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Strategic Doing and the PROSPER Program Delivery System: A Case Study of the Translational Research Process

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Abstract

This article summarizes a project focused on the PROSPER program delivery system as a formal vehicle for addressing substance misuse and abuse in Ohio communities. Promoting School–community–university Partnerships to Enhance Resilience (PROSPER) is a nationally recognized, evidence-based program delivery system designed to implement prevention programming provided by a partnership among local schools and communities, the university-based Cooperative Extension system, and state leadership. A case study is presented that describes a midproject effort to develop strategies for advancing PROSPER goals through a process called *strategic doing*. Strategic doing brings partners together to develop strong collaborations that achieve highly desired outcomes. The case study is an example of a formal effort to translate scientific knowledge into applications that address real-life problems. Implications for translational research are discussed.

Keywords: substance abuse prevention, translational research, PROSPER, university–community partnerships, Cooperative Extension

A team of program providers and researchers representing a research-intensive university located in a highly industrialized Midwestern state are engaged in a concerted effort to facilitate the implementation of substance misuse prevention programming at the local level. The Promoting School–community–university Partnerships to Enhance Resilience (PROSPER) program delivery system (Partnerships in Prevention Science Institute, n.d.) is being utilized as a significant element in support of this effort. In addition, actions derived from a formal planning activity referred to as *strategic doing* (Morrison & Hutcheson, 2014) are similarly being used to propel the project forward. Finally, team members are applying research, evaluation, and policy development processes highly consistent with a translational research framework. This article provides a case study linking translational research as a framework, the PROSPER program delivery system as an approach to implementation of prevention education programming, and strategic doing as a mechanism for defining and initiating project implementation activities.

Relevance to Extension

A brief review of the history of the land-grant university system indicates that translational research has been a major pillar (Gavazzi & Gee, 2018; Kellogg Commission on the Future of State and Land-Grant Universities, 1999; Peters et al., 2005). The land-grant mission provides a road map for strengthening translational research across the university campus for both land-grant and non-land-grant public universities. Beginning with the Morrill Act of 1862, the United States established a history of providing access to higher education for the nation's disadvantaged and underserved populations. Twenty-five years later, the federal partner established a funding commitment to research through the Hatch Act of 1887. This act acknowledged the importance of translational research for gen-

erating new knowledge needed to improve agricultural production and support of the developing nation's food system.

The second Morrill Act, enacted in 1890, supported the establishment of land-grant institutions for persons of color and increased access to higher education for underrepresented African Americans. The teaching and research missions of the land-grant universities benefited from a third initiative designed to enable the extension of the university to the community, which institutionalized the concept of translational research in the land-grant system. In 1914, the Smith-Lever Act was passed, resulting in a system to transmit new knowledge and understanding to the various publics that could use it. Funded by the federal government in partnership with states and counties, the Cooperative Extension Service became the vehicle for disseminating knowledge generated through research at land-grant universities, particularly the agricultural experiment stations.

Thus, the foundation has been laid over the last 150-plus years for land-grant institutions to play a key role in addressing the complex challenges and opportunities the country will face in the 21st century. The recent emphasis on university outreach and engagement for tackling problems at all levels can also benefit from the land-grant experience. The research and extension model that extends the university into the community to work in conjunction with local partners and collaborators provides a blueprint for effective outreach and engagement grounded in translational research. This case study provides a vivid example of Extension as a formal partner in a community-based effort to provide substance misuse prevention programs guided by the translational research framework.

The Translational Research Framework

There are a variety of models or approaches to translational research (Tabak et al., 2012). Translational research is most often defined in terms of moving scientific knowledge into routine use to address issues related to well-being (National Center for Advancing Translational Sciences, 2015; Woolf, 2008). Abernethy and Wheeler (2011) acknowledged a translational research continuum that encompasses three distinct components proceeding from knowledge generation to translation or implementation to policy formulation. The knowledge generation component might be thought of as culminating in the development of evidence-based interventions that produce valued outcomes, whereas the translation or implementation component refers to the procedures necessary to use evidence-based practices to effectively address problems in communities, schools, or other organizations. Finally, the policy formulation component focuses on developing and implementing evidence-based practices across multiple jurisdictions (Bogenschneider et al., 2019).

