The FAA M-SCAIT Survey Content

FAA Aviation Maintenance Safety Survey

You are invited to participate in this survey to assess employee perceptions of safety in your workplace. Please provide your honest feedback, because your responses along with those of your colleagues will provide the information needed to help improve safety and performance in your organization.

The survey takes about 20-30 minutes to complete. Participation in this survey is completely voluntary. You may choose freely to participate or not. Answers to the items are optional, and you may stop and exit the survey at any time without penalty.

Confidentiality: Your survey responses are **confidential**. Your responses will be combined with those of others and summary results will be reported. Essentially, who you are in your organization will not be identifiable, and your individual responses cannot be linked back to you.

On the next page you will be asked to indicate whether you consent to participate in the survey.

Please indicate whether you consent to participate.
- o   I consent to participate
- o   I do not consent to participate

[display if "I do not consent to participate" is selected]

You indicated that you do not want to participate in the survey. While getting as many participants as possible is important, the survey is voluntary and your choice to decline must be respected.

To decline participation, select "Exit Survey". If you would like to participate, select "Return to Informed Consent" and select "I consent to participate".
- o   Exit survey
- o   Return to Informed consent

Sample Demographics[1]

Demographics

D1   **How long have you worked in the aviation industry in <u>years</u>?** (required)

     [dropdown] Less than 1…More than 50

D2   **How long have you worked for your current organization in <u>years</u>?** (required)

     [dropdown] Less than 1…More than 50

D3   **What is your current job role?** (required)

- Senior management (e.g., Director, V. P.)
- Mid-level management (e.g., Program Manager, Division or Department Manager)
- Front-line management (e.g., Project Manager)
- Non-management Leadership (e.g., Lead, Alt. Lead Technician, Inspector)
- Non-management/Maintainer (e.g., Technician, Painter, Aircraft Cleaner, etc.)
- Non-management/Non-maintainer (e.g., Production Control, Tool Room, etc.)
- Safety or Quality Department

D4   **How long have you worked under your current job role in <u>years</u>?** (required)

     [dropdown] Less than 1…More than 50

D5   **What size team do you work with?** (required)

- I do not work as part of a team
- 1-5 other technicians/repairmen
- 6-10 other technicians/repairmen
- More than 10 other technicians/repairmen

D6   **Which Aviation Maintenance certificate(s) do you <u>currently</u> hold?** (required)
     [mark all that apply]

- ☐ Repairman Certificate
- ☐ Mechanic Certificate with Airframe Privileges
- ☐ Mechanic Certificate with Powerplant Privileges
- ☐ Mechanic Certificate with Airframe and Powerplant Privileges
- ☐ Inspection Authorization Designation
- ☐ I do not currently hold an Aviation Maintenance certificate

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[1] Note, example response options are provided; response options should be tailored to the organization's operational needs.

D7   **During the past 3 months on a typical work<u>day</u>, how many hours do you work for your current organization?** (required)

- o   1 to 4 hours
- o   5 to 8 hours
- o   9 to 12 hours
- o   13 to 16 hours
- o   17 to 20 hours
- o   More than 20 hours

D8   **During the past 3 months in a typical work<u>week</u> how many hours did you work for your current organization <u>(including ALL assigned work)</u>?** (required)

- o   Fewer than 30 hours
- o   30-40 hours
- o   41-50 hours
- o   51-60 hours
- o   More than 60 hours

D9   **On average, how often do you work overtime?**

- o   Never
- o   A few times per year
- o   1-2 times per month
- o   Once a week
- o   Twice a week
- o   More than twice a week

D10   **On average, how often do you travel for work?**

- o   Never
- o   A few times per year
- o   1-2 times per month
- o   Once a week
- o   Twice a week
- o   More than twice a week

D11   **What shift do you work?** (required)

- o   1st Shift
- o   2nd Shift
- o   3rd Shift
- o   On-Call

D12   **Are you a Contract or Direct employee of your company?** (required)

- o   Contract employee
- o   Direct employee

Demographics

D13   **Do you have prior military experience?** (required)

- o   Yes
- o   No

D14   **What area of aircraft do you work most of your time?**

- o   Avionics
- o   NDT
- o   Inspection
- o   Sheet metal
- o   A&P
- o   Paint
- o   Admin or Support
- o   Management
- o   Safety or Quality

Job Resources[2]

This section assesses your perceptions of the support you receive in your work environment.

