The Build and Bond: a team exercise

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Abstract

Purpose – The purpose of this paper is to present The Build and Bond, an experiential exercise which engages student teams while they apply team dynamics, enhance team skills and foster team member interpersonal bonds.

Design/methodology/approach – During The Build and Bond, teams design and execute their own team-building activity. Specifically, teams set goals, generate ideas, make decisions, create a team-building activity, develop implementation plans and ultimately execute the activity. Finally, during an all-class debrief discussion, teams describe their team-building activities, connect their experiences to the learning objectives and reflect on how these lessons can be applied in future team experiences. Pretest and posttest surveys were used to determine if participants perceived increases in team performance and cohesion following The Build and Bond.

Findings – All teams reported that their activity added value, was preferred over an instructor-assigned team-building activity and improved team states. Findings from *t*-tests supported an improvement in team performance and cohesion.

Social implications – The Build and Bond is designed to help students feel more equipped to communicate, have fun and work interdependently with current and future team members.

Originality/value – Teams design the team-building activity themselves, so members are often more interested in participating and engaging during the team-building activity.

Keywords Team building, Virtual teams, Experiential exercise, Student project teams,
Team member bonds

Paper type General review

Introduction

Have you ever heard a student sigh at the mention of a team project? Students commonly complain about barriers associated with team projects, with criticisms including communication issues, unmotivated peers or process issues (Holmer, 2001; Fiechtner & Davis, 2016). Although many teams struggle to accomplish goals, organizations are regularly using teams (Klang & Luria, 2021; Mathieu et al., 2008). Therefore, students are often required to learn team skills as they prepare for their professional lives.

Management instructors often teach team skills and embrace the use of a collaborative team learning environment, which research suggests helps students learn at a deeper level (Oakley et al., 2004). However, Riebe et al. (2016, p. 621) argue, "educators may place more emphasis on product or artifact production (outputs), rather than on the processes, skills, and dispositional attributes required to work collaboratively and productively within a team." For example, instructors might assign team cases, where the focus is all on solving an organization's problems rather than developing processes or interpersonal relationships. Yet, research suggests that students are more likely to believe teamwork skills will be incorporated in future settings when they participate in team exercises that incorporate both process and product outcomes (Delaney et al., 2013; Riebe et al., 2016). Therefore, the primary purpose of this article is to present an innovative instructional exercise, called The Build and Bond, which we designed to focus on both the development of team processes and the production of custom outcomes.

During The Build and Bond, students are prompted to engage in seemingly simple team tasks: develop, execute, reflect on and revise a team-building activity. Although seemingly straightforward, the team-building activity must be unique, meaningful to the team and designed to improve relationships. By adding these additional requirements, student teams are unable to select generic or common activities. Therefore, teams often experience conflict that must be overcome to successfully advance through various stages of team development (Tuckman, 1965). In doing so, teams explain how their processes (e.g. built systems) facilitate team functioning (e.g. interpersonal bonds) and result in higher performance. A unique feature of The Build and Bond is that teams are continually prompted to reflect on how well the processes contribute to the effectiveness of the outcome (the team-building activity). One significant benefit of The Build and Bond is that the instructor has the option to require the team-building activity take place in a virtual environment.

The Build and Bond has been successfully used in organizational behavior classes during multiple (5) semesters in both face-to-face and hybrid (face-to-face and virtual) modalities. Class size has ranged from 28 to 39 students, with 275 undergraduate junior and senior students who have part-time work experience, as well as prior experience working in student teams. The Build and Bond seems to be positioned best during the first half of the semester, after team members have participated in a few class discussions with each other. Student teams with longevity tend to experience more positive experiences and success (Bacon et al., 1999). One class of students (38 total) who started The Build and Bond during the fifth week of the semester were asked whether they would have preferred to start the exercise at the beginning, middle or end of the semester.

The majority (76.3%) selected the middle (fourth or fifth week), because there was an increased comfort level with peers by the fourth week. The rest (23.7%) of the students said they could have established bonds earlier if the exercise was started earlier. Depending on the instructor's goals, The Build and Bond could be started any time during the first half of the semester.

In the following sections, we present the theoretical background that provides the foundation for the design of The Build and Bond. Next, we present the learning objectives, detailed instructions for implementing the exercise and suggestions for common challenges. Then, we offer typical outcomes of The Build and Bond, along with potential variations and extensions.

