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Impact of Practice Scholarship as Perceived by Nurses Holding a DNP Degree

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OBJECTIVE: The aim of this study was to explore the perceived impact of practice scholarship among DNP-prepared nurses and the relationship of impact to primary work role and years since graduation.
BACKGROUND: Healthcare organizations continuously seek ways to improve health outcomes and reduce cost. Doctor of Nursing Practice–prepared nurses are educated with essential competencies to lead healthcare reform initiatives based on their practice scholarship contribution.
METHODS: A cross-sectional design was used to administer a self-report online survey to a convenience sample of 306 DNP graduates currently in practice.
RESULTS: The highest impact of practice scholarship was perceived on patients, populations, quality of care, and the profession. The impact on policy, cost, and cost savings was significantly lower. No significant difference was found on practice scholarship impact based on role or between years of experience since graduation.
CONCLUSION: Doctor of Nursing Practice competencies support practice scholarship outcomes. Organizational resources are needed to support the impact of practice scholarship.

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A commitment to quality and safety is imperative for healthcare organizations to be successful in today's environment.[1] Healthcare settings provide opportunities for nurse scholars prepared with a DNP degree to explore and address practice gaps where evidence-based practice (EBP) could be implemented to support patient safety and quality outcomes. Practice scholarship led by nurses enables healthcare organizations to build cultures that support value-driven care and sustain quality and safety initiatives.

Nursing practice scholarship is defined by the American Association of Colleges of Nursing as "the generation, synthesis, translation, application, and dissemination of knowledge that aims to improve health and transform healthcare."[2(p2)] This level of scholarship may be applied across a variety of settings and includes a broad range of outcomes that have a positive impact on healthcare delivery and wellness. For example, practice scholarship can include the development of clinical practice guidelines that incorporate patient

preference and research findings, clinical data outcomes that inform policy development within healthcare organizations, and program design and evaluation measures.

This study aimed to identify and examine: *a*) the perceived degree of impact of practice scholarship and *b*) the relationship between perceived impact of practice scholarship, work role, and years since graduation, as reported by DNP-prepared practicing nurses. Results of this study will inform leaders and employers in healthcare organizations about the practice scholarship competencies of DNP-prepared nurses and the impact, current and future, of practice scholarship activities.

Efforts to improve healthcare quality have been underway since 2001, with an aim to decrease patient care deficits in 6 dimensions identified by the Institute of Medicine: safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity.[3] The Institute for Healthcare Improvement purports that improvement efforts within the US healthcare system must focus on the pursuit of 3 aims: improving the experience of care, improving the health of populations, and reducing per capita costs of healthcare.[4]

Doctor of Nursing Practice programs emerged in 2004 with a focus on educating advanced practice nurses with practice scholarship competencies to enhance the translation of EBP and quality management within practice settings. Educators purport that DNP graduates are skilled at combining practice expertise with knowledge of clinical innovation to deliver enhanced patient and population health outcomes.[5] Doctor of Nursing Practice graduates influence health systems, clinical practice, health policy, and areas such as health economics, health insurance, and administration and information technology.[6-8] With visioning and support, hospital and health system leaders have the opportunity to facilitate the contribution of these advanced practice nurses in new and redesigned roles that contribute to achievement of strategic goals. It is imperative to integrate the essential practice scholarship competencies of the DNP graduate into healthcare system roles and responsibilities.[9]

Healthcare providers are facing complex health systems, complicated payment systems, high demand for quality and innovation, and accountability for practice outcomes.[5] Clearly, there is a need for DNP-prepared nurses to assist organizations to develop mechanisms to achieve financial stability and meet desired population health outcomes. The Centers for Medicare & Medicaid Services *Roadmap for Implementing Value Driven Healthcare* outlined the goals for a value-based purchasing system for healthcare to include financial viability, payment incentives, accountability across the system, effectiveness of care, ensuring access to care, safety and transparency, transitions across systems, and the meaningful use of electronic health records.[10] The complexity of these requirements to manage and report data, as well as to create systems to collect, assess, and use outcome measurement data, requires the combination of practice expertise, knowledge of clinical innovation, and desire for enhanced patient and population health outcomes. The DNP-prepared nurse is prepared for practice scholarship in the application of evidence to practice and clinical innovation to enhance quality outcomes as well as to examine variation in effectiveness across approaches of care and recommend approaches that achieve higher value and optimal outcomes for patients and populations.[5]

Model

The framework for this study is based on the actualized DNP model.[11] The model emphasizes the unique elements of doctoral education, which in turn affect the ability to develop new practice roles consistent with the developed competencies. It is this role evolution that facilitates the achievement of demonstrated outcomes in the patient, organization, health system, and policy spheres.

