



RESEARCH

# Temperament Profiles May Positively Impact Mentor/Mentee Relationships in Cooperative Extension

*Lori Korthals, EdD\**

*Research completed at the University Of Wisconsin-Stout*

*\*Lori Korthals, EdD, 400 Central Ave. NW, Ste. 700, Orange City, IA, 51041;*

*lorikort@iastate.edu*

## Abstract

This study examined the impact of temperament awareness education on mentor/mentee relationships in Cooperative Extension. Active, formal mentors were recruited from within Cooperative Extension systems across the United States. Qualitative findings were studied by collecting responses through an open-ended questionnaire. Responses were coded through thematic reduction. Three overarching themes were discovered from the mentor's responses: "temperament awareness," "intentionally changing behavior," and "awareness of the needs of themselves and others." One of several recommendations includes adding temperament profiles for both mentor and mentee in formal mentoring programs across Cooperative Extension.

## Temperament Profiles May Positively Impact Mentor/Mentee Relationships in Cooperative Extension

In 2019, the Bureau of Labor and Statistics reported the annual worker turnover rate for the United States at 45.1% overall, while the educational sector reported 29.8% (Bureau of Labor and Statistics, 2022). Boushey and Glynn (2012) note recruiting and training a new employee may cost more than one-fifth of the existing employee's salary to replace them when they leave. Additional costs may also be incurred as vacant positions potentially reduce morale, slow organization efficiency and create a lag in services or deliverables (Hinkin & Tracey, 2000).

Mentoring new employees by veteran employees has been shown to increase employees' feelings of belongingness and their intent to remain within the organization (Allen et al., 2004; Craig et al., 2013; Horner, 2017). According to Allen and Eby (2003), when organizations take time to mentor employees, staff earn higher salaries, advance more rapidly, and are more likely to remain employed at the organization.

Furthermore, mentoring experiences may lead to increased job satisfaction, leading to reduced turnover (Allen et al., 1999; Allen et al., 2004; Craig et al., 2013).

What is mentoring? Several scholars have acknowledged the challenges of creating a single definition of mentoring and have focused on identifying mentoring relationships' core components or attributes. Eby et al. (2007) described mentoring attributes as a unique learning partnership between individuals, a defined process of support provided by the mentor, and a reciprocal and dynamic relationship.

It should be noted that not all mentoring programs are the same. There are both formal and informal mentoring opportunities. Regardless of the formality of mentoring, the quality of the mentoring relationship is essential to the success of the relationship between the mentor and mentee (Bidwell, 2016; Scott, 2010). In her pivotal work on mentoring in the workplace, Kram (1983) stated that mentoring relationships have the "potential to enhance the career development of both individuals" (p. 613), the mentors and the mentees. Huggett et al. (2020) asserted that "Understanding the influence of personality on the mentoring relationship remains a gap in the literature, especially in the contexts of health professions and higher education" (p. 91).

A review of literature by Huggett et al. (2020) and Turban and Lee (2007) indicated a lack of information on the 'influence of personality' and little research examining individual personality characteristics and their impact on mentoring relationships. Mueller (2020) stated that effective mentoring is based on trust. Trust potentially develops through quality relationships; thus, creating opportunities for mentor/mentee dyads to learn more about each other may be beneficial. What is not known is if awareness education on individual temperament traits, the foundational building blocks of personality (Chess & Thomas, 1999), positively impacts the quality of the relationship between Cooperative Extension mentors and mentees.

## Purpose of the Study

Mentors who understand personality and behavioral reactions have higher emotional intelligence (Opengart & Biere-

ma, 2017). Emotional intelligence can be defined as knowing and managing emotions, motivating oneself, recognizing emotions in others, and managing relationships (Goleman, 1995). When mentors understand the foundational behavioral reactions due to temperament traits, they may improve their emotional intelligence and impact their perceived mentoring quality.