Figure 1 provides a graphic illustration of the relationship between the translational research process, PROSPER, and strategic doing. The top pathway depicts translational research as a three-part process proceeding from research and development to translation to policy development. The middle pathway views PROSPER through a translational research lens. PROSPER is strongly supported by a body of knowledge based on years of research and development. This research base establishes PROSPER as a formally recognized, evidence-based process that results in the provision of evidence-based substance misuse prevention services. The translation component, featured in the case study below, provides a variety of scientifically derived mechanisms for implementing effective programs in specific locations. The policy development component similarly provides for formal efforts to expand implementation of effective processes and programs more widely, in this case to multiple counties across an entire state. The bottom pathway positions strategic doing as a mechanism for improving research and development, translation, and policy development activities. We argue that this set of procedures, referred to as translational research, has the potential to produce transformative change. In the case of PROSPER in Ohio, this change is manifest in desired outcomes indicating reduced harm from opioid and/or other substance abuse.

There are a bevy of models and approaches to translational research. For example, Julian et al. (2021) identified eight models or approaches. The policy, systems, and environmental framework (PSE) and the Cooperative Extension's national framework for health and wellness also qualify as models or approaches to health promotion that are subsumed by a translational research approach to local problem-solving. The PSE framework focuses on improv-

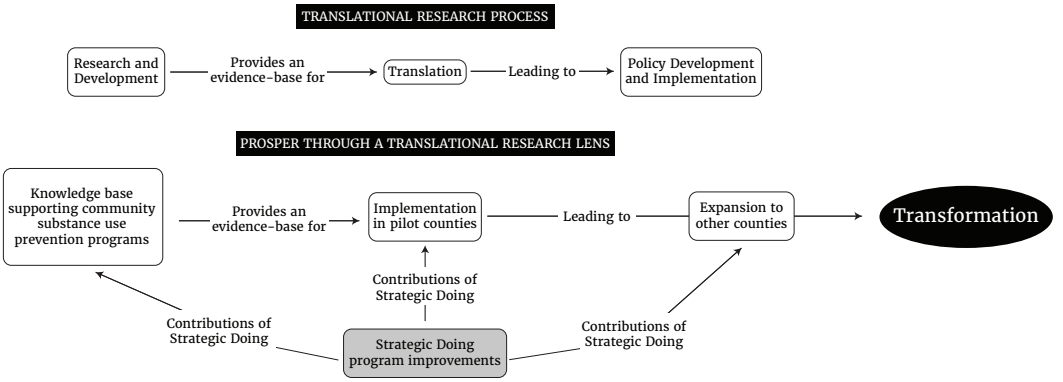

Figure 1. PROSPER Through a Translational Research Lens

ing community health and conditions. Historically, many behavioral health programs and initiatives targeted individual health and sought to influence behavior through educational outreach. However, individual choices are not the only decisions that impact the potential to be healthy. The PSE framework looks across the community and seeks to impact population health, leading to ongoing community health benefits by making more healthy choices available to community members.

Cooperative Extension's national framework for health and wellness is based on the social-ecological theoretical model (Bronfenbrenner, 1979), which considers the relationships between the individual, community, and society. This national framework is closely aligned with the U.S. Department of Health and Human Services National Prevention Strategy, which promotes four strategic prevention areas (National Institutes of Health, 2014): (1) healthy and safe community environments, (2) clinical and community preventive services, (3) empowered people, and (4) elimination of health disparities. Cooperative Extension can impact these prevention areas and works with partners to target Extension health and wellness priorities that help to promote healthy and safe environments and healthy and safe choices.

Translational research might be viewed as an overarching umbrella that subsumes other models and approaches. Its strength is evident in that it links and provides concrete guidance for research and development, translation, and policy development. Processes supporting research and development are well established, as are the requirements for establishing evidence-based practices and programs. The science and thus the process of translation is in its infancy, but well-researched guidelines are also available to practitioners to guide the implementation of complex social interventions. Finally, the policy development process is equally well established and provides a formal process for developing and initiating policies at the local, state, and national levels to promote the use of effective interventions. Thus, the translational research process provides a unique model for promoting transformative change.