Theoretical background

The design for The Build and Bond was founded on the stages of team development (Tuckman, 1965), as well as the literature pertaining to team development interventions (TDIs), team building and team member relationships.

Stages of team development

Tuckman's model suggests team development consists of four stages, forming, storming, norming and performing (Tuckman, 1965), and possibly a fifth stage called adjourning (Tuckman & Jensen, 1977). For definitions of each stage, see Appendix 1. Over time, variations of the traditional development model have focused on factors like member relationships and moving past conflict (Ito & Brotheridge, 2008). Experiential learning opportunities, like The Build and Bond, allow students and instructors to witness dynamic movement between stages and opportunities to identify when team progress requires intervention (Ito & Brotheridge, 2008). Therefore, TDIs are intentionally built into The Build and Bond to assure teams develop cohesiveness and eventually succeed. However, the instructor also provides feedback to help teams move through stages.

Team development interventions

Four common TDIs are leadership training, team training, team debriefing and team building (Lacerenza et al., 2018). The TDI of leadership training builds the skills specific to leaders, while team training promotes "a structured learning experience with preset objectives targeting competencies" (p. 519). These interventions will help teams stay on task and are built into The Build and Bond (Preparation and Planning stages) to help students understand concepts, set goals and establish roles. The TDI of debriefing allows members to reflect on their team's experience (Lacerenza, 2018). Finally, the TDI of team building is the central focus of The Build and Bond.

Team building and member relationships

One way to develop interpersonal relationships among a team is to conduct team-building activities. These activities often have positive impacts on students' perceptions of working in teams (Gordon et al., 2019). Furthermore, properly designed team-building activities can help improve team performance, trust and communication (Klein et al., 2009). Teammates who form close relational bonds are more likely to experience higher levels of team effectiveness (Klang & Luria, 2021). The Build and Bond is designed to foster interpersonal relationships during virtual or face-to-face team-building activities.

An overview of the exercise, along with learning objectives, detailed instructions for running The Build and Bond, and ideas to overcome potential challenges are presented below.

The Build and Bond exercise

During The Build and Bond, teams (approximately 4–5 members each) work together over a two- to four-week period to plan, design, execute, reflect and debrief on a team-building activity for their team. To prepare for The Build and Bond, the instructor can present team-related concepts (see Appendix 1 for concepts). Then, teams begin the Planning stage by developing goals, establishing team norms, expectations and roles. Next, during the Design stage, teams create a team-building activity and implementation plan before moving to the Execution stage. Finally, during the Reflection stage, teams debrief by looking back on the effectiveness of both the team processes and the team-building activity (outcome).

Learning objectives for The Build and Bond

Given the comprehensive nature of The Build and Bond, the learning objectives for the exercise are placed into three categories that reflect the entirety of the Planning, Execution, Design, Reflection and Revision, and Debrief stages.

After completing the Planning stage, students will be able to:

- establish goals for team performance.

After completing the Design and Execution stages, students will be able to:

- implement idea generation strategies, including those that minimize groupthink.

After completing the Reflection and Revision, and Debrief stages, students will be able to:

- evaluate the effectiveness of a team activity in improving interpersonal relationships and team states; and
- recommend revisions that could improve the Planning, Design and Execution stages of the exercise.

Detailed instructions for The Build and Bond stages
Instructions for conducting The Build and Bond can be found below (see Table 1 for an approximate timeline).

Preparation stage – foundational knowledge. At least one class session prior to beginning the exercise, discuss concepts such as stages of team development and explain that goal setting can enhance team performance. Instructors may want to emphasize that pooled interdependence (merging individual efforts) can inhibit performance, particularly on complex tasks.

Challenges and suggestions during the Preparation stage. One challenge that an instructor may experience during this stage involves team formation. Although teams can be student-formed teams or instructor-formed teams, The Build and Bond has used instructor-formed teams for the past five semesters because they are especially helpful to simulate real-world scenarios and promote diversity (Rusticus & Justus, 2019).

