

BACB Certification Trends: State of the States (1999 to 2014)

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Abstract Since the Behavior Analyst Certification Board (BACB) was officially created in 1998 (Shook, 2005), the number of individuals certified by the BACB has grown significantly, particularly in the USA. Some states have witnessed a steady growth in the number of certificants, whereas others have witnessed exponential growth. Many factors could account for these overall growth patterns, including (a) geographic variations in distribution of certificants across states, (b) the passage of autism insurance reform laws or state licensing laws that influence the professional practice of applied behavior analysis (ABA) services, and (c) the presence of major academic or practicum training programs. This report documents the growth and geographic distribution of Board Certified Behavior Analysts (BCBAs) and Board Certified Assistant Behavior Analysts (BCaBAs) from 1999 to 2014 and also discusses some of the factors that might have influenced the documented growth patterns.

Keywords Autism spectrum disorder · BCBA · Certification · Insurance reform · Supervision

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The professional discipline of applied behavior analysis (ABA) has grown at an unprecedented rate over the past two decades. Although some individuals in the field have expressed concerns that a considerable amount of this growth can be attributed to focusing almost exclusively on the treatment of autism spectrum disorder (ASD), there is still a general approval that ABA is being legitimately accepted as an authority in at least one capacity (Poling, 2010). Organizations that focus on behavior analytic research and practice, such as the Association of Behavior Analysis International® (ABAI) and the Association for Professional Behavior Analysts® (APBA), have provided evidence pertaining to the accelerated growth pattern for the discipline of ABA. There was a relatively steady growth in the attendance at the ABAI® annual convention over the first 25 years of its operation, a yearly trend that accelerated after 1998, the year the Behavior Analysis Certification Board® (BACB®) was established (Kangas & Vaidya, 2007). Total membership to ABAI experienced a similar shift in growth, albeit 2 years later. Noticeably in Fig. 1, there was a steady increase in total ABAI membership from 1977 to 2000, after which membership climbs more rapidly (Association for Behavior Analysis International, 2015). While there are occasional declines in total ABAI membership throughout the period of 1977 to 2015, the growth of the field is evident. These data are insufficient to denote a causal relationship between the creation of the BACB and growth of the field of ABA; it is nonetheless noteworthy. The discipline's growth is further reflected in the growing number of presentations and workshops offering continuing education credits at ABAI (Kangas & Vaidya, 2007), with an increasing focus on topics related to the service of individuals with ASD (Leblanc, Heinicke, & Baker, 2012).

Beyond growth in conference attendance, membership, continuing education opportunities for practitioners, and a shift in presentation topics, an additional indicator of the

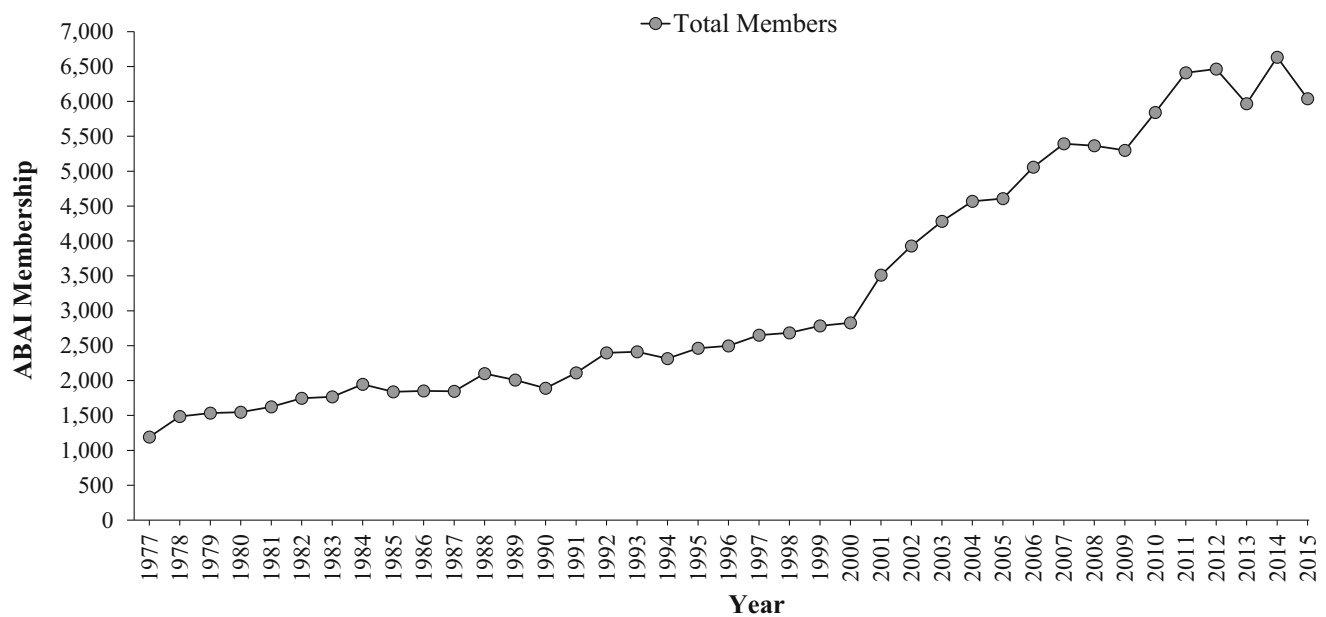


Fig. 1 Total ABAI membership from 1977 to 2015

disciplinary growth of ABA is the growing number of professionals who are credentialed by the BACB. A survey conducted by APBA noted that newly credentialed BACB certificants (less than 5-year experience) are compensated well for their services (Leblanc, Heinicke, & Baker, 2012). Additionally, the number of job postings from 2012 to 2014 appears to be increasing for BACB-credentialed practitioners (Burning Glass Technologies, 2015). In this article, we examine data on changes in the number of BACB-credentialed professionals from 1999 to 2014, a period that coincides with the largest expansion the field has witnessed.

