

# Qualitative safety research at mandg resins



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## Abstract

In this article, qualitative safety research at M&G Resins will be discussed. M&G Resins is a polymer production plant that is projected to be the largest producer of plastics in the United States. Currently, this company is under construction and has experienced numerous incidents and delays. To overcome these complications, M&G Resins will utilize the importance of qualitative research to enhance the construction project and prevent future incidents. The type of qualitative research that is being implemented is safety knowledge management (KM), and safety climate and behaviour research. These qualitative research tools are required to enhance the organization's safety program. Qualitative research provides the ability to understand other employee's safety needs or perceptions. It allows an organization to become a safety-first climate. In order to achieve a safety-first climate the organization needs to learn areas of needed enhancements. This is why qualitative safety research is paramount at M&G Resins. M&G will discuss the tools utilized for qualitative research, and how the effectiveness is measured in that research. To measure qualitative effectiveness the key safety indicators that will be utilized at M&G is the Experience Modification Rate (EMR), hazard observations with Stop Work Authority (SWA), and employee involvement. This paper will also inform the reader on the importance of safety research, safety methods and safety methodology behind a safety-first climate.

Qualitative Research in Safety

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M&G Resins is a polymer production plant that is projected to be the largest producer of plastics in the United States. Currently, this company is under construction and has experienced numerous incidents, work delays, and cost overruns. During the construction process there has been an extensive amount of recordable injuries and incidents. Overall, M&G Resins has an Experience Modification Rate (EMR) of greater than 2.0. The EMR is a number that utilizes payroll, and total incident loss experiences to measure insurance cost premiums (Smith, 2009). According to Smith (2009), a good EMR of less than 1.0 is achievable; only if the company adopts excellent incident control and prevention practices. M&G Resin's EMR reflects a lack in excellent incident control and prevention practices. At M&G, a majority of the incidents are not getting reported to M&G management.

To overcome this issue, qualitative research is now used to understand and evaluate the current safety program. Qualitative research relies on researching the individual's thoughts, perceptions, and experiences about a safety program (Olsen, Bjerkan, & Naevestad, 2009). It is imperative to incorporate qualitative research to ensure a proactive and successful safety program. To be more proactive towards accident prevention, M&G set high standards for a safety-first climate. A safety-first climate is defined as one that exhibits employee's beliefs in regards to safety. Research indicates that these beliefs are directly related to safety behaviors and incidents (Huang, Jeffries, Tolbert, & Dainoff, 2017). In support of these beliefs, there is an expectation for employers to research and implement safety programs. According to Neal and Griffin (2002), only just recently have organizations focused on implementing proactive safety behaviors. This is mainly due to

the extensive amount of direct and indirect cost associated with workplace incidents. Thus, M&G Resins adopted safety knowledge management (KM) as primary qualitative research to counteract the incident rate. Effective KM is seen when organizations continuously improve production, quality, safety, and corporate image. The only way to ensure this is achieved is to acquire employee feedback and involvement. M&G utilizes feedback surveys after every training session to ensure the correct goals and/or messages have been received. These surveys also provide other data to the presenter and management with an outsider's view as to enhance the programs.

Safety Climate and Behaviour research model is utilized as secondary qualitative research to support M&G's primary KM research. To measure the overall effectiveness of the KM research, M&G Resins utilizes the Safety Climate and Behaviour research model. This research model is developed by Andrew Neal & Mark Griffin (2002). These authors developed a model based on a five year study to convey the importance of a safety-first climate (Neal & Griffin, 2002). The components utilized to link the relationship of a safety-first climate in the workplace are leadership support, safety knowledge, and safety motivation to measure the overall safety performance. This model utilizes two data points to research an organization's safety performance. The first data point utilizes upper management and leadership as antecedents. Antecedents are individuals that indirectly affect the behavior of the entire organization in regards to knowledge, skill, or motivation (Neal & Griffin, 2002). Antecedents are normally considered as upper management. These antecedent individuals are normally the organization's Company Executive Officers (CEOs), or Directors. According to Neal and

Griffin (2002), the second data point utilizes determinants as a performance measure of factors that directly affect worker behavior through their actions. These determinant individuals are normally the organization's middle management. This is usually the front-line employee's immediate Supervisor, or Manager. The determinants directly affect the worker's performance in regards to knowledge, skills, and motivation (Neal & Griffin, 2002). In other words, people are dependent upon management to be role models through their daily actions.

For this reason, M&G developed a Fundamentals of Management (FOM) training program that is currently being implemented. This FOM training ensures management takes proper actions at all times. The FOM presentation identifies various research methods that visualize incident trends by using the safety triangle. According to the American Society of Safety Engineers (ASSE), the safety triangle was created 86 years ago by H. W. Heinrich (ASSE, 2014). The safety triangle provides an incident ratio that reassures the root causes of all incidents are identified. It is imperative that even minor incidents are prevented, which in turn will prevent the major incidents (ASSE, 2014). With the safety triangle, M&G inputs their incident ratio into the safety triangle to identify problem areas and trends.

The FOM presentation also utilizes research based on the total number of SWA's employees utilized and resolved. Employees are trained, supported, and motivated to utilize SWA for any hazard observations. A hazard could be any unsafe act or condition in the work environment. This continuous employee involvement is critical to ensure the safety program is psychologically working. As cited in Neal and Griffin (2002), psychological

climate is when individual perceptions of the work environment are established. It is when these perceptions of the work environment are shared, that it becomes an organizational climate (as cited in Neal & Griffin, 2002).

