

# Pathways and Burnout: Investigating Rates of Burnout between Alternatively Prepared Teacher and Traditionally Prepared Teachers

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## Abstract

*Imagining what could be in the schools of Texas usually does not lead to thinking about teacher burnout. However, to get to the place where imagination and innovation can grow, teacher burnout must be addressed. This study investigates burnout differences between traditionally and alternatively certified Texas teachers using Maslach Burnout Theory. A cross-sectional survey of 116 K-12 Texas teachers was conducted via social media using the Teacher Stress Inventory. Results showed traditionally certified teachers reported significantly higher stress levels than alternatively certified teachers, though both groups experienced moderate stress. Findings support the need for increased resources regardless of certification pathway.*

Keywords: *teacher attrition, burnout, certification pathways*

Imagining what could be in the schools of Texas usually does not lead to thinking about teacher burnout. However, to get to the place where imagination and innovation can grow, teacher burnout must be addressed. Teacher retention has always been a challenge to school districts. After COVID 19 many districts saw a dramatic increase in teachers leaving the classroom. Although the retirements and resignations due to COVID 19 may be leveling off now, the need for teachers is not. According to Tan, Arellano and Patrick (2024), there were 406,964 teaching positions either unfilled or filled by not fully certified teachers. For Texas, the report estimates 84,091 teachers were not fully certified or were teaching outside their field. A report from the Texas Education Agency (TEA) (Landa, 2023) states the attrition percentage for 2022-2023 at 13.44%, the highest rate over the last 10 years. The turnover rate, which is the percentage of teachers who leave their district or move to non-teaching within the district from one year to the next, peaked in 2022-2023 at 24.4% only coming down to 19.4% the next year (Legislative Budget Board, 2025). Additionally, according to the Charles Butt Foundation (2025), 66% of teachers considered leaving the profession this year. The need for teachers in Texas is still great.

In Texas, the pathways to teacher certification are numerous. Historically, the route to teaching was through the university educator preparation program (EPP). However, in the 1980s, reports like A Nation at Risk (NCEE, 1983) started discussing teacher shortages in math and science and other shortages to come. In response, beginning in 1985, Houston ISD offered the first alternative teacher certification program in the state. Since then, the number of alternative certification routes and alternatively certified teachers has increased. Alternative pathways to certification including non-certified teachers have risen to record levels in Texas accounting for 79% of new hires (TEA, 2025). Texas was also the first state to authorize for-profit EPPs and currently 70% of all EPP enrollment is in for-profit, non-college or university programs (Bland, Wojcikiewicz, Darling-Hammond & Wei, 2023). According to the TEA (2025), teachers prepared through alternative pathways or teachers who are not certified are leaving at a greater rate than traditional undergraduate candidates. This situation creates higher attrition rates and causes more issues for school administrators. Causes as to the reasons for attrition need to be identified.

Burnout has long been a leading factor to teachers leaving the profession. Now, according to Gallup (Marken &

Agrawal, 2022), K-12 teachers have the highest levels of reported burnout at 44%. In Texas, 68% of surveyed teachers by the Texas American Federation of Teachers (2025) say they are ready to quit. While COVID 19 was a major stressor for educators, there are other factors that lead to burnout including student behavior, low pay, administrative work, and more (Doan, Steiner & Pandey, 2024). Schools are in need of interventions and changes in order to ensure the well-being of teachers and to decrease the number of teachers leaving due to burnout.

Data supports that more alternatively certified teachers are leaving the field more quickly and that burnout can also lead to teachers leaving the field. So, then the question becomes:

- Is there a difference in burnout between pathways?
- In other words, could differences in the certification preparation lead to burnout and attrition?

This research study investigated the levels of burnout in traditionally certified and alternatively certified teachers in Texas. To investigate two research questions, a survey including a burnout scale as well as demographic information was administered via social media. This study will add to the knowledge of burnout among Texas teachers and possibly how burnout differs between alternatively and traditionally certified teachers.

## **Literature Review**

Public education in the state of Texas has many concerning issues including working conditions, school funding, teacher preparation and retention, and school safety. These issues intersect creating a complex web of factors that lead to teacher attrition. When the number of vacancies is greater than the number of certified teachers graduating from universities, Texas school district must turn to alternative certification and other certification routes for teachers. For this paper, attrition, certification routes, and burnout are the factors supporting the research question.