This article is broken down into five analyses: (1) overall certificant trend(s) in the USA, (2) geographical distribution of certificants, (3) ABA services in relation to population data, (4) Autism Insurance Reform and ABA licensure laws, and (5) institutions providing coursework and supervision.

Method

For the sake of this article, we will use the term BACB certificants to refer collectively to three categories of professionals who have met BACB credentialing standards: Board Certified Behavior Analysts-Doctoral® level (BCBA-Ds®), Board Certified Behavior Analysts® (BCBAs®), and Board Certified Assistant Behavior Analysts® (BCaBAs®). The Registered Behavioral Technician (RBT) certification is not included in our analyses because it is a relatively recent creation.¹ Although BACB certificants are present in a growing

number of countries, the vast majority of BACB certificants reside in the USA. Thus, we elected to exclude data on the growing but relatively smaller number of international certificants.

Data were requested from the BACB on the number of certificants living in each state of the USA between 1999 and 2014. It is important to note that data on the number of certificants does not necessarily reflect the location in which the individual was certified but their most recently recorded residence. Additionally, the current data do not include individuals who have let their certification lapse. However, the attrition rate of certificants is relatively low. For example in 2013, the annual attrition rate of BACB certifications was approximately 1.5 % (James E. Carr, personal communication, November 11, 2014). Unless otherwise noted, the state data will include all 50 states and the District of Columbia.

Overall Trend in BACB Certificants in the USA

Growth in the number of BACB certificants in the USA was analyzed by totaling the number of BACB certificants per year for all states and depicting the results graphically.

Figure 2 depicts the cumulative number of BACB certificants across all US states from 1999 to 2014. Figure 2 depicts a relatively constant growth from 1999 to 2009, besides a slight decrease in growth in 2005. Interestingly, the noted decrease in growth rate coincides with the introduction of more demanding certification standards in the spring of 2005 (Shook & Neisworth, 2005). After 2010, there is a more noticeable increase in the annual rate of certificants.

¹ See the BACB web site (www.BACB.com) for additional details regarding requirements and professional roles of each certification category.

Fig. 2 The cumulative number of BACB certificants across all US states from 1999 to 2014

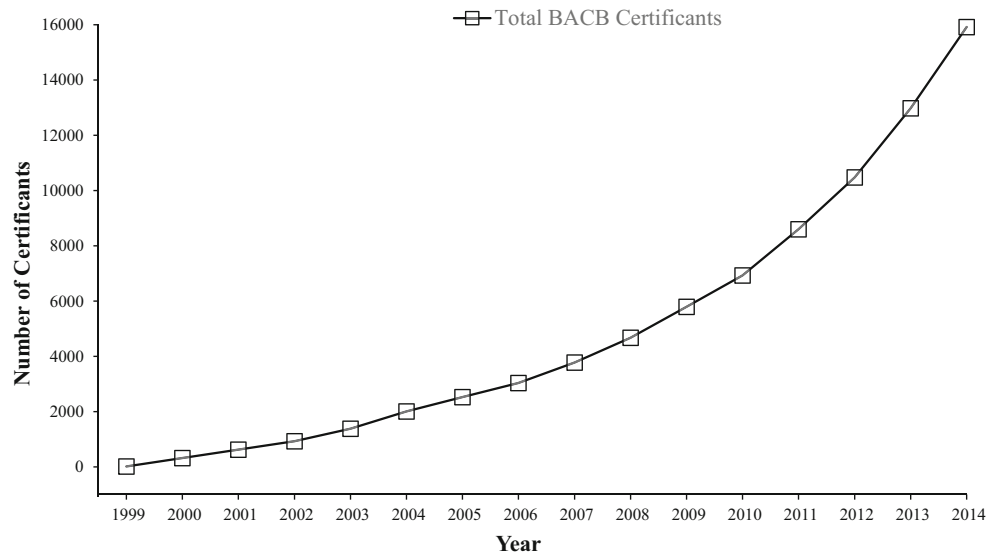


Figure 3 presents similar cumulative data broken down for each category of BACB certificant. This figure clarifies the source of the growth documented in Fig. 2. The vast majority of growth can be attributed to the increase in the number of BCBA-Ds. The number of BCBA-Ds and BCaBAs accounts for only a relatively small portion of the overall growth in certificant numbers. Growth in the number of BCaBAs appears to have slightly accelerated after 2009, compared to the slower growth of BCBA-Ds. Figures 2 and 3 document the steady and accelerating growth in the overall number of BACB certificants since the inception of the BACB credentialing system until 2014.

Geographic Distribution of BACB Certificants

In an effort to ascertain if the distribution of certificants is spread evenly throughout the USA, certificant data were geographically separated. Table 1 presents 2014 data of total BACB certifications for each region, division, and state.