It is important for management to receive feedback from employees on needed enhancement areas. During the FOM presentation, leaders are encouraged to support, train, and motivate employees to be safe on any job (as cited in Neal & Griffin, 2002). To overcome any miscommunication, it is critical for a safety program to test employees on knowledge learned. As a follow-up, M&G Resins constantly researches employees' feedback by issuing questionnaires on safety-related objectives. This research provides another means to ensure employees have received the correct message, as well as enhance future safety objectives. This helps to ensure the principles of learning have been achieved. Safety compliance and participation can only be achieved once employees have the proper knowledge, skills, and motivation (Neal & Griffin, 2002). Safety compliance and participation is measured by M&G Resins to ensure proper relationship behaviors are occurring.

When safety compliance and participation are both lacking in the workplace, the root cause can be traced back to the determinants of performance. If individuals do not have knowledge, skill, or motivation they will not comply or participate (Neal & Griffin, 2002). As a result, M&G's management is encouraged to follow the proper relationship among antecedents, determinants, and components for sufficient safety performance. Research is utilized on a daily basis within M&G Resins' to determine the overall success

and failures. Research is paramount in the safety field to prevent future incidents.

### Qualitative Research Results

Since implementation of the qualitative research, M&G safety program has improved significantly. Currently, M&G has an EMR of 1.5, and more employees are becoming involved to enhance the safety program. More incidents are now being reported, as well as SWA's. Last month alone there was a total of 30 SWA's that was reported to management. Management has also resolved hazard observations immediately to show employees the importance of their help. M&G has also formed a safety committee comprised of ten employees that freely volunteered to be on the committee. A safety committee is the sole driving force behind the success of a safety program. It provides a direct voice for employees out in the field to upper management on needed enhancements.

### Conclusion

In my opinion, as a safety professional, qualitative research is a required necessity to improve any organization. Without qualitative research an organization would become stagnant in day-to-day operations and programs. Qualitative research allows constructive feedback from employees to the organization which ensures proactive actions. Proactive actions are vital in a safety program and an organization as well. As a result, a future qualitative tool at M&G Resins will consist of a technology implementation called Eagle Eye. This is a software program, as well as a phone application. Eagle will allow employees to input hazard observations, needed enhancements, and

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other organization comments. This new technology will allow a quicker and effective means to track data. It will allow real time safety needs directly to management and supervisors. This ability will provide an effective means to reduce and prevent incidents.

In hindsight, when an organization is able to be proactive in reducing or eliminating incidents, it can then focus on other areas of the organization. These areas are production, quality, safety, and corporate image. Qualitative research will propel, achieve, and advance desired goals in these departments. As a result, the organization is able to understand the employee's needs and wants. This in turn creates sustainability and enhancement of in an organization. Any organization would be wise to incorporate and utilize qualitative research to achieve a spot on the global stage.

## References

American Society Of Safety Engineers. (2014). *ASSE's professional safety journal: A new view of the great safety pyramid*. Retrieved from <http://www.asse.org/asses-professional-safety-journal-a-new-view-of-the-great-safety-pyramid/>

Huang, Y. H, Jeffries, S., Tolbert, G. D., & Dainoff, M. J. (2017). *Safety climate*. Retrieved from <http://web.b.ebscohost.com.libraryresources.columbiasouthern.edu/ehost/pdfviewer/pdfviewer?sid=7b076142-a850-4215-a181-379f20d93365%40sessionmgr104&vid=4&hid=116>

Neal, A., & Griffin, M. A. (2002). *Safety climate and safety behaviour*. Retrieved from <https://assignbuster.com/qualitative-safety-research-at-mg-resins/>



<http://web. b. ebscohost. com. libraryresources. columbiasouthern. edu/ehost/detail/detail? vid= 6&sid= f4fdbfe9-acc4-46f7-bd19-fcdd784af3c4%40sessionmgr120&hid= 123&bdata=>

[JnNpdGU9ZWwhvc3QtbGl2ZSZzY29wZT1zaXRI#AN= 9373705&db= bth](http://web. b. ebscohost. com. libraryresources. columbiasouthern. edu/ehost/detail/detail? vid= 6&sid= f4fdbfe9-acc4-46f7-bd19-fcdd784af3c4%40sessionmgr120&hid= 123&bdata= JnNpdGU9ZWwhvc3QtbGl2ZSZzY29wZT1zaXRI#AN= 9373705&db= bth)

Smith, S. (2009). *Area workers' comp agency asks employers: How low can you go?* Retrieved from [http://ehstoday.](http://ehstoday.com/health/workers-compensation/workers_comp_modification_score_6765)

[com/health/workers-compensation/workers\\_comp\\_modification\\_score\\_6765](http://ehstoday.com/health/workers-compensation/workers_comp_modification_score_6765)

Olsen, E., Bjerkan, A. M., & Naevestad, T. O. (2009). *Modelling the effects of a large-scale safety culture programme: a combined qualitative and quantitative approach.* Retrieved from [http://web. b. ebscohost. com.](http://web. b. ebscohost. com. libraryresources. columbiasouthern. edu/ehost/pdfviewer/pdfviewer? sid= c551831e-3525-4ce7-8759-f0382ae7f697%40sessionmgr120&vid= 5&hid= 116)

[libraryresources. columbiasouthern. edu/ehost/pdfviewer/pdfviewer? sid= c551831e-3525-4ce7-8759-f0382ae7f697%40sessionmgr120&vid= 5&hid= 116](http://web. b. ebscohost. com. libraryresources. columbiasouthern. edu/ehost/pdfviewer/pdfviewer? sid= c551831e-3525-4ce7-8759-f0382ae7f697%40sessionmgr120&vid= 5&hid= 116)