



Audit & Feedback

MetaLab

International Audit & Feedback MetaLab Meeting: Putting A&F into real world practice

BEYOND AUDIT AND FEEDBACK FEATURES: ADVANCED FEEDBACK TRAINING TO IMPROVE FEEDBACK ORIENTATION AND CULTURE

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Acknowledgements



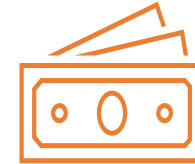
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Funding

This study was funded by a faculty pilot grant from the Baylor College of Medicine Department of Education, Innovation, & Technology (EIT).

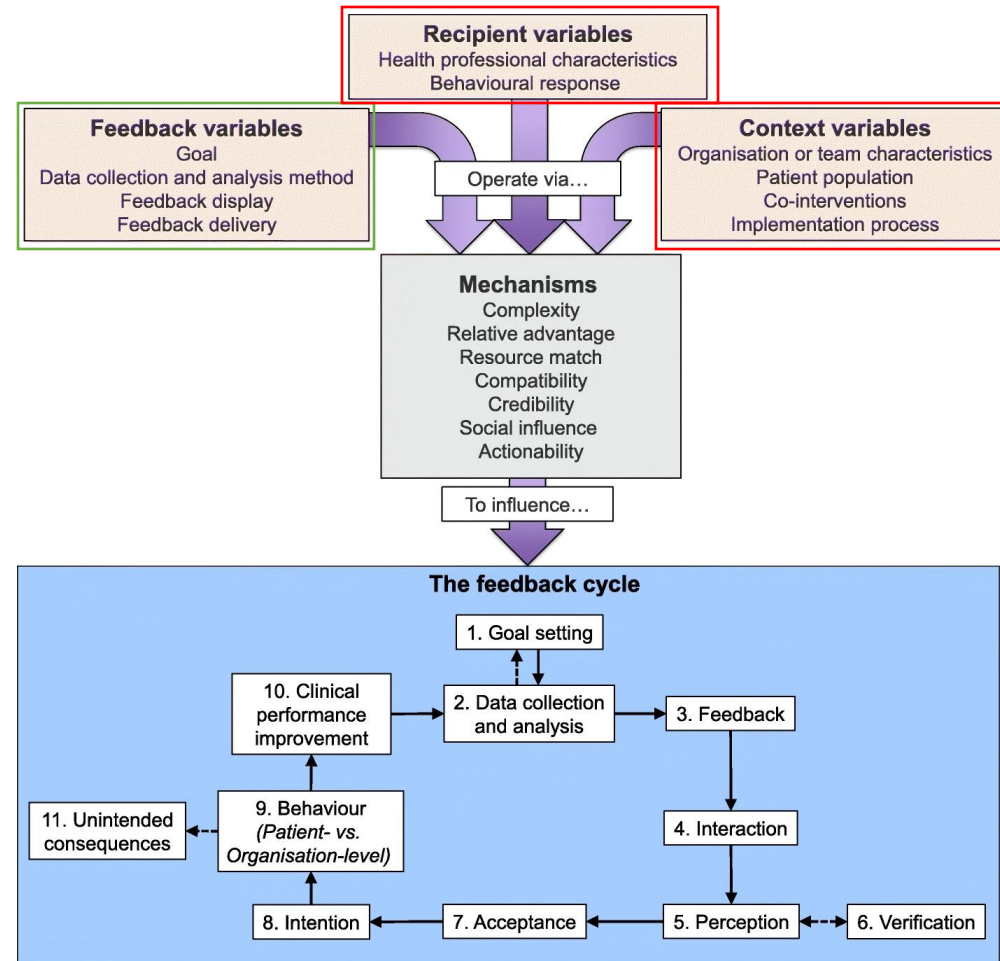


Background: Well-designed A&F improves care

- Audit and feedback (A&F) can significantly improve clinical outcomes, by targeting recipients' cognitive processes to enhance learning, motivation, and performance
- Most A&F research in healthcare is aimed at the characteristics of the feedback itself, with little if any attention to characteristics of the recipient or the feedback environment.