Notably, the east side of the USA contains a large proportion of the total BACB certificants, which might be unsurprising considering that the BACB certification model originated in Florida (Shook & Neisworth, 2005) and because the overall population density of the Eastern Seaboard of the USA exceeds that of other geographic regions with the exception of California. The Florida certification model used an examination to credential its behavior analysis practitioners as early as 1985 (Shook, 2005). The Florida credentialing model formed the basis of what would later become the national credentialing model that is now administered under the auspices of the Behavior Analysis Certification Board. Some states adopted an early certification model based on the Florida model that preceded the emergence of the national certification board (the Behavior Analysis Certification Board) in 1998. Some of these early adopter states (Florida, Oklahoma, Texas, California, Pennsylvania, and New York) also have the highest BACB certificants in the USA. In fact, five of the six early adopter states appear in the top seven states for highest number of BACB certifications in 2014 (see Table 1).

Fig. 3 Cumulative data for each category of BACB certificant

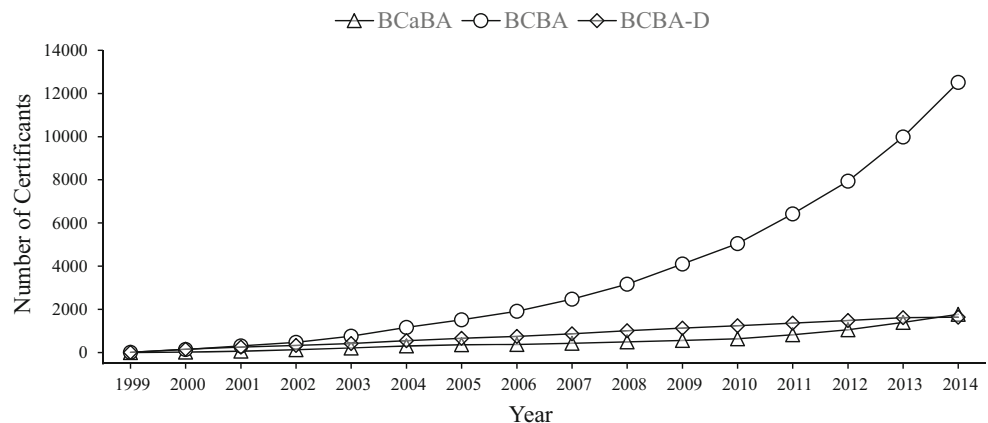


Table 1 The 2014 data of total BACB certifications for each region, division, and state in the USA. The proportion of BACB certificants comprised by each certificant category are outlined for each state respectively.

Region	Rank (no.)	Division	Rank (no.)	State/territory	Rank (no.)	BCBA	BCBA-D	BCaBA
Northeast	2 (4952)	New England	4 (2102)	Connecticut	10 (427)	79.16 %	9.37 %	11.48 %
				Maine	27 (111)	79.28 %	10.81 %	9.91 %
				Massachusetts	3 (1286)	88.10 %	8.48 %	3.42 %
				New Hampshire	25 (128)	87.50 %	7.03 %	5.47 %
				Rhode Island	33 (93)	81.72 %	9.68 %	8.60 %
				Vermont	37 (57)	87.72 %	1.75 %	10.53 %
		Middle Atlantic	3 (2850)	New Jersey	5 (904)	80.64 %	9.85 %	9.51 %
				New York	4 (1044)	83.62 %	12.16 %	4.21 %
				Pennsylvania	6 (902)	86.59 %	8.98 %	4.43 %
Midwest	4 (1940)	East North Central	5 (1303)	Indiana	16 (251)	77.69 %	5.98 %	16.33 %
				Illinois	9 (447)	85.46 %	7.83 %	6.71 %
				Michigan	15 (262)	81.30 %	13.36 %	5.34 %
				Ohio	18 (240)	70.00 %	12.92 %	17.08 %
				Wisconsin	29 (103)	70.87 %	20.39 %	8.74 %
		West North Central	9 (637)	Iowa	36 (63)	77.78 %	12.70 %	9.52 %
				Kansas	32 (100)	61.00 %	25.00 %	14.00 %
				Minnesota	26 (116)	68.10 %	10.34 %	21.55 %
				Missouri	14 (263)	76.81 %	7.22 %	15.97 %
				Nebraska	35 (67)	73.13 %	25.37 %	1.49 %
				North Dakota	49 (11)	81.82 %	9.09 %	9.09 %
				South Dakota	48 (17)	47.06 %	29.41 %	23.53 %
South	1 (5170)	South Atlantic	1 (3467)	Delaware	46 (22)	77.27 %	13.64 %	9.09 %
				District of Columbia	42 (32)	78.13 %	9.38 %	12.50 %
				Florida	2 (1982)	60.39 %	8.27 %	31.33 %
				Georgia	17 (242)	72.73 %	14.88 %	12.40 %
				Maryland	19 (230)	71.30 %	21.30 %	7.39 %
				North Carolina	20 (204)	73.53 %	13.24 %	13.24 %
				South Carolina	21 (165)	64.85 %	10.30 %	24.85 %
				Virginia	8 (536)	78.36 %	6.53 %	15.11 %
				West Virginia	38 (54)	75.93 %	20.37 %	3.70 %
		East South Central	8 (647)	Alabama	22 (154)	74.03 %	15.58 %	10.39 %
				Kentucky	24 (133)	84.21 %	10.53 %	5.26 %
				Mississippi	41 (35)	51.43 %	25.71 %	22.86 %
				Tennessee	11 (325)	86.77 %	11.69 %	1.54 %
		West South Central	6 (1056)	Arkansas	42 (32)	75.00 %	15.63 %	9.38 %
				Louisiana	28 (110)	75.45 %	18.18 %	6.36 %
				Oklahoma	39 (49)	75.51 %	14.29 %	10.20 %
				Texas	7 (865)	82.08 %	8.67 %	9.25 %
West	3 (3853)	Mountain	7 (662)	Arizona	23 (153)	82.35 %	12.42 %	5.23 %
				Colorado	13 (267)	75.28 %	6.37 %	18.35 %
				Idaho	50 (9)	66.67 %	22.22 %	11.11 %
				New Mexico	45 (27)	59.26 %	25.93 %	14.81 %
				Montana	47 (21)	90.48 %	9.52 %	0.00 %
				Utah	34 (80)	67.50 %	13.75 %	18.75 %
				Nevada	31 (101)	59.41 %	22.77 %	17.82 %
				Wyoming	51 (4)	100.00 %	0.00 %	0.00 %
		Pacific	2 (3191)	Alaska	44 (28)	82.14 %	10.71 %	7.14 %
				California	1 (2716)	84.61 %	9.83 %	5.56 %
				Hawaii	30 (102)	80.39 %	4.90 %	14.71 %
				Oregon	40 (41)	70.73 %	14.63 %	14.63 %
				Washington	12 (304)	79.28 %	12.83 %	7.89 %

