

The Contingencies Associated with Certification and Licensure

Anna Linnehan^{a,*}, Mary Jane Weiss^b, Thomas Zane^c

Received : 29 December 2022
Revised : 20 January 2023
Accepted : 20 March 2023
DOI : 10.26822/iejee.2023.297

^{a,*} **Corresponding Author:** Anna Linnehan, Endicott College, USA.

E-mail: alinneha@endicott.edu

ORCID: <https://orcid.org/0000-0003-1439-9350>

^b Mary Jane Weiss, Endicott College, USA.

E-mail: mweiss@endicott.edu

ORCID: <https://orcid.org/0000-0002-2836-3861>

^c Thomas Zane, University of Kansas, USA.

E-mail: tzane@ku.edu

ORCID: <https://orcid.org/0000-0002-2836-3861>

Abstract

The science of behavior began in the laboratory setting, focusing on the direct measurement of behavior-environment relations. The field of applied behavior analysis (ABA) is relatively new with the first publications in the flagship journal, *The Journal of Applied Behavior Analysis*, appearing in 1968. Soon the application of the science was applied to the treatment of autism and, due to its tremendous success, the number of professionals claiming to use behavioral procedures increased exponentially. It became obvious that some sort of systemic oversight needed to be created to protect both consumers and practitioners, and difficult questions had to be raised concerning licensure, certification, which was more advantageous to pursue, and with what consequences. The purpose of this paper is to explore the historical roots of behavior analysis and provide commentary and context to the movement of certification up to the current day. Current challenges within the field of ABA will also be reviewed, along with recommendations to ensure that ABA-based intervention in the future is high in quality.

Keywords:

Licensing, Certification, Autism, Behavior Analyst

Introduction

In 1987, Lovaas published a groundbreaking study, documenting unprecedented outcomes with children with autism receiving intensive behavioral intervention services. Roughly half of the children were labeled as indistinguishable from peers after two-plus years of intensive (i.e., 40 hr or more per week) intervention (Lovaas, 1987). In 1993, Catherine Maurice published a book outlining her two children's journeys through autism, which illustrated the remarkable outcomes that had been demonstrated in the Lovaas study. The book highlighted the contribution of a treatment, referred to as applied behavior analysis (ABA), which had contributed to their progress and remarkable outcomes. ABA is a branch of behavioral science that focuses on socially significant behavior; while it has been known best for autism intervention, it is the grounding in science that defines the field. Suddenly, parents of newly diagnosed children searched for ABA-based interventions (Maurice, et al., 2001). Soon, waiting lists were long, providers were overwhelmed, and a clear supply-demand issue arose (Roane et al., 2016).



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ISSN: 1307-9298

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This unfilled demand created an opportunity for practitioners within the field of ABA and showcased the potential of behavior analytic services for children diagnosed with autism. At the same time, this opportunity created a vulnerability for the field's reputation. In the absence of any identified criteria for competence, many uncredentialed practitioners claimed to be able to provide ABA-based services, leading to problematic varied quality of treatment (e.g., Stolz et al., 1975). Parents and school districts alike employed practitioners to guide ABA programs, many of whom did not have adequate professional training to treat the wide range of the population of individuals with autism (Bailey & Burch, 2022). This 'wild west' of clinical intervention had the unfortunate consequences of children being under served by a lack of sensitivity to the concerns of parents, families, and the child themselves, goals not being met, and procedures being used without necessary buy-in. It became clear that standards needed to be identified for professional competence in behavior analysis.

The movement for certification began in Florida in the early 1980s (for more historical details see Bailey & Burch, 2006; Dorsey et al., 2009). The early motivation for certification stemmed from the abuses that had occurred in the name of behavior modification, particularly at state hospitals (Goldiamond, 1975). The documentation of such treatment at Southland and Willowbrook, for example, offer a revealing glimpse into this dark past of behavior analysis. Eventually, certification moved to the national level and clarified the skill set associated with professionals in behavior analysis. With this clarification, parents and employers could identify individuals with at least the minimal requisite skill set to meet the needs of individuals with autism. Some earlier discussions of licensure had expressed ambivalence in the field, with some highlighting possibilities and others urging more merging with other fields (Agras, 1973; Alessi, 1979). Certification was the first step toward standardizing the expertise required to professionally practice as a behavior analyst, and was designed to protect consumers from inhumane care and ineffective treatment (Starin et al., 1993).