Research suggests that regardless of team size, team-building interventions can improve a variety of performance and team outcomes (Klein et al., 2009). Although The Build and

Stage	Complete during class?	Approximate time (in minutes)
1. Preparation stage – foundational knowledge	Yes	30–60
2. Planning stage – develop team collaboration process	Could be completed during class or outside of class in a team meeting	45–60
3. Design stage – generate ideas and develop activity	Could be completed during class or outside of class in a team meeting	45–75
4. Execution stage – execute team building activity	No	60–90
5. Reflection and Revision stage – reflect on effectiveness and revise implementation plan or activity based on the experience during the previous stage (Execution stage)	Could be completed during class or outside of class in a team meeting	30–45
6. Debrief stage	Yes	30–45

Source: Table by authors

Table 1.
The Build and Bond
timeline

Bond is designed for any size team, coordination efforts may be more challenging when teams have more than four to six members.

Planning stage – develop team collaboration process (e.g. nominal group technique). During the Planning stage, goals, expectations, norms and roles are established. The instructor may want to encourage students to focus their team goals around developing original team-building activities that will enhance team member bonds.

Students submit a summary (see Appendix 2 for a sample) detailing how the team will generate creative team-building ideas without experiencing groupthink. While completing the summary, teams identify the collaboration tools, develop goals, identify task interdependence, establish roles and set expectations.

An example team summary might specify that the team's goal is to develop a unique and meaningful team-building activity that increases team member bonds and motivates team members to engage in the team-building experience. Teams identify team member roles during this phase as well. For example, one member might volunteer to be the "devil's advocate," and another may volunteer to coordinate submissions. It can help to have teams clarify their team norms and behavioral expectations. For example, teams might state that members are expected to prepare for, attend and engage in team discussions throughout the process. Teams will also want to specify the preferred mode of communication (email, group chat, etc.).

The instructor will then provide feedback on the summary using statements like:

- The summary clearly states the team's goal.
- Expectations regarding attendance should be included in this summary.

Challenges and suggestions during the Planning stage. One challenge that may arise during this stage occurs when teams select pooled interdependence rather than comprehensive interdependence. This option is available on the summary provided in Appendix 2, primarily as a learning opportunity, because students frequently mention that they have experience using it in previous team experiences. However, comprehensive interdependence works best for The Build and Bond because the exercise is complex and requires participation from all team members. Therefore, the instructor could require teams to use comprehensive interdependence because this type of interdependence will help students achieve a successful outcome. Alternatively, the instructor could coach teams that select this option by asking probing questions like:

Q1. What would the specific individual contributions look like before they are pooled?

Q2. Do you think you will need to communicate at all throughout the project?

Typically, teams reach the conclusion that comprehensive interdependence is most appropriate. If not, the instructor may ask the team to identify scenarios when pooled interdependence is most appropriate and scenarios when comprehensive interdependence is most appropriate.

Design stage – generate ideas and develop team-building activity. Teams use the process (e.g. nominal group technique, appointed "devil's advocate") they identified in the summary that was submitted during the Planning stage to develop a team-building activity implementation plan.

Teams can submit a summary (see Appendix 3 for a sample) explaining how their process allowed them to produce creative team-building ideas, avoid the limitations of groupthink and develop an effective team-building activity.

Challenges and suggestions during the Design stage. Despite using processes that are designed to minimize groupthink, some teams may still select a team-building activity that seems generic (e.g. cook together, tell two truths and a lie). However, it is important that team members challenge each other and minimize groupthink, even if the challenges result in some level of conflict, because The Build and Bond requires activities that are unique and meaningful to the team. Therefore, the instructor may want to talk with teams who propose generic ideas and push the members to identify ways to make the activity "their own" by asking probing questions like:

Q3. What do you expect to learn about each other that you do not already know?

Q4. How is your activity different from those that appear in a Google search?

Q5. Will your activity be able to last and hold engagement levels for 1–2 hours?

An example of an activity that developed significantly after asking these probing questions was a virtual team-building activity. The team originally selected "share songs we like" as the activity. After thinking through the questions above, the activity was significantly changed. In the end, team members each selected a "theme song" for their living space as well as three other songs that related to other college memories (e.g. arriving to campus for move-in day, student organization experience). The implementation plan outlined the following steps:

- Team members take turns being the featured participant.
- The participant provides a virtual tour of their living space, while other members guess the space's theme song. Members are allowed to ask questions about items in the space before guessing. This step is expected to help team members get to know each other more.
- The participant plays one of the three selected songs, while other members guess what the story/memory was behind the song. This step is expected to be fun because members will create stories that could align with the song. This step is repeated for the other two songs.
- The next team member becomes the participant.

