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2019

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### Recommended Citation

Robinson, Ta'Niss (2019) "A Look at Mentorship in a Structured Undergraduate Program," *The Winthrop McNair Research Bulletin*: Vol. 5, Article 12.

Available at: <https://digitalcommons.winthrop.edu/wmrb/vol5/iss1/12>

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# A Look at Mentorship in a Structured Undergraduate Program

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## ABSTRACT

From the great deal of research previously done in the area of mentorship, we know that it can be very valuable to individuals across all ages and fields. However, there has not been much research done on how mentorship affects undergraduate students while in a structured program. In this study, we examine aspects of mentorship in a structured undergraduate program from the perspectives of the undergraduate protégés. We aimed to look at what specific mentorship interaction protégés had with their mentors and what aspect of satisfaction protégés had with their mentors. The structured program was the Ronald E. McNair Scholars program, a scholarship program that provides support and resources for those who are first generation, low income, and underrepresented in higher education to conduct research in order to prepare for graduate studies. McNair Scholars are paired with mentors who guide them through their summer research experience. Thirteen current protégé McNair Scholars participated in an approximately ninety to ninety-five question Qualtrics survey assessing mentoring functions, satisfaction, and mentorship recommendations using four previously published surveys, researcher designed questions, and general demographic questions. Those surveys include the following: Mentoring Functions Questionnaire (MFQ-9) (Scandura & Ragins, 1993), Mentoring Role Instrument (Ragins & McFarlin, 1990), Satisfaction with Mentor Scale (Ragins & McFarlin, 1990), and Mentoring Functions Scale (Noe, 1988). These questionnaires included items that could be broken up into 14 different categories including the following: sponsor, acceptance, challenge, coaching, counseling, friendship, psychosocial support, protect, exposure, role modeling, social, parent, career support, and satisfaction. After running a frequency analysis, we found that a higher percentage of protégés did not view their mentors as parents or friends, but a high percentage were still highly satisfied with their mentoring relationship. The data led us to believe that protégés seemed to appreciate career support and guidance rather than social friendships. This study did have limitations such as a small sample size. Further research could aim to obtain a larger sample size and collect data from not only protégés, but also their mentors.

## LITERATURE REVIEW

There have been multiple studies done throughout the years on mentorship in regards to a protégé having a personal mentor. The idea of one having a mentor can be traced back to have a Greek origin through the stories told in Homer’s the *Odyssey*. Gordon recaps of Homer’s story that before the war, Odysseus left the guidance of his son to a trusted friend named Mentor (Shea, 1997). From that story, the term “mentor” has taken the meaning of one who can be trusted to advise. The term “mentor” for the purpose of this paper is being defined as an individual who has knowledge, experience, and expertise in a particular area that can be used to aid in the professional and even personal development of someone with less knowledge,

experience, and expertise in that same area. Professional and personal development may be seen as advising, counseling, coaching, and promoting the development of the protégé (Chao, Walz, Gardner 1992). The term “protégé” will be defined as one who benefits under the personal direction of a mentor.

Previous research suggests that mentorship can have positive impacts on a protégé’s success. Fagenson (1989) concluded in his study that those who have been mentored in their area of work seem to have better career satisfaction and success than those who were not mentored. Since then, there have been many studies that look at the impacts of mentoring in general or on mentoring programs in particular fields. This can be seen in studies on different

careers such as clinical and translational science (Dilmore et al., 2010), nursing students (Nowell, Norris, Mrklas, & White, 2017), and medical doctoral students (Stamm & Buddeberg-Fischer, 2011) for example. There have also been studies that look at the impact of mentorship in general or mentoring programs in demographic populations including black engineering Ph.D. students (McGee et al., 2016) and American Indian/Alaskan Natives in the STEM field (Windchief & Brown, 2017). Throughout the years of studies centered on mentorship, it can be seen that protégés benefit from having mentors compared to those who do not have any kind of mentor relationship.

