

Influence Of Mentoring On Dyad Satisfaction: Is There Agreement Between Matched Pairs of Novice Teachers And Their Formal Mentors?

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Abstract

Mentoring has evolved to become a crucial aspect of support for new teachers and has become the dominant form of teacher induction. However, limited scholarly effort has compared the perceptions of dyad members for congruence and differences. The purpose of the study was to examine and compare the perceptions of novice teachers and formal mentors regarding the extent of mentoring received, and the influence that this interaction has on dyad satisfaction. Participants consisted of 30 matched-pairs of novice teachers of agricultural education and their formal mentors. Findings from the study provide empirical support for Kram's mentor role theory as it was concluded that novice teachers receive professional and psychosocial mentoring, and this was from the perspective of both dyad members. Furthermore, a positive relationship was found between novice teachers' perception of receiving professional and psychosocial mentoring and satisfaction with the mentoring relationship; however, no such relationship was found from the perception of formal mentors.

Introduction

The practice of mentoring beginning teachers emerged in the early 1980s as an induction strategy to assist new teachers adjust to the demands of teaching, and to become socialized to the school environment (Feiman-Nemser, 2003). This tactic was in response to the high levels of attrition that newcomers experienced during their induction into the teaching profession. Whereas a six percent loss of staff per year might be expected in the corporate world (Norton, 1999), previous research reported that up to 25% of teachers leave the profession by the end of the first year, and almost half of new teachers leave within the first five years of entry into the occupation (Ingersoll & Smith, 2003). As such, beginning teacher retention looms as an important challenge for school districts, and was identified by the National Commission on Teaching and America's Future as a "national crisis" (2003, p. 21). While it can be argued that some employee attrition is natural and to be expected, the literature contends that high levels of turnover are an indication of ineffectiveness and low performance in an organization (Smith & Ingersoll, 2004). Furthermore, research suggests that some of the most talented beginning teachers are voluntarily leaving the profession (Ponessa, 1996). Education's "revolving door" (Ingersoll, 2003, p. 11) phenomenon has resulted in a high cost of time, resources, teaching effectiveness, student achievement, and school cohesion (Cochran-Smith, 2004).

Beginning teachers encounter a myriad of issues as they enter schools, and novice teachers struggle both instructionally and psychologically during the initial years of teaching (Gold, 1996). Neophytes are challenged to meet student needs in regard to

classroom management, motivation, and dealing with individual student differences (Veenman, 1984); experience time management concerns such as the lack of spare time, burden of clerical work, and heavy teaching loads (Ganser, 1999); and are faced with defining their “teacher persona” (Feiman-Nemser, 2003). Beginning teachers feel overwhelmed, isolated, and perceive a lack of support that is necessary to successfully perform their job (Johnson & Birkeland, 2003).

Additionally, novice teachers are confronted with complex program management responsibilities (Greiman, Walker, & Birkenholz, 2005) associated with career and technical education. These include managing and maintaining laboratory facilities (Mundt & Connors, 1999), having responsibility for a number of different classroom preparations (Talbert, Camp, & Heath-Camp, 1994), developing a public relations program (Joerger, 2002), recruiting students (Mundt & Connors, 1999), and advising a youth organization (Myers, Dyer, & Washburn, 2005).

While the challenges of novice teachers have received widespread attention in the literature, a related and less reported matter is the extent of support that is being provided to program graduates as they begin to teach. To what extent do mentors assist novice teachers of agricultural education during the first-year of teaching, and do the perceptions of dyad members align regarding the outcomes of their interaction? Limited research in career and technical education has addressed this issue, and this study was conducted to extend our understanding of the dyad relationship.