Q1.1 Please indicate your <u>level of agreement</u> with each statement.

Communication

Q1.1_1	We are adequately informed about work-related issues.
Q1.1_2	Work issues are openly discussed between front-line (floor) employees and <u>management</u> (mid/upper).
Q1.1_3	Work issues are openly discussed between front-line (floor) employees and <u>supervisors</u>.
Q1.1_4	There is good communication across the different sections/work groups.
Q1.1_5	A good communication flow exists up and down the chain of command (or equivalent).
Q1.1txt	Please share any additional feedback regarding <u>Communication</u>: *[open-text]*

Q1.2 Please indicate your <u>level of agreement</u> with each statement.

Autonomy

Q1.2_1	We are encouraged to show initiative.
Q1.2_2	We are treated as responsible people.
Q1.2_3	We are trusted to do our work.
Q1.2_4	We are <u>micromanaged</u>.*
Q1.2txt	Please share any additional feedback regarding <u>Autonomy</u>: *[open-text]*

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[2] All 'Agreement' responses are measured on a 6-point Likert anchored at 'Strongly disagree (1)', 'Disagree (2)', 'Slightly disagree (3)', 'Slightly agree (4)', 'Agree (5)', and 'Strongly agree (6)', except open-text items.

Q1.3 Please indicate your <u>level of agreement</u> with each statement.

Training

Q1.3_1	Our training is effective in preparing us for the duties of our jobs.
Q1.3_2	Work related training is carried out at appropriate intervals.
Q1.3_3	Safety issues are given a high priority in training courses within our organization.
Q1.3_4	Safety is consistently emphasized during our training.
Q1.3_5	We understand the safety rules and policies.
Q1.3_6	We agree with the safety rules and policies.
Q1.3txt	Please share any additional feedback regarding <u>Training</u>: *[open-text]*

Q1.4 Please indicate your <u>level of agreement</u> with each statement.

Supervision

Q1.4_1	We see our manager/upper manager on the floor often.
Q1.4_2	We know who our managers are.
Q1.4_3	Supervisors set clear goals and objectives for the team.
Q1.4_4	We trust our supervisors.
Q1.4_5	We consider our supervisor part of our team.
Q1.4_6	Supervisors devote sufficient effort to safety in the workplace.
Q1.4_7	Supervisors carefully listen to safety concerns.
Q1.4_8	Supervisors appropriately react to safety concerns.
Q1.4_9	Management ensures the crew/team is prepared for assigned tasks.
Q1.4txt	Please share any additional feedback regarding <u>Supervision</u>: *[open-text]*

Q1.5 Please indicate your <u>level of agreement</u> with each statement.

Management Commitment

Q1.5_1	Management values safety.
Q1.5_2	We receive managerial support even if following safety rules affects operational activities.
Q1.5_3	<u>Supervisor/Front-line management</u> is committed to our safety objectives.
Q1.5_4	<u>Middle management</u> is committed to our safety objectives.
Q1.5_5	<u>Senior management (Owner/CEO)</u> is committed to our safety objectives.
Q1.5_6	Employee input is used to develop and improve safe work procedures.
Q1.5txt	Please share any additional feedback regarding <u>Management Commitment</u>: *[open-text]*

This section assesses your perceptions of how your organization responds to individuals who make an honest mistake.

Q2.1 Please indicate your <u>level of agreement</u> with each statement.

Just Culture

Q2.1_1	We seek to learn from honest mistakes rather than place blame.

Just Culture

Q2.1_2	We can report safety problems without fear of negative consequences.
Q2.1_3	We are confident that when we report our errors we will be treated fairly.
Q2.1_4	Corrective action for <u>unsafe practices</u> is <u>appropriate.</u>
Q2.1_5	Corrective action for <u>unsafe practices</u> is <u>consistent.</u>
Q2.1_6	Corrective action for <u>violations of safety procedures/rules</u> is <u>appropriate</u>.
Q2.1_7	Corrective action for <u>violations of safety procedures/rules</u> is <u>consistent.</u>
Q2.1_8	People will speak up when someone is working unsafely.
Q2.1txt	Please share any additional feedback regarding <u>Just Culture</u>: *[open-text]*

Q2.2 Please indicate your <u>level of agreement</u> with each statement.