### ***Attrition***

Teacher attrition creates unintended problems in classrooms and in schools. Carver-Thomas and Darling-Hammond (2019) found that there were higher turnover

rates in the South and in specific content areas including special education and English language development. Additionally, the study found higher rates of turnover in schools serving students of color and low-income families. Reasons for leaving the profession included lack of administrative support, salaries, and alternative certification (2019). Specifically for Texas, the top reasons teachers consider leaving include high work stress, poor pay, feeling undervalued, excessive workload, too much administrative burden, and disciplinary issues according to the Charles Butt Foundation (2025).

In Texas, Guthery and Bailes (2022) investigated teacher persistence. Their research found that traditionally certified teachers placed in traditional public schools were more likely to persist, or stay in the profession, as compared to other certification pathways and other school placements. Traditionally prepared and certified teachers teaching in traditional public schools had a probability retention rate of 67.5% while alternatively certified teachers in a traditional public school had a probability retention rate of 60.6%. If preparation is a predictor of a teacher leaving the profession, then it is critical to investigate the differences between the pathways.

Overall, attrition continues to be a challenge for school districts and the effects of attrition on learning can be detrimental and expensive. According to Carver-Thomas and Darling Hammond (2019) when teachers leave, they create more costs to schools and reduce achievement in the classrooms. When teachers leave, less experienced teachers may take their place, class sizes may increase, and course offerings may be cut. New teachers require more training and resources that may take monies from other initiatives within the school budget. In order to ensure students, receive effective instruction and support, the rates of turnover in schools needs to be addressed.

### ***Pathways***

Since 1985, Texas has had traditional and non-traditional pathways to educator certification. Alternative certification pathways may be administered through school districts, institutes for higher education, educational service center, or for-profit companies. Over time the numbers of teachers coming out of each pathway has changed. In 2015, the Texas Legislature passed legislation that would allow for

districts to hire uncertified teachers through a district of innovation plan if they showed difficulty in hiring certified teachers (Dey, 2025). This legislation opened a gate for districts to hire anyone, certified or not.

According to research conducted by Marder, Torres and Martinez (2024), during the 2013-14 school year, 44% of Texas teachers were certified teachers through standard pathways such as universities. In that same year, 35% of Texas teachers were either interns or alternatively certified. Only 10% of Texas teachers were uncertified. By the 2018-19 school year the number of uncertified teachers had grown to 18% and only 33% were certified through traditional means while 36% were alternatively certified. After COVID 19, the Texas state of public education was drastically changed. Based on the same study (2024), in 2023-24, 52% of teachers were uncertified and only 19% were certified through traditional means while 15% were alternatively certified. These three groups also differ on their attrition rates with 76% traditionally certified teachers staying after five years, 54% of alternatively certified teachers staying after five years and only 39% of non-certified teachers staying after five years.

One critical concern about alternatively and uncertified teachers is that they serve a temporary solution for an ongoing problem of teacher attrition. Both groups do not stay in the profession at the same rates of traditionally certified teachers. In order to keep teachers in the classroom, reasons for leaving and choices for staying need to be investigated. For this study, burnout is focus as a reason to leave the profession.

### ***Burnout***

Shortly after researchers identified occupational stress in the medical community, researchers turned to teachers as the next professional stress to study. One of the first methods to measure teacher stress was the Teacher Stress Inventory (TSI) that was first created in 1984 by Firmian to measure different physiological manifestations of stress along with professional domains. The TSI asks teachers how they feel about their use of time, autonomy in the classroom, professional growth, and classroom management.

Burnout was first identified in the 1970s as severe stress in caregiving professions (NCBI, 2024). The three primary characteristics of burnout include: exhaustion, depersonalization, and reduced personal accomplishment (Maslach et al., 2001).