Literature Review

It has been recognized that *mentors* have an important role in developing the skills and talents of others by engaging in an effective and positive dyad relationship. There are many examples of mentors in the context of art, business, education, medicine, music, nursing and organizations (Byrne, 1971) who have played a key role in shaping their protégés’ destiny. In education, the need for a mentor to assist beginning teachers has been acknowledged by researchers for a number of years. In one of the earliest writings on teacher induction, Gould (1931) decried the unwise practice of forcing new teachers to overcome their problems without any assistance. He suggested:

The new teacher must not be abandoned to her fate until, quickly or slowly as the case may be, she has been assimilated into the school and its spirit. Some one person, possibly a head of a department or some experienced teacher, should definitely be indicated as the sponsor of the newcomer to the end that the latter may have some one to whom she may turn at all times for friendly counsel and help. (p. 15)

More recently, Huling-Austin and Murphy (1987) posited that “the assignment of a mentor teacher may be the most powerful and cost effective induction practice available to program developers” (p. 28). Odell (1990) concluded that the mentor-protégé relationship was the bond that made the difference with induction programs, no matter how the program was designed or what activities were conducted. Previous research supported the concept that effective mentoring can be successful at increasing the

retention, efficacy, and satisfaction of new teachers (Holloway, 2001; Strong & St. John, 2001). Ultimately, successful mentoring can retain promising teachers, improve overall teacher quality, and lead to a positive impact on school performance (Evertson & Smithey, 2002; Smith & Ingersoll, 2004). As a result of this evidence, mentoring has evolved to become a crucial aspect of support for new teachers (Ingersoll & Smith, 2003), and has become the dominant form of teacher induction over the past two decades (Smith & Ingersoll, 2004).

Researchers have concluded that mentors assist beginning teachers in developing proficiency with classroom skills such as instructional strategies and student management expertise, which was found to positively influence student engagement and acceptable student behavior (Evertson & Smithey, 2001; Fletcher & Barrett, 2004). Beginning teachers also received mentoring in regard to lesson planning, curriculum development, working with diverse students, and adapting to the culture of the school (Fletcher & Barrett, 2004; Simon, 1989). While mentoring has been found to support the development of effective teaching, beginning teachers have frequently identified psychosocial assistance as a positive outcome connected with mentoring. Ehrich, Hansford, and Tennent (2004) conducted a structured analysis of 159 research-based articles, and found that novice teachers most often identified support, empathy, encouragement, counseling, and friendship as critical outcomes associated with mentoring. Simon (1989) focused on the induction process from the perspective of the mentor, and found that mentors perceived their role to be one of personal assistance and psychological support. Mentors listened sympathetically to beginning teachers, and one mentor commented, "I tried to be a good listener. I let him express his feelings and tried not to react in a judgmental fashion" (Simon, 1989, p. 218).

Previous research presented conflicting results when comparing the extent to which different functions are provided by a mentor. Some studies reported that mentors enact psychological support less often than any other mentoring function (Kram, 1985; Fagenson-Eland, Marks, & Amendola, 1997). In contrast, Andrews and Quinn (2005) found that beginning teachers received the most assistance related to personal/emotional concerns from their formal mentors and the least support with instruction/curriculum challenges. Noe (1988) stated that protégés valued the psychosocial benefits of mentoring in contrast to career-related benefits.

Both dyad partners seek to have their expectations met by participating in the mentoring relationship (Kram, 1985; Noe, 1988). As such, it is important to determine whether or not a participant views the mentoring experience as a success, and is satisfied with the dyad relationship. If dyad partners are not satisfied with the relationship, then it is likely that the mentoring experience has not been a worthwhile activity. Previous research (Allen, Russell, & Maetzke, 1997; Young & Perrewe, 2000) suggested that the extent of mentoring received is related to satisfaction with the dyad relationship.

Theoretical Framework

In conceptualizing a framework for the dyad relationship, the researcher acknowledged mentors as having two distinct functions that revolve around providing *professional* assistance and *psychosocial* assistance to protégés. Professional assistance refers to mentoring that supports novice teachers in the development of skills associated with career responsibilities, while psychosocial assistance is designed to enhance novice teachers' sense of competence and effectiveness. Support for this conceptual framework is drawn from literature pertaining to mentoring in organizational and educational settings. In her seminal research on mentoring, Kram (1985) conducted in-depth interviews with 18 managers who served as mentors, and then utilized content analysis to identify the forms of support that mentors provide their protégés. Kram labeled the forms of support as *mentoring functions*, and her mentor role theory posits that mentoring relationships provide two specific functions: (a) career, and (b) psychosocial. Through career functions, a mentor provides sponsorship, exposure and visibility, coaching, protection, and challenging assignments to his/her protégé. Psychosocial functions enhance an individual's sense of competence and effectiveness, may alleviate work-related stress, and include *acceptance, counseling, friendship, and role modeling*. *Social*, a fifth psychosocial function, was identified by Raggins and McFarlin (1990) and was incorporated into the mentor role theory by Greiman (2002). Kram suggested that the greater the number of functions provided by the mentor, the more beneficial the relationship would be to the protégé. The literature on teacher development parallels Kram's work, and supports the concept that two major types of support are considered necessary for novice teachers (Feiman-Nemser, 2003; Gold, 1996). Instructional support focuses on assisting the new teacher with the knowledge and skills necessary to be successful in the classroom and school, whereas psychological support is directed at building the novice teacher's self-concept by promoting confidence, developing self-reliance, and encouraging feelings of effectiveness and self-esteem.

