

Measuring High School Counselor Beliefs on the Importance of MTMDSS Universal Supports Since COVID-19

Ryan J. Carter

San José State University

Lorri M. Capizzi

San José State University

Brent Duckor

San José State University

The onset of the 2019 coronavirus disease (COVID-19) pandemic in the United States (U.S.) brought immediate and unprecedented disruption to kindergarten through twelfth grade (K-12) education. California high school counselors, faced with the dilemma of how to support student needs effectively and equitably during COVID-19, have looked to the state government and professional organizations for guidance on best support practices. While multi-tiered support frameworks, such as Multi-Tiered System of Supports (MTSS) and Multi-Tiered, Multi-Domain System of Supports (MTMDSS) have been increasingly recommended as part of the pandemic response, the effective use of MTSS/MTMDSS by school counselors presupposes a degree of belief in these frameworks. This study explored and measured California high school counselor beliefs about the importance of MTMDSS (Tier 1) universal supports since the onset of the COVID-19 pandemic. Data collected from 101 California high school counselors through the Universal Supports Importance Scale (USIS) survey instrument and from six follow-up semi-structured interviews suggested that counselors have high levels of belief in the importance of MTMDSS universal supports. Preliminary results of this USIS validation study displayed strong evidence for overall quality of valid and reliable scale score interpretation for measuring school counselor beliefs, offering promise for future diagnostic and formative uses of the USIS instrument in professional development settings.

Keywords: beliefs, school counselor, MTSS, MTMDSS, COVID-19, item response modeling, IRT scaling

The objective of secondary school counseling is “to help students overcome barriers to learning and to prepare for successful lives after high school graduation” (American School Counselor Association [ASCA], 2019, p. x). The United States (U.S.) onset of the 2019 coronavirus disease (COVID-19) pandemic in March 2020, brought immediate and unprecedented disruption to California secondary education, beginning with school closures, transitions to distance learning, and new modes of instruction (Savitz-Romer et al., 2021).

Correspondence concerning this article should be addressed to Ryan J. Carter, San José State University, Center for Innovation in Applied Education Policy, Lurie College of Education, Sweeney Hall 420, One Washington Square, San Jose, CA 95192-0073. Email: ryanjcarteredd@gmail.com.

Throughout the pandemic, California high school students have endured varying degrees of uncertainty, hardship, and trauma, resulting in an evolving range of student needs (American Academy of Pediatrics [AAP], 2021; Minkos & Gelbar, 2020; Murata et al., 2021; Watson et al., 2022). Students have experienced the pandemic in vastly different ways depending on a variety of intersectional and demographic factors with the most significant impact on students from underrepresented and/or marginalized backgrounds (Azar et al., 2021; Goldhaber et al., 2022; Sullivan et al., 2020). Emerging research has revealed a correlation between the amount of time spent in distance learning and declines in academic achievement, with the most profound impact on students of color and/or students attending high-poverty schools (Goldhaber et al., 2022; Jack et al., 2021). Beyond declines in academic achievement, students have reported significant increases in anxiety, depression, stress, loneliness, chronic absenteeism, and suicidal ideation (AAP, 2021; Gazmararian et al., 2021; Murata et al., 2021).

U.S. public education has long been criticized for its inequities, yet public school campuses also provide some level of equalizing when students are on campus (Downey et al., 2004). While the sudden transition to distance learning during the COVID-19 pandemic spotlighted inequities within educational systems in California, social movements building in tandem with the pandemic such as the Black Lives Matter movement, gained national prominence and created a swelling of demand for social justice and equity throughout societal institutions, including kindergarten through twelfth grade (K-12 education (Sullivan et al., 2020). Many California public school districts responded by instituting equity-oriented goals, curriculum, institutional policy and practices, and state-endorsed systems of support to ensure the success of all students (Largent et al., 2021; Orange County Department of Education [OCDE], 2020). California high school counselors, faced with the dilemma of how to support student needs effectively and equitably with limited resources during COVID-19, have looked to the state as well as professional organizations for guidance on best support practices.

Multi-tiered support frameworks, such as Multi-Tiered System of Supports (MTSS) and Multi-Tiered, Multi-Domain System of Supports (MTMDSS) existed prior to COVID-19 and have emerged as prominent pandemic response recommendations (Sailor et al., 2021). Multi-tiered intervention models are designed to offer a systemic, data-driven, and equity-oriented approach to supporting students by deploying varying degrees of intervention intensity, based on student need (Belser et al., 2016). Within a three-tiered structure, *Tier 1* is considered a *universal supports* intervention because all students in a school receive it. *Tier 2* and *Tier 3* interventions are progressively more targeted and intensive for a smaller portion of students whose needs are not fully met by a lower tier. Multi-tiered models are currently being implemented by school districts throughout California as preventative frameworks that focus on distributing limited school resources equitably to ensure the success of all students (California Department of Education [CDE], 2022; OCDE, 2020; Sullivan et al., 2020).