Equipment and Tools

Q2.2_1	Our work facilities are adequate for the safe performance of our duties.
Q2.2_2	There is sufficient personal protective clothing and equipment available for tasks to be carried out safely.
Q2.2_3	Necessary safety equipment is always accessible.
Q2.2_4	Available safety equipment is in good condition.
Q2.2_5	We have the equipment/tools that we need to do our job properly.
Q2.2_6	We have the parts/consumables that we need to do our job properly.
Q2.2txt	Please share any additional feedback regarding <u>Equipment and Tools</u>: *[open-text]*

This section assesses your perceptions of job role-specific factors.[3]

Q3.1 Please indicate your <u>level of agreement</u> with each statement.

Documentation

Q3.1_1	Technical manuals are easy to use.
Q3.1_2	Technical manuals are up-to-date.
Q3.1_3	Technical manuals are easy to access.
Q3.1_4	Technical manuals are easy to learn.
Q3.1_5	Updates to our technical manuals are handled <u>in a timely manner</u>.
Q3.1_6	Operating procedures are accurately described in our technical manuals.
Q3.1_7	Our electronic manuals have all the functions and capabilities we expect them to have.
Q3.1_8	Electronic devices are an effective way to present technical manuals.
Q3.1_9	I am committed to following the procedures documented in the technical manual.
Q3.1_10	We have enough time to read all the documentation.

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[3] *Note,* questions were tailored to the organization's operational needs.

Documentation

Q3.2	**Do you know about the standard method of reporting missing or unclear procedures in our technical manuals?** *[Yes/No]*

Q3.3 Please indicate your <u>level of agreement</u> with each statement. *[Agreement scale with N/A option]*

Documentation

Q3.3_1	There are too many sources of information that we need to consult in addition to our manuals.*
Q3.3_2	It is easy to get lost in our electronic manuals when following procedures that require access to multiple screens.*
Q3.3_3	I report missing or unclear procedures.[4]
Q3txt	Please share any additional feedback regarding <u>Documentation</u>: *[open-text]*

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[4] This item was reclassified into Willingness to Report subscale for the SEM modeling.

This section assesses your perceptions of your organization's voluntary reporting system. A voluntary reporting system is a formal (non-verbal) way of reporting hazards and safety violations or incidents in your environment.

Report System

Q4.1	**Our organization has a voluntary reporting system.** *[Yes/No]*
Q4.2	**Our organization's voluntary reporting system is electronic.** *[Yes/No]* [display if Q4.1 = yes]
Q4.3	**I know how to use our organization's voluntary reporting system.** *[Yes/No]* [display if Q4.1 = yes]

Q4.4 Please indicate <u>how well</u> each statement represents your organization's voluntary reporting system. [display if Q4.1 = yes]

Report System

Q4.4_1	Easy to use.
Q4.4_2	Accessible to everyone.
Q4.4_3	Confidential.
Q4.4_4	Allowed to make reports while on the clock.
Q4.4_5	Everyone is included in our safety reporting and resolution system.

Report System

Q4txt	**Please share any additional feedback regarding <u>Report System</u>:** *[open-text]*

Job Demands[5]

This section explores challenges you may encounter at work.

Q5.1 Please indicate <u>how often</u> you encounter each of these challenges.

Workplace Restraints

Q5.1_1	We are given enough notice of variations to schedules/duty rosters.
Q5.1_2	We are concerned about loss of skills because of the lack of opportunity to practice.*
Q5.1_3	We spend more time on paperwork than our real jobs.*
Q5.1_4	Unimportant tasks or activities interfere with our real jobs.*
Q5.1_5	Conflicting job assignments are given (e.g., told to do flight control functional checks while avionics has power off changing boxes).*
Q5.1_6	We are interrupted part-way through tasks to perform other, more urgent tasks.*
Q5.1txt	Please share any additional feedback regarding <u>Workplace Restraints</u>: *[open-text]*

Q5.2 Please indicate <u>how often</u> you encounter each of these challenges.