Previous publications have focused on each component of the model. In Kesten et al,[12] practicing DNPs identified the competencies that were attained through education, aligning with the 1st aspect of the model. In the 2nd publication, practicing DNPs identified their ability to use their competencies to contribute to practice scholarship, including knowledge generation and dissemination.[13] This focus aligns with the 2nd model component around innovative roles. The final aspect of the model is the resultant outcomes, which is highlighted in this study (Figure 1).[11]

Methods

Design/Setting/Sample

A cross-sectional design was used to administer a self-report online survey to a convenience sample of 306 graduates of DNP programs currently in practice via a national membership organization for nurses holding a DNP degree. After data cleaning, 269 completed surveys were used in the analysis.

Procedures

Data were collected using a researcher-designed, Research Electronic Data Capture tool.[14] The electronic survey tool contained participant demographics, including work role, years since graduation with a DNP degree, questions assessing perception of practice scholarship outcomes, knowledge gained in DNP programs, and frequency of engagement in practice scholarship activities. The survey was developed using constructs from the literature, national nursing organization position statements, and standards of doctoral

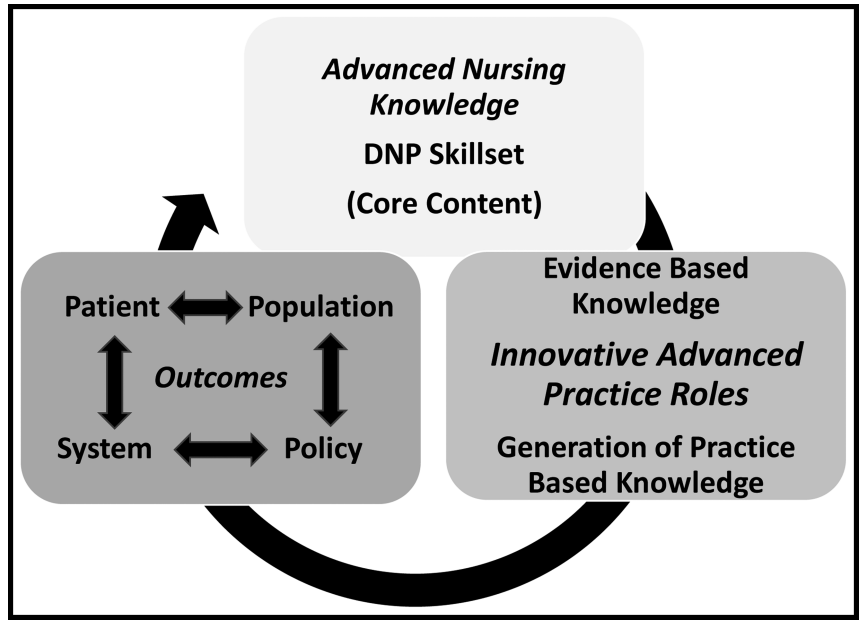

Figure 1. The actualized doctor of nursing practice (DNP) model.[11] Reprinted with permission.

nursing education.[12] Five content experts reviewed the survey tool, and 10 DNP graduates piloted the survey before it was distributed. The institutional review board at the George Washington University deemed this study exempt status.

Data Analysis

Survey data were analyzed using SPSS 26 software (version 26.0; Armonk, New York) in consultation with a statistician. Descriptive and inferential statistics were generated for each variable, and Pearson χ^2 tests were conducted on individual impact items, work role, and years of experience. One-way analysis of variance (ANOVA) was conducted on the mean summary impact and pertinent demographic data.