The nation's distribution of certification type is 79 % BCBA, 10 % BCBA-D, and 11 % BCaBA. In Table 1, the most variability in the BACB certification type generally occurs in the states with the lowest number of certifications. There are noteworthy exceptions, like Florida for example, where the existing Medicaid waiver infrastructure could partially account for the disproportionate amount of a BCaBAs (31 %).

ABA Services in Relation to Population Data

Clearly, there is a relationship between the number of BACB certificants in a state and that state's population, with some of the states with low numbers of BACB certificants (Idaho, New Mexico, Montana, Alaska, or Wyoming) also having smaller populations compared to the larger states, like California, which has the largest state population in the USA and also the largest number of BACB certificants of any state in 2014.

Data regarding the number of BACB certificants for each state (gray-filled bars) and the number of certificants per 1000 state population size (dark-filled bars) are represented in Fig. 4. The histograms in this figure are ordered from those states with the highest population (e.g., California is at the top of this figure) to those states with the lowest (Wyoming is depicted at the bottom) based on 2014 state population size estimates (U.S. Census Bureau, 2015). There is a strong positive linear relationship between state population size and number of BACB certificants within that state, $r(50)=0.86$, $p=0.00000008$. Not surprisingly, states with higher populations have higher numbers of BACB certificants. After all, states with larger populations might also be expected to have greater demand for ABA service providers, considering that ASD is reported to occur in all racial, ethnic, and socioeconomic groups (Durkin et al. 2010). Additionally, these states might also have a larger pool of professionals who are pursuing a career in behavior analysis.

Despite the high correlation between state population and the number of BACB certificants there, are some interesting individual cases that cannot be anticipated from the overall correlation. Perusal of Fig. 4 shows that the some states have disproportionately high per capita distributions of BACB certificants. For example, New Jersey, Massachusetts, and Connecticut have a larger number of BACB certificants per capita than other states relative to other states with similar population sizes. Figure 4 also documents relatively high per capita numbers of BACBs for some states with smaller populations, a trend that may reflect the impact of small increase in the absolute number of BACBs on the per capita measure when the overall state population is relatively small. These per capita distribution patterns suggest that factors other than

a state's population might be having an impact on the number of BACB certificants.