MTSS/MTMDSS Prominence

Multi-tiered support frameworks have been gaining ground in public education nationally throughout recent decades. The 2015 signing into law of the Every Student Succeeds Act (ESSA) specifically called for MTSS in public education (Braun et al., 2018). Since then, multiple states have instituted statewide MTSS models, including California. Prior to the arrival of COVID-19, the California Department of Education (CDE) embraced MTSS as “essential” and adopted a state MTSS model (CDE, 2022; Sailor et al., 2021).

Recent state legislation has intensified MTSS prominence within school districts throughout California. California Assembly Bill (AB) 104 and Senate Bill 828 funded a “scaling-up” of MTSS (CA SUMS) to encourage school districts throughout the state to “establish and align school-wide, data-driven systems of academic and behavioral supports to more effectively meet the needs of California’s diverse learners in the most inclusive environment” (OCDE, 2020, p. 2). California’s MTSS model is designed to align with California’s Eight State Priorities, Local Control Funding Formula (LCFF), and Local Control Accountability Plan (LCAP), which allows for California MTSS to be the “driver” of a statewide system of support (OCDE, 2020).

MTSS, which focuses on data-driven academic and behavioral support interventions, is intended to be a schoolwide system, drawing from the contributions of administrators, teachers, counselors, staff, families, and the community (Belser et al., 2016; Bohanon et al., 2021; Sailor et al., 2021). As MTSS has become increasingly prevalent in California public schools, school counselors have considered how to align their curriculum and standards with the MTSS framework. In 2017, Dr. Tricia Hatch, a founding research contributor to the ASCA National Model for school counseling, introduced a school counseling-specific delivery model that aligns the three main competency domains of the ASCA National Model (academic development, social-emotional development, and college and career readiness development) with MTSS.

Multi-Tiered, Multi-Domain System of Supports (MTMDSS) provides school counseling programs a way to directly align their standards and competencies within a multi-tiered structure (Hatch et al., 2019). In alignment with MTSS, MTMDSS operates within the same three-tier intervention structure and emphasizes data-driven decision making and evidence-based practices in core instruction to address the needs of all students (Hatch et al., 2019). Unlike MTSS, which focuses only on the two domains of academic and behavioral support, MTMDSS also includes multi-tiered interventions focused on the college and career readiness domain of the ASCA National Model. Thus, MTMDSS was created to provide a supplement to the MTSS model by delivering interventions in all three ASCA National Model domains, across all three tiers (Geiger & Oehrtman, 2020). Since its arrival, ASCA and California’s state charter of ASCA, the California Association of School Counselors (CASC), included MTMDSS as a delivery model recommendation for MTSS within school counseling programs (ASCA, 2020; CASC, 2020).

Recommendations for California school counselors to utilize MTSS/MTMDSS have increased since the arrival of the COVID-19 pandemic. In the fall of 2022, California’s state legislature passed Assembly Bill (AB) 2508, with the governor signing it into law and California Education Code shortly thereafter. California Education Code (1987/2022) calls on public school counseling programs throughout California to “work within multi-tiered systems of support that use multiple data sources to monitor and improve pupil behavior, attendance, engagement, and achievement” (California Education Code, §49600, [c3]). School counseling professional standards and competencies, guided by national and state professional organizations, have also increasingly called for school counselors to align their roles with multi-tiered support frameworks since COVID-19. For example, in 2023, CASC adopted a new set of school counseling standards calling upon California school counselors to design and implement counseling programs that align with California’s MTSS framework (CASC, 2023). Recommendations for school counselors to utilize MTMDSS to deliver multi-tiered school counseling support interventions presuppose their belief in these systems, which holds implications for successful implementation.

School Counselor Beliefs and Behavior

School counselor beliefs about school counseling program components and supports are an important construct to consider, as they may impact the likelihood of successful implementation (Dahir, 2004; Hatch & Chen-Hayes, 2008; Pérusse et al., 2004; Sink & Yillik-Downer, 2001). Sink and Yillik-Downer (2001) examined 1,033 school counselors' views on comprehensive guidance and counseling programs across western, midwestern, and southern regions of the U.S. and revealed a moderate relationship between the level of importance school counselors ascribe to their program and how involved they become with the development and implementation of it (Lauterbach et al., 2018). The 2001 study that guided the development of the ASCA National Model for School Counseling drew upon the theoretical underpinnings of Ajzen's Theory of Planned Behavior, which posits that beliefs can predict and influence behavior (Ajzen & Fishbein, 1980; Hatch & Chen-Hayes, 2008). Ajzen's tested theory (Knabe, 2012; Teo et al., 2016) has also informed the construct development of this study.

National Events of Educational Significance, Beliefs, and School Counseling Supports

This study sought to explore beliefs within the context of a major event of educational significance (the COVID-19 pandemic). Epstein's social cognition-oriented Cognitive-Experiential Self-Theory (CEST) posits that beliefs are influenced by significant events (Epstein, 2003). Multiple studies have tested this theory, including Fletcher (1988) and Catlin and Epstein (1992), which demonstrated associations between significant events and impacted beliefs.