Other focus areas of studies on mentorship look at how mentorship relationships occur (formally or informally) and the effects of those happenings. Formal mentorship relationships develop due to the specific assignment of a mentor to a protégé, most likely due to a program that encourages mentor guidance. An informal mentorship occurs when a pair comes together without a specific assignment from an outside advisor. Dilmore et al. (2010) completed a study on a formal mentoring program with trainees in clinical and translational science and inferred from their findings that the program provided career and psychosocial benefits that correlated with mentor satisfaction from the protégé. Seibert (1999) found in his study that those who had formal mentors while in their field had significantly higher job satisfaction than those who did not have a mentor. Noe (1988) also conducted a study on a formal mentor/protégé program for adult educators already in the workforce. His findings led him to infer that although formal mentors do provide career and psychosocial benefits to the protégée, protégés would benefit more from informal mentors (Noe, 1988). Janssen, van Vuuren, and de Jong (2014) also examined the effects of informal mentorship and found a positive correlation between career success and informal mentors among medical doctoral students. Ragins and Cotton (1999) looked at both formal and informal relationships among those already in the workforce and inferred those with informal mentors had higher correlations of satisfaction

with their mentors than those who had formal mentors. Whether formal or informal, mentorship does seem to have more benefits to those in their careers compared to those who do not have a mentor at all.

Most of the research looks at mentoring among those already in the work place. For example, Janssen, van Vuuren, and de Jong (2014) looked at relationships between high level supervisors and subordinates; Ragins and Cotton (1999) looked at those in the field of engineering, social work, and journalism; Seibert (1999) looked at workers in a Fortune 100 corporation; Noe (1988) conducted a study on a formal mentor/protégé program for adult educators; Malota (2017) examined Polish managers; and Matarazzo and Finkelstein (2015), in a longitudinal study, looked at those in the consumer goods work force. Much research has been done on mentorship once one has left his or her undergraduate studies as well.

Some researchers chose to look at those who were continuing education while in training programs or graduate studies, such as Dilmore, Rubio, Cohen, Seltzer, Switzer, Bryce & Kapoor (2010), who completed a study on formal mentoring programs on trainees in clinical and translational science; Nowell et. al (2017) looked at nursing students who had formal mentors; and Stamm and Buddeberg-Fischer (2011) studied medical doctoral students who had mentors, and also demographic populations including black engineering PhD students (McGee et al. 2016). Neither of the latter two studies specified if the students connected with their mentors formally or informally. All of these mentor relationships occurred while the students were in post undergraduate studies or trainings, but not yet in the work force.

Some researchers looked at mentorship relationships over a timespan. Chao, Walz, and Gardner (1992) conducted a longitudinal study on alumni of an institution looking at formal and informal mentorship relationships that suggest protégés believe their mentors have had a positive impact on their career and personal development. In their longitudinal study, Stamm and Buddeberg-Fischer (2011) concluded that their medical students attributed some of their success in their careers to the personal

advisement of a mentor. Matarazzo and Finkelstein (2015) also used longitudinal data to examine qualities of mentorship by looking at characteristics that may be beneficial when matching pairs; they concluded that similar basic characteristics of mentors and protégés can enhance the relationship in terms of protégés' success. Over time, it can be seen that mentors have a lasting impact on their protégés.

There have also been multiple studies that examine the motivation of why mentors choose to take protégés under their wings. One of Ragins and Scandura's (1999) key findings in their study that examined mentors' views on cost and benefits of mentoring suggest that those who had been a protégé previously are more likely to be willing to mentor someone else as opposed to those who have never had a mentor in their own lives. With a sample of Polish managers, Malota (2017) found that the managers mostly had intrinsic motivational factors when deciding to mentor others while in a formal programming setting. Janseen, van Vuuren, and de Jong (2014) looked at only informal mentor/protégé relationships of those in professional organizations and their motives and concluded five broader categories of motivation as an extension to the dichotomy of intrinsic versus extrinsic motivation. Those categories suggest motives for mentoring include that the mentors' motives were self-focused, protégé focused, relationship-focused, organizational-focused, and even unfocused (Janseen, van Vuuren, & de Jong, 2014). There can be many different reasons why and factors as to why some choose to mentor others.

As mentioned previously, there is much literature that examines many different aspects of mentorship; however, more can still be contributed to the literature. Most of the research looks at mentoring in organizations between high level supervisors and subordinates and while in their graduate career, but not at mentorship before people leave their undergraduate studies. There is also research done on motivating factors of why people choose to mentor, but not really much in depth qualitative data. The purpose of this study is to look at the multiple aspects of mentorship from the perspective of mentors and protégés that have been connected within

structured programs while in their undergraduate studies and to also examine what mentor qualities factor in as well.