Burnout in teachers is particularly troubling. Consider the three domains of burnout from a teacher's experience: teachers coming to school exhausted may experience impaired judgement, increased frustration/irritability, trouble sleeping, forgetfulness, and feelings of overwhelm (Maslach et al., 2001). Depersonalization occurs when teachers become so stressed that they begin to have negative feelings towards students to the point that a burnt-out teacher may think of students as objects. Reduced personal accomplishment describes a teacher's self-reflection of their skills or professional efficacy, and often coincides with feelings of incompetence, lack of accomplishment, and lack of productivity (Maslach & Leiter, 2016). One can see how exhaustion and depersonalization can quickly lead to a decline in work satisfaction. When burnout causes a teacher's work to become meaningless, leaving the job becomes more likely. Agyapong et al. (2022) conducted a scoping review to determine the extent of current literature on the prevalence and correlates of stress, burnout, anxiety and depression among teachers and found 190 articles that met their inclusion criteria. Based on the number of current scholarly research, the implications of teacher burnout are critical to public education. Published studies have identified three different burnout profiles among teachers with the prevalence ranging from 25.12% to 48.37% (Agyapong et al., 2022).

One factor that may affect prevalence of burnout is student population. Teachers who taught special education reported relatively high prevalence (87.1%) compared to other studies and student populations (Fimian & Santoro, 1983). One particularly interesting finding from Malaysia was that education level and teaching experience predict depression. Burnout and depression have several overlapping characteristics so it is significant to note that teachers with the lowest level of education were the most depressed followed by teachers with most teaching experience (Othman & Sivasubramaniam, 2019). Teachers who are alternatively certified may not have as much experience or

education, therefore they may be more susceptible to depression or burnout.

Consequences of teacher burnout are critical. Teachers experiencing burnout are more likely to leave the profession. In Gundlach's scoping review (2025), teachers reported the reason for leaving the profession were 1) loss of passion (30%) 2) stress burnout and exhaustion (27%) and finally 3) feelings of unhappiness or dissatisfaction (24%). Many researchers have shown the correlation between teacher turnover and loss of student achievement. The best protective factor for teacher burnout is administrative support. School climate factors like co-worker support or social support were negatively related to anxiety and depression (Mahan et al., 2010). Having a fully-staffed and fully funded school can have a major effect on a school's climate. Teachers simply having the support of their administration while managing the current demands of the job can be the difference between staying another year or leaving the profession.

Understanding the effects of burnout in Texas teachers can guide interventions and policy change. It is important to identify the characteristics of burnout and stress across different demographics of teachers in order to provide the most effective interventions and identify protective factors.

## **Methodology**

A quantitative survey approach was used to answer the research questions:

- Is there a difference in burnout between pathways?
- In other words, could differences in the certification preparation lead to burnout and attrition?

The survey approach was chosen to be able reach a large number of teachers and also to be efficient in administering the stress inventory digitally. Administration targeted alternatively and traditionally certified teachers in Texas.

## ***Participants***

Participants included 116 Texas teachers, ranging in age from 18 to over 50 years. Recruitment was conducted through social media, specifically Facebook and Instagram.

The survey link was shared on the researcher's personal Instagram and Facebook accounts and distributed across multiple educator-focused Facebook groups targeting Texas public school teachers. Snowball sampling was supplemented as participants were encouraged to share the survey within their networks. A total of 271 individuals responded to the survey. After applying inclusion criteria, 116 participants were retained for final analysis.

To be included in the study, participants were required to (1) be currently employed as K-12 teachers in the state of Texas, and (2) provide complete responses to all primary measures. Responses that did not meet these criteria or were incomplete were excluded from the dataset.

The final sample (N = 116) consisted of Texas teachers possessing varying levels of experience, with 50% having taught for 15 or more years. Participants worked across different school settings, including rural (n= 48), suburban (n= 40), and urban (n= 27) school environments. Based on certification pathway, participants were split into two groups: traditionally certified teachers and alternatively certified teachers.

## ***Traditionally Certified Teachers***

The traditionally certified group comprised 52 participants who obtained their teaching credentials through university-based educator preparation programs, specifically undergraduate programs. These programs typically emphasize pedagogical courses and clinical experiences to prepare teachers to deliver effective instruction and support student learning (Townsend & Bates, 2007). To be categorized in this group, participants had to report earning their teaching certification through an undergraduate program.

## ***Alternatively Certified Teachers***

The alternatively certified group consisted of 64 teachers who entered the profession through non-traditional programs. These programs offer an alternative pathway to certification, often allowing individuals to begin teaching while simultaneously completing coursework and training (Texas Education Agency, 2023a). To be categorized in this group, participants had to report earning their teaching certification through a district-based or Education Service

Center (ESC) program, a graduate-level certification program, or a Teach for America or similar program.