Examination of the historical arc of the school counseling profession reveals abundant literature demonstrating the connection between national events of educational significance, school counselor beliefs, and the changing landscape of school counseling supports (Lauterbach et al., 2018). The direction and prominence of school counseling in U.S. education throughout its first half-century of existence was influenced by significant national events including: the industrial revolution which prompted a focus on vocational guidance around the early 1900s; the emergence of cognitive development, psychological theory, and humanistic movements of the 1920s, 1930s, and 1940s which led to student-centered support related to personal needs; and the launch of Sputnik and the subsequent National Defense Act of the 1950s, which resulted in increased investment in education, nearly doubling the number of school counselors in the U.S. (Aubrey, 1977; Blake, 2020; Gladding, 2013; Lambie & Williamson, 2004; Shertzer & Stone, 1981; Williams & Lair, 1991). A wave of professionalization in the 1980s led to early counselor education standards and the accreditation body, The Counsel for Accreditation of Counseling and Related Educational Programs (CACREP) and ASCA, which gave increasing visibility, legitimacy, and direction to the profession (Gladding, 2013; Schweiger et al., 2007).

The standardization and accountability movement in U.S. education throughout the late 1990s and early 2000s, and including the 2001 No Child Left Behind (NCLB) Act, influenced the beliefs of ASCA members, who saw a need for a set of national standards and a standardized school counseling model that could measure the outcomes and impact of school counseling programs on student development and achievement (Campbell & Dahir, 1997; Hatch & Chen-Hayes, 2008). In 1995, ASCA deployed a survey instrument to 2,000 members to measure beliefs about the need for standardization, as well as identification of standards, priorities, and best practices. In 1997, ASCA created its inaugural set of national school counseling standards developed with the input of school counselor attitudes and beliefs (Campbell & Dahir, 1997). In 2001, ASCA again sought the beliefs of school counselors as it set out to create a national school counseling model guided by standards and competencies-based curriculum, as well as data-supported outcomes

measurement. The School Counseling Program Component Scale (SCPCS), which aimed to measure school counselor beliefs about the proposed components of the forthcoming ASCA National Model, was deployed to 3,000 school counselors throughout the

U.S. The SCPCS served as a primary data source in the development and finalization of the inaugural ASCA National Model for School Counseling launch in 2003 and has been redeployed to re-evaluate how those beliefs have evolved over time and with changes in education (Hatch & Chen-Hayes, 2008; Hatch et al., 2015).

School Counselor Beliefs on MTSS/MTMDSS

The available literature on school counselor beliefs related to MTSS/MTMDSS frameworks in the U.S. is, at present, limited. Previous studies have explored: school counselor beliefs related to earlier iterations of MTSS, such as Response to Intervention (Patrikakou et al., 2016), counselor knowledge and skills of MTSS frameworks (Olsen et al., 2020), the connection between MTSS training and school counselor perceptions about components of school counselors' roles (Goodman-Scott et al., 2022), and recently, the relationship between school counselor beliefs of the MTSS framework and implementation (Edwin & Bahr, 2023). Literature examining high school counselor beliefs on the importance of MTMDSS framework interventions since the onset of the COVID-19 pandemic, however, is currently unavailable.

Consequently, professional school counseling organizations in the U.S. and California, California Education Code, and California public schools/districts, are recommending and delivering MTSS/MTMDSS frameworks in their pre-pandemic formats without a body of research to assess the extent to which school counselors consider them important since COVID-19. These gaps in the extant literature indicate a need for research in this area. This study took the first steps of measuring high school counselor beliefs on the importance of MTMDSS, by focusing on one of the multiple dimensions that make up the MTMDSS model.

Purpose of the Study

The purpose of this study was to explore and measure California high school counselor beliefs on the importance of MTMDSS universal supports since the onset of the COVID-19 pandemic. The research questions that were addressed in this study are: (1) What are California high school counselors' beliefs about the importance of Multi-Tiered, Multi-Domain System of Supports (MTMDSS) universal supports since the onset of the COVID-19 pandemic?, (2) Which variables, if any, predict/explain these universal supports-based beliefs?, and (3) Can these universal supports-based beliefs be measured reliably, and is there validity evidence to trust the meaningfulness of the scores generated by the Universal Supports Importance Scale (USIS) instrument?

Methods

Design and Instrumentation

This study utilized an explanatory sequential mixed methods design that included two phases of data collection. Mixed methods research is recognized to support deeper insight into a problem or phenomena being studied, by combining data collection and rigorous analysis methods, thereby

bolstering the limits of the methods in isolation (Creswell & Creswell, 2018; Yin, 2006). Utilizing the strengths of these approaches, two instruments were designed, deployed, and used to collect a robust body of evidence, explore a complex construct (school counselor beliefs), and address the research questions presented in this study. An online survey was designed to collect a representative sample of high school counselors' beliefs about MTMDSS universal supports across California; a semi-structured interview protocol was employed to triangulate survey responses and probe for deeper themes with in-depth interviews from survey takers. These instruments were designed to capture descriptive and demographic data, in addition to examining recurring themes and patterns in high school counselor beliefs.