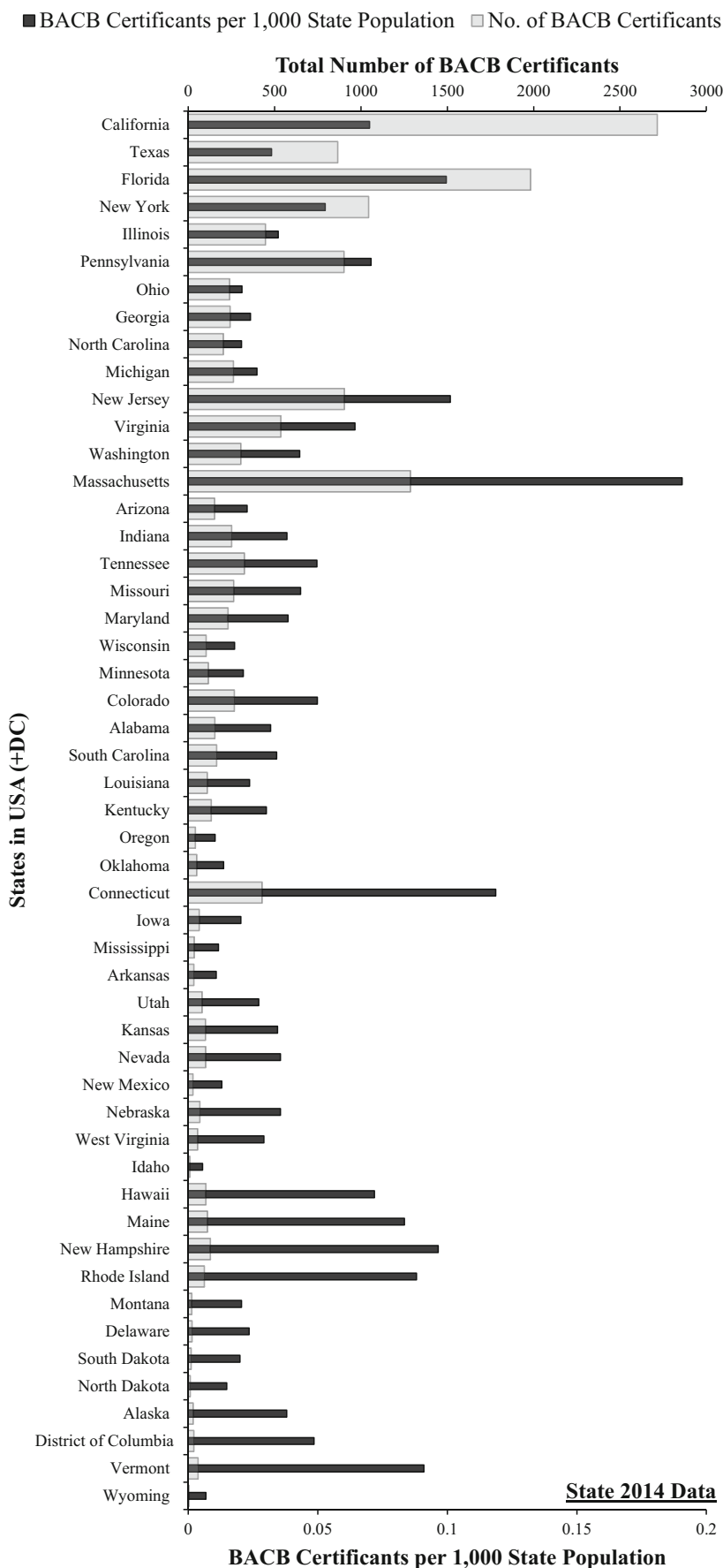
There is a higher demand for jobs for credentialed behavior analysts in some of those states. The uneven distribution of BACBs across the states is reflected in a report on national demand for behavior analysts which documented that three states, California, Massachusetts and New Jersey, account for almost half of all behavior analytic job postings (Burning Glass Technologies, 2015). These data suggest that factors other than population size might be driving the growth and distribution of BACB certificants.

Autism Insurance Reform and ABA Licensure Laws

A number of states have enacted reforms that have extended insurance coverage to autism. Dates in which various states enacted insurance reforms were collected from the Autism Speaks website (Autism Speaks® State Initiatives, 2014). In addition to insurance reforms, a smaller number of states have also enacted state-level BCBA licensure or credentialing requirements which usually occur after insurance reform. The dates for state legislation enactments of this nature were collected from the Association of Professional Behavior Analysts website (APBA® State Laws to License, 2014).

Although it was not feasible to include all state data, the full set of graphs depicting the growth of BCBAs between 1999 and 2014 for each state are available upon request from the first author. Due to the significant variability across states regarding the adoption of insurance reform, we selected representative states to depict various stages of legislative reform: states that rejected insurance reform midway in 2014 ($n=6$) and early insurance reform adopters ($n=6$). Figures 5 and 6 depict the total cumulative number of BACB certificants for these six representative states over time. Phase change lines were inserted within each figure representing the year of legislative enactments (insurance or license bills). Figure 5 depicts the cumulative number of BACB certificants for states that rejected insurance reform in 2014 (Alabama, Idaho, North Dakota, Oklahoma, Washington, and Wyoming). Figure 6 contains the six states that enacted insurance reform earlier than all other states (Arizona, Florida, Indiana, Louisiana, South Carolina, and Texas).

In general, these graphs document an increase in the number of BACB certificants over time, with the most rapid growth occurring in states that were early adopters of insurance reform, although these changes do not always temporally correspond to the reform. However, of some interest in Fig. 5 is the adopting of BCBA licensure reform, which appears to be associated with an increase in certificants for two states (Oklahoma and North Dakota). Interestingly, some of the states that rejected insurance reform in 2014, such as Idaho



◀ **Fig. 4** The number of BACB certificants for each state (*gray-filled bars*) and the number of certificants per 1000 state population size (*dark-filled bars*)

and Wyoming, also have the lowest BACB certificants per state population.

Influencing policy and state-level regulations can determine the extent of a professions right to practice (Shook & Favell, 2008), and this may depend on having a critical number of behavior analysts within a state. Lobbying power potentially could be dependent on the proportion of BACB certificants per state population. There might be some support for this interpretation of the data, considering that Washington altered its position and accepted autism insurance reform at end of 2014, and it incidentally had the highest BACB certificants per state population in the group that rejected insurance reform. Using this logic, Alabama might be the next state to reverse its position on the rejection of autism insurance reform.

Multiple states had marked increases in BACB® certificants after 2010 regardless of insurance reform (data available upon request). Indiana enacted insurance reform earlier than all other states, yet there is a significantly delayed

increase in BACB® certificants after the reform (see Fig. 6). Some other variable(s) appear to be operative after 2010. The causes for the accelerating trend are only speculative at this time, but it coincides with a time period where there was widespread recognition that ABA was the treatment of choice for autism-related behavioral challenges. Increased national media attention and reports from independent panels could have been influential during this period. It is worth noting that the National Standards Project first published their systematic review of established treatments for autism-related behavioral challenges in 2009 (National Autism Center, 2009). Although this does not appear to be national variable level effect, as some states do not show the same effect, it does implicate the importance of some other variable influencing multiple state data.

