

Questionnaire to identify teamwork-related resources and stressors in firefighting operations (REST-Q Fire)

In the following, various situations from **firefighting operations** are described.

We are interested in **how often** you have experienced such or similar situations in a firefighting operation. Please refer to operations of the fire department in which you **mainly** work. Consider all operations, **regardless of the function** in which you were deployed.

Please try to put yourself in the situations described and think back to various firefighting operations you have experienced in your career that are similar to the situation described.

In firefighting operations, **teamwork** carries a high value - we want to know which behaviors in the team are perceived as **particularly stressful**, but also as **particularly supportive**.

Accordingly, two options are described for each situation described and we ask you to evaluate both.

On the one hand, we describe which **negative behaviors** could occur and want to know how much such things stress you out.

On the other hand, we describe situations in which **positive behaviors** were exhibited and want to know how much something like that helps you during firefighting operations.

In part, the situation descriptions sound very similar. This is because different negative and positive behaviors can occur in very similar situations and we want to capture a comprehensive picture. That is why we ask you to answer **all** the questions anyway.

Now please read the following situation descriptions. Put yourself in your previous experienced firefighting operations that are similar to the situation described and then answer the questions formulated for this purpose.

Please answer each question and clearly decide on an answer and place your cross in the circle.

Initial situation:

During a firefighting operation, a firefighter of the firefighting platoon had important information (e.g., knot in hose; sudden discomfort) to pass on to **the other squad member**.

And then the following happened:

Information was not passed on at all or too late and/or there was **no coordination**.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly

Information was passed on in time and/or **brief consultations** took place.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, a firefighter of the firefighting platoon had important information (e.g., situation report; briefing of new squads) which he or she was supposed to pass on to the other firefighters of the platoon.

And then the following happened:

Information was not passed on at all or too late and/or there was no coordination.

How often did this occur in your previous experienced firefighting operations?

never

rarely

sometimes

often

always

If it happened, how much did this **stress** on average?

did not occur

not at all

slightly

moderate

strongly

very strongly

Information was passed on in time and/or brief consultations took place.

How often did this occur in your previous experienced firefighting operations?

never

rarely

sometimes

often

always

If it happened, how much did this **help** on average?

did not occur

not at all

slightly

moderate

strongly

very strongly

Initial situation:

During a firefighting operation, a firefighter of the firefighting platoon had to **pass on important information**.

And then the following happened:

The **information** passed on was **incorrect, inaccurate** and/or **incomplete**.

How **often** did this occur in your previous experienced firefighting operations?

never

rarely

sometimes

often

always

If it happened, how much did this **stress** on average?

did not occur

not at all

slightly

moderate

strongly

very strongly

The **information** passed on was **clear, unambiguous** and/or **correct**.

How **often** did this occur in your previous experienced firefighting operations?

never

rarely

sometimes

often

always

If it happened, how much did this **help** on average?

did not occur

not at all

slightly

moderate

strongly

very strongly

Initial situation:

During a firefighting operation, **information was passed on, arrangements were made and the procedure was discussed** within the firefighters of a firefighting platoon.

This was done as follows:

There was an **unnecessary amount of talking** (e.g., too much discussion; too much information at once).

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always
-

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly
-

There was **as much talking as necessary** but **as little as possible** (e.g., enough detail but no unnecessary information/discussion).

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always
-

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly
-

Initial situation:

During a firefighting operation, **many parties who did not know each other well** and did not otherwise work together (e.g., different firefighting units; Deutsche Bahn/emergency managers; police) had to **exchange information and agree on a joint course of action**.

And then the following happened:

Information was not passed on at all or was **incomprehensible** to the other parties involved (e.g., railroad-typical terms; involvement of police and other fire units/firefighting groups).

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly

Information was passed on in a timely and understandable manner (e.g., terms understood by all).

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, a firefighter of the firefighting platoon **perceived something** (e.g., cries for help; hazards at the scene).

And then the following happened:

The **impressions perceived** by one firefighter were **not passed on to the other firefighters**, so that **no shared picture of the situation** emerged.

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **stress** on average?

did not occur not at all slightly moderate strongly very strongly

The **impressions perceived** by one firefighter were **passed on to the other firefighters** and **compared with the perceptions of the others**, so that a **shared picture of the situation** was created.

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **help** on average?

did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, firefighters from one firefighting platoon **worked together**.

And then the following happened:

Firefighters **did not pay attention to each other** (e.g., did not check on each other; did not point out mistakes and/or hazards to others; did not intervene even when hazards were identified).

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always
-

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly
-

Firefighters **paid attention to each other** (e.g., checked on each other; pointed out mistakes and/or (potential) hazards to others; intervened when needed).

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always
-

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly
-

Initial situation:

During a firefighting operation, firefighters from one firefighting platoon **worked together**.