Universal Supports Importance Scale Design (USIS)

The Universal Supports Importance Scale (USIS) was designed to measure high school counselor beliefs on the importance of (Tier 1) universal supports within the MTMDSS model. The scale's design was informed by best practices of education measurement and assessment. By utilizing the National Research Council's Assessment Triangle (NRC, 2001) and Wilson's building blocks of instrument development (Wilson, 2005), evidence to support valid and reliable inferences drawn from the scale was obtained with quantitative methods.

Survey Design. The bulk of the survey was designed to measure how important high school counselors believe universal supports are since COVID-19 (see Table 1). Likert style items with a five-category outcome space ranging from *strongly agree* to *strongly disagree* were divided between four overarching types of school counseling interventions prescribed by the MTMDSS model's (Tier 1) universal supports interventions. The four facets of practice include: (1) school counseling curriculum, (2) individualized student planning, (3) schoolwide events, and (4) parent education events. The second portion of the USIS was designed to examine whether various demographic variables predict or explain school counselor beliefs. Finally, exit interview items were used to check the validity of the USIS responses from a psychometric perspective.

Semi-Structured Interview Protocol

Qualitative data were collected through semi-structured interviews designed to promote a deeper understanding of the quantitative data collected, as well as triangulate the researcher's preliminary analysis and interpretations of the quantitative results (Creswell & Creswell, 2018; Yin, 2006). The interview protocol was designed to align with survey items from the quantitative phase of the study. Consistent with the USIS instrument, the semi-structured interview protocol focused on the same four facets of practice within the MTMDSS model's universal supports. The interview protocol revisited items within Part 1 of the USIS survey instrument, by asking a single question related to the importance of each facet of practice. For example, the interview question for the core curriculum facet of practice was, "As a high school counselor, how important is having a planned school counseling curriculum that reaches all students since COVID-19?" A series of follow-up probes were deployed to elicit narrative explanations with the goal of providing deeper context and understanding of survey participants' cognitive processes, survey responses, and levels of belief. Examples of probes included, "Can you explain?" and "Can you give some examples?" Each interview participant received the same interview protocol.

Participants and Sampling

To measure California high school counselor beliefs on the importance of MTMDSS universal supports, high school counselors actively employed throughout the state of California were invited to participate in the study. Counselors were identified through publicly available high school counselor directories throughout California and the CASC membership directory (the CASC directory listed approximately 515 high school counselors). These multiple sampling sources were utilized to increase participation and encourage a sample that was representative of the statewide composition of high school counselors. Using purposive sampling (Patton, 2105), the researcher considered both school counselor and school community demographics in identifying potential interview candidates for the qualitative phase to ensure that the qualitative participant population would (1) be reflective of diverse statewide school counselor demographics, and (2) align as closely as possible to the sample demographics from the quantitative phase. The demographics considered included gender identity of counselor, race/ethnicity identity of counselor, counselor years of experience in the field, school county type, and school population socio-economic indicators.

Data Collection Procedures

Following institutional review board (IRB) approval, research was conducted during the third year of the COVID-19 pandemic. The 903 school counselors identified as meeting criteria for participation were invited to respond to an anonymous online survey near the start of the 2022/2023 academic year. Preliminary data analysis began once the survey data had been collected, and this informed further refinement of the qualitative phase of the study. A small sample of school counselors were invited to participate in a 30-minute semi-structured interview, which took place remotely. Transcription of interviews preceded qualitative, quantitative, and side-by-side data analyses.

Analyses

Qualitative Data Analysis

Following transcription of the semi-structured interviews, case profiles were created for each of the purposively sampled interviewees with key demographic information and responses for each question. Validity evidence produced by the exit interview items provided a trustworthy measurement to ensure credible results from the qualitative portion of this mixed methods study. Deductive thematic analysis was applied to the response data, using a coding system developed based on the predetermined facets of practice, as well as recurring emergent thematic patterns within interviewee responses (Braun & Clarke, 2006). Codes were applied to excerpts manually and using Dedoose software to identify each theme in the content analysis of the data as well as facilitate quantitative and qualitative side-by-side data analysis.

Quantitative Data Analysis

Descriptive statistics analysis was performed in SPSS Statistics (Version 28) to observe frequencies for all survey items as well as demographic items. Item response models were then fit

to the survey responses to obtain fit indices, including item “difficulties” and person “endorsability” estimates, on a unidimensional scale using ConQuest (Adams et al., 2020; Wilson, 2005). Wilson (2005) notes that both of these parameters in a Rasch model are meant to represent the probable locations of survey respondents’ willingness to endorse a particular statement on the USIS scale. A logit value is assigned based on the ConQuest estimation procedures. Three linear regression models were then applied to the data utilizing SPSS to explore the potential relationship between the dependent response variable (school counselor beliefs) and the independent explanatory variables (such as years of experience in the field, gender, or urbanicity of school district). In total, seven explanatory variables were used in differing combinations within the different linear regression models: (1) urbanicity of school community, (2) percentage of students who qualify for free and reduced lunch (socioeconomic indicator), (3) number of years worked as a school counselor, (4) professional membership in CASC, (5) gender identity of school counselor, (6) race/ethnicity identity of school counselor, and (7) age of school counselor. In all three models, the dependent variable was the degree of school counselors’ belief in the importance of MTMDSS universal support interventions, as measured by the USIS. Collinearity diagnostics were also run to examine Variance Inflation Factor (VIF) effects, if any.