## **METHODS**

### **Participants**

All participants have, at one point, been involved in the Ronald E. McNair Scholars program. These participants include those who are currently undergraduate students in the program, alumni of the program, currently a mentor of scholars in the program, or were once a mentor of scholars in the program. These four categories of people were asked to complete an approximately 90 question survey regarding mentorship in regards to functions, advice, and demographics. The sample consisted of 13 current program scholars.

### **Measures**

Those who indicated that they are a current protégé in the program, have been a protégé in the program previously, or is a past or present mentor to the program scholars were exposed to the following questions. Noe's (1988) 29 item scale was used with a 5 point scale ranging from 1= "to a very slight extent" to 5= "to a very large extent" to measure Mentoring Functions. Scandura and Ragins' (1993) 9 item scale, the Mentoring Functions Questionnaire (MFQ-9), was also used to measure mentoring functions. Ragins and McFarlin's (1990) 33 item Mentor Role Instrument, measured on a 7 point Likert scale ranging from 1= "strongly disagree" to 7= "strongly agree," was used to assess mentoring functions. We also used Ragins and McFarlin's (1990) 4-item Satisfaction with Mentor Scale to measure one's satisfaction for their mentors on a 7-point Likert scale. Some of the items were adjusted to fit the context depending on the whether the survey went to one who had only ever been a protégé in the McNair program, or a faculty member who has been a protégé and a mentor at least once in their life. Additional open-ended questions generated by the authors were also asked. Those who indicated that they are current or past scholars of the program were asked additional open-ended questions. Examples of a question would be "what advice would you give to someone who is looking for a mentor?" and what their major

is/was while in the program. Those who indicated that they are faculty mentors were asked open-ended questions such as “what advice do you have for someone who wants to or is going to be a mentor in the program?,” what their area of concentration is, and how many years they have been serving as a mentor in the program. Additional demographic questions such as race, gender, and program region were asked of everyone.

## RESULTS

In this study, the items were in put into categories based on what aspect of mentorship they represented. There were fourteen categories including the following: sponsor, acceptance, challenge, coaching, counseling, friendship, psychosocial support, protect, exposure, role modeling, social, parent, career support, and satisfaction. We looked at the five categories of mentorship that had over 50% of participants either strongly agree and agree as well as strongly disagree and disagree with items. These five categories of mentorship include the following: social, parent, career support, role model, and satisfaction.

A sample of the results revealed that the majority of scholars (81%) were highly satisfied with their mentoring relationship. A frequency analysis revealed that a higher percentage of protégés viewed their mentors as role models rather than as parent figures or friends. Fifty-four percent of protégés specifically reported that they did not view their mentors as parents, and 64.1% of protégés did not interact with their mentors socially outside of research. Additionally, 71.2% of protégés viewed their mentors positively as role models, and 61.6% agreed that they received career support from their mentors. Refer to Figure 1 and Figure 2 for a visual representation of the data.

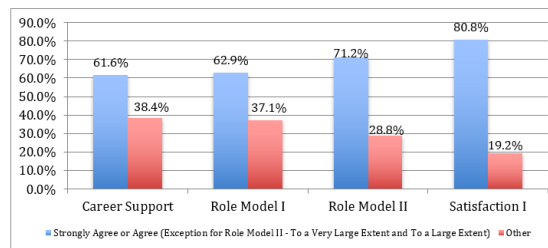


Figure 1. Participants who strongly agree or agree

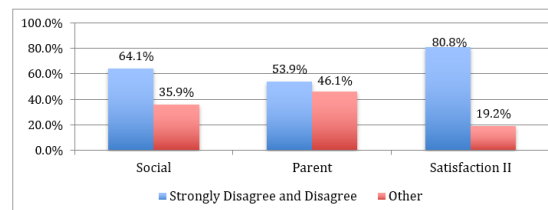


Figure 2. Participants who strongly disagree or disagree

We also included an open-ended question in our survey with the prompt “what advice would you give to someone who is looking for a mentor.” Examples of responses are “Your mentor should be someone you have a close relationship with and also someone who has your best interest at heart;” “I don't think you need to be best friends with your mentor...It is important that there is respect, trust, and a desire to advance your academic achievement...its an added bonus if your mentor is a pretty cool person;” “Choose a mentor that respects you as a person and someone that can guide your professional development.”