And then the following happened:

One or more firefighters **behaved in a hectic, selfish, and/or unprofessional manner**. This **created stress** and transferred to others.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always
-

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly
-

One or more firefighters behaved in a **calm and considered, team-oriented manner** and/or **provided affirmation** to other firefighters (e.g., praise; patting on the back). This **reduced stress** and transferred to others.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always
-

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly
-

Initial situation:

A firefighter noted that a member of the firefighting platoon needed **assistance or encouragement** (e.g., sudden discomfort in the field; experienced psychological distress).

And then the following happened:

The firefighter **ignored the needs of the other** and **did not provide support**.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly

The firefighter was **responsive to the other person's needs** and attempted to **provide support**.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, firefighters from one firefighting platoon **worked together**.

And then the following happened:

Firefighters **did not notice that a member of the group needed assistance** and/or **did not offer assistance** (e.g., one person had to work alone while others had spare capacity; no contribution of ideas/expertise).

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly

Firefighters **noticed that a member of the group needed assistance but were unable to help** (e.g., because the path was blocked).

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly

Firefighters **noticed that a member of the group needed assistance and assisted when possible** (e.g., it was natural for everyone to pitch in when possible; contributing ideas/expertise).

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, the firefighters of the firefighting platoon had their **assigned tasks** and worked together at a scene.

And then the following happened:

Tasks were **not performed at all or were not performed conscientiously** and/or one or more firefighters **did not take their duties seriously**.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly

Tasks were completed **reliably and on time** and/or the firefighters worked **with motivation** and the **necessary seriousness**.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly

In the following, four different situations are described in which the **leader** is of particular importance. The term "leader" refers to all persons who assume leadership tasks during the operation (**e.g. group leader; attack squad leader; water squad leader; hose squad leader**).

Put yourself in experienced firefighting operations that are similar to the situation described:

Initial situation:

During a firefighting operation, a leader gave an **instruction** that **did not make sense to a firefighter** or that **could have led to hazardous situations**.

And then the following happened:

The firefighter **followed the leader's instructions without voicing his/her concerns or opinion**.

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **stress** on average?

did not occur not at all slightly moderate strongly very strongly

The firefighter **thought for him/herself** and **expressed his/her concerns or opinion** to the leader.

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **help** on average?

did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, **firefighters** from a firefighting platoon **worked together with their leaders**.

And then the following happened:

There were **no clear leadership structures** (e.g., it was not clear who should give which orders to whom) and/or **leadership tasks were not performed adequately** (e.g., no orders; necessary decisions were not made).

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **stress** on average?

did not occur not at all slightly moderate strongly very strongly

There was a **clear structure and hierarchy in the team** (e.g., adherence to command structures) and **leadership tasks were fulfilled** (e.g., maintaining an overview; directing course of action).

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **help** on average?

did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, the firefighters of a firefighting platoon worked together with their leaders. The **leaders had certain tasks** (e.g. reconnaissance; hazard assessment), which they should always fulfill.

And then the following happened:

Potential **hazards** and/or **operational standards** were **not considered** by one or more leaders (e.g., no functioning respirator monitoring; inadequate scene reconnaissance).

How **often** did this occur in your previous experienced firefighting operations?

- | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| never | rarely | sometimes | often | always |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

If it happened, how much did this **stress** on average?

- | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| did not occur | not at all | slightly | moderate | strongly | very strongly |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

One or more leaders **considered** potential **hazards** and/or **operational standards** (e.g., warned of hazards; ensured timely retreat).

How **often** did this occur in your previous experienced firefighting operations?

- | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| never | rarely | sometimes | often | always |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

If it happened, how much did this **help** on average?

- | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| did not occur | not at all | slightly | moderate | strongly | very strongly |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Initial situation:

During a firefighting operation, **firefighters** from a firefighting platoon **worked together with their leaders**.

And then the following happened:

One or more leaders **behaved in a hectic, uncertain and/or uncoordinated manner**. This **created stress** and transferred to others.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly

One or more leaders **behaved in a calm and level-headed, structured and/or supportive manner**. This **reduced stress** and transferred to others.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, the firefighters from a firefighting platoon worked together and **tried to achieve their operational goal together**.

And then the following happened:

Firefighters **lacked information on the course of action and objective of the operation** (e.g., sequence of steps; operational strategy).

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly

All firefighters **knew the course of action and objective of the operation** and **everyone knew what to do** (e.g., everyone knew the operational tactics and their tasks).

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, firefighters from one firefighting platoon **worked together**.

And then the following happened:

The firefighters **knew each other poorly or insufficiently** (e.g., skills; strengths and weaknesses; personality) and were therefore **unsure whether they could rely on each other**.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly

The firefighters **knew each other** (e.g., skills; strengths and weaknesses; personality) and were therefore able to **assess each other well** during operations and/or **knew whether they could rely on each other**.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, firefighters from one firefighting platoon worked together. **Each firefighter had a fixed function** and had to **exchange information with the other firefighters**.