Another example team-building activity that significantly changed was from a team that originally selected "potluck" and "scavenger hunt" as their favorite activities. After thinking through the questions and trying find ways to combine their top two activities, the team experienced some conflict, but agreed to focus their activity around an "apple hunt and bake" theme by hunting for apples at a local apple orchard and baking an apple pie together.

Execution stage – execute the team-building activity. Teams execute their team-building activity.

Challenges and suggestions during the Execution stage. Although recording the activity is an option, team members may not be as willing to offer or share information in a video. Recording may interfere with establishing team bonds if they are worried about an instructor "watching" the team-building activity. Instructors may find more value in having students reflect on the activity.

Reflection and Revision stage – reflect on and revise the team-building activity. Students submit a brief reflection (see Appendix 4 for a sample) on the value of the team-building activity to their team. Teams should indicate whether they would make changes to the process (e.g. generate more creative ideas, use collaboration tools) or the outcome (e.g. team-building activity). The Reflection and Revision stage is intended to allow students to connect

their experiences to two learning objectives (evaluate the effectiveness of a team activity in improving interpersonal relationships and team states and recommend revisions that could improve the planning process and implementation of the team activity).

The instructor asks students to reflect on their team's states (e.g. cohesion). Here, teams also reflect on whether they experienced any decision-making failures (e.g. social loafing, groupthink). Teams should make necessary revisions before moving to the Debrief.

Debrief. After students submit their reflection document, the instructor asks students to share a description of their team-building activity and explain whether it added value to the team.

Instructors can also ask students to explain whether (and why) this team experience was better or worse than previous student team experiences. Typically, students discuss how they established roles, developed goals, became interdependent and used strategies for reducing groupthink. Often, these answers help the instructor connect the learning to the first two learning objectives of The Build and Bond (i.e. establish goals for team performance and implement idea generation strategies including those that minimize groupthink).

The Debrief can also focus on the stages of team development (Tuckman, 1965). For example, the instructor can ask students how they determined expectations during the forming stage. Furthermore, the instructor can ask when students experienced the storming stage. Typically, students will mention that they experienced the most conflict after the idea generation stage because they had to figure out a way to make their team-building activity meaningful or unique, but also feasible. The instructor can then ask students how they moved to the norming stage.

Students will often mention that they needed to find an activity that would build bonds and, therefore, they needed all members to have an interest in the activity. A common way teams move past the storming stage is to eliminate ideas that caused one or more members to be uncomfortable.

Challenges and suggestions during the debrief. If student answers do not align with the learning objectives naturally, the instructor may want to probe for more detail to help students connect their experience to the objectives. For example, to connect the learning to the second learning objective of The Build and Bond, which is to "implement idea generation strategies, including those that minimize groupthink," The instructor could ask students what they learned that could help them generate ideas and reduce groupthink in future team experiences.

Methods

Procedure. The Build and Bond has been used in one of the author's undergraduate organizational behavior courses for five semesters (275 total students), and all teams that used comprehensive interdependence reported process gain. Quantitative data was collected in organizational behavior during Fall 2022 to assess whether team performance, cohesion and an understanding of groupthink improved after completing The Build and Bond. Responses to the questionnaires from the pretest and posttest were matched.

Sample. In total, 48 students (out of 58 possible students) completed both the pretest and posttest surveys, resulting in a response rate of 82.76%. Paired samples (one-tailed) *t*-tests were used to analyze the data because the dependent variables were expected to improve. This type of analysis is frequently used when analyzing data from a sample of students who self-enroll in a class (Krishnan, 2021).

Measures. Team performance was measured by using a seven-item scale from Williams and Anderson (1991). Students were asked to select a response that describes the level they

agreed (1 = strongly disagree; 7 = strongly agree) with each statement. The referent of the
statements was "this team," and an example item was "adequately completes assigned
duties." The Cronbach's alpha was 0.81 for the pretest and 0.75 for the posttest.