Clinical Performance Feedback Intervention Theory

Brown et al., 2019



It's not just about the feedback features...

Feedback Recipient Characteristics

- Feedback Seeking Behavior
- Feedback Receptivity
- Goal Orientation
 - Mastery orientation
 - Performance-*approach*
 - Performance-*avoidance*

Feedback Climate

- Source credibility / availability
- Feedback frequency
- Feedback-seeking encouragement
- Time for high-quality reflection
- Recognizes diverse perspectives

Well-designed A&F improves care

- Audit and feedback (A&F) can significantly improve clinical outcomes, by targeting recipients' cognitive processes to enhance learning, motivation, and performance
- Most A&F research in healthcare is aimed at the characteristics of the feedback itself, with little if any attention to characteristics of the recipient or the feedback environment.
- To address this gap, **we developed an advanced course on giving, receiving, and using feedback** and pilot-tested its impact on feedback orientation and environment.

Methods

Course Development through Backward Instructional Design

- Our course goal was for learners to:
 - Explore their awareness of personal feedback tendencies and social issues while delivering and receiving feedback
 - Discuss pragmatic strategies to incorporate within their own learning or work
 - Understand how these topics can contribute to a more positive and equitable feedback environment
- Worked backwards to determine necessary assessment and learner centered strategies to achieve course goals and outcomes.
- Systematically reviewed the literature to ensure up-to-date course content

Course Structure

- **Navigation**

- Seven 10-minute modules
- All web-based
- Could be navigated independently
- Could stop and start at any time

- **Evaluation**

- Brief end-of-module quizzes
- End-of-course scenario with live evaluation by instructor.

- **Module Topics**

- The Social Side of Feedback
- Understanding How Feedback Works
- Delivering Actionable Feedback
- Understanding My Feedback Orientation
- Receiving Feedback Effectively
- Using Feedback Effectively
- Promoting a Positive Feedback Environment

Advanced Feedback Techniques: Creating an Inclusive Environment of Feedback

0% COMPLETE

☰ Course Introduction

☰ The Social Side of Feedback

☰ Understanding How Feedback Works

☰ Delivering Actionable Feedback

☰ Understanding Your Feedback Orientation

▼ RECEIVING & USING FEEDBACK

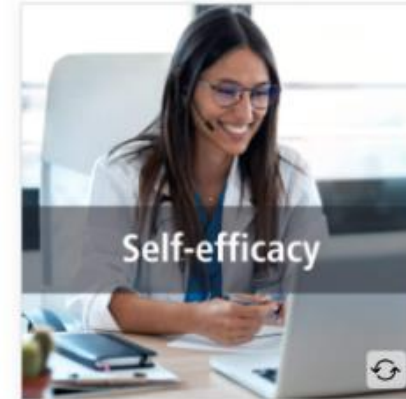
☰ Receiving Feedback effectively

☰ Using Feedback Effectively

▼ CONCLUSION

We are **active participants** in the **feedback process!**

Linersbaum & Levy (2010) describe 4 dimensions of feedback orientation. Individuals with higher ratings on these dimensions are more likely to have better outcomes in their training and work environments. Click on each dimension below to learn more:



Pilot Study

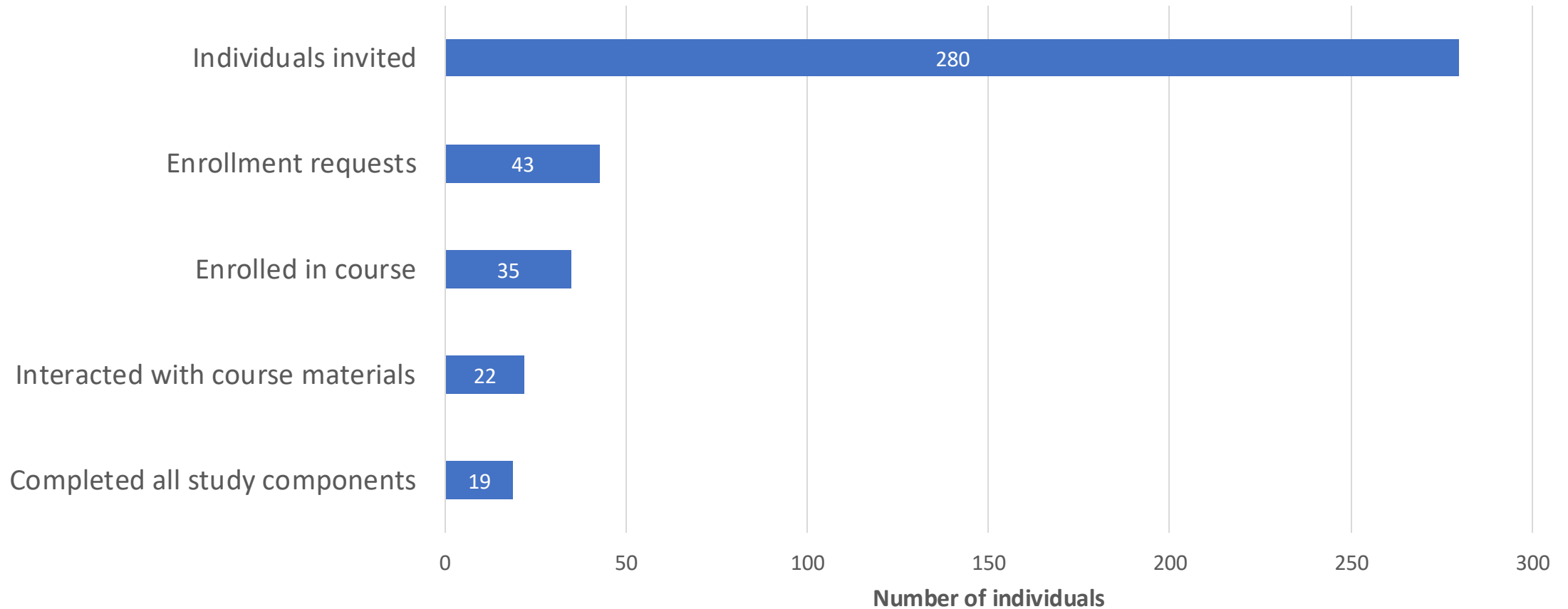
- Participants –
 - Students, faculty and staff from two departments at Baylor College of Medicine (Medicine, Emergency Medicine)
- Measures
 - Feedback orientation – Feedback Orientation Scale (Linderbaum & Levy, 2010) - utility, accountability, social awareness, self-efficacy
 - Feedback seeking behaviors (London, 2014)
 - Feedback environment – Feedback Environment Scale (Steelman Levy & Snell, 2004)

Procedure

- Pre- and post-course questionnaires measuring feedback environment and feedback characteristics
- Participants completed self-paced web-based course
- Scenario-based questions assessed post-course knowledge
- Participants completed a post-module reflection and structured debrief with a live instructor
- Post-pilot focus groups with participants to obtain feedback about the course
- Quantitative analysis of questionnaires
- Qualitative analysis of focus groups and reflections

Results

Participation Through Pilot Stages



Enrollment Requester Characteristics (n=43)

Learner Type	n	%
Resident Physicians	2	4.7
Post-Doctoral Fellows	2	4.7
Faculty	30	69.8
Staff	9	20.9

Gender	n	%
Male	8	18.6
Female	34	79.1
Unreported	1	2.3

Department	n	%
Health Services Research	10	23.3
South Central Mental Illness Research, Education and Clinical Center	2	4.7
School of Health Professions	9	20.9
Physical Medicine & Rehabilitation	2	4.7
Emergency Medicine	15	34.9
Psychiatry	4	9.3
Center for Medical Ethics & Health Policy	1	2.3

Participant Feedback Survey Scores (n=19)