### ***Materials***

Two major sections were included in the survey. First, the TSI to measure burnout and secondly, demographic items to give information about the participants.

#### *Teacher Stress Inventory*

The Teacher Stress Inventory (TSI) (Fimian, 1984) was administered via a Qualtrics survey to assess occupational stress levels. The TSI is a 49-item self-report questionnaire designed for educators. The instrument includes 10 subscales that reflect specific aspects of teacher stress. Each question is rated on a 5-point Likert scale ranging from 1 (not noticeable) to 5 (extremely noticeable), indicating the frequency with which stress-related thoughts, symptoms, and feelings are experienced. The scale has demonstrated strong criterion validity, with significant correlations to both physical and psychological health outcomes (Boshoff et al., 2018). Each subscale is scored with the average of its respective items to receive a single composite score. The 10 subscale scores are then averaged to yield a single total score.

#### *Demographic Questionnaire*

A demographic questionnaire was supplemented in the Qualtrics survey to collect information on each participant's age, content area, grade level taught, number of years teaching, school setting (urban, rural, suburban), how likely they were to leave teaching (Not likely, somewhat likely, neither likely nor unlikely, extremely likely), and certification pathway (undergraduate, graduate, district/ESC program, or Teach for America/similar). These data were added to the analysis of teacher burnout by providing demographic variables.

#### *Informed Consent Form*

Before having access to the survey, participants completed an informed consent form. The consent form provided details on the study's purpose, data collection procedure, and participant rights. Each participant was informed that their information was confidential, no identifiable information would be asked, and that they could withdraw from the study at any time for any reason.

### ***Procedure***

Participants were recruited through social media advertisements posted on platforms such as Facebook and Instagram. The survey was posted to the researcher's personal Facebook and Instagram accounts, including educator-focused Facebook groups. Recruitment invitations provided information on the study, a point of contact, and the study's IRB approval number. Snowball sampling was implemented as participants were encouraged to share the survey within their networks.

Participants accessed the study by following a link provided to a Qualtrics survey. Immediately after clicking the link, participants were directed to the first page of the survey, which included an informed consent detailing the purpose and structure of the study. The consent form explained that the study's objective was to gain knowledge of burnout among traditionally and alternatively certified teachers. It also outlined the types of questions included and what participants could expect when completing the survey.

Participants were informed that the survey did not require any personally identifying information, and they could stop taking it at any time. The research advisor's number and email were provided in case of questions or concerns. By selecting the "I consent" button at the bottom of the page, participants acknowledged that their participation was voluntary, that they were at least 20 years of age, and that they were aware that they could terminate their participation in the study at any point for any reason. If participants selected "I do not consent," participation was terminated and they could not access the rest of the survey.

After providing consent, participants were directed to the next page of the Qualtrics survey and began the questionnaire. The first section of the survey included the Teacher Stress Inventory (Fimian, 1984), a 49-item self-report measure designed to assess occupational stress in educators. Items are rated on a five-point Likert scale and address multiple dimensions of stress, including time management, professional distress, emotional and physical manifestations, and work-related stressors. Factor analyses support a 10-factor structure reflecting both psychological and physiological aspects of teacher stress.

Following completion of the TSI, participants responded to a brief set of demographic questions. The items gathered information about age, years of teaching, school setting (urban, suburban, rural), and type of certification pathway (undergraduate, graduate, district/ESC program, or Teach for America/similar). Participants were not asked to provide any identifying information, and all responses remained anonymous. Following the demographic section of the survey, participants were directed to the last page of the survey, which thanked them for their time and assured them that their response was recorded.

Data collection was conducted entirely online, and participants could complete the survey at their convenience. The survey was opened on December 15, 2024, and closed on February 16, 2025. The average completion time was approximately eight minutes. No compensation was offered. Respondent data were exported from Qualtrics to an Excel file for initial cleaning and preparation. All responses were reviewed for completeness and adherence to inclusion criteria before being imported into JMP Pro 18 for analysis.

Following data collection, participants were categorized into one of two groups (traditionally certified or alternatively certified) based on their self-reported certification pathway. This grouping was used for comparative analysis.