Team cohesion was measured with the six items developed by Mathieu (1991) and
reported by Mathieu et al. (2015). Students were asked to select a response that best
describes the level they agreed (1 = strongly disagree; 7 = strongly agree) with each
statement. Three items focused on the interpersonal aspects of cohesion, and an example
item was "members of my team feel close to each other." The Cronbach's alpha was 0.90 for
the pretest and 0.89 for the posttest. Three items focused on the goal and task-oriented
aspects of cohesion. A sample item was "members of my team share a focus on our work."
The Cronbach's alpha was 0.89 for the pretest and 0.82 for the posttest.

Exercise outcomes and student comments

To assess whether students understood groupthink better after completing The Build and
Bond students were asked the following question: "You are a member of a group that tends
to make very fast decisions without considering alternatives. You often feel pressure to
conform to the group decision, even if you don't fully agree with this. Which of the following
most closely describes what the group is experiencing?" The response options were group
shift, groupthink, social loafing and storming. Only 58.33% of the students selected
groupthink during the pretest. Approximately 90% (43/48) answered correctly during the
posttest.

Perceptions about team performance, team cohesion (interpersonal) and team cohesion
(task) also seemed to improve significantly. To assess these improvements, we conducted a
series of *t*-tests, and these results can be found in Table 2.

Significant differences were found between the preactivity scores and the postactivity
scores, generating support for improved team performance and cohesion. Furthermore, the
effect size (Cohen's *d*) suggested a large improvement in team performance and cohesion.

Furthermore, although quantitative information regarding the cohesions scales was
collected from students during only one semester, every team that completed The Build and
Bond, virtually or face-to-face, over five semesters reported an improvement in one or more
team states. For example, one team that completed a virtual team-building activity stated:

> The activity was effective because we built off each other's creativity. Our cohesion improved
> mostly because of the fact that it was the first time we worked together outside the classroom. It
> seemed more personal. It was fun.

A student from a team that completed a team-building activity in a face-to-face setting
commented that the activity was the main reason the team improved how they worked
together during the rest of the class. The student also said, "we had the opportunity to bond
in a setting outside the classroom." The sentiments expressed in these statements were

| Parameter | Pretest | | Posttest | | | | |
	M	SD	M	SD	$T(26)$	p	Cohen's d
Team performance	5.53	0.74	6.43	0.55	−8.20	<0.001	−1.18
Team cohesion (Interpersonal)	4.67	1.21	5.94	0.87	−6.73	<0.001	−0.97
Team cohesion (Task)	5.59	0.78	6.41	0.59	−7.16	<0.001	−1.03
Source: Table by authors							

Table 2.
T-test results:
comparing pretest
and posttest means
for team performance
and team cohesion

consistent and reflective of the students' self-reported experience with The Build and Bond in both face-to-face and virtual settings.

Although instructors have the option of assigning their own team-building activity to teams or asking teams to complete activities designed by other teams, students seem to express a preference for the activity their team designed. For example, when one section of 36 students during Spring 2022 was asked whether they preferred to execute their own team-building activity, an activity assigned by the instructor, or another team's activity, all teams selected their own activity. To further assess students' interest in developing their own team-building activity, the instructor asked two class sections during Fall 2022 (58 total students) to write down their least preferred team-building activity out of a list of common activities (e.g. escape room, high ropes course, bake together) and compare the written activity to the activity their team developed and executed. Students were asked which activity they would have preferred to complete and explain why. Every student demonstrated a preference for their own team activity. The most common theme that emerged pertained to confidence in their team members to engage and participate in an activity that they all agreed to and designed.

The instructor asked five teams during Fall 2022 how they would have felt if, instead of developing the activity idea, the instructor had assigned the team to complete the same executed activity, without student input. The students mentioned that they would have had more negative attitudes if the instructor had required the team to complete the same activity. Because teams develop and commit to their own idea, they express more ownership over the process.