Results

Demographics

The sample (n = 269) was primarily female (92%, n = 248) and White (77.7%, n = 207), and represented all regions of the United States with an additional 5 international participants. Most worked full-time (74%, n = 199); in community (35%, n = 94), acute care (31.2%, n = 84), or academic (32.7%, n = 88) settings; and held direct care advanced practice RN (APRN) roles (47%, n = 126), academic faculty roles (25.9%, n = 70), and non–direct care roles such as leadership and professional development (17.8%, n = 48), with a mean of 4.6 years of experience since DNP graduation.[12]

Degree of Impact of DNP Scholarship

As noted in Table 1, the vast majority of respondents reported their practice scholarship was somewhat impactful, very impactful, or profoundly impactful on quality of care (94.8%, n = 269), on the profession of nursing (94.8%, n = 255), and on individual patients or populations (94.4%, n = 254). The perception of impact was reported by most respondents at the patient care level (91.4%, n = 244), on patient families (90.6%, n = 244), the system (89.9%, n = 243), the interprofessional team (89.6%, n = 241), and the community (88.8%, n = 238). A notable difference was observed in perceived practice scholarship impact on cost and cost savings (72.1%, n = 194) and policy (70.1%, n = 188). The lowest perceived impact from practice scholarship was noted within the regional (70%, n = 189), national (58.1%; n = 87), and international (40.4%, n = 109) arenas. Furthermore, in these arenas, 30% to 59.6% of those who responded reported that their practice scholarship had no impact.

Relationship Between Impact on Practice With Work Role and Years of Experience

The relationship between practice scholarship impact and primary work role and years since DNP graduation was examined using the summary mean score for impact and categorized primary work role and years of experience. Primary work roles were categorized as: *a*) direct care roles such as the 4 APRN roles, *b*) indirect care roles including leadership and professional development, and *c*) academic faculty roles. For primary work roles, there was no statistically significant difference between any role on impact by a 1-way ANOVA, $F_{2,267} = 2.273$, $P = 0.105$. There was also no statistically significant difference between

Table 1. *Degree of Impact of DNP Scholarship*

Factor	Not at All Impactful	Somewhat Impactful	Very Impactful	Profoundly Impactful	Mean	SD
On quality of care	5.2 (14)	16.0 (43)	38.7 (104)	40.1 (108)	3.14	0.87
On the nursing profession	4.9 (13)	25.2 (67)	30.5 (81)	39.5 (105)	3.05	0.92
At the patient care level	8.6 (23)	19.1 (51)	36.3 (97)	36.0 (96)	3.00	0.95
On individual patients or populations	5.6 (15)	26.0 (70)	38.3 (103)	30.1 (81)	2.93	0.88
On families of patients	9.3 (25)	21.9 (59)	36.4 (98)	32.3 (87)	2.92	0.95
On the interprofessional team	10.4 (28)	20.8 (56)	38.3 (103)	30.5 (82)	2.89	0.96
At the system level	10.0 (27)	24.4 (66)	38.5 (104)	27.0 (73)	2.83	0.94
On the community	11.2 (30)	29.9 (80)	34.3 (92)	24.6 (66)	2.72	0.96
On policy/legislation	29.9 (80)	35.8 (96)	19.4 (52)	14.9 (40)	2.19	1.03
On cost or cost savings	27.9 (75)	38.3 (103)	23.8 (64)	10.0 (27)	2.16	0.95
At the regional level	30.0 (81)	36.3 (98)	21.1 (57)	12.6 (34)	2.16	1.00
At the national level	41.9 (113)	28.5 (77)	20.0 (54)	9.6 (26)	1.97	1.00
At the international level	59.6 (161)	23.3 (63)	11.9 (32)	5.2 (14)	1.63	0.89

Data are presented as valid % (n), unless otherwise indicated. In the survey, *impact* was defined as a powerful effect that something, especially something new, has on a situation or person, for example, change in practice and/or sustained change in practice.

years of experience since DNP graduation on practice scholarship impact, $F_{3,265} = 2.032$, $P = 0.110$. However, individual χ^2 tests on impact items and work role and years of experience since DNP graduation produced differing results. Table 2 describes the relationships between these variables. Although years of experience since DNP graduation showed no significant relationships between individual impact items except on cost or cost savings, most individual impact items had a significant relationship with primary work role.