This study was approved by the Institutional Review Board at Stephen F. Austin University (IRB #: IRB-FY2025-69).

## **Results**

Data were collected and analyzed to answer the research question: Is there a difference in burnout between pathways? Could differences in the teacher certification pathways lead to burnout and attrition? Data were analyzed through descriptive and inferential statistics. Demographic and t-test results are reported.

### ***Data Preparation***

Statistical analysis was conducted using JMP Pro 18. Descriptive statistics were calculated for total and subscale scores from the Teacher Stress Inventory (TSI). An independent samples t-test was performed to analyze the

differences in overall stress levels between traditional and alternatively certified teachers. Effect size was calculated using Cohen's *d*, and 95% confidence intervals for the mean difference were reported.

Survey responses were exported from Qualtrics and cleaned in Excel. Of the 271 responses received, only fully completed surveys were retained for analysis. After applying inclusion criteria and removing incomplete responses, the final sample included 116 participants. There was no missing data in the final dataset. All 116 participants provided complete responses on both the TSI and demographic questions.

### ***Descriptive Statistics***

The final sample ( $N=116$ ) included teachers across varying age groups. The sample was distributed as follows: 18–25 years old ( $n=11$ ), 26–30 ( $n=15$ ), 31–35 ( $n=10$ ), 36–40 ( $n=20$ ), 41–45 ( $n=14$ ), 46–50 ( $n=12$ ), and 50 or older ( $n=34$ ). Although teachers of all ages were represented, the sample skewed more towards older age groups. Participants taught in a variety of content areas, with the largest groups made up of English language arts ( $n=48$ ), science ( $n=42$ ), reading ( $n=39$ ), and history/social studies ( $n=29$ ). Regarding the school setting of teachers, participants represented diverse educational environments. Forty-eight teachers taught in rural schools, 40 in suburban schools, and 27 in urban schools. A total of 59 teachers reported being extremely likely to leave ( $n=43$ ) and somewhat likely to leave ( $n=25$ ).

Regarding certification pathways, 52 participants reported receiving their certification through an undergraduate program, 34 through a graduate-level program, 10 through a district or Education Service Center (ESC) program, and 20 through Teach for America or similar. While early career teachers were represented in the study, a large portion of the sample consisted of educators in later career stages. Further information regarding participants' years spent teaching is presented in Table 1.

**Table 1.***Number of Years Participants Spent Teaching*

Years Spent Teaching	n	%
First year	6	5%
2-5 years	22	19%
Years Spent Teaching	n	%
6-10 years	18	16%
11-15 years	12	10%
15+ years	58	50%

N=116

**Statistical Analyses**

Following the procedure outlined in the Teacher Stress Inventory scoring instructions, total TSI scores were calculated by averaging the scores from each of the 10 subscales (Fimian, 1984). Each subscale reflects a specific aspect of occupational stress, and the composite average score is a representation of an individual participant's stress level.

The traditionally certified group (n=52) had a mean total TSI score of M=3.25, SD=0.69, while the alternatively certified group (n=64) had a mean score of M=2.99, SD=0.60.

Subscale means and standard deviations were also computed to examine stress patterns across the 10 TSI sections: Time Management, Work-Related Stressors, Professional Distress, Discipline and Motivation, Professional Investment, Emotional Manifestations, Fatigue Manifestations, Cardiovascular Manifestations, Gastronomical Manifestations, and Behavioral Manifestations. Descriptive statistics indicated that traditionally certified teachers reported slightly higher average scores in most subscales, such as Time Management, Professional Distress, and Emotional Manifestations. However, work-related stressors stood out greatly between the two groups. Full subscale results are presented in Table 2. No inferential statistics were conducted for the instrument's subscales, as the primary hypothesis addressed total stress differences only.

An independent samples t-test was conducted to examine differences in total TSI scores between certification

pathways. The traditionally certified group (n=52) had a significantly higher mean TSI score (M=3.25, SD=0.69) than alternatively certified teachers (n=64; M=2.99, SD=0.60),  $t(101.94)=-2.14, p=.0344$ . The 95% confidence interval for the mean difference was [-0.50, -0.02], indicating a lower level of burnout among alternatively certified teachers. The observed effect size was measured by Cohen's d, where  $d=0.41$ , indicating a moderate effect.