Will the results of this study support Kram's mentor role theory, and confirm previous research which suggests that the extent of mentoring received is related to satisfaction with the dyad relationship? Most investigations have examined either professional mentoring *or* psychosocial mentoring, but few have examined *both mentoring functions* with a participant group. In addition, mentoring research has primarily investigated the induction process from the novice teachers' perspective, while a limited scholarly effort has focused upon the perception of the mentor. Developing a better understanding of the dyad relationship suggests that the perspective of both dyad members should be *compared* for congruence and differences (Young & Perrewe, 2000). Adding further support for this line of inquiry, Chao (1998) noted that "the inability to validate one mentoring partner's perceptions with the other's reactions is a common pitfall in mentoring research" (p. 335). The dyad relationship is arguably one of the most critical interactions for a novice teacher during his or her socialization into the profession, and as such, merits inquiry to better understand this phenomenon.

Purpose and Objectives

The purpose of this study was to examine and compare the perceptions of novice teachers of agricultural education and formal mentors regarding the extent of mentoring received, and the influence that this interaction has on dyad satisfaction. The following research objectives were developed to achieve the purpose: (a) determine and compare the perceptions of novice teachers and their formal mentors regarding the extent of mentoring received (i.e., professional and psychosocial mentoring), and (b) determine the relationship between mentoring received and dyad satisfaction. The following null hypotheses were tested to determine whether there were statistically significant findings from the study:

- Ho₁ There is no statistically significant difference between the perceptions of novice teachers and their formal mentors regarding professional mentoring.
- Ho₂ There is no statistically significant difference between the perceptions of novice teachers and their formal mentors regarding psychosocial mentoring.
- Ho₃ There is no statistically significant relationship among professional mentoring, psychosocial mentoring, and dyad satisfaction for novice teachers and their formal mentors.

Methods and Procedures

This study utilized causal-comparative and correlational research methods (Gall, Borg, & Gall, 1996). The target population for the study was novice teachers of agricultural education and formal mentors in a Midwestern state. Based on demographic data, the researcher determined that the respondents were a representative time and place sample of the population (Oliver & Hinkle, 1982), and therefore inferential statistics were utilized to analyze the data. The accessible sample consisted of 40 matched-pairs of novice teachers of agricultural education in their first year of teaching and their formal mentors provided by school districts. The names of the novice teachers were obtained from education officials located in the Midwestern state, while school administrators provided the names of formal mentors assigned to the beginning teachers. A total of 39 novice teachers and 31 formal mentors participated in the study, resulting in a response rate of 88% ($n = 70$). Only matched-pairs were utilized for data analysis, and this resulted in 30 dyads being the focus of the study. The Mentoring Relationship Questionnaire (MRQ) (Greiman, 2002) was utilized to collect information from dyad partners. The MRQ consists of scales that measure professional mentoring, psychosocial mentoring, dyad similarity, and dyad satisfaction. A beginning teacher version and mentor version of the MRQ mirrored each other, and details of each scale follow.

Professional mentoring. This part of the MRQ consisted of 28 items designed to measure the level of satisfaction with professional mentoring provided to the novice teacher by the formal mentor. This list was developed from a review of literature and utilized several sources (Greiman, Walker, & Birkenholz, 2002; Mundt & Connors, 1999;

Veenman, 1984). The 28 questions were organized around four subscales that represented professional responsibilities. Ten of the questions pertained to program management responsibilities, eight questions focused on teaching and learning, five questions related to student relationships, and five questions pertained to school and parent relationships. A 4-point Likert-type scale (1 = *very dissatisfied*, 2 = *somewhat dissatisfied*, 3 = *somewhat satisfied*, 4 = *very satisfied*) was utilized to elicit responses from participants. Reliability coefficients for the construct and four subscales in this study ranged from .82 to .99, and were calculated post-hoc.