Discussion

Degree of Impact of DNP Scholarship

Impact was defined in the survey as "a powerful effect that something, especially something new, has on a situation or person, for example change in practice and/or sustained change in practice." This study affirms that DNP-prepared nurses perceive their practice scholarship was impactful on individual patients, populations, and the profession of nursing. The perception of impact was also noted by most respondents at the patient care level, on patient families, the system, the interprofessional team, and the community. The difference in reported practice scholarship impact on cost and cost savings may be attributed to the educational preparation, competency, limited dissemination of results, area of expertise, and work role of the DNP-prepared nurse. Although respondents expressed a lower impact on cost and cost savings, it may be possible they are able to contribute in other areas of organizational and systems leadership and may not recognize the contributing factors that lead to a positive financial impact. Furthermore, because the most respondents held direct care work roles of APRN (47%, n = 126) or academic faculty roles (25.9%, n = 70), it is feasible that financial analysis and policy contributions were not part of their job responsibilities.

Engagement in practice scholarship certainly requires knowledge and competency attainment, but it also depends on available and supported time to engage in these activities. In other words, the ability to produce practice scholarship outcomes may depend on the available resources from the employer and the value placed on these outcomes. Value may be described as the importance, worth, or usefulness of something, considered to be beneficial. Doctor of Nursing Practice graduates may be prepared academically to engage in practice scholarship, but these

Table 2. *Relationship Between Impact on Practice With Work Role and Years of Experience*

Factor	Years of Experience χ^2 (9)	Primary Work Role χ^2 (6)
On quality of care	12.797	15.045[a]
On the nursing profession	9.392	13.870[a]
At the patient care level	14.972	14.596[a]
On individual patients or populations	12.129	9.352
On families of patients	7.559	22.188[a]
On the interprofessional team	15.937	14.622[a]
At the system level	8.569	13.145[a]
On the community	3.804	14.474[a]
On policy/legislation	10.307	15.260[a]
On cost or cost savings	18.033[a]	15.019[a]
At the regional level	10.347	14.451[a]
At the national level	8.282	11.264
At the international level	6.744	7.548

[a] $P < 0.05$.

competencies may not be valued by organizations as demonstrated by alignment with job descriptions and practice expectations in the workplace. For example, Beeber et al[15] examined the role and value of 155 DNP graduates across 23 employers who articulated that DNP-prepared nurses do impact outcomes but organizations do not have measurable data to quantify the overall impact.

Finally, nearly 30% (n = 80) of survey respondents expressed that they were "not at all impactful" in areas of policy/legislation. Perceptions of contributions toward policy and advocacy may be limited due to the breadth and depth of the direct care work role responsibilities of DNPs, leaving limited opportunity to contribute to legislation at the local, state, and national levels. Further definition of policy and advocacy to include clinical practice guidelines, organizational policies, and healthcare policies is needed. Although competency in advocacy and policy change is acquired in DNP education, additional research in this area is essential to more fully appreciate the potential for impact and facilitating factors.

Relationship Between Impact on Practice With Work Role and Years of Experience

Previous research has shown that DNP-prepared nurses hold practice scholarship knowledge and competencies.[12] While in practice, these skills are being used, especially in direct care roles.[13] These current impact data show that DNP-prepared nurses perceive that their most profound practice scholarship impact rests in areas involved in direct patient care such as quality of care, at the patient care level, on families of patients, and on the interprofessional team. This is supported by the χ^2 analysis that showed relationships between the work role and many of the patient- and provider-related areas of impact.

When examining the relationship between impact and years of experience, it is important to note that, in this study, the average time since graduation from their DNP program was 4.6 years.[12] During transition into practice, most respondents were graduates who were refining newly acquired direct care patient management skills. In this study, only those respondents with more than 10 years of experience since graduation from a DNP program reported realized impact. This could be attributed to maturation in the role or gravitation to leadership roles.