The Opioid Epidemic in Ohio

In 2018, over 3,000 Ohioans died from unintentional opioid overdoses (National Institute on Drug Abuse, 2020a). Furthermore, in 2018, the Ohio opioid-related death rate was 29.6 deaths per 100,000, compared to the national age-adjusted rate of 20.7 per 100,000 (National Institute on Drug Abuse, 2020b, 2020a). According to the National Institute on Drug Abuse (2020b), Ohio had the fifth highest rate of drug overdose deaths involving opioids. Compounding the issue of drug overdose deaths, in 2016–2017, as many as 750,000 Ohioans had a diagnosis of substance use disorder (SAMHSA, 2019). Estimates indicated that the annual cost to Ohio was between $6.6 and $8.8 billion (Health Policy Institute of Ohio, 2017). The many statewide efforts to reduce opioid deaths through harm reduction included Narcan (naloxone) distribution and syringe exchange programs. However, prevailing thought held that the long-term prevention of opioid deaths required targeting root causes such as mental health status,

addiction, and factors related to the social determinants of health. The Ohio implementation of PROSPER was designed to address such issues.

Case Study

PROSPER in Ohio

In 2018, in response to the public health challenge of the opioid epidemic, a university Extension system (Ohio State University Extension) and partner colleges successfully applied for three grants to implement prevention education programs using the PROSPER program delivery system. The Ohio implementation of PROSPER involved the delivery of two evidence-based prevention programs: Strengthening Families 10-14 (SFP 10-14), a family-focused program delivered to sixth grade students and their families, and Botvin Life Skills, delivered to seventh grade students. The United States Department of Agriculture's (USDA) Rural Health and Safety Education (RHSE) grant provided funding for implementation of PROSPER in three rural counties, and the Substance Abuse and Mental Health Services Administration's (SAMHSA) Rural Opioid Technical Assistance grant provided funding for PROSPER in six additional rural counties. Finally, the Ohio Department of Higher Education provided funding for PROSPER in one urban county.

The goal of these grants was to implement the evidence-based PROSPER program delivery system and provide associated educational programs in rural and urban communities to reduce risky youth behaviors associated with substance misuse and abuse. Technical assistance was provided by the PROSPER Network organization (Partnerships in Prevention Science Institute, n.d.). The PROSPER implementation framework in Ohio had six primary components: (1) a state management team, (2) implementation professionals, (3) a research team, (4) local community teams, (5) Extension educators, and (6) prevention coordinators. The state management team consisted of Extension faculty and other key staff. State management team members supported community teams and prevention coordinators by providing administrative oversight and guidance. The state management team also oversaw local data collection and shared results with a variety of stakeholders. Implementation professionals established recommendations for implementation at the local level, and research team members developed guidelines for formal research activities.

Community team members were responsible for quality program delivery and management in their local communities. They engaged in community prevention awareness activities and focused their efforts on sustaining programs through local financial support, volunteerism, and in-kind donations. Extension educators were expected to recruit and organize community teams. This involved identifying two coleaders, holding and facilitating monthly team meetings, and recruiting program facilitators and student and family participants. A prevention coordinator provided technical assistance to the Extension educator in the educator's home county. This technical assistance ranged from creating marketing and promotional materials for school- or family-based programs to data collection support to fidelity observations. Finally, the university partnership was part of the National PROSPER Network and received ongoing support from the network team housed at another research-intensive university.

Implementation professionals adhered to the prescribed PROSPER process for the duration of the implementation period. However, many instances required modifications to timelines or slight alterations to implementation plans. The most concrete example arose as a result of the COVID-19 pandemic. Because face-to-face options had been put on hold, implementation professionals engaged in significant efforts to adopt virtual/online options for program delivery. Although this option required additional training for program providers and development of new educational resources to support program delivery, it was also anticipated that virtual program delivery would help to build sustainability by providing more options to local program providers. Other examples of modifications included expansion from a school district focus to a county/community focus to assist with recruitment of program participants, acceptance of existing drug/alcohol teams (or subcommittee equivalents) as the functional PROSPER community team, and an expanded focus on evaluation and measuring outcomes.