This study aimed to examine the impact of temperament awareness education on the mentor/mentee relationship in Cooperative Education. The study explores the assumption that when mentors complete temperament profiles (awareness education), they may increase awareness of how their temperament may negatively or positively impact the quality of the mentor/mentee relationship.

## Methodology

This study is a qualitative examination of the survey results from a mixed-methods, multi-phase study. The qualitative phase consisted of an eight-item, open-ended Qualtrics questionnaire delivered electronically. Before answering the survey, participants completed the Adult Temperament Questionnaire.v2 (ATQ2) (Chess & Thomas, 2008) and received awareness education via a personal temperament profile interpretation summary. The ATQ2 identifies an individual's temperament along a continuum of the nine traits identified by Chess and Thomas' New York Longitudinal Study (1983) and a temperament awareness educational summary.

Convenience sampling was utilized by contacting formal mentors from Cooperative Extension Land-Grant Affiliates throughout the United States. Invitations to participate were sent through Cooperative Extension Professional organizations and professional contacts. Nineteen mentors completed IRB protocols and were sent the ATQ2 profile. Upon completing the ATQ2 profile and reviewing the individual interpretive summary, mentors continued engaging with their mentees for approximately 30 days. At the end of 30 days, mentors were sent the Qualtrics questionnaire to gather the perceptions of their mentoring effectiveness after receiving the temperament profile interpretive summary. Results of the Qualtrics questionnaire were analyzed with thematic coding.

## Results

Qualitative data revealed three overarching themes, "temperament awareness," "intentional change during interactions," and "responsive to the needs of self and others." While mentors not only became more aware of temperament overall, they made or planned to make immediate behavioral changes. Additionally, they noted becoming more responsive to the needs of themselves and others. Mentors' ability to become more responsive to not only their needs but also the needs of others may assist in developing a deeper interpersonal relationship.

### Temperament Awareness

Overall, "temperament awareness" allowed mentors to take the knowledge gained from the ATQ2 interpretive summary and try it out in real time. Mentors applied what they learned to the mentor/mentee partnership and adjusted their interactions to create a new 'fit' between themselves and their mentees. Mentors shared specific examples of how they understood temperament's role in emotional responses. "...use temperament traits to your advantage to keep yourself motivated," and "we had a discussion on the ability to be adaptable in situations while still honoring process and routine. We discussed boundaries and how to determine the physical reaction and how it relates to the needs for boundaries." Another mentor wrote that her mentee "shared she was very sensitive and reactive to a comment that a colleague had made about their working together." Finally, one mentor stated that, "persistence and focus are essential to completion of our work plans."

### Intentional Change During Interactions

Mentors indicated an intentional change occurred in their interactions with the mentees during the 30 days following the ATQ2 and summary interpretations. Mentors began

modeling for mentees how to interact and socialize within their systems. Mentors shifted how they approached conversations, made environments more amenable to discussions with the mentees, and offered shared experiences as a way to engage.

A new awareness of temperament moved the mentors to make deliberate changes during the interactions. Participants began to consider temperament in their mentees' interactions intentionally. One mentor stated, "[I needed] to be sensitive to where we are meeting so there are limited distractions, and I can focus on the conversation." Another mentor shared, "Being very aware of high level of distractibility, I wanted to find a way to keep [the] mentor/mentee meetings on task. I found that by implementing a checklist of topics...set a timetable...taking notes..." A third mentor stated, "I need to be more open...need to stay focused."

## Responsive to the Needs of Self and Others

More "awareness of the needs of themselves and others" offered the mentors a new skill or task to analyze the interactions with their mentees. Responses by the mentors indicated that becoming more self-aware allowed them to move deeper into the relationship with the mentee. One mentor stated, "it created a deeper awareness of the whole person," while another wrote, "...[this] impacts all of my relationships and interactions."