Limitations

The size and homogeneity of the sample population may limit the overall generalizability of the study as primary work roles consisted of APRNs, academic faculty, and nurses holding leadership positions. Although the recruitment strategy through a national membership organization was used to help ensure a representative sample, most APRNs were nurse practitioners. Representativeness of the sample may be a limitation as the APRN roles of the certified RN anesthetist, clinical nurse specialist, and certified nurse midwife were not well represented. In addition, there was a relatively limited sample from participants in roles outside direct care. Future studies may require segmented recruitment for a variety of work roles of DNP-prepared nurses in practice. A larger and broader sample of DNPs is recommended. The length of the survey and the time required to complete may have been a limitation, because it may have been a deterrent to participation or completion. However, strategies to combat participant fatigue were used, and the option to return to the survey later for completion was offered.

There is a possibility of bias and recall error associated with self-reports. Several strategies were used to limit self-report bias, such as keeping the questions short, defining concepts, and avoiding leading questions. The survey did not differentiate between postbaccalaureate DNP graduates from postmaster's DNP graduates. The addition of this data in future studies is recommended. Because of the lack of previous research on this topic, additional studies are recommended with a larger sample size and broader representation of work roles to better understand the implications and impact of practice scholarship in nursing.

Implications

Doctor of Nursing Practice–prepared nurses are educated across 8 distinct "Essentials" to impact the delivery, experience, and cost of care, and the overall health of the populations served.[16] Although this study affirms that DNP-prepared nurses perceive their practice scholarship as impactful, questions remain regarding whether practice scholarship opportunities are available, recognized, valued, and integrated into policies by employers of DNP-prepared nurses. This study found similar results to Beeber et al,[15] that DNP-prepared nurses impact healthcare outcomes; however, quantifying impact is difficult because organizations do not have measurable data in sufficient quantities. This is largely because there are currently insufficient DNP-specific roles or positions in organizations, which makes it difficult for employers to compare the role of the DNP-prepared nurse to nurses with a master's degree. As nurse practitioner roles are interchangeably filled with master's- or DNP-prepared nurses, employer-reported comparisons of the 2 academic preparations range from no difference to a marked difference.[15] These findings echo the results by Nichols et al[17] of chief nursing officers (CNOs) who noted improvements to patient

care and access to care by employing DNP-prepared nurses, yet in qualitative interviews, the CNOs voiced a lack of understanding related to the value of the DNP-prepared nurse.

In the Beeber et al[15] study, employers identified that DNP-prepared nurses are unique due to their ability to translate evidence into practice and their understanding of health policy and population health. Yet, Beeber et al[15] and Nichols et al[17] find that practice roles for DNP-prepared nurses remain ambiguous and care outcomes are not differentiated based on preparation. Clearly, further exploration of practice scholarship outcome measurement, dissemination of outcomes, and examination of employers' perception of the value of practice scholarship are needed to support improvements in health policy.

In conclusion, there is a need for shared accountability to move doctoral nursing practice impact forward to achieve the needed patient, population, system, and policy outcomes. Academia is challenged to develop stronger curriculums around business and policy competencies to allow for confidence development among the students in identifying cost benefit in practice and effective policy engagement. Finally, DNP-prepared nurses must pursue new opportunities to differentiate themselves, disseminate their work, and highlight how their practice scholarship competencies can contribute to the organization's strategies.

The need to communicate the value of the DNP-prepared nurse by organizations, academia, and practitioners was even more apparent after the release of the recent *Future of Nursing 2020-2030* report.[18] The vision articulated in the report outlines the need to achieve health equity built on strengthened nursing capacity and expertise. The authors missed an opportunity to leverage the attributes of DNP-prepared practice scholars in creating and contributing to equitable healthcare systems designed to optimize patient and population outcomes.

There is a need for academic practice partnerships to conceptualize how DNP-prepared nurses could be leveraged to reach organizational and societal healthcare goals. Commitment to excellence and support from senior leadership from both academia and practice is needed. The results from this study are promising, as the respondents recognize the positive impact they have made within their own organizations. Nevertheless, it is clear that if society is to realize patient-centered and cost-effective healthcare, organizations must ensure DNP-prepared nurses are empowered to engage in practice to their full potential. To achieve this, policy changes and innovative roles are needed at the organizational level to provide time and opportunity for these nurses to lead transformation. As noted by Patton,[1] healthcare organizations should develop policies that promote a culture that embraces models of translation of evidence into practice. These efforts will lead to not only achieving but also sustaining and quantifying quality and safety outcomes.