This analysis is admittedly complicated by the logistical challenges of rolling out reform that impacts the delivery of ABA services. More specifically, it may take a while to fully hire or train a sufficient number of BACB certificant providers to meet the increased service demand that might accompany the passage of autism insurance reform. Moreover, different types of reform like license reform might impact BCBA certificants differentially. For example, license reform does

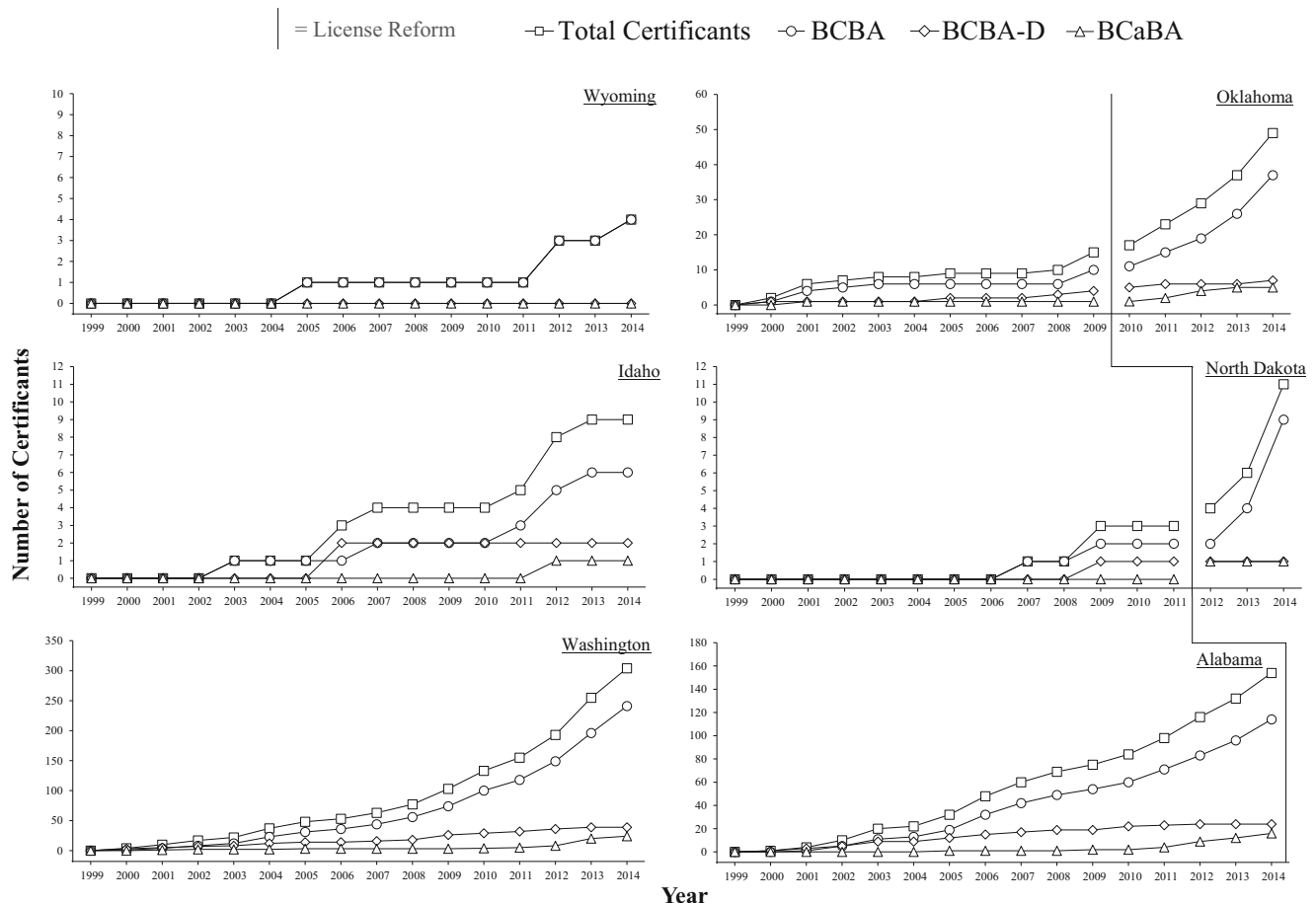


Fig. 5 Cumulative number of BACB certificants and BACB certificant types for states that rejected insurance reform in 2014