The purpose of this paper is to review the rise of certification, the changes in certification that have transpired, and the practice challenges that face practitioners today. Some current challenges include the interest of businesses in ABA-based intervention which is leading to changes in business models applied within service intervention. Suggestions for blending clinical expertise and business acumen to ensure high quality, sustainable intervention will be discussed.

Movement for Licensure and Mixed Opinions

Discussions ensued about whether certification's strength could be augmented with state licensure (e.g., Bailey, 1991; Green & Johnston, 2009a). Some argue that such licensure would lead to additional benefits, including insurance reimbursements and further oversight of the individual practitioners. Furthermore, licensure would not only expand the number of autistic individuals who would have access to ABA-based services, transforming the landscape of autism intervention (Hassert et al., 2008), but also provide protections to the consumers in the form of disciplinary procedures that would deliberately enhance gatekeeping and quality control (Dorsey et al., 2009). Dorsey et al. (2009) highlighted several additional strengths of licensure, including defining a scope of practice and distinguishing the field as separate from psychology.

Green and Johnston (2009a) highlighted several areas of risks as well as benefits to professional licensure. Benefits included legal protection of a right to practice and third-party reimbursement (e.g., insurance funded services; Green & Johnston, 2009b). However, licensure was impacted by individual state laws (Green & Johnston, 2009b). Risks included limiting the types of activities a practitioner may engage in under their license and overlap with other professions (e.g., psychology and social work, which may create competition to limit scope of practice particularly when other professions claim to utilize ABA in their practice). In addition, the public process of professional licensure had an inherent risk of alerting other fields who use behavior analytic principles in their practice (Green & Johnston, 2009b). For example, such fields, including psychology, might advocate for behavior analysts to receive supervision under their discipline rather than within its own clinical framework. Given these considerations, and the then-current status of licensure of applied behavior analysts, the field was divided about how to ensure that the sustained movement continued (Dorsey et al., 2009; Green et al., 2009a; Green et al., 2009b). Although there were some advocates of licensure, there were also advocates of certification who did not think licensure was the best path. Indeed, the landscape was difficult to predict, and differential outcomes across states did play out (Dorsey et al., 2009).

In 2014, the Association of Professional Behavior Analysts (APBA) published a position statement on government regulation of practice as well as on potential benefits, risks, and recommendations. It indicated that government regulation for professional licensure in the United States commonly included the development of statutes, typically adopted and developed at the state level, and regulated in an ongoing way by state agencies (APBA, 2014). "Statutes and regulations

may mandate that ABA services be provided only by individuals who hold a government-issued credential" (APBA, 2014, p. 1). Additionally, government regulation may protect ABA practitioners' right to practice from intrusion by other professions, help ABA practitioners qualify for third-party payments for services (but national or international certification may suffice) and other types of laws and regulations typically govern third-party payments, afford ABA practitioners parity with other professions, and provide for enforcement of standards of professional practice by government regulatory bodies (e.g., licensing boards) to protect consumers (APBA, 2014).

Several risks of pursuing government regulation were also highlighted.

Obtaining a statute to regulate professional practice is a complex, resource-intensive political process. Ideally, the legislative effort should be led by an autonomous local (e.g., state or provincial) behavior analysis organization supported by a national or international organization that has public policy experience. Even then, the legislative process may yield unsatisfactory outcomes, and may leave ABA practitioners worse off than before. Other interest groups may oppose policy initiatives by behavior analysis and create statutes and regulations that impose undesirable restrictions on the practice of ABA. Government regulatory boards may not include people who are trained in ABA. Fees may be relatively high. Statutes and the regulations or rules to implement them will vary across jurisdictions, which may limit portability of government issued credential (APBA, 2014, p. 2)

Given the complexity of the regulatory process, which includes considerations of local regulation including the creation and composition of licensing boards and the funding of such initiatives, APBA's (2014) position statement cautioned the field on a variety of issues. APBA (2014; 2020) recommended consideration of several factors regarding government regulation. Specifically, they identified several key potential vulnerabilities (APBA, 2014; 2020). First, they noted that licensure is a resource-intensive political process. This necessitates the mobilization of a professional guild with public policy experience. Second, they noted that others may oppose the initiatives, and may lobby to restrict the practice of behavior analysts. This actually did occur in several states. For example, in North Carolina, behavior analysts were made to operate under the supervision of licensed psychologists. In New York, behavior analysts were restricted to working with the population of individuals with autism only. Additional risks included that boards may not include those who are trained in ABA, licensing fees may be high, and the recognition of the credential across states could be limited, making it difficult for practitioners to move or be recognized in different locations.