Unit Role Overload

Q5.2_1	We have trouble keeping up with our workload.*
Q5.2_2	We have to work overtime to get our work done.*
Q5.2_3	We feel pressure because of the critical nature of our work.*
Q5.2_4	Work requirements (e.g., absences or extended hours) put pressure on our personal lives.*
Q5.2_5	We are required to rush tasks to meet job requirements.*
Q5.2_6	We have enough time to carry out our tasks properly.
Q5.2_7	We have insufficient staffing to achieve allocated tasks on time.*
Q5.2txt	Please share any additional feedback regarding <u>Team Role Overload</u>: *[open-text]*

Q5.3 Please indicate <u>how often</u> you encounter each of these challenges.

Safety Concerns

Q5.3_1	There is pressure from management to quickly complete assigned tasks at the cost of safety.*
Q5.3_2	We cannot work safely and keep up with our work schedule.*
Q5.3txt	Please share any additional feedback regarding <u>Safety Concerns</u>: *[open-text]*

Q5.4 Please indicate <u>how often</u> you encounter each of these challenges.

Personal Role Overload

Q5.4_1	I am pressured to work long hours.*
Q5.4_2	I have unachievable deadlines.*
Q5.4_3	I have unrealistic time pressures.*

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[5] All 'Frequency' responses are measured on a 6-point Likert anchored at 'Never (1)', 'Rarely (2)', 'Sometimes (3)', 'Frequently (4)', 'Most of the time (5)', and 'All of the time (6)', except open-text items.

Personal Role Overload

Q5.4_4	I have to neglect some tasks because I have too much to do.*
Q5.4txt	Please share any additional feedback regarding <u>Personal Role Overload:</u> *[open-text]*

Q5.5 Please indicate <u>how often</u> you encounter each of these challenges.

Co-worker Concerns

Q5.5_1	Underperformance is dealt with effectively.
Q5.5_2	We have to cover for underperforming colleagues.*
Q5.5_3	Inexperienced staff are promoted/appointed too quickly into supervisory/ management roles.*
Q5.5txt	Please share any additional feedback regarding <u>Co-worker Concerns</u>: *[open-text]*

Organizational Outcomes

This section assesses your reporting behavior.

Q6.1 Please indicate your <u>level of agreement</u> with each statement.

Willingness to Report[6]

Q6.1_1	I always make the effort to report my own mistakes and incidents.
Q6.1_2	I encourage others to report safety hazards, their mistakes, and safety incidents.
Q6.1_3	Reporting safety hazards, mistakes, and incidents makes a difference to safety.
Q6.1_4	Employees who report safety hazards are given positive recognition by management.
Q6.1_5	Management encourages the reporting of safety hazards, mistakes, and safety incidents.
Q6.1txt	Please share any additional feedback regarding <u>Willingness to Report</u>: *[open-text]*

This section explores your views on how well you and your team are performing.

Q7.1 Please indicate your <u>level of agreement</u> with each statement.

Performance

Q7.1_1	We work efficiently.
Q7.1_2	Our work output is high.
Q7.1_3	We consistently meet our objectives.
Q7.1_4	We review our work processes for opportunities to improve.
Q7.1_5	It is acceptable to challenge the way things are done.
Q7.1_6	There is a genuine focus on continuous improvement.
Q7.1txt	Please share any additional feedback regarding <u>Performance</u>: *[open-text]*

Q7.2 During the past 12 months...

Injury (12 months)

Q7.2_1	Have you experienced any job-related <u>repetitive strain injuries</u> that required medical attention (e.g., carpal tunnel, tendinitis)? *[Yes/No]*
Q7.2_2	Have you experienced any job-related <u>moderate to serious acute injuries</u> (e.g., fractured/broken bones, head or eye injuries)? *[Yes/No]*

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[6] Items Q6.1_3, Q6.1_4, and Q6.1_5 were excluded from SEM Model 3.

This section asks you about your work-related mistakes or errors during the past 3 months.

Keep in mind that these items are meant to assess your own, personal experience, not those of your co-workers. Answer these items based on your own, personal experience. Please be honest, and remember that your responses are confidential and cannot be linked back to you.