Evidence of Validity and Reliability to Support Scale Uses

Checking for validity and reliability of the USIS was a central focus of this study. Systematic evidence was collected to eliminate or reduce, where possible, threats to meaningful and dependable scale score interpretations. This was critical in the development of the USIS, to ensure that the instrument measured what it claims to measure, consistently and dependably.

Evidence for USIS Scale Validity. The USIS was developed utilizing several strategies as checks for content validity. Content validity evidence was collected through construct maps and expert panel reviews during the development of the items design (Wilson, 2005). Response process validity evidence was collected and examined through a panel think aloud protocol and the survey’s exit item questions. Item Response Theory (IRT) Analyses, Wright maps, and Differential item functioning (DIF) analysis were utilized to produce internal structure validity evidence and confirm alignment between construct maps and the survey’s items design (Wilson, 2005).

Evidence for USIS Scale Reliability. Internal consistency data were collected to explore and understand the reliability of the survey instrument. Two internal consistency coefficients, Cronbach’s alpha and Person separation, were generated to document the reliability of the instrument. In classical test theory, Cronbach’s alpha (1951) is accepted as an indicator of internal consistency, particularly with polytomous response data, as was used in this study. In Rasch IRT modeling, a comparable indicator of internal consistency is person separation reliability (Wright & Masters, 1982).

Results

Participant Characteristics

Participant demographics were central to this study, as they played a key role in addressing the study’s second research question. The 101 participants who completed the entire USIS survey were

highly educated professional school counselors (99% earned master's degrees or higher), predominantly (89%) working in comprehensive California public high schools. Most respondents (78.2%) were female and 21.8% were male. Respondents' ages varied, with 65% between the ages of 30-49 years old. White school counselors made up a slight majority of the respondents at 53.5%. Hispanic or Latino/a/x school counselors were 36.6%. The majority of respondents (57.9%) had more than ten years of experience working as a school counselor, nearly 20% had between 5-9 years, and 22.6% had fewer than five years of experience in the field. The majority (58.8%) of high schools were located in suburban counties, while 22.5% were located in urban counties and 18.6% were located in rural counties. Respondents served a diverse range of students across socioeconomic indicators. Table 2 presents a summary of the personal demographics of the school counselors who participated in the survey. Table 3 presents a summary of the school community demographics identified by the school counselors who participated in the survey.

Among the six participants who were interviewed for the qualitative phase of this study, four were female and two were male. Three of the participants identified as Hispanic or Latino/a/x, two as White, and one as Black/African American. The reported number of years working in the field of school counseling were: 1 year, 3 years, 6 years, 10 years, 16 years, and 23 years. Half of the participants were active members of ASCA, and one was a member of CASC. All six of the interview participants worked at comprehensive public high schools, with a distribution of urbanicity and socioeconomic school profiles that aligned with the larger, quantitative sample.

Dimensionality of School Counselor Beliefs on Universal Supports Facets

Table 4 contains a summary of results from Part 1 of the USIS which measured school counselor beliefs about the importance of MTMDSS universal supports since COVID-19. As the summary shows, there was a high rate of agreement with all USIS items within the four universal supports facets of practice. This resulted in a distribution of responses, with over 75% of responses falling into the *agree* or *strongly agree* outcome spaces for all 21 items across the four facets (school counseling curriculum = 85% or more of responses, individualized planning = 80% or more of responses, schoolwide events = 75% or more of responses, and parent education events = 75% or more of responses). *Neutral* responses were low overall, with no more than 13% of responses falling into this outcome space across all/any items and facets. *Disagree* responses were sparse (no more than 5% of responses) on each item across all facets of practice. None of the items in any facet received *strongly disagree* responses. The median scores for each ordinal type item are reported in Table 4.

Overall, the semi-structured interview responses reflected the frequencies and ranges of beliefs observed in the survey response data throughout each facet. There was relatively strong alignment between participants' survey responses and their semi-structured interview responses for each facet of practice. The interview participants described school counseling curriculum, individualized planning, schoolwide events, and parent education events facets of universal supports as being "important," "very important," "critical," and "essential." Taken together, these statements suggest a pattern of high levels of belief in the importance of MTMDSS universal supports. As was the case in the survey results, there were no strong disagreements within any facet amongst the interviewees. Figure 1, Figure 2, Figure 3, and Figure 4 present side-by-side analyses of the variation in responses on the importance of each respective facet of practice, as sampled from survey items and the primary interview question for each facet.

Follow-up probes initiated by the researcher revealed additional context and depth to

counselors' degree of beliefs. This included additional levels of enthusiasm, neutrality, and skepticism. Figure 5 demonstrates a range of interviewees' beliefs within each facet.

