyer (1986) has stated since more than three decades, inconsistencies in the team-building intervention results were due to the need for more clarity in the conceptualization of team-building interventions. *Team building can be interpreted following each organizational development practitioner or psychology researcher who conducts field studies.* Based on the reported articles, there has yet to be a specific agreement on a team-building construct for practitioners, resulting in different methods

and forms of team-building interventions in the field. Unfortunately, inconsistent theoretical constructs are still used to develop interventions to this day.

For example, Birx et al. (2011) used a retreat method or outdoor activity as a form of team-building intervention. Activities are carried out as problem-solving games and group challenges. Similarly, Ginting et al. (2020) chose a series of outdoor game activities as a medium for team-building interventions. Unfortunately, the theoretical basis for the formulation of activities of these two studies was not reported. Team-building interventions have also been reported in studies in the educational setting. Marasi (2019) reported implementing a team-building process built through an interactive learning process between teachers, students, and classmates. On the other hand, Spink & Carron (2016) provided an intervention for college students implemented through routine sports activities conducted in 13 meetings. Other researchers use a variety of indoor games, such as puzzles, hula hoops, and tracing, for student team-building activities (Smallwood & Allen, 2020).

Team-building interventions are also prevalent in the fields of sports. Unfortunately, unclear theoretical constructs result in a very diverse operationalization of intervention. One example is two studies by Paradis & Martin (2012) and Saavedra (2013), which reported different intervention methods for sports teams. Paradis and Martin used a goal-setting approach for team building, while Saavedra used group problem-solving activities. Along with the development of technology and virtual teams, numerous researchers are exploring the uses of virtual games as a mode for team-building (Ellis et al., 2008; Keith et al., 2018; & Martín-Hernández et al., 2021). Other

studies have reported team-building methods such as self-disclosure and mutual sharing (Holt & Dunn, 2006).

Team-building interventions are also popular in the context of the health services field. Researchers in the field of health services have attempted to explore strategies to build effective work units in a hospital environment (Burtscher & Manser, 2012). Miller et al. (2018) summarized fourteen team-building intervention modules often used in the health field. Even in the same team-building modules, such as the teamSTEPSS module, presentation strategies have many significant differences (Aldawood et al., 2020; Gaston et al., 2016; Roman et al., 2016).

In addition to variations in the methods, the theoretical construct practitioners or researchers use in designing team-building interventions differs. Some researchers use the group formation theory formulated by Tuckman (Thomas et al., 2008). While many other researchers use theoretical framework of Carron & Spink (1993), as stated in many journals in the context of team sports setting (Bruner & Spink, 2011; Bruner & Spink, 2010; Paradis & Martin, 2012). Other studies use the concept of team-building problem-solving formulated by Buller (1986) as stated in a study by Bell & Buller (1986) and (Bartlett et al., 1999).

The absence of an agreed construct is one of the reasons for inconsistent results in studies on group intervention via team-building. Mathieu (2008) states in his meta-analysis of hundreds of studies on team training that it is necessary to formulate a conceptual agreement on team training, which needs to be studied empirically. This paper attempts to contribute to the conceptual formulation so that practitioners and researchers can consistently use the formulation of the theoretical construct of team intervention.

RESEARCH METHOD

This study utilizes a literature review approach, where the researcher collects references from various books, journals, and publications related to the research topic, to produce an article on that particular topic (Marzali, 2016). In this case, the researcher is exploring literature with relevant topics related to team-building.

Articles studied in this recent paper were collected from various journal databases with keywords: *team building*, *team training*, *team intervention*, & *team effectiveness*. Some articles that contain definitions and main features of a team and training blueprints were selected to be analysed, as summarized in table 1.

Tabel 1 Team Building/ team Training Studies

Artikel	Main findings
(Rapp et al., 2021)	Main feature of teams
(Buller, 1986)	Team building intervention design
(Salas et al., 2008)	Team training effectiveness
(Salas et al., 2007)	Team training strategies
(Shuffler et al., 2011)	Main difference between team training and team building
(Salas, 2015)	Key elements of team training
(Klein et al., 2009)	Team building effectiveness
(Benishek & Lazzara, 2019)	Change on team studies strategy
(Driskell et al., 2018)	Team development intervention
(Salas et al., 2014)	Improving teamwork practical guide

RESULT AND DISCUSSION

Team Definition Result

A team is an interdependent group of individuals who work with clear boundaries and share the goal of carrying out the tasks given by an organization (Rico et al., 2011). Meanwhile, a leading researcher on teamwork and team performance, Eduardo Salas, defines a team as "*a distinguishable set of two or more people who interact dynamically, interdependently, and adaptively toward a common and valued goal/objective/mission*" (Salas, 2015). The interdependence between group members is a crucial aspect of a team because it indicates the effectiveness of team performance (Mathieu et al., 2008).