Mentors shared comments such as, "I did a lot of reflection... on how to draw more out of my mentee, how to build the relationship". One mentor wrote, "I am learning that it is best to focus on listening and responding objectively without emotion." Still another mentor utilized a temperament trait word to describe self-awareness by stating, "...trying to control my mood, so it does not play into my interaction." One mentor, shared a reflection process, "saying what I thought I heard her say, offering open-ended questions and specific guidance when requested, and then checking for understanding." Opengart and Bierema (2017) impart that mentors' ability to gauge their mentees' emotions and become aware of their own emotions may assist in developing a deeper interpersonal relationship.

## Discussion

Mentoring adults has traditionally been built upon three distinct theoretical foundations: developmental, learning, and social theories (Dominguez & Hager, 2013). The theories became evident in the three overarching themes discussed above.

### Developmental Theories

Developmental theories are fundamental to mentoring approaches (Dominguez & Hager, 2013). They speak to the processes or tasks occurring as humans grow and change throughout their lifespan (Horowitz, 2014). Developmental tasks typically build from the simple to more complex stages. These processes are generally orderly but may occur at different rates of time for everyone (Horowitz, 2014). The overarching theme of "awareness of the needs of themselves and others" offered the mentors a new skill or task to analyze the interactions with their mentees. Learning new skills and growing personally and professionally reflects a developmental theory foundation change. As mentors grow, they have the potential to model that growth to their mentees.

### Learning Theories

Learning involves the transfer of knowledge. Mentoring leaders Fain and Zachary (2020) state, "Effective mentoring requires a strong relationship between mentoring partners" (p. 7). The relationship between the mentor and mentee is a process-oriented partnership that involves critical reflection and application instead of product-oriented teaching and transfer of knowledge (Zachary, 2005). Levinson The overarching theme of "temperament awareness" allowed mentors to take their newfound temperament awareness and development and apply it immediately with their mentees. Using their insight from the ATQ2 into their relationship with their mentee shows a learning theory process.

## Social Theories

In mentoring programs, a vital piece of the program is engaging the mentee in the organization's social fabric (Kram, 1983). Social theories view mentors as role models that help integrate mentees into the organization's social fabric when used as frameworks for mentoring programs. Successful socialization in mentoring programs has been tied to higher satisfaction in the workplace, career advancement, and retention (Boushey & Glynn, 2012; Cohen et al., 2007). Mentors can help mentees join an organization's social networks by modeling behaviors, providing information, and introducing mentees while adjusting (Dominguez & Hager, 2013).

The overarching theme of "intentionally changing behavior" shows developmental and learning theory strategies but also connects to social theories. This study utilized the Social Network Theory to think about a person's connection and purpose within their system. As mentors created intentional change in their interactions, they were modeling for the mentees how to interact and socialize within their systems. Mentors shifted how they approached conversations, made environments more amenable to talks, and offered shared experiences. The mentor's behavior change potentially created more opportunities for the mentee to successfully understand how to replicate social exchanges in their systems.

## Summary

These findings mirror the type of changes that Cameron et al. (2013) found in their work on temperament with parents and children. Their research was completed at Kaiser Permanente, a large Health Maintenance Organization in the United States. It showed that parents who completed a temperament profile (i.e., awareness assessment) were likelier to implement positive behavior changes during interactions with their children (Cameron et al., 2013). For this study on temperament and mentoring, mentors who completed temperament the ATQ2 profiles also began implementing behavior changes that impacted the mentor/mentee relationship, just like the parents did with their children in the Cameron et al. (2013) study. This study's themes supported that mentors became respon-

sive to the needs of others and then intentionally changed their behavior to support their mentor's needs. This change may potentially increase the effectiveness of the mentor/mentee relationship.

## Future Recommendations

Research shows that the retention of employees is a problem many organizations have (Bidwell, 2016; Mullen, 2012). Cooperative Extension is no exception (Extension Committee on Organization and Policy's Leadership Advisory Council, 2005). Healthcare, education, and manufacturing research support mentoring to impact employee retention. Curtin et al. (2016) state that mentoring may impact individuals personally and professionally.