Assuch, local jurisdictions were encouraged to consider whether regulation was feasible. Additionally, local jurisdictions were encouraged to ensure that Board

Certified Behavior Analyst (BCBA®) certification was the foundational requirement of licensure and that behavior analysts were included in the regulation of ABA practice (APBA, 2014). In addition, while behavior analysis was a relatively "young" field (compared to allied, well-established fields such as psychology and education), local groups were encouraged to continue their efforts to maintain and build high level standards (APBA, 2014).

An Analogous Process in Psychology

Licensure was new to the field of behavior analysis. The field had to act quickly to learn about credentialing, licensure, insurance reimbursement, and the business aspects of these changes to service delivery models (Green & Johnston, 2009a). With 50 states facing this issue, and international applicants for certification, it became difficult to envision a message that would universally apply to different regions. Allied fields had more history and expertise in this area, and there were lessons to be learned in their processes (Kaslaw et al., 2004).

First and foremost, establishment of a credential requires defining and outlining competence of the practitioner. The National Council of Schools and Programs of Professional Psychology (NCSPP), incorporated in 1985, outlined the core competencies for training and practice in psychology (see Table 1). Additionally, psychology has developed a system of foundational as well as functional competencies (Kaslaw et al., 2004). To develop agreement throughout various domains of professional psychology and to develop tools moving beyond curriculum to a competency-based approach, representatives from several areas including education, practice, research, and public interest, were selected to participate in a Competencies Conference, held in Scottsdale Arizona, in November of 2002 (Kaslaw et al., 2004). The goal of the conference was to identify and make recommendations for the identification, training, and assessment of competencies in the field of psychology. A major shift away from core curriculum and toward identification of core competencies was recommended (Kaslaw et al., 2004). In psychology, training methods used are specified to meet levels of competence as well as to generalize competence across domains (Kaslaw et al., 2004). Although the specific training methods and areas of specific competence were not described by the committee, it was suggested that future efforts should be directed at determining the specific areas in which to build and measure skills (Kaslaw et al., 2004).

Similar concerns and processes related to the evolution in behavioral science. The addition of functional competencies provides not only an educational but a practical requirement for the practice. Foundational competencies for those credentialed by the Behavior

Table 1
The National Council of Schools and Programs of Professional Psychology Core Competencies in Graduate Training

Number	Competency
1	Develop standards for the education and training of professional psychologists.
2	Monitoring and providing input into public policy with regard to education and training of professional psychologists.
3	Providing a forum for the exchange of information about the functioning of schools and programs of professional psychology.
4	Providing a liaison with others involved in the education and training of professional psychologists.
5	Providing consolation of the development and maintenance of schools and programs of professional psychology.
6	Fostering research, development and application in appropriate areas of psychology and to the solution of significant problems of human welfare.
7	Developing quality assurance methods based on an empirical evaluation.
8	Gather and disseminate information regarding schools and programs of professional psychology.

Analysis Certification Board (BACB) such as Registered Behavior Technicians (RBT[®]s), Board Certified Assistant Behavior Analysts (BCaBA[®]s), and BCBA[®]s must meet criteria based on Task List items (BACB, 2022). Task List items are frequently reviewed and altered, based upon priorities discussed within the field. The 6th edition of the Task List has been released, and the areas outlined include:

- A. Behaviorism and Philosophical Foundations
- B. Concepts and Principles
- C. Measurement, Data Display, and Interpretation
- D. Experimental Design
- E. Ethical and Professional Issues
- F. Behavior Assessment
- G. Behavior-Change Procedures
- H. Selecting and Implementing Interventions 20
- I. Personnel Supervision and Management

As can be seen in this list, Task list items include competencies that are foundational as well as those that require the application of the principles of ABA. This practical requirement for BCBA[®] certification includes fieldwork supervision by an approved, trained BCBA[®] supervisor. Clinical supervision must meet certain requirements as outlined by the BACB. Additionally, some state licensure boards also include supervision by a BCBA[®], especially for certain tiers of the profession or for those who are relatively newly credentialed.