For example, early in the implementation process, the research team investigated options for understanding the outcomes of participation in substance abuse pre-

vention programming in the urban setting. The project logic model or theory of change indicated that program participants would experience protection from risk and/or enhanced resilience. This observation suggested measuring risk and resilience among adolescent program participants. A formal assessment questionnaire, the Ohio Program Evaluation Questionnaire (OPEQ), was developed based on a thorough review of the literature. The OPEQ consisted of a 12-item resilience scale (Liebenberg et al., 2013) and scales designed to measure several risk/protective factors. Data were collected from potential program participants in the urban setting to pilot test the OPEQ.

Over the 2-year timeline of the project, two SFP 10-14 programs and one Botvin Life Skills program were to be delivered. Stakeholders intended to deliver the sixth grade SFP 10-14 program in spring 2019, the Botvin Life Skills program in fall 2019, and another SFP 10-14 program in spring 2020. Issues in grant approval and funds release resulted in delays in hiring prevention coordinators. Consequently, the timelines were moved back. Challenges in getting sixth grade students and their families to commit during summer and fall 2019 included conflicts with other summer programs for youth and hunting season in the fall. It was easier to schedule Botvin Life Skills for seventh grade students, as this program was delivered in the school during regular school hours. Then, as the Extension educators and schools prepared to schedule programs in spring 2020, the COVID-19 pandemic hit, and all face-to-face meetings were prohibited. No cost extensions were requested for the grants, and faculty and staff explored the possibility of developing online and virtual options for delivering programming.

Application of Strategic Doing

Problem Statement

The complexities of the PROSPER project revolved around weaving together implementation of two complex evidence-based programs in schools located in 10 counties and issues related to the COVID-19 pandemic. The Ohio project also involved the addition of urban communities, which was new territory for the PROSPER National Network. Complicating matters, many actors were involved in implementing PROSPER at the local level, including university-based faculty and staff, researchers, county-based Extension educators, prevention coordinators, and community teams, not to mention locally based community organizations and other state and local officials. Through the strategic doing process, stakeholders hoped to create a common vision and concise action plan to further the implementation of substance misuse and abuse programming in Ohio.

Strategic Doing

Strategic doing (Morrison et al., 2019) is an alternative to strategic planning that allows partners to address complex problems related to a variety of issues. For example, it has been used to address workforce development planning in Lafayette, Indiana and violence prevention in Flint, Michigan. Sullivan et al. (2016) defined *strategic doing* as a model or approach rooted in assets that are identified and combined to achieve desired outcomes. Strategic doing focuses on four strategic questions: What could we do? What should we do? What will we do? What will we do in the next 30 days? It is also guided by a set of 10 rules.

Strategic doing rules define a problem-solving process that proceeds from intense discussion of an issue to identifying assets that might be used to address the issue at hand to combining and leveraging assets to create and implement a specific strategy that yields desired outcomes. Strategic doing focuses on a relatively short timeline, ideally 6 to 9 months, and encourages specification of a small and manageable set of action items given existing assets and resources. The emphasis on assets is critical because it forms the foundation for ideas and opportunities contained in an action plan. At the end of a strategic doing session, participants leave with a concrete action plan, a scheduled follow-up meeting, and a designated strategic doing officer tasked with coordinating communications and providing gentle "nudges" to move the team forward.

The Ohio Strategic Doing Team

Eight PROSPER stakeholders convened on February 18, 2020, to engage in a strategic doing session. Participants represented all three colleges and departments involved in the PROSPER grants. Strategic doing team members filled a variety of PROSPER roles. Two of the three principal investigators (PIs) of the grants that supported the implementation of PROSPER were in at-

tendance, and three members of the Ohio strategic doing team served as prevention coordinators. Other team members filled various support roles and focused much of their time on the day-to-day management of the PROSPER project. The strategic doing process was facilitated by an experienced, university-based facilitator not affiliated with the Ohio PROSPER project.

The Strategic Doing Process

The strategic doing process focused on three major activities. As noted, the process was led by a certified strategic doing workshop leader. Early in the session, the facilitator posed a framing question: "Imagine PROSPER Ohio as a sustainable model for school–community–university collaboration that ensures that programs are offered with high quality year after year, benefiting youth, families, schools, and communities across Ohio. What does that look like?" This prompted intense discussion of a variety of aspects of the Ohio effort to implement PROSPER. Much of this discussion focused on addressing specific implementation challenges and expanding PROSPER beyond the 10 initial counties. The strategic doing team was next instructed to identify the personal and team assets they might bring to the table to promote sustainable school–community–university collaborations to address substance misuse and abuse.