Psychosocial mentoring. A 15-item scale was designed to measure the extent to which the formal mentor provided psychosocial assistance to the novice teacher. The researcher adopted and modified items used by Ragins and McFarlin (1990), and Turban, Dougherty, and Lee (2002). Each of the psychosocial functions of acceptance, counseling, friendship, role modeling, and social were represented by three Likert-type questions based on a 7-point scale (1 = *not at all*, 3 = *some extent*, 5 = *large extent*, 7 = *very large extent*). Ragins and McFarlin (1990) reported a Cronbach's coefficient alpha that ranged from .82 to .93 for each of the psychosocial functions. Reliability coefficients for the construct and five subscales in this study ranged from .75 to .96, and were calculated post-hoc.

Dyad satisfaction. Five items were intended to gain a measure of the perceived satisfaction with the dyad relationship, and participants responded to a 7-point Likert-type scale (1 = *strongly disagree*, 3 = *disagree*, 5 = *agree*, 7 = *strongly agree*). The five items were modified from Ragins and Cotton's (1999) questionnaire, which reported a coefficient alpha of .83. Post-hoc reliability analysis yielded a Cronbach's alpha of .99 for the novice teacher version, and .98 for the mentor version.

A panel of experts from across the United States with an identifiable research focus involving mentoring and/or the induction of novice teachers was asked to review the MRQ for content and face validity. Appropriate changes to both versions of the MRQ were made based on the recommendations of expert panel members. Both data collection instruments were pilot tested with a group of second and third year agricultural education teachers who were not participating in the study. As a result of the input, several questions in the beginning teacher version of the MRQ were eliminated.

The data were collected using Dillman's (2000) tailored design method. This included mailing a hand-written prenotice post card, and two mailings consisting of a cover letter, questionnaire, and a self-addressed, stamped envelope. The final contact with nonrespondents was approximately 25 days after the first mailing, and consisted of a telephone call that encouraged the return of the questionnaire. Research has shown that late respondents are often similar to nonrespondents (Miller & Smith, 1983). Therefore, analysis of variance (ANOVA) procedures were used to compare on-time respondents to late respondents to ensure that nonresponse was not a threat to external validity. No statistically significant difference was found with regard to participant response to scaled sections in the questionnaire.

Data were analyzed using the Statistical Package for the Social Sciences (SPSS version 13.0). Paired-samples *t* tests were conducted to test hypotheses one and two by comparing differences in perceptions between novice teachers and formal mentors. Pearson product-moment coefficients were utilized to test null hypothesis three, and the relationships were described using Davis' (1971) conventions. Effect sizes were calculated and interpreted using Cohen's (1988) *d* and *r* coefficients and indices. The alpha level was established a priori at .05.

Findings

Demographically, 53% of the novice teachers and 87% of the mentors were male. The average age of the novice teachers was 25 ($SD = 4.9$), with a range of 22 to 48. Formal mentors were an average of 42 ($SD = 8.3$) years in age, with a range of 25 to 56. This resulted in an average age difference of 17 years between novice teachers and their formal mentors. Novice teachers taught in schools that had an average enrollment of 86 agricultural education students, with a range of 24 to 300 students (four-teacher program). Half (50%) of the novice teachers were located in single-teacher agricultural education programs. Formal mentors had taught an average of 15 years ($SD = 8.7$), with a range of 2 to 31 years of teaching experience, and 50% of the formal mentors taught agricultural education as their subject area.

Mentoring Received

The first research objective sought to determine and compare the perceptions of novice teachers and their formal mentors regarding the extent of mentoring received. As displayed in Table 1, novice teachers ($M = 3.14$) and their formal mentors ($M = 3.17$) were *somewhat satisfied* with the extent of professional mentoring received. Null hypothesis one was tested by performing a paired-samples *t* test. A statistically significant difference was not found between novice teachers and their formal mentors regarding professional mentoring, and the four professional mentoring functions (Table 1). As a result, null hypothesis one failed to be rejected.