A team's performance is measured by how effectively a team produces products or services needed by the organization per the purpose of the team (Salas et al., 2008). Besides the output, several indicators can be observed to gauge how effective the team is, such as communication, decision-making processes, and conflict management. These aspects can also be used to determine how effectively the team works. (Benishek & Lazzara, 2019; Salas, 2015).

Several components affect the characteristics of a team, including 1. Membership refers to whether the team

members are a relatively permanent team or a team formed for a particular task (ad hoc). 2. *Interdependence* refers to how closely related the task of one group member is to another. The higher the connectedness between tasks, the higher the group's interdependence level. On the other hand, if each team member is more likely to complete their work independently, the interdependence level will be lower. This aspect significantly influences the group dynamic and social process within a team. 3. *Shared Responsibilities*, The more aware the team is of the team's purpose, the more likely behavior, and performances align with the team's goal, thus making the team work more effectively. 4. *Team dynamics* refers to how teams interact within their task environment. This aspect includes communication, problem-solving, and conflict resolution (Benishek & Lazzara, 2019; Lacerenza et al., 2018; Salas et al., 2008).

Taskwork and Teamwork

In addition to understanding the framework of an effective team, in order to understand the form of intervention that can be given to a work team, it is essential to know the concept of teamwork and task work. Salas (2015) distinguishes these two concepts in discussing teams. Taskwork is technical tasks

related to team functions. For example, in a work team on a submarine, taskwork refers to the team's ability to carry out technical tasks to operate the equipment on board. Meanwhile, teamwork includes nontechnical team functions such as communication, decision-making, and nontechnical problem-solving (Benishek & Lazzara, 2019). Another scholar, Marks (Bragg et al., 2021), defines *taskwork* as what the team does, while teamwork is how the team completes the task.

Among the forms of taskwork is the ability to monitor the work of other members, share roles, adapt in unexpected situations, and correct and back up technical errors of other team members. These components in the team are essential to support the effectiveness of teamwork because, in the end, the team will be measured based on the produced output. On the other hand, teamwork includes interpersonal skills, attitude toward the team, collaboration in problem-solving, and communication (Salas, 2015). Understanding these two concepts' differences is vital when considering and structuring forms of team intervention.

In the inputting and outputting framework process, (Mathieu et al., 2008) suggests that *teamwork* and *taskwork* concept can be utilized to simplify the components of a team. *Taskwork* refers to the component of the team, such as task structure, clarity, and the members' ability and understanding of the task. On the other hand, *teamwork* refers to the relationship between members, interaction, group norms, and team functioning. Regarding output, when using the effective team framework mentioned previously, the concepts of task work and teamwork can be used to see the output component in a group. Taskwork describes the team's objective

performance to complete tasks and achieve group targets. On the other hand, teamwork is observed in the form of member happiness, group member satisfaction, and other affective reactions from group members.

Team Building Intervention Vs. Team Training

The intervention process is an advanced stage of the assessment process carried out by organization practitioners. Understanding the differences between task work and teamwork in a team based on the team diagnosis will influence the intervention design process. Teams that experience difficulties in the teamwork aspect should get an element of team intervention that is more dominant than the task aspect of task mastery. On the other hand, teams with a more dominant technical work/task work challenge must receive interventions to develop their members' task ability. Further explanation will be given in the following paragraphs.

Two primary forms of work team intervention (team building and training) are the most common interventions used in team development. These two forms of intervention are often used interchangeably in mention, even though they are conceptually fundamentally different. Team training refers to training focused on improving the team's competence in completing its task. Meanwhile, team building is an intervention that targets the team's ability to carry out teamwork, including interaction, communication, and trust between members (Lacerenza et al., 2018; Shuffler et al., 2011).

