Once More, with Feeling: A Case Study in Emotional Intelligence Testing of Library Staff

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Abstract
Emotional intelligence is key to employee success, yet many libraries do not consider EI in training. 46 library staff completed the Emotify test and a survey assessing their performance. Staff in leadership roles tended to score higher and rate their EI knowledge higher. Staff with lower scores tended to assess the test as not useful. More EI training is needed for nonsupervisory staff, and library administrations should encourage EI training for all staff.

Keywords
library, emotional intelligence, EI, Emotify, emotions, training
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Since the term first emerged in the 1960s, the concept of emotional intelligence has fascinated researchers and business practitioners alike. At its core, emotional intelligence (EI) involves the dual abilities of recognizing and managing one’s own emotions and recognizing and responding to the emotions of others. These EI skills have been proven important to success in business and academic endeavors, and they are equally helpful to the success of staff engaged in the helping profession of librarianship. In particular, emotional intelligence is now considered an important construct in theories of successful leadership (Northouse, 2019). Nevertheless, research on emotional intelligence in library staff remains scarce, and EI as a training tool is rarely discussed. This case study represents a step toward the analysis of the emotional intelligence skills of library staff, and reveals the need for library administrators to take the lead in encouraging EI training for library staff.

Literature Review

The topic of emotional intelligence in libraries is still infrequently discussed, but a few authors have published on the topic. Lucas (2020) made a recent argument for focusing on emotional intelligence skills when hiring library staff, particularly those in leadership positions. Her premise, that simply listing leadership skills on a job application is not enough, leads her to suggest that hiring committees build emotional intelligence skills into job postings. Promis (2008) issued the same call over a decade ago when she asked the question, are library managers looking for the right competencies when hiring library staff? Her research found that only a small percentage of job postings referenced specific emotional intelligence skills, even at a time when teamwork in libraries has grown more important. Reflecting on EI skills in library work, King and Porter (2013) also suggest that emotional intelligence is important to all interactions at the library, from hiring decision to dealing with challenging patrons.
Outside the realm of literature related to libraries, the body of research is growing on emotional intelligence as it relates to hiring and training. Authors and researchers seek to address the challenges of hiring for EI, including the use of techniques like behavioral event interviewing (McKee, 2016). In a study with more than 600 participants, researchers examined the incremental validity and differential prediction of an emotional intelligence test as a hiring tool, finding it was predictive of performance and cognitive abilities (Iliescu et al., 2012). In addition, researchers are seeking to determine whether the skills associated with emotional intelligence can be developed through training. Dulewicz and Higgs (2004) found that elements of emotional intelligence could be developed by training after observing improvement in the scores of test subjects who completed a course in the subject. In a study of 59 participants who completed a 3-week online EI training, those who completed the training scored higher on the Mayer-Salovey-Caruso Emotional Intelligence Test and demonstrated a faster learning rate during an emotion-based decision-making task. Participants in the placebo group, who did not complete EI training, did not demonstrate the same improved abilities (Demers et al., 2019).

Using EI testing as a hiring tool is problematic when its use is considered among neurodivergent job candidates or candidates from other disadvantaged populations. Neurodivergent job applicants, for example, face both outright and systemic discrimination when applying for positions. At the same time, they bring valuable talents and perspectives to the workforce—so much so that companies such as Microsoft and IBM have launched exploratory programs designed specifically to attract neurodiverse talent to their organizations (Austin & Pisano, 2017). In light of the potential for discrimination, libraries may do better to employ EI tools toward staff training and development, rather than as part of the hiring process. EI training has the potential to benefit all employees, including neurodivergent employees. For example, adults with high-functioning autism have been found to show increased social skills from social cognition training (Kandalaft et al., 2012), and participants in another social cognitive training program showed increased scores on the Mayer-Salovey-Caruso Emotional Intelligence Test.
(Shashi et al., 2015). For the above reasons, this case study focuses primarily on EI testing as a training tool.

**Case Study Methodology**

In this case study, 46 volunteer library staff members completed an online test (Emotify) designed to measure emotional intelligence and a follow-up survey to collect their perceptions and self-analysis after the experience. Participants in the case study represented diverse ages, genders, races, education levels, and positions within a public library in South Carolina. Participants’ test results and survey responses were analyzed together to identify trends in the information and further opportunities for training and research.