Additional requirements are needed for certification at other ranks of the profession. The BCaBA[®] credential also requires both coursework and supervised fieldwork in order to obtain the credential. In addition, BCaBA[®]s must be supervised by BCBA[®]s in their clinical work. RBT[®] certification requires competency assessment for initial certification and requires ongoing supervision at the level of 5% of hours worked. These guidelines are designed to ensure quality control in both the certification and the ongoing service provision of the RBT[®].

BACB Changes and Alternative Credentials

Over time, the BACB became internationally relevant. The BACB was established in 1998 and first began credentialing outside of the United States in 2001 (BACB, 2019). In 2002, the BACB began implementing several initiatives for international expansion, including course sequence approvals, translating exams, adding international members to the Board of Directors as well as in subject matter working groups, and providing financial support to assess degree requirements for international certification applicants (BACB, 2019). However, it became increasingly difficult to ensure equal access worldwide. Issues were noted in the ability to serve an international community and to provide appropriate levels of guidance in geographically diverse regions (BACB, 2019). In 2019, the BACB indicated the need for a change to international certification, citing several areas impacting the viability of maintaining a global credential. Several areas considered included ensuring secure testing facilities, compliance with varying privacy laws, ensuring eligibility and maintenance as well as ethics requirements are legally enforced, and enforceable regulatory authority in each country (BACB, 2019).

Ultimately, the BACB stepped back from credentialing individuals except in North America (BACB, 2019). As previously noted, issues in equal access to materials was an issue, given the diversity of worldwide certificants. In addition, regional issues created a need for different models for training and for credentialing. It became clear that individual countries or regions were in the best position to advocate for, design, and implement the credentialing systems in their parts of the world. While this was understandable in terms of global considerations, it also created some confusion about how competence can be identified in the absence of the BACB credentials.

While the BACB's decision to end credentialing individuals except in North America created some uncertainty for the internal behavior analytic community (Keenan et al., 2022), it also created opportunities for countries and regions to consider the development of national or regional credentials that better reflected their systems and cultures. For example, higher education systems vary by country, and some requirements did not easily align with pre-existing structures within their educational systems. The paucity of available, local supervisors also created logistical challenges to meeting the requirements outlined by the BACB. Despite stepping back from the international credential, the BACB demonstrated commitment to supporting the global community with its mission "to protect consumers of behavior analysis services worldwide by systematically establishing, promoting, and disseminating professional standards (BACB, 2019, p.3). In the wake of these changes, a variety of alternative certifications arose. For example, the Qualified Applied Behavior Analysis Credentialing Board (QABA; <https://qababoard.com/about/>) credentials focused on the application of the science of ABA with individuals with autism and marketed itself as internationally accredited. The International Behavior Analyst Association (<https://theibao.com/>) credentials specifically targeted the international behavior analytic community serving individuals with autism. These alternate certifications have created some genuine confusion on the part of practitioners, as well as on the part of third parties.

Evaluating Credentialing Bodies

The Association of Professional Behavior Analysts (APBA), in response to requests for information on the various types of credentials within behavior analysis, has established a set of guidelines for evaluation of such credentials (Green, 2015). The guidelines include a series of questions to ask regarding credentialing programs. The evaluation includes a series of questions in two key areas: 1) the credentialing body and 2) the credentialing program(s). Some key features to consider in the credentialing body included: time in existence, who makes decisions for the organization, evaluation of the organization by standards for

nonprofit organizations, and evaluation of the senior leadership's training in behavior analysis. Key features highlighted for assessing the credentialing program included ensuring the accreditation by the National Commission for Certifying Agencies (NCCA) or the American National Standards Institute (ANSI), assessment of job analysis studies, incorporation of a comprehensive outline of competencies, a comprehensive, well-designed exam, continuing education requirements, and the incorporation of ethical and disciplinary standards (APBA, 2018; Green, 2015).