Assets included strong connections with the state Department of Health and local health departments and established partnerships with individuals, organizations, and businesses at the local, state, and national levels. University Extension was identified as a highly valued and ongoing partner. It was also clear that team members brought many personal assets to the table. Team members excelled at capacity-building activities, engaging community members, program implementation, creating visuals, and grant writing. Critically, strategic doing team members were able to persuade or "woo" and connect potential partners. Access to various communication tools that might be used to promote PROSPER, including a professionally produced monthly television show, was also identified as an asset. Finally, significant knowledge and experience in project development focused mostly on fundraising was noted as a unique asset associated with the university.

In the next phase of the strategic doing process, team members identified potential projects (ideas) by "linking and leveraging" assets, generating a variety of project ideas. Some examples included collaborating with other university colleges or units; educating the public about mental health and building public awareness related to substance misuse and abuse; developing and disseminating a prospectus to share with potential donors, funders, and/or partners; conducting a needs assessment at the local level; creating and launching a prevention institute; securing funding from the Ohio Opioid Settlement fund or other public or private sources; leveraging involvement of the Farm Bureau via the Farm and Ranch Stress Initiative; and holding an annual summit for external or internal partners to strengthen collaborative efforts.

Commitment to a Project

In the next strategic doing process step, potential project ideas were reviewed and combined in unique ways. Most importantly, the strategic doing team identified the top three ideas from the potential project list. The development of a prevention institute was deemed a high priority potential project; this institute was conceived as a vehicle to showcase what thriving or competent communities look like. Convening an annual summit was described as an opportunity to focus on local issues, including access to resources. Finally, stakeholders indicated that efforts to seek additional funding to build local capacity and expand PROSPER across Ohio was a high priority. The strategic doing team rated all the opportunities on two subscales: potential impact and relative ease or difficulty of implementation.

Much like the process of democratic deliberation, each individual on the strategic doing team voted for their preferred initiative, and then the group negotiated a final decision as to the highest priority project: seeking additional funding and building local capacity. Further deliberations suggested that such a project should focus on the university-based team "becoming a trusted partner" by developing a variety of communication vehicles (e.g., PSAs) and increasing connections to local communities. In addition, it was felt that funding proposals should be directed to state, federal, or private industry sources such as pharma and the insurance industry and other traditional and nontraditional public health partners. To conclude the strategic doing session, the team identified concrete actions to be taken in the

following 30-day period.

The case study summarized in the previous paragraphs suggests that the framework provided by translational research is an ideal construct to guide the transfer of scientific knowledge to applications in local communities. This case study effectively illustrates several critical aspects of implementation of the PROSPER delivery system by school–community–university partnerships. For example, implementation team members were responsible for implementing the PROSPER model in several Ohio schools consistent with research-based guidelines. Overall, the strategic doing process offered the opportunity to consider significant assets that might be leveraged to generate resources to build local capacity and expand PROSPER to other locations in Ohio. This case study offers several implications related to the translational research enterprise rooted in university-based Extension systems.

Implications for Translational Research

First, the case study summarized in the preceding paragraphs suggests that the three-tiered model or approach to translational research (Abernethy & Wheeler, 2011) may be a useful tool to promote problem-solving in local communities. This model or approach posits three distinct components: (1) knowledge generation, (2) translation or implementation, and (3) policy formulation. The considerable research base supporting the PROSPER delivery system is a testament to its status as an evidence-based intervention (Greenberg et al., 2007; Redmond et al., 2009; Spoth et al., 2009). For example, implementing PROSPER with fidelity includes research-based requirements defining specific activities, roles, and infrastructure. Implementation of PROSPER and specific substance abuse programs in Ohio counties appears to be consistent with such guidelines. Expansion of PROSPER beyond Ohio's 10 pilot counties is likely to depend on formal policy development and resulting state and local policy decisions. Case study evidence suggests that Ohio project staff are actively engaged in a variety of activities consistent with the three-tiered model or approach to translational research. Importantly, such an approach may support efforts in other communities utilizing translational research as a means to address locally defined issues impacting well-being.