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References

1. Patton C. Chapter 13: the impact of DNP projects on quality and safety in healthcare organizations. In: Anderson B, Knestrick J, Barroso R, eds. *DNP Capstone Projects: Exemplars of Excellence in Practice*. New York, NY: Springer Publishing Company; 2015. doi:10.1891/9780826130266.0013.
2. American Association of Colleges of Nursing. Defining scholarship in academic nursing task force consensus position statement. https://www.aacnnursing.org/News-Information/Position-Statements-White-Papers/Defining-Scholarship-Nursing. Accessed June 3, 2021.
3. Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the Twenty-First Century*. Washington, DC: The National Academies Press; 2001.
4. Berwick DM, Nolan TW, Whittington J. The triple aim: care, health, and cost. *Health Aff (Millwood)*. 2008;27(3):759-769. doi:10.1377/hlthaff.27.3.759.
5. Berkowitz B. Chapter 1: the emergence and impact of the DNP degree on clinical practice. In: Anderson B, Knestrick J, Barroso R, eds. *DNP Capstone Projects: Exemplars of Excellence in Practice*. New York, NY: Springer Publishing Company; 2015. doi:10.1891/9780826130266.0013
6. Edwards NE, Coddington JA, Erler C, Kirkpatrick J. The impact of the role of Doctor of Nursing Practice nurses on healthcare and leadership. *Med Res Arch*. 2018;6(4):4-11. doi:10.18103/MRA.V614.1734.
7. Paplham P, Austin-Ketch T. Doctor of nursing practice education: impact on advanced nursing practice. *Semin Oncol Nurs*. 2015;31(4):273-281. doi:10.1016/j.soncn.2015.08.003.
8. Terhaar MF, Taylor LA, Sylvia ML. The doctor of nursing practice: from start-up to impact. *Nurs Educ Perspect*. 2016;37(1):3-9. doi:10.5480/14-1519.
9. Tussing TE, Brinkman B, Francis D, Hixon B, Labardee R, Chipps E. The impact of the doctorate of nursing practice nurse in a hospital setting. *J Nurs Adm*. 2018;48(12):600-602. doi:10.1097/NNA.0000000000000688.
10. Centers for Medicare & Medicaid Services. Roadmap for implementing value driven healthcare in the traditional Medicare fee-for-service program. https://www.cms.gov/Medicare/

Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/downloads/vbproadmap_oea_1-16_508.pdf. Accessed June 3, 2021.
11. Burson R, Moran KJ, Conrad D. Why hire a doctor of nursing practice-prepared nurse? The value added impact of the practice doctorate. *J Dr Nurs Pract*. 2016;9(1):152-157. doi:10.1891/2380-9418.9.1.152.
12. Kesten KS, Moran K, Beebe SL, et al. Drivers for seeking the doctor of nursing practice degree and competencies acquired as reported by nurses in practice. *J Am Assoc Nurse Pract*. 2021. doi:10.1097/JXX.0000000000000593.
13. Kesten K, Moran K, Beebe SL, et al. Practice scholarship engagement as reported by nurses holding a doctor of nursing practice degree. *J Am Assoc Nurse Pract*. 2021. doi:10.1097/JXX.0000000000000620.
14. Research Electronic Data Capture. REDCap: Research Electronic Data Capture. https://projectredcap.org. Accessed June 3, 2021.
15. Beeber AS, Palmer C, Waldrop J, Lynn MR, Jones CB. The role of doctor of nursing practice-prepared nurses in practice settings. *Nurs Outlook*. 2019;67(4):354-364. doi:10.1016/j.outlook.2019.02.006.
16. American Association of Colleges of Nursing. The essentials of doctoral education for advanced nursing practice. http://www.aacn.nche.edu/dnp/pdf/Essentials.pdf. Accessed June 3, 2021.
17. Nichols C, O'Connor N, Dunn D. Exploring early and future use of DNP prepared nurses within healthcare organizations. *J Nurs Adm*. 2014;44(2):74-78. doi:10.1097/NNA.0000000000000029.
18. National Academies of Sciences, Engineering, and Medicine. *The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity*. Washington, DC: The National Academies Press; 2021. doi:10.17226/25982.