Construct	Pre-Course Mean (SD)	Post-Course Mean (SD)	<i>t</i>	<i>p</i> value
• Participant Feedback Orientation	4.10 (0.40)	4.30 (0.57)	-1.94	0.04
• Social Awareness	4.06 (0.77)	4.32 (0.70)	-1.76	0.05
• Feedback Self-Efficacy	3.56 (0.62)	4.01 (0.85)	-2.77	0.01
• Frequency of Seeking Feedback from Peers	2.97 (0.83)	3.41 (0.86)	-4.05	< 0.001
• Frequency of Seeking Feedback from Supervisors	2.56 (0.75)	3.07 (0.71)	-3.51	< 0.001
• Peer Feedback Environment	5.12 (0.87)	5.40 (0.87)	-1.81	0.04
• Supervisor Feedback Environment	5.72 (0.72)	5.70 (0.98)	0.13	0.45

Feedback from Participant Focus Groups

Participants Appreciated:

- Specific content on how diversity impacts the feedback process,
- Theoretical and explanatory explanations interwoven throughout the course, and
- Topics not ordinarily covered in other feedback courses.
- Ability to view pre- and post-course assessment results,
- Self-paced, easily navigable design

Participants struggled with:

- Restricted to BCM affiliates only
- Study and course components in separate places

Discussion & Takeaways

- Training on giving, receiving, and using feedback inclusively shows promise in significantly improving recipient feedback orientation, feedback-seeking behaviors, and perceptions of feedback environment
- **Limitation:** small sample size, pilot
- **Future work:** Larger samples, longitudinal design

For More Information...

Medical Science Educator
<https://doi.org/10.1007/s40670-024-02111-y>

INNOVATION



Curriculum as Change Agent: Promoting Inclusivity through an Advanced Feedback Curriculum

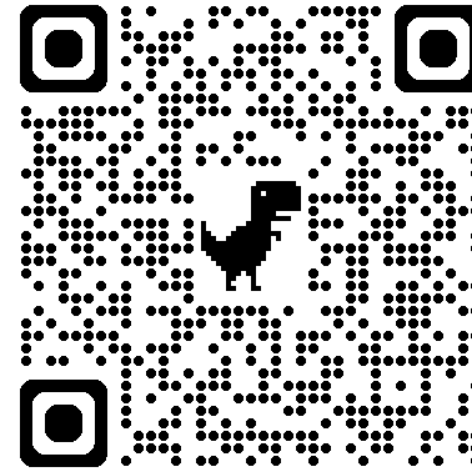
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Accepted: 1 July 2024

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Abstract

Feedback curricula in medical education typically cover only the uncontextualized basics of feedback. We created a self-paced, online course that covered advanced feedback techniques with intentional inclusion of social dynamics that can influence feedback processes. Results revealed significant improvements in participant feedback orientation, feedback-seeking behaviors, and perceptions of feedback environment.



Gardner AK, Pillow MT, Castillo J, Elliott A, Love SJ, Hysong SJ.
Curriculum as Change Agent: Promoting Inclusivity through an Advanced
Feedback Curriculum. *Medical Science Educator*. 2024 Jul 24:1-3.

<https://doi.org/10.1007/s40670-024-02111-y>

References

1. London M. *The Power of Feedback: Giving, Seeking, and Using Feedback for Performance Improvement*. Routledge; 2014.
2. Steelman LA, Levy PE, Snell AF. The feedback environment scale: construct definition, measurement, and validation. *Educ Psychol Meas*. 2004;64(1):165-184; <https://doi.org/10.1177/0013164403258440>.
3. Linderbaum BA, Levy PE. The development and validation of the Feedback Orientation Scale (FOS). *J Manage*. 2010;36(6):1372-1405; <https://doi.org/10.1177/0149206310373145>.
4. Gardner AK, Pillow MT, Castillo J, Elliott A, Love SJ, Hysong SJ. Curriculum as Change Agent: Promoting Inclusivity through an Advanced Feedback Curriculum. *Medical Science Educator*. 2024 Jul 24:1-3. <https://doi.org/10.1007/s40670-024-02111-y>



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Funding and Conflicts of Interest:

The work presented here was partially funded by the U.S. Department of Veterans Affairs, including Dr. Hysong's salary. Dr. Hysong salary has no conflicts to disclose.