Team training is an intervention designed to improve team competence. Team training can be aimed at improving better team decisions, performing under high pressure, and reducing the number of errors (Salas et al.,

2008). There are several forms of team training strategies. Several team training strategies include cross-training, adaptation training, and team coordination training. (Salas et al., 2007). Some of these strategies aim to improve the team's ability to carry out its operational task.

Team building is a form of training that addresses team dynamics or teamwork. The main components of this training contain interpersonal relationships between members, goal setting, clarity of tasks and roles, and communication. A typical form of team building exercises includes observing the social interaction within the team as a basis to improve team performance; Beauchamp et al., 2017).

The team-building practices practitioners have used often differ from the team-building concept reported in studies. The most prominent definition of team building was proposed by Dyer (2007). In the article, *team building* was defined as group training to solve problems within the team. Salas (2015) states that work team training is broader than solving problems. Team training can also be used to improve team performance before problems arise. Salas introduces at least three approaches that can be used in team training: coordination, cross, and self-guided correction training (Landy & Conte, 2013). However, based on the concepts of task work and teamwork described previously, none of these three types of team training focuses on overcoming interpersonal problems. At the same time, the problems groups face generally consist of task work and include problems related to group dynamics (teamwork).

Team Development Intervention

In practice, team building and team training are often used simultaneously because

the difficulties faced by groups in the field generally do not come from just one aspect. Looking at the practices in this field, Lacarenza et al. (2018) classified two types of interventions under one umbrella group intervention in the form of team development intervention, along with two other forms of intervention, namely leadership training and team debriefing.

This classification is a conceptual solution to the misuse of components in interventions that are not in line with the problems faced by the group. However, dividing team training into four types of interventions based on the leaders' presence or absence and Adhoc or intact group type was deemed impractical. In practice, both intact and Adhoc groups face similar problems, taskwork or teamwork problems. Therefore, the division of group training types by Shuffler et al. Shuffler et al., (2011) becomes easier to understand and practical in application. Shuffler et al. (2011) formulated the concept of Team Development Training, which consists of two types of training strategies according to the target: team training, which targets taskwork, and team building, which targets teamwork. Based on the formulation of Shuffler et al. (2011), the team-building strategy is appropriate to target goal-setting goals, interpersonal relationships, role clarification, and problem-solving. In contrast, the team training strategy emphasizes team-based knowledge, decision-making, self-correction, and cross-training.

The formulation of these two types of training into the development intervention team is crucial information that can be used as a conceptual basis for practitioners to formulate intervention designs for targeted organizations or groups. This concept is also in

line with the taskwork and teamwork concept described previously. Practitioners can formulate intervention designs according to the client's needs. Suppose the problems faced by the group include problems with team member relationships, communication patterns, and team cohesiveness. In this case, practitioners can develop a team training design with activity components that targets teamwork, i.e., team building. Meanwhile, suppose the results of the diagnosis indicate that the concern of team effectiveness is in task performance or the ability of team members to complete work. In that case, the concept of team training can be the basis for the formulation of training interventions that will be given.

Suppose the problems faced by the group are problems that originate from two aspects of the team, namely taskwork and teamwork. In that case, practitioners can use both formulations in the concept of Team

Development Intervention, which targets both aspects of the team. The intensity of each aspect can be adjusted to the degree of problems experienced by the group. Assuming the group problems are dominated by relationships, group dynamics, or communication and less about the maturity of members' tasks. The composition of interventions in the Team Development program design can adjust to these needs by increasing the portion of activities that target teamwork rather than taskwork.

Practitioners can also search for the most suitable reference regarding team-building strategy activity or training according to the team's needs. Researchers can find references to forms of activity based on previous studies that have been proven effective interventions for the targeted aspects. Exploring references is necessary to carry out deep-rooted interventions with a scientific basis.

Table 1 Component and Strategy of Team Development Intervention *

Team Development Intervention	
Team Building/ Team Work	Team Training/ Task work
- Interpersonal relation	- Performance issue diagnosis
- Role clarity	- Job knowledge and skill sharing
- Problem-solving	- Task communication and coordination
- Goal Setting	- Mastery of group assignment

*) Adapted from Shuffler et al. (2011)

With this formulation, practitioners can develop an intervention blueprint according to the needs of the field but still maintain the theoretical construct of the designed intervention. In the long term, it will be beneficial for scientists and practitioners to ensure that the intervention steps are supported by empirical evidence in the field. Consistency in the theoretical construct will

enable a more grounded development of methods and techniques of intervention.