Q8. Everyone makes mistakes. Below are some of the common reasons why people make errors on the job.
Please answer the following items based on your own, personal experience. Please consider ALL mistakes and errors, big or small.

During the past 3 months, how often has each of the following contributed to your work-related mistakes or errors (big or small)? *[Frequency scale with N/A option]*

Errors (3 months)

Q8.1_1	Stress.
Q8.1_2	Distractions.
Q8.1_3	Tiredness.
Q8.1_4	Time pressure.
Q8.1_5	Apathy.
Q8.1_6	Complacency.
Q8.1_7	Too many things to do.
Q8.1_8	Lack of concentration.
Q8.1_9	Lack of knowledge.
Q8.1_10	Forgetfulness.
Q8.1_11	Poor teamwork.
Q8.1_12	Not having the right equipment/tools.
Q8.1_13	Not having the right parts/consumables.
Q8.1_14	Not having correct/current documentation.
Q8.1_15	Physical work environment (e.g., lighting, temperature, noise).
Q8.2_1	Failing to detect a fault when completing a visual inspection.
Q8.2_2	Misunderstanding how a particular aircraft system worked.
Q8.2_3	Resuming at the wrong place when returning to a task after an interruption.
Q8.2_4	Missing a step(s) in a maintenance task.
Q8.2_5	Installing a part the wrong way.
Q8.2_6	Fitting/applying an incorrect part or component into an aircraft.
Q8.2_7	Refitting an aircraft panel incorrectly after a task.
Q8.3_1	Forgetting to check that all steps in a procedure were completed.
Q8.3_2	Leaving a tool or some other items in the aircraft/system.
Q8.3_3	Finding a part left over after a job was completed.
Q8.3_4	Forgetting to sign off a task.
Q8.3_5	Signing off a task without completely/ thoroughly checking.

Errors (3 months)

Q8.3_6	Incorrectly entering the details of a component into the documentation.
Q8.3_7	Variance in model of aircraft we work on.
Q8.3_8	Changes in the assignment of aircraft that we work on.
Q8txt	Please share any additional feedback regarding <u>Errors</u>: *[open-text]*

Q9.1 Please indicate your <u>level of agreement</u> with each statement.

Compliance

Q9.1_1	I have taken risks, beyond those inherent in my job, in order to get a task done.*
Q9.1_2	I am prepared to overlook some rules in order to get the job done more quickly.*
Q9.1_3	Supervisors sometimes 'turn a blind eye' when rules are bent.*
Q9.1_4	People use undocumented and/or unauthorized workarounds to get the job done.*
Q9.1_5	People have intentionally not complied with an approved procedure or process to get the job done.*
Q9.1_6	Written procedures often do not reflect how the job is done.*
Q9.1_7	My workgroup uses locally developed processes to perform work tasks.*
Q9txt	Please share any additional feedback regarding <u>Compliance</u>: *[open-text]*

Employee Outcomes

This section explores satisfaction and morale at work.

Q10.1 Please indicate your <u>level of agreement</u> with each statement.

Job Satisfaction and Morale

Q10.1_1	I am satisfied with my current job.
Q10.1_2	I like the type of work I do.
Q10.1_3	I find my job rewarding.
Q10.1_4	The morale in my unit/workplace is high.
Q10.1_5	I like my co-workers.

Q10.2 Please indicate your <u>level of agreement</u> with each statement.

Turnover Intentions

Q10.2_1	I often think about quitting this organization.*
Q10.2_2	I intend to search for a position with another employer in the next year.*
Q10txt	Please share any additional feedback regarding <u>Job Satisfaction and Morale</u>: *[open-text]*

This section assesses your general health.

Q11 Please indicate <u>how often</u> you encounter each of these challenges.