Findings related to psychosocial mentoring are shown in Table 1, and reveal both novice teachers ($M = 4.80$) and their formal mentors ($M = 5.23$) perceived that psychosocial mentoring was being provided to a *large extent*. Null hypothesis two was tested by performing a paired-samples *t* test, and a statistically significant difference was not found between novice teachers and their formal mentors regarding the extent of psychosocial mentoring received. Thus, null hypothesis two failed to be rejected. However, a statistically significant difference was found between novice teachers and their formal mentors regarding the psychosocial functions of acceptance, counseling, and friendship. The effect size for difference in perception between novice teachers and their formal mentors regarding mentoring functions was small for acceptance ($d = .41$), counseling ($d = .42$), and friendship ($d = .47$).

Table 1

Paired-Samples T Test for Perceptions Regarding Professional Mentoring and Psychosocial Mentoring

Mentoring function	Novice teachers		Formal mentors		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Professional mentoring ^a	3.14	.70	3.17	.62	-.17	.87
Student relationships ^a	3.29	.60	3.24	.68	.25	.81
Teaching & learning ^a	3.26	.61	3.09	.68	.96	.35
School & parent relationships ^a	3.25	.70	3.30	.66	-.27	.79
Program management ^a	3.16	.65	3.17	.67	-.06	.96
Psychosocial mentoring ^b	4.80	1.46	5.23	1.00	-1.78	.09
Acceptance ^b	5.24	1.36	5.84	1.14	-2.26	.03*
Counseling ^b	5.18	1.51	5.78	.98	-2.28	.03*
Friendship ^b	5.04	1.79	5.73	.98	-2.55	.02*
Role modeling ^b	4.71	1.72	5.02	1.17	-.97	.34
Social ^b	3.84	2.08	3.78	1.78	.18	.86

^a4-point scale (1 = *very dissatisfied*, 2 = *somewhat dissatisfied*, 3 = *somewhat satisfied*, 4 = *very satisfied*). ^b7-point scale (1 = *not at all*, 3 = *some extent*, 5 = *large extent*, 7 = *very large extent*).

**p* < .05

Dyad Satisfaction

The second research objective sought to determine the relationship between mentoring received and dyad satisfaction. Novice teachers (*M* = 5.33, *SD* = 1.76) and formal mentors (*M* = 5.67, *SD* = 1.64) *agreed* that they were satisfied with the mentoring relationship. As displayed in Table 2, Pearson product-moment correlations were calculated to test null hypothesis three. *Very strong* (Davis, 1971) statistically significant correlations were discovered from the perception of novice teachers involving: (a) psychosocial mentoring and dyad satisfaction (*r* = .88, large effect size), (b) professional mentoring and dyad satisfaction (*r* = .86, large effect size), and (c) professional mentoring and psychosocial mentoring (*r* = .73, large effect size). A *substantial* statistically significant correlation was found between novice teachers' dyad satisfaction and formal mentors' dyad satisfaction (*r* = .50, large effect size). Three additional correlations were found to be *moderately* statistically significant (Table 2), and the effect

sizes were medium. It was determined that the Pearson product-moment correlations were significant at the .05 alpha level, and therefore null hypothesis three was rejected.

Table 2

Intercorrelations Among Professional Mentoring, Psychosocial Mentoring, and Dyad Satisfaction

Variable	1	2	3	4	5	6
1. Professional mentoring ^a	—	.73**	.86**	.10	.36	.38*
2. Psychosocial mentoring ^a		—	.88*	.11	.48**	.42*
3. Dyad satisfaction ^a			—	.04	.35	.50**
4. Professional mentoring ^b				—	.30	.22
5. Psychosocial mentoring ^b					—	.19
6. Dyad satisfaction ^b						—

^aNovice teacher perception. ^bFormal mentor perception.