Additionally, two new themes emerged from the interview responses. First, a pattern of conflict and dissonance within interviewees' beliefs of overall importance of an intervention emerged repeatedly from the interviews. For example, one interviewee described a school counseling curriculum as "definitely important," but also expanded on the dissonance between her beliefs and perceived realities of practice since the arrival of the pandemic.

I don't know if it's been long enough for us to really be able to think about all those things. I think we're still in this stage of trying to get back to something normal. I think last year, being our first year back on campus, it was just kind of like a 'what are we doing?' type of thing. So, it's definitely important, but probably like a 5 out of 10 right now. It's definitely important, but I don't know how that's really been the priority.

A second recurring emergent theme revealed by the interviews was the immediate need for school counseling interventions to address new student needs since COVID-19. The most prominent needs that emerged from these conversations were (1) the need for students to establish/re-establish personal connections within their school community, (2) the need for prioritizing equity within school counseling services, (3) the overwhelming need for student mental health and wellness/SEL support, and (4) the need to address gaps in student learning, motivation, and social-emotional skills upon returning from distance learning. For example, one interviewee shared the need at her school for mental health support since COVID-19.

Living through the pandemic. . . There's more of an urgency to it [individualized planning], because it's also addressing the social-emotional piece. Yes, social- emotional. In the last two years, it has been essentially what I do. I'd say almost 90% of my day and it's become higher-level. I would say my typical day consists of students suffering from major depression, generalized anxiety, panic attacks where students are unable to get out of bed, chronic absenteeism, students that have experienced sexual assault—it's just been constant. I have several students hospitalized. So, yes, it's the social-emotional needs, I can't even describe how much this has grown. I've always thought it [individualized planning] was important, but for different reasons—to provide students with agency, and, that they're able to make these decisions for themselves, and know the ins-and-outs of how to make that all happen. But since COVID, the [4-year] plan is actually being used to address social-emotional consequences of the pandemic, like anxiety. . . and so we started doing 4-year planning with ninth graders again this school year . . .and I can't imagine not doing them. They are critical right now.

Factors Influencing School Counselor Beliefs

Three separate regression analysis models were utilized to address this study's second research question and explore the different possible interactions between predictor variables and the outcome variable. Table 5 demonstrates the effect of explanatory variables for the second regression model. All three regression analyses revealed no statistically significant relationships between the explanatory variables and school counselor beliefs at the $\leq .05$ level. Thus, it is not reasonable to conclude from these analyses that any of the variables measured predict or explain

the degree of school counselor beliefs on the USIS. Both models produced low VIF levels of less than 2.5, an acceptable threshold according to conservative research authorities (Allison, 1999; 2012; Johnson et al., 2018). This suggests that there were no problems with multicollinearity in these multiple linear regression analyses.

USIS Validation Findings

Content Validity Evidence

Construct maps (Wilson, 2005) provide a model for the construct being measured and are designed to ensure an instrument's items align with the range or continuum of the construct. Construct maps developed for this study produced a visual representation and guiding framework for the construct being measured (degree/range of school counselor belief in the importance of universal supports) by the USIS (see Figure 6). The USIS items design was aligned to the construct maps and items were reviewed repeatedly, at each stage of development, by a panel of school counseling experts (who were not participants in the study). This ongoing and iterative review process led to several improvements of the USIS items leading up to its deployment.

Response Process Validity Evidence

The exit interview section of the USIS revealed that 100% of the school counselors who completed the USIS responded to all exit interview questions, 100% of the respondents reported that they had enough time to complete the survey and 87% found the questions to be clear. The panel think aloud protocol, conducted prior to the deployment of the USIS to study participants, consisted of three current California high school counselors, who went through the survey item- by-item and offered their interpretations, concerns, and suggestions for improving the items in an iterative process with each other and the researcher. The evidence document produced from the panel think aloud was triangulated by the study's expert panel as an additional validity checkpoint.

Internal Structure Validity Evidence

The Wright Map. The Wright map was generated with ConQuest software and represents the unidimensional scale of the USIS. Wright maps visually display evidence of a measurement scale's range of responses and are useful in detecting poor item fit (Wilson, 2005). Figure 7 presents this study's Wright map. The left side of the Wright map represents USIS respondents at various levels of belief and is referred to as person proficiencies. The right side of the Wright map represents the probability of individual USIS items to be endorsed by respondents at each belief logit level, referred to as item thresholds. The distribution of respondent and item locations is on a single logit scale. The relationship between the left and right side of the Wright map indicated that the respondents were not covered across their entire range by the item thresholds, particularly on the higher end of the school counselor belief logit scale. In particular, approximately 95 (83%) of the respondents were 50% or more likely to achieve the third step (.2 = *strongly agree*) on the most difficult to endorse items. Conversely, the first step (.0 = *disagree – neutral*) on all 21 items was 50% or more likely to be achieved by all respondents with the lowest proficiency. The second step (.1 = *agree*) was 50% or more likely to be achieved by nearly all respondents with the lowest proficiency. This distribution indicates that overall, most respondents found most items easy to

endorse.