**Emotify Test**

The Emotify test is a game-based assessment containing two sections titled “Matching Faces” and “Emotional Ties.” These two sections require test takers to correctly identify an emotion from a person’s face and to match emotional responses to different situations. Unlike tests with traditional answer formats (multiple choice, true/false, etc.), the game-based testing format has been shown to maximize the test-taker’s engagement and effort, while minimizing biased or dishonest answers. Professional actors were captured in over 10,000 images genuinely displaying the seven universal emotions: happiness, sadness, anger, surprise, disgust, contempt, and fear. The test underwent two rounds of validation, involving 3,000 testers, to test its psychometric properties; the results indicated a strong correlation between test results and emotional intelligence performance (Criteria, 2020). The library in the case study obtained access to the test through Criteria’s HireSelect software.

Using an ability-based approach to emotional intelligence (EI), the Emotify test uses the research of Mayer and Salovey to measure both emotional perception and emotional understanding. The concept of emotional perception involves the ability to accurately assess expressions of emotion and correctly use that nonverbal data to identify emotions in other individuals (Criteria, 2020). A similar
emotional perception test using visual stimuli also found that “the ability to extract emotional information from faces” was indeed associated with the attributes of emotional intelligence, particularly empathy (Mayer, DiPaolo, & Salovey, 1990). Emotional perception has been shown to positively affect performance at work (Lam & Kirby, 2002).

Figure 1: Matching Faces

The second section of the Emotify test focuses on the concept of emotional understanding, which “is concerned with how well one can effectively identify connections between events and emotional reactions” (Criteria, 2020, p.3). As an individual’s level of emotional intelligence increases, so too does their ability to link event-based emotional triggers to a predicted emotional response in themselves and in others. The Emotional Ties section of the assessment requires test-takers to match a described scenario with a face realistically displaying the emotion likely triggered in a participant in the situation (Criteria, 2020). Other situational judgment tests with a similar premise include the Changes section of the MSCEIT and the Situational Test of Emotional Understanding, though scoring of these tests remains a challenge (Hellwig, Roberts, & Schulze, 2020).
Volunteer Test-Takers

The case study involved 46 volunteer participants who were current public library staff members. Participants represented a variety of job titles and years of experience. The case study group also included diversity in areas such as age, race, ethnicity, gender identity, and ability. Each participant completed the 20-minute Emotify test including the “Matching Faces” and “Emotional Ties” sections. The participants’ results were not automatically shared with them, but the test did indicate performance to the individual while they were still completing the test, using a star-based rating system after each activity. The test scores were automatically grouped into 5 categories, consisting of Far Above Average,
Above Average, Average, Below Average, and Far Below Average; however, a numeric percentile score (reflecting participants’ performance in relation to other test-takers as normed by Criteria) was also available.

After completing the initial test, participants received a brief follow-up survey designed to encourage self-analysis and obtain their perspective on the test after completion. Participants could also indicate whether they had encountered any technical issues which may have inhibited their testing experience, and which may have affected their score. Of the 46 individuals in the case study, 42 completed the follow-up survey.

Findings

Of the 46 participants, 33 (72 percent) scored in the Average range. The default Average category is assigned to scores from the 20th to the 79th percentile. Of the 33 participants who fell into the Average category, 5 scored below the 40th percentile, and 15 scored above the 60th percentile. Only one of the lower-scoring participants indicated that they had encountered technical difficulties, and the individual was still able to successfully complete the test. Overall, the mean score on the Emotify test fell in the 58th percentile, with the median score in the 60th percentile, both slightly above the overall test mean (50th percentile) established by Criteria. The range of the percentile scores was 6-93, and the interquartile range was 51, with an overall standard deviation of 24.1.

Of the participants who scored Above Average or higher, only two were in leadership positions; however, the mean score of participants in supervisory roles was in the 62nd percentile, 7 percentile points higher than the mean score of non-supervisory staff. The median score of participants in supervisory roles was in the 69th percentile, while the median score of participants in non-supervisory roles was in the 59th percentile. Over 70 percent of participants in leadership roles scored above the 50th percentile, compared to 61 percent of non-supervisors. This data was not enough to determine a statistically significant difference, however, and requires reevaluation with a larger data set. A two-
sample t-test assuming equal variances was conducted and was determined not to disprove the null hypothesis, \( t(45) = 2.02, P = .418 \).

**Figure 4: Survey Participants in Each Test Score Range**

![Survey Participants in Each Test Score Range](image1)

**Figure 5: Supervisors Compared to Non-Supervisors: Test Score Percentiles**

![Supervisors Compared to Non-Supervisors: Test Score Percentiles](image2)
Test Results and Self-Perception

Of the 42 respondents who completed the follow-up survey, 60% correctly self-scored their test results by selecting the correct score category, and 40% did not correctly self-score. Those who correctly scored themselves fell into the Average and Above Average Categories. All the participants who scored at the low end of the spectrum (Below Average or Far Below Average) gave themselves a higher self-score when responding to the follow-up survey. Participants who received a lower score on the test were also more likely to rate the test as Somewhat Difficult or Very Difficult.