Recently, how often have you…

General Health Questionnaire

Q11.1_1	Been able to concentrate on what you are doing.
Q11.1_2	Lost sleep over worry.*
Q11.1_3	Felt that you are playing a useful part in things.
Q11.1_4	Felt capable of making decisions about things.
Q11.1_5	Felt continually under strain.*
Q11.1_6	Felt you could not overcome your difficulties.*
Q11.2_1	Been able to enjoy your normal day-to-day activities.
Q11.2_2	Been able to face up to your problems.
Q11.2_3	Felt unhappy and/or depressed.*
Q11.2_4	Experienced a lack of confidence in yourself.*
Q11.2_5	Thought of yourself as worthless.*
Q11.2_6	Felt happy.
Q11txt	Please share any additional feedback regarding <u>General Health</u>: *[open-text]*

Fatigue
This section assesses your fatigue.

Fatigue Risk Management

Q12.1 **Our organization has a formal Fatigue Risk Management System.** *[Yes/No/Don't Know]*

Q12.2 Please indicate your <u>level of agreement</u> with each statement.
Fatigue Risk Management

Q12.2_1	Fatigue represents a significant risk in our organization.[7]
Q12.2_2	Our organization is aware of impact of fatigue on employee's performance.
Q12.2_3	Our organization attempts to mitigate employee's fatigue.
Q12.2_4	All maintenance employees have received fatigue awareness training provided by the organization.

Q12.3 Please indicate your <u>level of agreement</u> with each statement.
Fatigue Risk Management

Q12.3_1	Our organization assesses for extended duty shifts (+12 hours).
Q12.3_2	Our organization assesses for excessive consecutive days on duty (+7 days).
Q12.3_3	Extended duty shifts (+12 hours) are common practice for our organization.*
Q12.3_4	Excessive consecutive days on duty (+7 days) are common practice for our organization.*
Q12.3_5	There are special considerations to address fatigue risk on the graveyard shift (early morning or night shift).
Q12.3_6	Workers can use sick leave to call in fatigued.
Q12.3_7	Management/Supervisors schedule to minimize fatigue.

Q12.4 Please indicate <u>how often</u> you have experienced each of the following:
Strain and Fatigue

Q12.4_1	I work seven (7) consecutive duty days without 24 hours of rest.*
Q12.4_2	I feel stressed at work.*
Q12.4_3	I experience fatigue while on duty.*
Q12.4_4	Fatigue has affected my ability to perform the job effectively.*
Q12.4_5	I commit errors while on duty because of fatigue.*
Q12.4_6	Others in your work group exhibit fatigue while on duty.*

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[7] Note that this item can be interpreted either 1) positively - Our organization considers fatigue as a key risk factor (to be controlled), or 2) negatively - Our organization currently has a fatigue risk. The researchers categorized it positively, but additional caution is needed when interpreting this result.

Q12.5 **Which of the following factors contributed to your fatigue while on duty?** *[mark all that apply]*

- ☐ Workload
- ☐ Work pace
- ☐ Rotating work schedule
- ☐ Work shift (i.e., early morning, night shift)
- ☐ Work environment (i.e. noise, temperature, air quality, lighting, etc.)
- ☐ Family demands
- ☐ Physical health
- ☐ Travel for work (distance and duration)
- ☐ On-call operations
- ☐ Other (please specify)

Q12.5txt **Other factors that contributed to your fatigue while on duty:** *[open-text]* [display if Q12.6 = Other (please specify)]

Q12.6 **Are there any operational changes that you would recommend to reduce your risk of fatigue?** *[Yes/No]*

Q12.6txt **Operational changes you recommend to reduce risk of fatigue:** *[open-text]* [display if Q12.7 = yes]

Q12txt **Please share any additional feedback regarding <u>Strain and Fatigue</u>:** *[open-text]*

Bullying[8]
This section assesses your work environment.

"Workplace bullying" is a persistent, unreasonable form of harassment. It can be defined as unwanted or unwelcome behavior that a reasonable person, having regard to all the circumstances, would consider offensive, insulting, humiliating, or intimidating. Workplace bullying does not include reasonable management action taken in a reasonable way.

Please indicate <u>how often</u> you encounter each of these challenges.

Bullying (3 months)

Q13.1   In the past three months, how often have you been subjected to workplace bullying?

Bullying (conditional questions)

[display if 13.1 = sometimes, frequently, most of the time, or all of the time]
Q13.2 The following behaviors are often seen as examples of negative behavior in the workplace. Please indicate <u>how often</u> you've encountered these negative acts in the <u>last 3 months</u>.