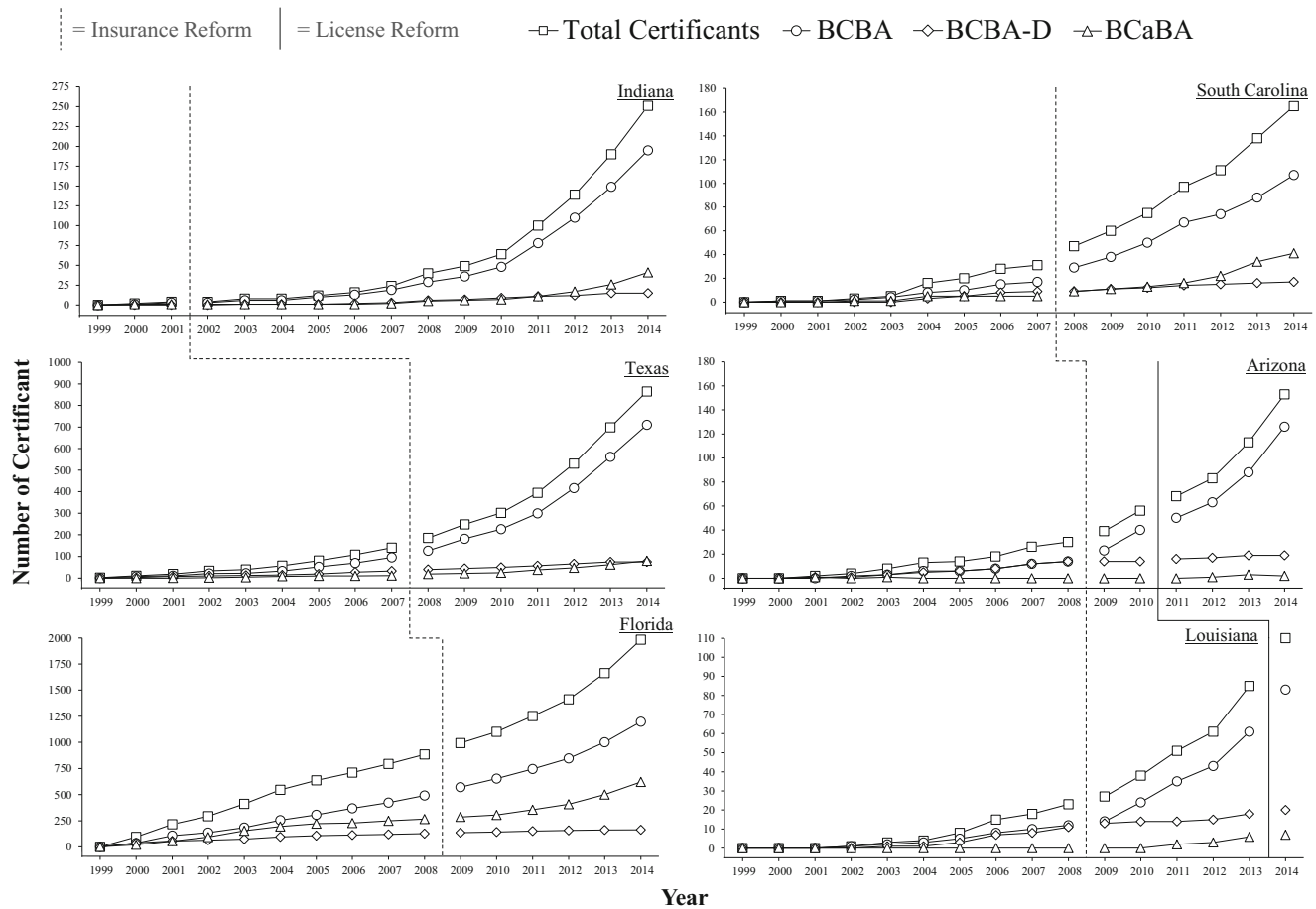


Fig. 6 Cumulative number of BACB certificants and BACB certificant types of the six states that enacted insurance reform earlier than all other states

not always extend to BCaBA certificants, and each state might have a different requirement of BCaBA practitioners such as fulfilling the technician role (program delivery) rather than having them as involved in program development. The training requirements for each certificant type vary, but one consistent factor is the oversight from the BACB. One factor worth considering is how the number of training sites in a state offering approved BACB course sequences relates to the number of BACB certificants.

Location of Approved BACB Coursework and Supervision Sites

Previous research has demonstrated that as the number of approved BACB® course sequences increase, so do the number certificants (Shook & Favell, 2008). To examine if this relationship between BACB certificants and the availability of approved training programs also extends to the state level, we collected the number of approved BCBA, BCaBA coursework locations, and approved supervision sites that were located in each of the 50 states from the BACB website (www.BACB.com). We then clustered the states into five

groups of ten based on their respective number of BACB® certificants and depicted the data graphically (see Fig. 7). Notably, the ten states with the highest number of BACB certificants contained an average of ten approved BCBA coursework locations, whereas the ten states with the lowest BACB certificants had an average of 0.6 approved BCBA coursework locations. It appears that as BACB certificant numbers decrease, so do the number of locations offering approved BCBA and BCaBA course sequences.

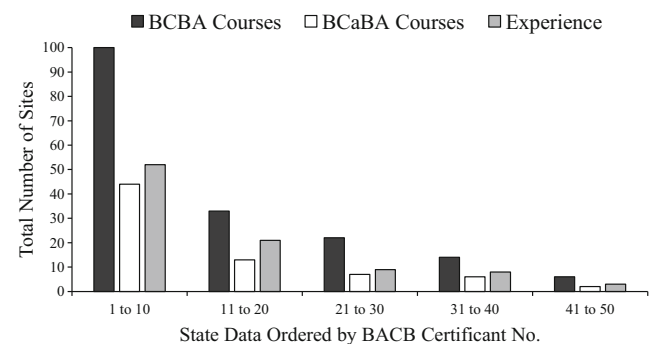


Fig. 7 Number of sites offering BACB approved course sequences or experience standards based on state data ordered by their respective number of BACB certificants

Statistical analyses revealed a large positive linear correlation with number of sites in a state offering approved BCaBA coursework ($r(49)=0.91$, $p=0.000066$) with all BACB certificants for each state. Interestingly, the number of BCBA approved coursework locations shared a similar large positive linear correlation ($r(49)=0.88$, $p=0.000069$) with all BACB certificant types, but the number of sites offering approved BCBA coursework in a state co-varied more ($r(49)=0.86^2$) with state population than BCaBA coursework ($r(49)=0.77^2$). Perhaps the number of approved BCaBA coursework locations in each state will become an informative index of future growth of the field, especially if this certification level experiences an exponential growth in numbers comparable to that which the BCBA credential is currently undergoing.