Second, anecdotal evidence accumulated through a variety of formats, including review of the strategic doing process, suggests that community engagement likely plays a critical role in the translational research process. Such engagement is a key ingredient in the PROSPER partnership process. Community teams are convened and facilitated through a series of activities designed to promote engagement and ownership of the local effort to address substance misuse and abuse. Given that the Ohio implementation of the PROSPER delivery system is largely focused on uptake by schools, engagement of and planning with school personnel, including superintendents, principals, teachers, and central office staff, are also critical factors that appear to be strongly related to successful implementation. In Ohio, challenges related to community engagement might ultimately be addressed through implementation of strategies developed through the strategic doing process summarized above. Short-term strategies and assets for addressing issues related to community engagement resulting from the strategic doing session include a variety of mechanisms to enhance communications among stakeholders. Thus, implementing the brand of translational research described in this article may hinge on successful engagement of and communication with a variety of community stakeholders.

Third, and perhaps most important, this case study points to the pivotal role of translation or implementation professionals in the translational research process. *Translation* refers to the active management of the steps and procedures necessary to effectively use an evidence-based practice (Wilson et al., 2011). In the case study provided above, strategic doing functions as a means of exploring and initiating concrete actions to promote implementation of PROSPER in Ohio. This perspective suggests that successful translational research is dependent on a formal community process, supported by the application of an array of implementation tools. In the best case, this community process results in the identification of a problem or opportunity and proceeds through the implementation and evaluation of potential solutions. Ohio's effort to address opioid abuse through the implementation of PROSPER is a keen example illustrating the importance of competent implementation as an essential ingredient in knowledge transfer. Competent

implementation appears to hinge on the ability to remain flexible but ultimately adhere to a structured and iterative process.

Fourth, within the translational research framework, solutions are selected based on available evidence and collective thought related to the appropriateness of the intervention in question given characteristics of the host community (APA Presidential Taskforce, 2006). This perspective relative to the process of translation suggests that thoughtful modifications to evidence-based practices to suit local circumstances are entirely appropriate. Such modifications appear to be routine. In a comprehensive review, Escoffery et al. (2018) suggested that many public health interventions are intentionally modified as part of the implementation process. Thus, a key aspect of the translation component of the translational research process might be conceptualized as an iterative set of activities focused on selection, modification, implementation, and evaluation of interventions designed to address specific local problems.

Fifth, the approach to translational research described in this article placed significant emphasis on implementation of interventions that have the capacity to address significant community problems (Fixsen et al., 2009). The PROSPER case study presented above suggests that implementation professionals fill critical roles relative to problem-solving and implementation or translation and that significant skills and access to a variety of implementation tools are required to perform these roles. For example, the OPEQ measurement tool was devised in order to collect data related to desired outcomes. Team members designed the OPEQ tool and administered it based on a formal data collection protocol. This data collection effort filled a specific local need consistent with PROSPER's research-based guidelines. The strategic doing process represented a second tool used to enhance the achievement of desired outcomes related to diminished substance misuse and abuse among students participating in substance abuse prevention programming.

Finally, bridging or integrating information and activities across the three translational research components (knowledge generation, translation or implementation, and policy formulation) also appeared to be a critical skill in translational research (Aarons et al., 2011; Moullin et al., 2019). Such skills were highly relevant in the case study described in this article. For example, implementation professionals were charged with understanding the knowledge base relevant to PROSPER and evidence-based guidelines for implementation. In addition, Ohio implementers had primary responsibility for facilitating local implementation of PROSPER. This involved contracting with a national vendor to train personnel; understanding the intricacies of implementing PROSPER at the local level; collecting and using evaluation data to inform program improvement planning; and engaging the local community, school personnel, and state education officials in policy development activities.

This case study suggests that the three-tiered model of translational research described above might be extremely useful to stakeholders committed to evidence-based practices to address problems identified by communities, schools, or other organizations. It also suggests that the process of translational research hinges on access to implementation professionals who possess a variety of skills related to strategic planning, the strategic doing case study being a prime example of the use of such a tool. The Ohio experience also suggests that implementation professionals must be versed in the use of evaluation and community engagement technology and associated strategies. Positioning implementation professionals as key partners in community problem-solving and making an array of tools such as strategic doing available to them may prove critical to the translational research process and may ultimately assist communities in addressing pressing problems such as substance misuse and abuse and ultimately enhancing well-being.

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