Variation and extension

The Build and Bond allows students to develop and implement their own team-building activity. However, an instructor may prefer to have students complete another team's team-building activity. This variation adheres to the timeline presented in Table 1 and may be especially appropriate if the instructor would choose to add a learning objective that pertains to developing team-building activity implementation plans. Alternatively, the instructor could extend The Build and Bond, by having teams first execute their own team-building activity and then execute another team's activity. When extending The Build and Bond in this way, it is important to add an additional 30 min to the timeline (Reflection and Revision stage), presented in Table 1, to allow teams time to share feedback and revise their activity based on the feedback. This extension was offered as an extra credit option during a recent semester after teams executed their own team-building activity. The eight students that participated in this option enjoyed the opportunity to try another team's activity and revise their own activity based on the recommendations provided. All eight participants offered recommendations for the implementations plans. Although all participants preferred their own team-building activity, this extended opportunity helped students understand the need for detailed implantation plans during the Design stage.

Conclusion

Teams have become ubiquitous within organizations and business courses, yet many students and instructors often focus on the team tasks and outcomes and overlook the role that relationship building and team processes play in producing team outputs. The Build and Bond emphasizes team dynamics, interpersonal relationships and team skills. It exposes teams to issues of creativity, team struggles and team processes. The Build and Bond has been successful demonstrating the value of teams.

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Concepts	Definition
Pooled interdependence (Thompson, 1967; Van de Ven et al., 1976)	Members work independently, then add their work together
Comprehensive interdependence (Thompson, 1967; Van de Ven et al., 1976)	Members have a high degree of connection and coordination to produce the team's output
Nominal group technique (Delbecq & Van de Ven, 1971)	Process whereby members write down their ideas and take turns sharing them with the group
Cohesion (Festinger, 1950)	A team state that occurs when team members develop strong emotional bonds
Forming (Tuckman, 1965)	Stage of team development characterized by team members orienting themselves and setting expectations, etc.
Storming (Tuckman, 1965)	Stage of team development characterized by idea exchange and conflict
Norming (Tuckman, 1965)	Stage of team development characterized by acknowledgement of needing to work together
Performing (Tuckman, 1965)	Stage of team development characterized by progress towards the goals
Adjourning (Tuckman, 1965)	Stage of team development typically characterized by team members' anxiety as they debrief and separate from the team

Source: Appendix created by authors with concept sources listed

Table A1.
Team concepts

Appendix 2. Planning stage – develop team collaboration process

Team summary

The purpose of The Build and Bond is to develop and execute a unique and meaningful team-building activity designed to improve team member interpersonal relationships. Your team will advance through three stages throughout The Build and Bond. During this first stage (Planning), your team will create goals, set expectations, establish norms, determine team member roles, justify an approach to task interdependence and agree to a process to generate creative ideas.

Your Tasks:

A. Which collaboration tools do you plan to use? (Microsoft Teams, etc.)
B. Your team goals are:
C. Identify the task interdependence you will use.
   ❐ Pooled   ❐ comprehensive
   • Why will you use this technique?
D. Identify the processes you will use for idea generation while minimizing groupthink.
   ❐ nominal group technique   ❐ assigned devil's advocate   ❐ Others:
E. What are your team norms and expectations?
F. List the team member roles.

Instructor Feedback:

Source: appendix by authors

Appendix 3. Design stage – generate ideas and develop activity

Team summary
The Design stage has two parts that will be completed in order: (1) Idea Generation and (2) Team-Building Activity Selection.

Your Tasks for Idea Generation: Use the process established during the Planning stage to develop a list of several possible team-building activities and then answer the questions below:

(1) How many team-building ideas did your team generate?
(2) How did you determine which ideas would work best?
(3) Explain whether your team experienced groupthink.

Your Tasks for Team-Building Activity Selection: Select one team-building activity that your team will later execute. Then, answer the questions below:

(1) How is your team-building activity unique and creative
(2) How did your activity add value?
(3) Detail the process for implementing the team-building activity

Instructor Feedback:
Source: Appendix by authors

Appendix 4. Reflection and Revision stage – reflect on effectiveness

Team summary
Your team is ready to execute your team-building activity and then move to the Reflection and Revision stage.

Your Tasks during the Reflection and Revision stage:

(1) Explain how your team-building activity added value to your team
(2) Explain revisions you would make to improve the process you used to select and develop the team-building activity
(3) Explain revisions you would make to improve the team-building activity
(4) Explain whether your team experienced process gain
(5) Identify any team decision-making failures
(6) Did your team experience improved team states? Explain
(7) Evaluate the effectiveness of the team activity in improving interpersonal relationships

Instructor Feedback:
Source: Appendix by authors

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