Forms of activities

Researchers and practitioners can develop training intervention designs and activities by operationalizing aspects or components in team training and building. Scholar Salas has previously provided signs for the forms of activities in team training that can

be carried out, which include: *information presentation, demonstration, practice, and feedback* (Salas, 2015). Meanwhile, Lacerenza compiles various activities in the team training program in the form of videos, discussions, and module submissions (Lacerenza et al., 2018). Salas (2015) emphasizes that regardless of the form, the activity must build the engagement and motivation of the participants.

Regarding team building, the form of activities that can be carried out is extensive, ranging from games and outdoor adventures to a series of exercises activity (Klein et al., 2009). Lacerenza et al. (2018) used regular meetings, discussions, and exercises to analyze team issues. In the field of their experiment study, Bell & Buller (1986) also used regular meetings, discussions, and exercises to analyze team issues.

Based on a series of summaries of the methods used in the team development training above, it can be seen that the researcher can arrange the training delivery method as long as the selected activity can be explained rationally with the given training construct. In *Team Building: Proven Strategies for Improving Team Performance* (2007), Dyer states there are numerous ways to execute a team-building program. The format depends on the experience, interests, and needs of the team members, the experience and needs of the team leader, the consultant's skills (if needed), and the nature of the situation that has prompted the meeting. This statement can be the basis for practitioners to continue to develop various methods as long as they are based on a clear theoretical construct. In line with this, Klein et al. also emphasize that practitioners develop various techniques and methods to continue to deepen their

understanding of team building and its effectiveness (Klein et al., 2009).

CONCLUSION

Team performance cannot be avoided from task performance and team members' psychological aspects. As seen in the concepts of an effective organization, an effective work group must balance these two aspects. The need to form an effective team cannot be separated from these two aspects, so whatever form of intervention is given, it must be able to impact the group's output through performance and positive relationships (taskwork and teamwork). The Team Development Interventions reviewed in this paper can be an option for practitioners and researchers to achieve team effectiveness goals, but are still designed with a clear and robust theoretical foundation. Furthermore, practitioners and researchers are encouraged to develop modules based on this theoretical construct and report the results to continue as a joint effort to understand this prevalent team intervention.

REFERENCES

- Aldawood, F., Kazzaz, Y., AlShehri, A., Alali, H., & Al-Surimi, K. (2020). Enhancing teamwork communication and patient safety responsiveness in a paediatric intensive care unit using the daily safety huddle tool. *BMJ Open Quality*, 9(1), 1–5. <https://doi.org/10.1136/bmjopen-2019-000753>
- Bartlett, A. L. B., Propper, J., & Mohammed, S. (1999). The effect of team-building on team process and performance. *Journal of Hospitality and Tourism Research*, 23(3), 299–311. <https://doi.org/10.1177/10963480990230>