Discussion

Limitations of the Data

There are many extraneous variables that impact analyses of the historical trends of behavior analyst certifications in the USA. For one, it is important to recognize that even if data appear to match the population proportionally in a state, this does not mean that the geographic distribution of BACB® certifications is evenly spread in that state, i.e., there might be fewer BACB certificants in remote rural areas.

In addition to the staggered nature in which states have adopted legislative reform, there can also be a great deal of variability in the specifics of the autism reform and professional regulations (e.g., the age ranges and maximum annual caps for insurance coverage, permitting third party reimbursement, details of licensing regulations, and whether they extend to the BCaBA certificant type). Unfortunately, these details are challenging to include in a graphical displays and could detract from visually interpreting the data. However, there are still data that could still be included regarding other types of legislative reforms. Education reform recognizes behavior analysts certified by the BACB as authorized providers of services within a state's education system. While fewer states have adopted education reform, analyzing their impact could provide further resolution to the data.

Lastly, the analysis on coursework and supervision sites as they relate to states' locations becomes complicated due to increases in the use of distance learning through the offering remote online programs. This blurs the boundaries of a state-level analysis. In the same manner, academic institutions vary in the number of certificants they graduate and the expected certification pass rate.

Concluding Remarks

In spite of the state by state differences, we contend that there are enough similarities in legislative reform and academic institutions across states to draw some meaningful conclusions about their impact on the growth of the BACB® certifications.

The mean growth for all US states (and DC) across two 8-year periods, in 1999–2006 and 2007–2014, went from 379 to 1610 incoming BACB® certificants per year. This is over a 400 % increase in certification growth.

It seems safe to conclude that the forecast for the ABA field appears favorable, barring any unanticipated factors that might mitigate the continued growth of the field (e.g., a major downturn in prevalence of autism, the reversal of autism insurance reform, or an abrupt increase in the requirements for certification). Based on these data, we can also offer some rough predictions about future growth.

After conducting a regression analysis, residual plot data revealed a non-random inverted U curve, indicating that a non-linear regression transformation would best account for the trajectory of the current data. The non-linear options that yielded the highest R^2 values were exponential and polynomial trend lines (see Fig. 8 in supplementary material). According to these projections midway in 2020, the number of BACB® certifications in the USA could reach up to 42,000 or 60,000 if the exponential trend is more accurate.

Most likely, the factors discussed work in concert, and there are important variables that have not been considered or are unavailable. Regardless, the data are worthy of regard in their own right. Recognizing this fact, two supplementary three-dimensional videos (<https://youtu.be/B0J6jyRoxcg>; <https://youtu.be/RZ6s7DfrSKY>) showing the interactive growth of cumulative BACB® certifications and certification types across 1999–2014 in the USA have been created so that the reader can glean some general information about BACB certificant trends over the years. The current environment is sustaining the growth of applied behavior analysts, and we hope that the field continues to live long and prosper.

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References

- Association for Behavior Analysis International. (2015). *ABAI Member Data 1977–2015 [Data set]*. Portage, MI: ABAI.
- APBA® State Laws to License. (2014). Retrieved November 11, 2014, from <http://www.apbahome.net/pdf/State%20Regulation%20of%20BA%20062314%20V2.png>
- Autism Speaks® State Initiatives. (2014). Retrieved October 21, 2014/ updated May 19, 2015, from <http://www.autismspeaks.org/advocacy/states>
- Burning Glass Technologies. (2015). *US Behavior Analyst Workforce: Understanding the National Demand for Behavior Analysts*. Retrieved from <http://bacb.com/wp-content/uploads/2015/10/151009-burning-glass-report.pdf>
- U.S. Census Bureau. (2015). *Population Estimates – National Totals: Vintage 2014*. Retrieved November 10, 2015, from <http://www.census.gov/popest/data/national/totals/2014/index.html2>
- Durkin, M. S., Maenner, M. J., Meaney, F. J., Levy, S. E., DiGuseppi, C., Nicholas, J. S., et al. (2010). Socioeconomic inequality in the prevalence of autism spectrum disorder: evidence from a U.S. cross-sectional study. *PLoS One*, 5(7), e11551.
- Kangas, B. D., & Vaidya, M. (2007). Trends in Presentations at the annual conference of the association for behavior analysis. *The Behavior Analyst*, 30, 117–131.
- LeBlanc, L. A., Heinicke, M. R., & Baker, J. C. (2012). Expanding the consumer base for behavior-analytic services: meeting the needs of consumers in the 21st century. *Behavior Analysis in Practice*, 5(1), 4–14.
- National Autism Center. (2009). *National Standards Report*, 1–160.
- Poling, A. (2010). Looking to the future: will behavior analysis survive and prosper. *The Behavior Analyst*, 33, 7–17.
- Shook, G. L. (2005). An examination of the integrity and future of the Behavior Analyst Certification Board® Credentials. *Behavior Modification*, 29(3), 562–574.
- Shook, G. L., & Neisworth, J. (2005). Ensuring appropriate qualifications for applied behavior analyst professionals: the Behavior Analyst Certification Board. *Exceptionality: A Special Education Journal*, 13(1), 3–10.
- Shook, G. L., & Favell, J. E. (2008). The Behavior Analyst Certification Board and the profession of behavior analysis. *Behavior Analysis in Practice*, 1(1), 44–48.