The follow-up survey also asked participants to indicate whether the test might be a useful tool for training on the topic of emotional intelligence. Of the 42 participants who completed the survey, 74 percent of respondents selected Yes, indicating that they felt the test would have relevance for emotional intelligence training. The group who provided a Yes response had a mean test score in the 64th percentile, with a median score in the 67th percentile. Of the survey respondents, 26 percent responded No, indicating that they did not feel the test material had relevance for training. The mean test score for the No group was in the 38th percentile, with a median score in the 32nd percentile. An F-test determined the two samples (the “no” group and the “yes group”) were of equal variance. A two-sample t-test assuming equal variances was conducted and was determined to disprove the null hypothesis, $t(40) = 2.02, P < .001$, meaning that a statistically significant difference is present between these two groups.
Figure 6: Perception of Test Value for Training - Comparison of "Yes" and "No" Groups

Analysis

Although some of the data in this case study was inconclusive, people in leadership roles generally tend to score higher on emotional intelligence tests (Stein, 2017). The link between emotional intelligence and success in a leadership position has been examined by many researchers, although more research is needed in the realm of libraries. For library staff seeking a promotion to management, emotional intelligence training represents a potential stepping-stone toward achieving their goal.

At the same time, staff in management positions are more likely to have had training on the topic of emotional intelligence. In the follow-up survey, 40 percent of supervisors stated that they “knew a lot” about emotional intelligence, as opposed to only 25 percent of non-supervisor staff who felt that they had extensive knowledge in the topic. Further research might examine the nature of the supervisors’ knowledge and whether their EI skills tend to be intrinsic or developed by past training opportunities.

Overall, the library staff participants scored 7 percentile points higher than the 50th percentile mark established by Criteria. According to Sweetman (2015), emotional intelligence has become a key
expectation for the workforce of today’s libraries, raising the question: Do library staff need higher than normal emotional intelligence skills to be successful in their positions? Wilkinson (2015) discussed the key role of emotional intelligence competencies in a very particular role—disaster response and collection recovery. More research is needed to determine whether the library profession, as a helping profession, tends to attract members of the workforce for whom emotional intelligence is already an area of interest or a natural strength.

In contrast to the high scorers, participants who scored lower on the EI test were significantly less likely to rate it as helpful for future staff training. The 26-point score difference between the Yes and No groups points to a correlation between EI ability and perception of the value of an EI test. The nature of emotional intelligence means that individuals with underdeveloped EI skills may not recognize the need for and importance of training on the topic. Therefore, leaders in a library organization should be prepared to take the lead in initiating emotional intelligence training for staff at all levels. Further research in this case might examine whether participants’ perceptions of the value of EI testing are changed by more in-depth training on the topic.

Conclusion

Emotional intelligence is an ever-evolving area of knowledge and research. Library administrations cannot afford to ignore the importance of EI training for their employees’ success. Staff with high emotional intelligence perform better on the job, adapt more quickly to change, and are more resilient in the face of adversity—qualities which any organization would want in its employees. In addition, library employees who hope to rise through the ranks of leadership should seek out EI training opportunities. Supervisors tend to demonstrate higher EI skills overall, and these skills are likely contributors to their success. With this knowledge, library trainers and those in charge of professional development should also promote EI training to the staff they serve, and make the most of available EI tools. Emotional intelligence tests like Emotify represent a promising development in emotional
intelligence training tools for library staff. Armed with new EI skills, library staff could better adapt to the current pandemic situation and better serve the communities who depend on them.
References


Appendix: Case Study Follow-Up Survey

1. How would you assess the difficulty of the Emotify test?
   a. Very easy
   b. Somewhat easy
   c. Neither easy nor difficult
   d. Somewhat difficult
   e. Very difficult

2. While taking the test, did you realize that it was designed to measure emotional intelligence?
   a. Yes
   b. No

3. How would you rate your knowledge on the topic of emotional intelligence?
   a. I know a lot about it
   b. I know a little about it
   c. I've never heard of it before

4. How do you think you did on the test? (Pick a range.)
   a. Far above average
   b. Above average
   c. Average
   d. Below average
   e. Far below average

5. Did you have technical difficulties while completing the test?
   a. Yes
   b. No

6. Do you think this test would be useful as part of a training on emotional intelligence?
a. Yes

b. No