It should be noted that using time in existence as a key indicator of quality is dangerous; presumably, all credentials begin as new, and changing times may necessitate the development of targeted credentials. While the international market has been a catalyst for some of the newer credentials for the autism sector, concerns about quality ABA have also sparked new credentials. The Progressive Behavior Analyst Autism Council (<https://progressivebehavioranalyst.org/>) is designed to ensure high level training of autism interventionists. Their Certified Progressive Behavior Analyst - Autism Professional certification denotes a high level of content knowledge and expertise in the application of ABA to autism, and the pending Interventionist and Supervisor credentials will extend the certification to those who implement and oversee intervention.

What Has Been Achieved?

One of the major accomplishments of certification in behavior analysis was the identification of critical skills for practicing behavior analysis (Moore & Shook, 2001). Until the development of professional certifications, there were no standards by which consumers could judge competency (Baily, 1991). Certification resulted in the development of lists of knowledge, skills, and competencies that then served as a guide for professional competency (Johnston & Shook, 1993). Certification began the process of empowering consumers to identify providers that have met a set of established competencies and served as a gateway for licensure. When first introduced in the United States, licensure laws were focused on insurance reimbursement eligibility (Unumb, 2015). This had a tremendous impact on families of children with autism, who were able to get vital treatment covered through medical insurance. It created a seismic shift in the industry, greatly increasing demand and forcing new models of service delivery. It was unquestionably this insurance reimbursement entitlement that created a multi-tiered model of service delivery, with RBT[®]s providing direct instruction under the supervision of other tiers of the profession, notably BCaBA[®]s and BCBA[®]s (Council of Autism Service Providers, 2014, 2020).

What Are Other Unintended Consequences?

Perhaps the largest unanticipated consequence of licensure and insurance reimbursement has been the monetization of the field (Fry, 2022; Jennings, 2022; Perna, 2022). Business professionals have realized that they can make a profit doing ABA-based therapy with insurance reimbursement (Fry, 2022), with interest in acquiring ABA businesses growing, and many service providers selling their businesses to larger conglomerates and to big equity firms (Matthew, 2022). Major shifts in service delivery have resulted from financial and logistical barriers. Specifically, in several instances, providers have opted to simply discontinue service in certain states. This can leave clients without services, in danger of skill loss, and can leave families clamoring for services. Short of this, some companies increase caseloads for behavior analysts and/or reduce supervision for RBT[®]s. They may also restrict activities that cannot be billed to insurance companies, which include vital services such as parent training. Some highly publicized examples of these decisions have shed light on some of the unanticipated negative outcomes associated with business's interest in ABA.

Naturally, this is a circumstance with both potential positive and potential negative impacts. On the positive side, the influx of business expertise may be helpful; indeed, some say that the expertise of business professionals is sorely needed. As the field has rapidly expanded, and as more documentation is expected by funders, business practice updates are sorely needed. There is a deep need for the expertise of business professionals in examining expenditures, in streamlining processes and evaluating room for improved efficiency. These are skills that are generally not emphasized in the training of practitioners of behavior analysis, and there is room for improvement in the business aspects of ABA intervention.

At the same time, there is a need to commit to the maintenance of high-quality intervention. When adjustments are made for efficiency purposes that reduce quality of care, an ethical dilemma arises for practitioners. This creates inherent tension between the clinicians and the business partners. Clinicians have been trained to act in the best interests of clients, to provide best practice interventions, to train staff to mastery, and to closely supervise staff in an ongoing manner to ensure high fidelity and effective intervention. These values are deeply embedded. They are also expensive.

A business professional is concerned about quality, of course, but is also charged with ensuring the health of the business. Hence, they examine trends in spending, in waste, and inefficiency. They suggest alternatives to streamline such processes. It may be that there is a suggestion for reduced supervision, for truncated

training, or for the expansion of caseloads. A behavior analyst hearing these suggestions will focus on their obligations to clients, primarily, and to trainees, secondarily. The impact on services to the individual will be examined, and potential negative impact will be flagged as problematic. In the same way, inadequate training and supervision will be flagged as potentially leading to ineffective intervention and to poorer outcomes for the client.

On a broader level, the business partners may assess a context as unsalvageable, and may pull services from a region. This has been reported by several companies in multiple regions recently (e.g., Matthew, 2022). This is considered highly unethical by clinicians, who see this as abandonment of clients.