Model Fit. Additional internal structure validity evidence was collected through a partial credit model to generate an item fit analysis. The results and analysis of the weighted mean square fit and t statistics support the finding that all USIS instrument items fit the partial credit model well. Table 6 provides the parameter estimates, standard errors, and mean square weighted fit and t statistics for the partial credit model applied to the USIS instrument data. All of the USIS item's mean square values are within the commonly accepted lower (0.75) and upper (1.33) boundaries (Adams & Khoo, 1996; Wilson, 2005). Thus, no misfitting items were identified.

IRT Analysis. The general results of the item analysis suggest that individual items across the USIS instrument were generally stable and consistent. The analysis of the mean person locations for all items indicated that 20 of the 21 items displayed well-functioning mean locations and one item displayed a lack of consistency. Overall, the results of the item analysis for the USIS instrument show that all but one of the 21 individual items are consistent with the instrument as a whole. This result means that, on the whole, the USIS instrument is consistently and meaningfully measuring participants' beliefs about the importance of universal supports.

DIF Analysis. Differential item functioning (DIF) occurs when different groups of examinees with similar overall ability have, on average, systematically different responses to a particular item (American Educational Research Association [AERA] et al., 2014). Gender and ethnicity DIF analyses of belief surveys matter because this study's instrument is intended to measure diverse respondents in California's school counselor population in an unbiased manner. The gender DIF model examined the following terms: (a) item, (b) gender, and (c) item and gender by step. The ethnicity DIF model examined the following terms: (a) item, (b) ethnicity, and (c) item and ethnicity by step.

To decide whether any of these differences are evidence for DIF, confidence intervals at the 95% level were constructed around the male and female identified (gender) and White and Underrepresented Groups-identified (ethnicity) subgroup thresholds to determine whether they overlap. According to Wilson (2005), any differences can be subjected to the "effect size" test. A standard of effect size for Rasch models is reported: a logit difference value less than .426 is "negligible," a value between .426 and .638 is "intermediate," and a value over .638 is "large" (Paek, 2002). For this study, gender DIF was negligible (-0.095). Similarly, the ethnicity DIF was negligible (-0.006). The effects of random chance alone may explain the difference in scores between gender subgroups and ethnicity subgroups of respondents on the USIS instrument.

The results of the partial credit model fit, Rasch IRT item analysis, and DIF analysis provide strong evidence for the quality of the overall item design for the USIS instrument. The scaling properties of the instrument have been demonstrated through these procedures, and the survey is reliable and valid for its intended research purposes. More validity evidence (AERA et al., 2014) can be gathered over multiple occasions and for other uses (e.g., diagnostic purposes or formative interventions in professional development settings) in the future, but the USIS scale for research purposes shows it is an unbiased indicator and measure of school counselor beliefs.

Reliability Evidence

Cronbach's alpha and Person separation coefficients were generated to document the reliability of

the USIS instrument. Table 7 shows the internal consistency reliability coefficients for the USIS instrument. The reliability evidence based on internal consistency coefficient values shown in Table 7 suggests that the USIS is a reliable indicator ($r = .85$) of high school counselor beliefs and supports the scale's limited use in future research.

Discussion

This study's findings for the first research question suggest that school counselors believe in the importance of the interventions within the primary tier of the MTMDSS framework. Given the increased prominence of multi-tiered supports, high levels of school counselor belief on the importance of MTMDSS universal supports is not surprising. Within these enthusiastic beliefs, however, two themes emerged from participant narratives.

First, there is complexity and a degree of cognitive dissonance with the subjects' reported beliefs about the realities of counseling and their aspirational ideals, not fully captured by the USIS instrument (Festinger, 1957). This study's interview participants described examples of how they struggle to connect their professional ideals (e.g., that the recommended MTMDSS universal supports are "important," "necessary," "essential") to the realities they perceive within their practices since COVID-19. This dissonance tracks with recent research in California suggesting that educators who believe strongly in MTSS importance, nonetheless, still struggle to prioritize its implementation during/since COVID-19 (California MTSS et al., 2021). As one school counselor put it, "I think it's really important. But it's one thing to believe that something is important on its face, and it's another to make it happen once my school day begins."

The second theme relates to the current and emerging literature on the impacts of the COVID-19 pandemic on student needs and counselors' roles in addressing these needs. Although not the focus of this study's research questions, the school counselors interviewed shared immediate intervention areas of focus needed in their practices to support the student needs that they have encountered since the arrival of COVID-19. The most prominent needs that emerged from these conversations were (1) the need for students to establish/re-establish personal connections within their school community, (2) the need for prioritizing equity within school counseling services, (3) the overwhelming need for student mental health and wellness/SEL support, and (4) the need to address gaps in student learning, motivation, and social-emotional skills upon returning from distance learning. The school counselors interviewed for this study described these needs as impactful on their practices as well as their beliefs about why the facets of universal supports are important since COVID-19.