- 0305
Beauchamp, M. R., McEwan, D., & Waldhauser, K. J. (2017). Team building: conceptual, methodological, and applied considerations. *Current Opinion in Psychology*, 16(16), 114–117. <https://doi.org/10.1016/j.copsyc.2017.02.031>
- Bell, C. H., & Buller, P. F. (1986). Effects of team building and goal setting on productivity: A field experiment. *Academy of Management Journal*, 29(2), 305–328.
- Benishek, L. E., & Lazzara, E. H. (2019). Teams in a new era: Some considerations and implications. *Frontiers in Psychology*, 10(MAY), 1–15. <https://doi.org/10.3389/fpsyg.2019.01006>
- Birx, E., LaSala, K. B., & Wagstaff, M. (2011). Evaluation of a Team-Building Retreat to Promote Nursing Faculty Cohesion and Job Satisfaction. *Journal of Professional Nursing*, 27(3), 174–178. <https://doi.org/10.1016/j.profnurs.2010.10.007>
- Bragg, M., Arshonsky, J., Pageot, Y., Eby, M., Tucker, C. M., Yin, S., Goldmann, E., & Jay, M. (2021). Student-led research team-building program may help junior faculty increase productivity in competitive biomedical research environment. *BMC Medical Education*, 21(1), 1–9. <https://doi.org/10.1186/s12909-020-02396-8>
- Bruner, M. W., & Spink, K. S. (2010). Evaluating a team building intervention in a youth exercise setting. *Group Dynamics*, 14(4), 304–317. <https://doi.org/10.1037/a0018296>
- Bruner, M. W., & Spink, K. S. (2011). Effects of Team Building on Exercise Adherence and Group Task Satisfaction in a Youth Activity Setting. *Group Dynamics*, 15(2), 161–172. <https://doi.org/10.1037/a0021257>
- Buller, P. F. (1986). The Team Building-Task Performance Relation: Some Conceptual and Methodological Refinements. *Group & Organization Management*, 11(3), 147–168. <https://doi.org/10.1177/105960118601100303>
- Burtscher, M. J., & Manser, T. (2012). Team mental models and their potential to improve teamwork and safety: A review and implications for future research in healthcare. *Safety Science*, 50(5), 1344–1354. <https://doi.org/10.1016/j.ssci.2011.12.033>
- Carron, A. V., & Spink, K. S. (1993). Team building in an exercise setting. *The Sport Psychologist*, 7(1), 8–18.
- Cummings, T., & Worley, C. (2014). Organization Development and Change. In *Management*. Cengage learning. <https://doi.org/10.1093/obo/9780199846740-0009>
- Dyer, W. G. (Et. A. (2007). *Team Building, Fourth Edition Proven Strategies for Improving Team Performance*.
- Ellis, J. B., Luther, K., Bessiere, K., & Kellogg, W. A. (2008). Games for virtual team building. *Proceedings of the Conference on Designing Interactive Systems: Processes, Practices, Methods, and Techniques*, DIS, 295–304. <https://doi.org/10.1145/1394445.1394477>
- Gaston, T., Short, N., Ralyea, C., & Casterline, G. (2016). Promoting Patient Safety: Results of a TeamSTEPS® Initiative. *The Journal of Nursing Administration*,

- 46(4), 201–207.
<https://doi.org/10.1097/NNA.0000000000000333>
- Ginting, H., Mahiranissa, A., Bektı, R., & Febriansyah, H. (2020). The effect of outing Team Building training on soft skills among MBA students. *International Journal of Management Education*, 18(3), 100423. <https://doi.org/10.1016/j.ijme.2020.100423>
- Holt, N. L., & Dunn, J. G. H. (2006). Guidelines for delivering personal-disclosure mutual-sharing team building interventions. *Sport Psychologist*, 20(3), 348–367. <https://doi.org/10.1123/tsp.20.3.348>
- Johnson, S. S., Grossman, R., Miller, J. P., Christfort, K., Traylor, A. M., Schweissing, E., Bonaventura, C. Di, Salas, E., Kreamer, L., Stock, G., Rogelberg, S., & Hickman, A. (2021). Knowing Well, Being Well: well-being born of understanding: The Science of Teamwork. *American Journal of Health Promotion: AJHP*, 35(5), 730–749. <https://doi.org/10.1177/08901171211007955>
- Keith, M. J., Anderson, G., Gaskin, J. E., & Dean, D. L. (2018). Team Gaming for Team-building: Effects on Team Performance. *AIS Transactions on Human-Computer Interaction*, 10(4), 205–231. <https://doi.org/10.17705/1thci.00110>
- Klein, C., DiazGranados, D., Salas, E., Le, H., Burke, C. S., Lyons, R., & Goodwin, G. F. (2009). Does team building work? *Small Group Research*, 40(2), 181–222. <https://doi.org/10.1177/1046496408328821>
- Kozlowski, S. W. J. (2018). Enhancing the Effectiveness of Work Groups and Teams: A Reflection. *Perspectives on Psychological Science*, 13(2), 205–212. <https://doi.org/10.1177/1745691617697078>
- Lacerenza, C. N., Marlow, S. L., Tannenbaum, S. I., & Salas, E. (2018). Team development interventions: Evidence-based approaches for improving teamwork. *American Psychologist*, 73(4), 517–531. <https://doi.org/10.1037/amp0000295>
- Landy, F., & Conte, J. (2013). Psychology at work: An introduction to industrial and organizational psychology. In *Work in the 21st Century: An Introduction to Industrial and Organizational Psychology*. Wiley.
- Marasi, S. (2019). Team-building: Developing Teamwork Skills in College Students Using Experiential Activities in a Classroom Setting. *Organization Management Journal*, 16(4), 324–337. <https://doi.org/10.1080/15416518.2019.1662761>
- Martín-Hernández, P., Gil-Lacruz, M., Gil-Lacruz, A. I., Azkue-Beteta, J. L., Lira, E. M., & Cantarero, L. (2021). Fostering university students' engagement in teamwork and innovation behaviors through game-based learning (GBL). *Sustainability (Switzerland)*, 13(24), 1–16. <https://doi.org/10.3390/su132413573>
- Mathieu, J., Maynard, T. M., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997–2007: A review of recent advancements and a glimpse into the future. *Journal of Management*, 34(3), 410–476. <https://doi.org/10.1177/0149206308316061>
- Miller, C., Kim, B., Silverman, A., & Bauer, M.