Fain and Zachary (2020) also frame mentoring as a reciprocal learning relationship. The mentor and mentee are responsible for the partnership; findings from this study support intentionally adding temperament education to formal mentoring programs.

Adding temperament profiles allows mentors and mentees to enhance relationship interactions positively. One mentor stated, "I would like more information... and would like my mentee to have the profile as well." Offering both parties the opportunity to complete temperament profiles and have conversations around similarities and differences creates an opening for honest dialogue and potentially more positive relationships. Research shows that mentor/mentee relationship success can be tied to the quality of the interactions (Allen et al., 2004; Brondyk & Serby, 2013; Zachary, 2005).

Along with completing temperament profiles, these findings call for additional opportunities to share temperament education. While an increase in awareness of temperament in the interactions was shown in the responses, further education may offer mentors and mentees opportunities to practice and model temperament awareness in their relationships. Additional temperament education opportunities, spaced at intervals throughout the mentor/mentee relationship, may provide further learning and development of relationship skills.

## References

- Allen, T. D. & Eby, L. T. (2003). Relationship effectiveness for mentors: Factors associated with learning and quality. *Journal of Management*, 29(4), 469-486. [https://doi.org/10.1016/S0149-2063\(03\)00021-7](https://doi.org/10.1016/S0149-2063(03)00021-7)
- Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology*, 89(1), 127-36. <https://doi.org/10.1037/0021-9010.89.1.127>
- Allen, T. D., McManus, S. E., & Russell, J. E. (1999). Newcomer socialization and stress: Format peer relationships as a source of support. *Journal of Vocational Behavior*, 54(3), 453-470. <https://doi.org/10.1006/jvbe.1998.1674>
- Bidwell, L. (2016, October 28). Why mentors matter: A summary of 30 years of research. SAP Community. <https://blogs.sap.com/2016/10/28/mentors-matter-summary-30-yearsresearch/>
- Boushey, H. & Glynn, S. J. (2012, November 16). There are significant business costs to replacing employees. Center for American Progress. <https://www.americanprogress.org/article/there-are-significant-business-costs-to-replacing-employees/>
- Brondyk, S. & Searby, L. (2013). Best practices in mentoring: Complexities and possibilities. *International Journal of Mentoring and Coaching in Education*, 2(3), 189-203. <https://doi.org/10.1108/IJMCE-07-2013-0040>
- Bureau of Labor and Statistics. (2022, January 12). Table 16. Annual total separations rates by industry and region, not seasonally adjusted. United States Department of Labor. <https://www.bls.gov/news.release/jolts.t16.htm>
- Cameron, J. R., Rice, D. C., Sparkman, G., & Neville, H. F. (2013). Childhood temperament based anticipatory guidance in an HMO setting: A longitudinal study. *Journal of Community Psychology*, 41(2), 236-248. <https://doi.org/10.1002/jcop.21526>
- Chess, S. & Thomas, A. (1999). Temperament and the concept of goodness of fit. In J. Strelau & A. Angleitner (Eds.), *Perspectives on individual differences. Explorations in temperament: International perspectives on theory and measurement* (pp. 15-28). Springer. [https://doi.org/10.1007/978-1-4899-0643-4\\_2](https://doi.org/10.1007/978-1-4899-0643-4_2)
- Chess, S. & Thomas, A. (2008). *The NYLS Adult Temperament Questionnaire*. (2nd Ed.). Behavioral Development-Initiatives.
- Cohen, N. H. (1995). *Mentoring adult learners: A guide for educators and trainers*. Krieger Publishing Company.