**Table 2.***Teacher Stress Inventory Subscale Averages by Certification Pathway*

Subscale	Traditionally Certified	Alternatively Certified
	M (SD)	M (SD)
Time Management	3.75 (0.65)	3.64 (0.60)
Work Related Stressors	3.98 (0.74)	3.85 (0.73)
Professional Distress	3.74 (0.95)	3.54 (0.89)
Discipline & Motivation	3.91 (0.94)	3.61 (1.08)
Professional Investment	3.20 (0.97)	2.91 (0.94)
Emotional Manifestations	3.20 (1.21)	2.93 (1.06)
Fatigue Manifestations	3.43 (1.05)	2.90 (0.94)
Cardiovascular Manifestations	2.93 (1.07)	2.62 (1.11)
Gastronomical Manifestations	2.26 (1.15)	2.00 (1.14)
Behavioral Manifestations	2.07 (1.00)	1.86 (0.80)

N=116

**Discussion**

The present study aimed to investigate differences in burnout levels between traditionally and alternatively certified teachers in Texas using the Teacher Stress Inventory. The results revealed a statistically significant difference in burnout scores, with traditionally certified teachers reporting higher stress scores than alternatively certified teachers. The findings challenge common assumptions that alternatively certified teachers are more likely to have higher levels of burnout due to a lack of formal preparation. Looking at findings by Guthery and Bailes (2022), who reported that traditionally certified teachers are more likely to have a higher retention rate compared to those who are alternatively certified, it raises the question if a longer career equates to more burnout. The higher level of burnout observed in traditionally certified

teachers may reflect different dimensions of strain, such as the cumulative impact of careers in more demanding roles as they grow.

Despite these differences, both groups reported moderate levels of occupational stress, reinforcing the existing literature on the widespread nature of teacher burnout in Texas. Factors contributing to this may include heavy workload and the ongoing impact of teacher shortages and staffing instability in Texas (TEA, 2025). In order to ease the levels of burnout, TEA (2023b) released a report on teacher vacancies that includes strategies on increasing compensation, improving training and support, and improving working conditions. However, two years have passed with teachers continuing to report elevated levels of burnout.

Both pathways showed high levels of burnout. While more research is conducted to tease out the reasons for the difference between the groups, all EPPs could benefit from sharing best practices and curriculum with each other. The problems of teacher retention and burnout cannot be attributed to just one preparation pathway or even just preparation in general. Schools, districts, and the state also contribute to the issues. Additionally, societal views of education are changing and that may affect the teacher pipeline and teacher well-being.

### ***Limitations***

Several limitations should be considered in the interpretation of these results. The use of convenience and snowball sampling through social media limits the generalizability of the results, as the sample may not represent all Texas teachers. Self-reporting measures such as TSI are subject to bias, including social desirability and over-/under-reporting of stress symptoms. Lastly, the cross-sectional design of the study restricts drawing causal conclusions regarding burnout and certification pathways. In future research, these limitations could be addressed through different methodologies and sampling techniques. For example, a random sample of teachers with a large school district could be asked to sit down for an in-person administration of the TSI.

### ***Recommendations***

This study found that traditionally certified teachers reported higher stress scores than alternatively certified teachers. Situating those results within the literature, it may be that the longevity of the career of the traditionally certified teacher may lead to the higher levels of burnout. Further research would be needed to investigate that possibility.

The results of this study highlight the need for systemic support for teachers regardless of certification pathway. School districts and policymakers should consider targeted interventions such as mental health resources, caseload management, and mentorship programs for the needs of both traditionally and alternatively certified educators. Teacher education programs should consider implementing self-care curriculum into their programs so that new teachers are prepared for the realities and pressures of schools. Also, schools could implement professional development on burnout and mental health. A major change would be to address the factors that are leading to attrition to begin with as the Charles Butt Foundation reported such as low pay, high work stress, feeling undervalued, excessive workload, too much administrative burden, and disciplinary issues (2025). Future research could include the exploration of these findings using a larger and more diverse sample. It could also use a different research design to assess how certification pathways impact burnout over time. Future work could investigate how factors such as grade level taught, school environment, and subject level lead to burnout between certification pathways.

To be able to become an innovative and imaginative place for Texas school children, Texas schools need to protect and nurture the teachers that teach them. Only then can students bloom and grow.

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