* $p < .05$ ** $p < .01$

Conclusions, Discussion, and Recommendations

This study sought to examine and compare the perceptions of novice teachers of agricultural education and formal mentors regarding the extent of mentoring received, and the influence that this interaction has on dyad satisfaction. Based on Young and Perrewé's (2000) suggestion that research on mentoring be conducted as a dyad, and that "studying two large separate groups provides general findings about the perceptions of mentors and protégés, but studying dyads would elucidate even further the exchange that takes place between two individuals" (p. 628-629), a matched-pairs approach to conducting this study was utilized. From the findings of this study it was concluded that novice teachers receive professional and psychosocial mentoring from formal mentors. This conclusion was reached by both dyad members, and there was not a statistical difference in the perceptions of novice teachers and formal mentors regarding mentoring received (i.e., professional and psychosocial mentoring). The findings from this study reinforce research conducted by Kram (1985), and provide support for her mentor role theory which posits that career and psychosocial mentoring are two major functions that mentors exhibit. What is unique about the findings of this study is that *empirical* evidence from the perception of *both* dyad members was found to confirm the conclusions that Kram obtained through qualitative research. As a result, novice teachers and formal mentors can anticipate that professional and psychosocial support will be provided during the induction year of teaching. Dyad members acknowledge that mentoring can assist novice teachers with challenges regarding student relationships, teaching and learning, school and parent relationships, and program management. As such, it appears that formal mentors are assisting novice teachers in developing the skills

necessary to be an effective teacher. Dyad partners recognize the psychosocial benefits of the mentoring relationship whereby the novice teacher is assured that their formal mentor is someone in the school who will support, encourage, and listen to their problems, concerns, and questions. Knowing this support is available may help to build the self-confidence of novice teachers, and help to reduce feelings of insignificance and isolation that novice teachers often experience (Andrews & Quinn, 2005).

Novice teachers and formal mentors were found to differ regarding the extent that the psychosocial functions of acceptance, counseling, and friendship are being provided. This conclusion supports previous research that reported a similar finding (Burris, Kitchel, Greiman, & Torres, 2006). Formal mentors perceive that they are providing acceptance, counseling, and friendship to a large extent, but novice teachers perceive that they receive these three functions to a lesser extent. This disagreement could be an indication of the high level of stress and self-doubt that novice teachers experience during the induction year of teaching, and the extra effort required of a formal mentor to provide psychosocial assistance. Or this difference in perception might emphasize the challenge that mentors face in remembering their first year of teaching, and in devising the most helpful mentoring strategies to meet the psychosocial needs of their protégé. This finding merits additional research so that a better understanding of the dyadic interaction associated with psychosocial mentoring can be obtained.

Quite possibly the most interesting conclusion was in regard to the relationship of mentoring received and satisfaction with the dyad relationship. Although both groups of dyad members reported that they were satisfied with the mentoring relationship, there were conflicting results obtained through correlation analysis. From the perception of novice teachers, receiving professional and psychosocial mentoring was positively related to dyad satisfaction, which aligns with previous research (Allen et al., 1997; Young & Perrewe, 2000). Thus, the more a novice teacher receives professional and psychosocial mentoring, the more likely the novice will be satisfied with the dyad relationship. However, it was perplexing that no significant correlations were discovered from the perception of formal mentors regarding mentoring received and dyad satisfaction. As a result, formal mentors' perception of providing professional and psychosocial mentoring to novice teachers was not shown to be related to satisfaction with the dyad relationship. This finding likely indicates that formal mentors consider other factors as contributing more to dyad satisfaction than the amount of mentoring they provide. It could be that the altruistic benefit (Ehrich et al., 2004) of mentoring is a significant factor that formal mentors deem important to their satisfaction with the dyad relationship. Further, Ragins, Cotton, and Miller (2000) suggest that mentoring satisfaction falls along a continuum, and found different outcomes for protégés categorized by level of relationship satisfaction. It appears that future research could benefit from this strategy to explore the phenomenon of dyad satisfaction. Further, while this study was limited by its focus on three mentoring variables, the number of matched-pairs, and its generalizability to a Midwestern state, it is suggested that antecedents for a satisfying and effective dyad relationship be investigated in future studies.

It is predicted that over two million new teachers will be employed in America's schools during this decade due to increased student enrollments, and to replace a large cohort of retiring teachers (Gerald & Hussar, 1998). Developing ways to attract and retain the next generation of teachers presents the educational community with a formidable task. Therefore, it is critical that all novice teachers be provided with a quality mentoring experience. As such, the findings of this study imply that the job seeking process may be more high stakes for novice teachers than they realize. Not only will they be accepting a teaching position but novice teachers will also be gaining a formal mentor to assist with their professional and psychosocial development.

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