- Craig, C. A., Allen, M. W., Reid, M. F., Riemenschneider, C., & Armstrong, D. J. (2013). The impact of career mentoring and psychosocial mentoring on affective organizational commitment, job involvement, and turnover intention. *Administration & Society*, 45(8), 949-973. <https://doi.org/10.1177/0095399712451885>
- Dominguez, N. & Hager, M. (2013). Mentoring frameworks: Synthesis and critique. *International Journal of Mentoring and Coaching in Education*, 2(3), 171-188. <https://doi.org/10.1108/IJMCE-03-2013-0014>
- Eby, L. T., Rhodes, J. E., & Allen, T. D. (2007). Definition and evolution of mentoring. In T. D. Allen & L. T. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 7-20). Blackwell Publishing.
- Extension Committee on Organization and Policy's Leadership Advisory Council. (2005). *National Association of State Universities and Land-Grant Colleges*. <https://files.eric.ed.gov/fulltext/ED508419.pdf>
- Fain, L. & Zachary, L. J. (2020). *Bridging differences for better mentoring: Lean forward, learn, leverage*. Berrett-Koehler Publishers.
- Goleman, D. (1995). *Emotional Intelligence: Why it can matter more than IQ for character, health, and lifelong achievement*. Bantam Books.
- Hinkin, T. R. & Tracey, J. B. (2000). The cost of turnover: Putting a price on the learning curve. *Cornell Hospitality Quarterly*, 41(3), 14-21. [https://doi.org/10.1016/S0010-8804\(00\)80013-0](https://doi.org/10.1016/S0010-8804(00)80013-0)
- Horner, D. K. (2017, January - March). Mentoring: Positively influencing job satisfaction and retention of new hire nurse practitioners. *Plastic Surgical Nursing*, 37(1), 7-22. <https://doi.org/10.1097/PSN.0000000000000169>
- Horowitz, F. D. (2014). *Exploring developmental theories: Toward a structural/behavioral model of development*. Psychology Press. <https://doi.org/10.4324/9781315801834>
- Huggett, K. N., Borges, N. J., Blanco, M. A., Wulf, K., & Hurtubise, L. (2020). A perfect match? A scoping review of the influence of personality matching on adult mentoring relationships-implications for academic medicine. *Journal of Continuing Education in the Health Professions*, 40(2), 89-99. <https://doi.org/10.1097/CEH.0000000000000290>
- Kram, K. E. (1983). Phases of the mentor relationship. *Academy of Management Journal*, 26(4), 608-625. <https://www.jstor.org/stable/255910>
- Mueller, A. (2020). Mentoring in action model-Exploring the mentoring process in Nebraska Extension. *Journal of Extension*, 58(5), 1-7. <https://tigerprints.clemson.edu/cgi/viewcontent.cgi?article=1059&context=joe>
- Mullen, C. A. (2012). Mentoring: An overview. In S. J. Fletcher & C. A. Mullen (Eds.), *The SAGE handbook of mentoring and coaching in education* (pp. 7-23). Sage Publications.
- Opengart, R. & Bierema, L. (2017). Keeping emotions in it: Emotionally intelligent mentoring. In F. K. Clutterbuck, F. Kochan, L. G. Lunsford, N. Dominguez, & J. Haddock-Millar (Eds.), *The SAGE Handbook of mentoring* (pp. 274-289). SAGE Publications.
- Scott, S. (2010). Pragmatic leadership development in Canada: Investigating a mentoring approach. *Professional Development in Education*, 36(4), 563-579. <https://doi.org/10.1080/19415251003633458>
- Turban, D. B. & Lee, F. K. (2007). The role of personality in mentoring relationships: Formation, dynamics, and outcomes. In Ragins, B. R. & Kram, K. E. (Eds.), *The Handbook of Mentoring at Work: Theory, research, and practice* (pp. 21-50). Sage Publications.
- Zachary, L. J. (2005). *Creating a Mentoring Culture: The organization's guide*. Jossey-Bass.
- Zachary, L. J. (2012). *The mentor's guide: Facilitating effective learning relationships*. (2nd ed.). Jossey-Bass. Z