And then the following happened:

The firefighters **did not know enough about the other functions in the firefighting platoon** and **their duties** (e.g., engineer has little knowledge of the water trooper's function), so they **could not assess what the other person needed** at the time (e.g., information) and/or **how their own actions affected the others**.

How **often** did this occur in your previous experienced firefighting operations?

never

rarely

sometimes

often

always

If it happened, how much did this **stress** on average?

did not occur

not at all

slightly

moderate

strongly

very strongly

The firefighters **knew the tasks in the other functions well enough** that they **could assess what the other person just needed** (e.g., information) and/or **how their own actions affected the others**.

How **often** did this occur in your previous experienced firefighting operations?

never

rarely

sometimes

often

always

If it happened, how much did this **help** on average?

did not occur

not at all

slightly

moderate

strongly

very strongly

Initial situation:

During a firefighting operation, **many different tasks occurred simultaneously.**

And then the following happened:

Tasks were not distributed at all or not evenly, so some firefighters had to do too many tasks at the same time (e.g., listening in on the radio, issuing materials, and monitoring breathing apparatus).

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **stress** on average?

did not occur not at all slightly moderate strongly very strongly

Tasks were clearly and evenly distributed so that loads were spread and/or no one was overwhelmed with too many tasks.

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **help** on average?

did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, the firefighters of a firefighting platoon worked together. This **involved both routine tasks and special tasks**.

And then the following happened:

One or more firefighters **acted on their own authority** during the operation **without consultation** (e.g., independently changed course of action).

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **stress** on average?

did not occur not at all slightly moderate strongly very strongly

One or more firefighters **had to be asked to perform every single step** (e.g., put on protective equipment).

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **stress** on average?

did not occur not at all slightly moderate strongly very strongly

The firefighters **recognized possible tasks, acted independently** and, **if necessary, coordinated work steps on their own initiative** (e.g. information about their own course of action).

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **help** on average?

did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, firefighters from a firefighting platoon **worked together**.

And then the following happened:

Firefighters **did not adhere to standards and safety measures** (e.g., securing the return path), **putting themselves and/or others at risk**.

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **stress** on average?

did not occur not at all slightly moderate strongly very strongly

Firefighters **adhered to standards and safety measures** (e.g., squad stayed together; followed reporting routes), **avoiding dangerous situations for themselves and others**.

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **help** on average?

did not occur not at all slightly moderate strongly very strongly

Initial situation:

During a firefighting operation, **important decisions had to be made** that had an influence on the further course of the operation.

And then the following happened:

It was **not clearly defined who had to make this decision** and/or the **decision was made** by someone **who did not have the necessary information/skills**.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always
-

If it happened, how much did this **stress** on average?

- did not occur not at all slightly moderate strongly very strongly
-

Decision-making structures were **clearly established** and/or the **decision-maker** was **provided with the necessary information** so that he or she could make the decision.

How **often** did this occur in your previous experienced firefighting operations?

- never rarely sometimes often always
-

If it happened, how much did this **help** on average?

- did not occur not at all slightly moderate strongly very strongly
-

Initial situation:

During a firefighting operation, **important decisions had to be made** and **new information** from the environment was constantly coming in. The decisions had an impact on the further course of the operation.

And then the following happened:

New information about a **change in the situation** was **not used** (e.g., new source of fire) to decide on an **adjusted course of action**.

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **stress** on average?

did not occur not at all slightly moderate strongly very strongly

When an important **decision** had to be taken, **several alternatives were available** and firefighters had to decide (e.g., which person would be rescued first; firefighting or human rescue; degree of deviation from accident prevention regulation during human rescue).

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **stress** on average?

did not occur not at all slightly moderate strongly very strongly

Firefighters **used new information** to **reassess the situation** and decided to **change the plan** if necessary.

How **often** did this occur in your previous experienced firefighting operations?

never rarely sometimes often always

If it happened, how much did this **help** on average?

did not occur not at all slightly moderate strongly very strongly

So far, we have already described some situations in which teamwork (cooperation) can be **stressful**. Can you think of any other **stressors or requirements** of teamwork (cooperation) **during firefighting operations**?

So far, we have already described some situations in which teamwork (cooperation) can be **helpful**. Can you think of any other **resources** of teamwork (cooperation) **during firefighting operations**?

Are there any other **stressors** for you as a firefighter in your day-to-day work that you would like to share?

Are there any other **resources** for you as a firefighter in your day-to-day work that you would like to share?

A great moment of stress is experienced when **firefighters are separated from each other**.

If you have ever experienced something like this, try to put yourself in that position.

What were the **reasons** for the separation of the team?

You have completed the questionnaire. Thank you for your participation.