## DISCUSSION

In sum, our data led us to believe that protégés appreciate professional guidance from their mentors rather than social friendships. Undergraduate protégés are not looking to replace their parents, but instead, seem to desire mentors who can help them prepare for their careers and transition to being young professionals. These findings are noteworthy because the McNair Scholars in our study were able to request their mentors to be formally paired with; instead of seeking the most comfortable social relationships, the Scholars seem to have prioritized preparation for the future when picking a mentor. Such knowledge

might be beneficial to those who want to mentor in the future or want to know specifically what aspects of mentorship may be more valued by those being mentored.

## REFERENCES

- Chao, G. T., Walz, P. M., & Gardner, P. D. (1992). Formal and informal mentorships: A comparison on mentoring functions and contrast with nonmentored counterparts. *Personnel Psychology*, 45(3), 619-636. doi:10.1111/j.1744-6570.1992.tb00863.x
- Dilmore, T. C., Rubio, D. M., Cohen, E., Seltzer, D., Switzer, G. E., Bryce, C., ... Kapoor, W. N. (2010). Psychometric Properties of the Mentor Role Instrument when Used in an Academic Medicine Setting. *Clinical and Translational Science*, 3(3), 104-108. <http://doi.org/10.1111/j.1752-8062.2010.00196.x>
- Fagenson, E. A. (1989). The mentor advantage: Perceived career/job experiences of proteges versus non-proteges. *Journal Of Organizational Behavior*, 10(4), 309-320. doi:10.1002/job.4030100403
- Janssen, S., van Vuuren, M., & de Jong, M. D. (2014). Motives to mentor: Self-focused, protégé-focused, relationship-focused, organization-focused, and unfocused motives. *Journal Of Vocational Behavior*, 85(3), 266-275. doi:10.1016/j.jvb.2014.08.002
- Matarazzo, K. L., & Finkelstein, L. M. (2015). Formal mentorships: Examining objective-setting, event participation and experience. *Journal Of Managerial Psychology*, 30(6), 675-691. doi:10.1108/JMP-02-2012-0041
- Malota, W. (2017). Motivational Factors to be a Mentor in Formal Mentoring in Organisations. The Role of Intrinsic and Extrinsic Motivation in the Propensity to Mentor. *Journal Of Management & Business Administration. Central Europe*, 25(4), 119-143. doi:10.7206/jmba.ce.2450-7814.210
- McGee, E. O., White, D. T., Jenkins, A. T., Houston, S., Bentley, L. C., Smith, W. J., & Robinson, W. H. (2016). Black engineering students' motivation for PhD attainment: Passion plus purpose. *Journal For Multicultural Education*, 10(2), 167-193. doi:10.1108/JME-01-2016-0007
- Noe, R. A. (1988). An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology*, 41(3), 457-479. doi:10.1111/j.1744-6570.1988.tb00638.x
- Nowell, L., Norris, J. M., Mrklas, K., & White, D. E. (2017). A literature review of mentorship programs in academic nursing. *Journal Of Professional Nursing*, 33(5), 334-344. doi:10.1016/j.profnurs.2017.02.007
- Ragins, B. R., & Cotton, J. L. (1999). Mentor functions and outcomes: A comparison of men and women in formal and informal mentoring relationships. *Journal Of Applied Psychology*, 84(4), 529-550. doi:10.1037/0021-9010.84.4.529
- Ragins, B. R., & McFarlin, D. B. (1990). Perceptions of mentor roles in cross-gender mentoring relationships. *Journal Of Vocational Behavior*, 37(3), 321-339. doi:10.1016/0001-8791(90)90048-7
- Scandura, T. A., & Ragins, B. R. (1993). The effects of sex and gender role orientation on mentorship in male-dominated occupations. *Journal of vocational behavior*, 43(3), 251-265.
- Seibert, S. (1999). The effectiveness of facilitated mentoring: A longitudinal quasi-experiment. *Journal Of Vocational Behavior*, 54(3), 483-502. doi:10.1006/jvbe.1998.1676
- Shea, G. F. (1997). *Mentoring: A practical guide*. Menlo Park, Ca: Crisp Publications.
- Stamm, M., & Buddeberg-Fischer, B. (2011). The impact of mentoring during postgraduate training on doctors' career success. *Medical education*, 45(5), 488-496.
- Windchief, S., & Brown, B. (2017). Conceptualizing a mentoring program for American Indian/Alaska Native students in the STEM fields: a review of the literature. *Mentoring & Tutoring: Partnership In Learning*, 25(3), 329-345. doi:10.1080/13611267.2017.1364815