- (2018). A systematic review of team-building interventions in non-acute healthcare settings. *BMC Health Services Research*, 18(1), 146. <http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L623647321%0Ahttp://dx.doi.org/10.1186/s12913-018-2961-9>
- Paradis, K. F., & Martin, L. J. (2012). Team building in sport: Linking theory and research to practical application. *Journal of Sport Psychology in Action*, 3(3), 159–170. <https://doi.org/10.1080/21520704.2011.653047>
- Rico, R., María, C., De, A., & Taberner, C. (2011). WORK TEAM EFFECTIVENESS , A REVIEW OF RESEARCH. 15(1), 57–79.
- Roman, T. C., Abraham, K., & Dever, K. (2016). TeamSTEPS in Long-Term Care-An Academic Partnership: Part II. *Journal of Continuing Education in Nursing*, 47(12), 534–535. <https://doi.org/10.3928/00220124-20161115-04>
- Saavedra, L. K. (2013). Effective Team Building: The Role of Coaches. *Strategies*, 26(4), 3–6. <https://doi.org/10.1080/08924562.2013.799925>
- Salas, E. (2015). *Team training essentials* (1st ed.). Routledge.
- Salas, E., DiazGranados, D., Klein, C., Burke, C. S., Stagl, K. C., Goodwin, G. F., & Halpin, S. M. (2008). Does team training improve team performance? A meta-analysis. *Human Factors*, 50(6), 903–933. <https://doi.org/10.1518/001872008X375009>
- Salas, E., Nichols, D. R., & Driskell, J. E. (2007). Strategies in Intact Teams. *Small Group Research*, 38(4), 471–488.
- Salas, E., Tannenbaum, S. I., Kozlowski, S. W. J., Miller, C. A., Mathieu, J. E., & Vessey, W. B. (2015). Teams in Space Exploration: A New Frontier for the Science of Team Effectiveness. *Current Directions in Psychological Science*, 24(3), 200–207. <https://doi.org/10.1177/0963721414566448>
- Santos, C. M., Uitdewilligen, S., Passos, A. M., Marques-Quinteiro, P., & Maynard, M. T. (2021). The Effect of a Concept Mapping Intervention on Shared Cognition and Adaptive Team Performance Over Time. *Group and Organization Management*, 46(6), 984–1026. <https://doi.org/10.1177/1059601120981623>
- Shuffler, M. L., DiazGranados, D., & Salas, E. (2011). There's a science for that: Team development interventions in organizations. *Current Directions in Psychological Science*, 20(6), 365–372. <https://doi.org/10.1177/0963721411422054>
- Sidiq, W., & Abdullah, S. M. (2022). Effectiveness of Team Building Training Improving The Cohesiveness of The Working Group. *Psikostudia: Jurnal Psikologi*, 11(1), 89. <https://doi.org/10.30872/psikostudia.v11i1.7168>
- Smallwood, J., & Allen, C. (2020). The impact of a first-year orientation team building exercise. *Construction Economics and Building*, 20(3), 142–159. <https://doi.org/10.5130/AJCEB.v20i3.7062>
- Spink, K. S., & Carron, A. V. (2016). The Effects of Team Building on the Adherence Patterns of Female Exercise

Participants. *Journal of Sport and Exercise Psychology*, 15(1), 39–49.
<https://doi.org/10.1123/jsep.15.1.39>
Thomas, M., Jacques, P., Adams, J., &

Kihneman-Wooten, J. (2008). Project Portfolio Control and Portfolio. *Project Management Journal*, 39(March), 28–42.
<https://doi.org/10.1002/pmj>