How can we build bridges between the clinicians and the business partners in these scenarios? This is the part of the story that is not yet written, as it is a current and ongoing developing story. It remains to be seen how behavior analysts and business professionals can partner to deliver behavior analytic services. Issues of effectiveness, quality control, efficiency, shared governance, and training abound. Such a partnership could work under certain conditions that have yet to be identified.

Challenges include identifying how to ensure quality intervention, balancing the need for efficiency with the commitment to quality, and ensuring that training programs prepare practitioners for the real-world challenges in today's ABA practice context. Many hopeful signs have been noted. A number of organizations are certifying (or plan to be certifying) organizations, including the Behavioral Health Centers of Excellence (BHCOE; <https://www.bhcoe.org/>) and the newly formed Autism Commission on Quality (ACQ; <https://autismcommission.org/>), offer standards for quality care and a mechanism for identifying providers who meet them. In this new era, it is important for behavior analysts to partner with business professionals to find ethical and effective ways to efficiently deliver services. A heightened interest in efficient business models may help behavior analysts contribute to the solutions; increasingly, knowledge of the organizational behavior management arm of the science of ABA is crucial for behavior analysts to possess. There are indications that both practitioners and students of ABA are being increasingly supported in learning about the practice challenges facing providers of ABA. All of the professional organizations associated with ABA now highlight practice issues substantially in conference offerings. It will also be important for universities to include practice challenges in their course content; they are especially relevant in courses such as ethical conduct and supervision, both of which are required for certification by the BACB.

It may also be necessary to identify models of shared governance and decision making within organizations devoted to serving the autism community. Some of the present-day challenges seem to stem from the loss of the clinical perspective in leadership and management. The complex needs of individuals with autism require highly specialized expertise; models of service delivery must be vetted by those who best know the needs of this population. It will be vital to create some shared governance models (in which behavior analysts and business professionals jointly manage organizations), and to assess how well these models do in providing quality care.

Conclusion

Ultimately, the priority of the behavior analyst should always be the best interests of the individual served. This has been a foundational value (Bailey, 1991), is embedded into the Ethics Code (2020), and should always be the purpose of any intervention. Certification advanced this priority by outlining key competencies essential for professional behavior analysts (BACB, 2022). Certification created a road map that inspired training programs (Pastrana et al., 2018), supervision requirements (LeBlanc et al., 2016), and standards of practice (BACB, 2020). Certification professionalized behavior analysis. It also highlighted behavior analysis as a professional guild. Behavior analysts were seen as vital members of interdisciplinary teams (Brohead, 2015). Importantly, certification also linked behavior analysis with autism service provision (Zhang & Cummings, 2020), since much of the increased demand was for individuals who could serve individuals with autism.

Licensure expanded the extent to which behavior analysis became a business. Business became interested in the profits available in behavior analysis, and began buying small companies at a high rate. The consequences of insurance reimbursement were far-reaching, and included the expansion of services, an increase in training programs, and an increase in the purchasing of ABA organizations (Matthew, 2022).

Much of history can only be understood in retrospect. While some consequences can be anticipated, many arrive unexpectedly. Behavior analysts were unprepared for the consequences of insurance reimbursement and licensure. Many practitioners have limited knowledge of business practices (e.g., Critchfield, 2015); it is generally not covered in coursework for the profession. While some individuals may have gleaned this information from mentorship or work experience, many are largely unaware of business practice issues. Educational programs that train students in behavior analysis rarely cover issues of business ethics (Ventura & Bailey, 2016). As the field expanded and practices were bought by businesses,

a whole new world of challenges arose (Fry, 2022). The field faced issues never before experienced such as fraudulent billing, inadequate supervision, and clinical cost cutting at levels (e.g., Matthews, 2022). These challenges are being identified, and effective solutions will be found.

Certification and licensure remain vital to the field and continue to protect client and practitioners alike. It is still true that certification created a road map for the identification of competencies, and licensure created consumer protection. The field has been improved by these processes and consumers have had access to lifesaving care because of the existence of the profession and the credentials associated with it. The challenge is to gain control of the contingencies that result in poor services and unethical conduct. The good news is that analysis of contingencies is the heart of the science of ABA; we must now apply this defining skill set to resolve the current challenges and to protect the field.

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