Over the <u>last 3 months</u> how often have you been subjected to the following...

Note: The response scale has changed. Please read carefully.

Bullying (3 months)

Q13.2_1   Someone withholding information which affects your performance.*
Q13.2_2   Being humiliated or ridiculed in connection with your work.*
Q13.2_3   Being ordered to do work below your level of competence.*
Q13.2_4   Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks.*
Q13.2_5   Spreading of gossip and rumors about you.*
Q13.2_6   Being ignored, excluded or getting 'the cold shoulder'.*
Q13.2_7   Having insulting or offensive remarks made about your person (i.e., habits and background), your attitudes, or your private life.*
Q13.2_8   Being shouted at or being the target of spontaneous anger (or rage).*

Q13.3_1   Intimidating behavior, such as finger-pointing, invasion of personal space, shoving, blocking/barring the way.*
Q13.3_2   Hints or signals from others that you should quit your job.*
Q13.3_3   Repeated reminders of your error or mistakes.*
Q13.3_4   Being ignored or facing a hostile reaction when you approach others.*
Q13.3_5   Persistent criticism of your work and effort.*
Q13.3_6   Having your opinions and views ignored.*

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[8] All 'Frequency' responses are measured on a 5-point Likert anchored at 'Never (1)', 'Now and then (2)', 'Monthly (3)', 'Weekly (4)', and 'Daily (5)', except for item 13.1 and open-text items.

Bullying (3 months)

Q13.3_7	Practical jokes carried out by people you don't get along with.*
Q13.3_8	Being given tasks with unreasonable or impossible targets or deadlines.*
Q13.4_1	Having unsubstantiated allegations made against you.*
Q13.4_2	Excessive monitoring of your work.*
Q13.4_3	Pressure not to claim something which by right you are entitled to (e.g., sick leave, holiday entitlement, travel expenses).*
Q13.4_4	Being the subject of excessive teasing and sarcasm.*
Q13.4_5	Being exposed to an unmanageable workload.*
Q13.4_6	Threats of violence or physical abuse or actual abuse.*
Q13txt	Please share any additional feedback regarding Bullying: *[open-text]*

System Usability and Workload

This section assesses the usability and workload that you experienced while completing the survey. Please be honest, as your responses will be used to improve the survey for future respondents.

Q14.1 Please indicate your level of agreement with each statement.

Usability

Q14.1_1	The time required to complete this survey is appropriate for the value of the data collected.
Q14.1_2	The survey contains important items to assess an organization's safety culture.
Q14.1_3	The survey is user-friendly.
Q14.1_4	I would recommend this survey for industry use.
Q14.1_5	The survey results will be used by management to identify areas in need of improvement.
Q14.1_6	Managers will make meaningful improvements based on the survey results.
Q14.1_7	I thought there was too much inconsistency in the survey.*
Q14.1_8	I found the survey unnecessarily complex.*
Q14txt	Please share any additional feedback regarding Usability: *[open-text]*
Q15txt	**If you have feedback about how to improve the survey content, please provide it in the text box below.** *[open-text]*

Data Scoring and Analysis

- To protect confidentiality of the participants, only analyses and reports of aggregated data (i.e., where $n \geq 8$) should be produced and reported.
- The survey items and response options can be standardized for analysis. This allows easier interpretation of the results, where higher values always reflect more positive perceptions of the safety culture regardless of meaning of all subscales. To calculate a simple average within each subscale, all average scores can be mathematically standardized from a 6-point Likert scale to a 10-point score for ease of interpretation (see *Equation 1*). When standardizing, keep in mind:
    - Items marked by an asterisk (*) are reversely worded; therefore, the scores should be reversed before standardizing and analyzing the data.
    - The 'Not Applicable' (N/A) responses can be excluded for score averaging.
- Standardizing scores may not be appropriate for some data types, such as yes-no response options and comment responses. Instead, consider:
    - Calculating percentage of yes responses.
    - Identifying themes in comment responses, such as: strengths, opportunities, recommendations for improvement.

Equation 1
Rescaling Likert Scales for Standardized Scores

$$Standardized\ score\ = \frac{Average\ score - 1}{Maximum\ scale\ score - 1} * 10$$