Three separate linear regression analysis models were utilized in this study to address the second research question and explore the different possible interactions between demographic predictor variables and school counselor beliefs on the importance of MTMDSS universal supports. All three analyses revealed no statistically significant relationships between the explanatory variables and school counselor beliefs. Thus, it is our conclusion that within this study's findings, none of the variables studied predicted or explained school counselors' universal supports-based beliefs.

To address the third research question, the USIS instrument underwent a robust IRT focused validation study. This was based on evidence drawn from the Standards for Educational and Psychological Testing (AERA et al., 2014). The USIS displayed strong evidence for overall quality of valid and reliable score interpretation, offering promise for future diagnostic and formative uses.

Limitations

There are several limitations with the results from this study on school counselors' beliefs about the importance of universal supports during the pandemic and in its aftermath. Although this study was able to recruit a relatively representative sample of California high school counselors across school community, professional, and personal demographic indicators, a larger sample size would be helpful in improving the generalizability of the findings. This study employed a cross-sectional rather than longitudinal sample of beliefs of school counselors working at the high school level, within the state of California. A stratified random sampling method embedded in longitudinal research may be useful in examining how school counselor beliefs evolve over time in response to particular periods or events. Lastly, despite strong evidence for the validity and reliability of the measurement tool, the use of the USIS tool in this sample tended to register endorsement for positive (*agree* and *strongly agree*) elements of the scale. In addition to sample size and other factors related to the study design, this may account for failure to identify predictive relationships through regression analyses.

Recommendations

These preliminary findings yielded three recommendations for further study. First, future research is needed to explore the complex, and at times dissonant relationship between school counselors' ideals and beliefs about MTSS/MTMDSS, their perceived and experienced realities of practice since COVID-19, and their implementation of multi-tiered support frameworks. Second, future research is needed to examine the longitudinal impacts of events (e.g., dynamic and evolving intervention needs since COVID-19) and their relationship to school counselors' MTSS/MTMDSS beliefs. Both state and district/school site level policy priorities and implementation strategies are likely nested in school counselor belief systems. The degree to which belief about the MTMDSS framework is viable, useful, and/or efficacious for its stakeholders over time is worth investigating and each may impact recruitment, selection, and retention of the present and future school counselor workforce long after the pandemic. Lastly, to be more assured that the USIS instrument captures a full range of school counselor beliefs on the importance of MTMDSS universal supports, it may benefit from some enhancements prior to future deployment, such as: (a) exploring different point configurations of the outcome space, (b) exploring alternatives to Likert-style items that may more effectively draw out variation such as Guttman (1944) items, and (c) exploring alternative IRT measurement models to apply to the USIS survey data, such as unfolding models which have been found to be useful in studies of individual attitudes and preferences (Andrich, 1988; Liu & Chalmers, 2018; Wilson, 2005; Yuan et al., 2022).

Conclusions

This study explored and measured California high school counselor beliefs on the importance of MTMDSS universal supports since COVID-19. Understanding high school counselor beliefs has implications for effective implementation of universal supports, in part, because these beliefs are a proxy for degree of engagement with good practices. Having a reliable instrument that fares well in robust validation protocols aids researchers and evaluators who examine what makes a difference in successful MTMDSS universal supports initiatives. It also can directly aid

practitioners and preparers who value beliefs inventories as part of a process of self-and peer assessment.

Findings from this specific sample reveal high levels of belief in the importance of MTMDSS (Tier 1) universal supports since COVID-19 among California's school counselor population. Future studies should include other states in the U.S. that are engaging in transformational assistance for at-risk students. As multi-tiered supports become increasingly embedded in national educational policy and standards, ongoing research with the USIS instrument can help inform the school counseling profession about factors influencing practitioners' beliefs.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Conflict of Interest Statement

The authors have no conflicts of interest to disclose.

References

- Adams, R. J., & Khoo, S. T. (1996). ACER Quest: The interactive test analysis system. Australian Council for Educational Research (ACER). <https://research.acer.edu.au/measurement/3/>
- Adams, R. J., Wu, M.L., Cloney, D., Berezner, A., & Wilson, M. (2020). *ACER ConQuest: Generalised item response modelling software* (Version 5.29) [Computer software]. Australian Council for Educational Research. <https://acer.org/au/conquest>
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. American Educational Research Association.
- Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Prentice Hall.
- Allison, P. (1999). *Multiple regression: A primer* (1st ed.). Pine Forge Press.
- Allison, P. (2012, September 10). *When can you safely ignore multicollinearity?* Statistical Horizons. Retrieved April 10, 2023, from <https://statisticalhorizons.com/multicollinearity/>
- American Academy of Pediatrics. (2021, October 19). *AAP-AACAP-CHA declaration of a national emergency in child and adolescent mental health*. Retrieved May 2, 2023, from <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/>
- Andrich, D. (1988). The application of an unfolding model of the PIRT type to the measurement of attitude. *Applied Psychological Measurement*, 12(1), 33–51. <https://doi.org/10.1177/014662168801200105>
- American School Counselor Association. (2019). *ASCA national model: A framework for school counseling programs* (4th ed.). American School Counselor Association.
- American School Counselor Association. (2020, December). American School Counselor Association. <https://www.schoolcounselor.org/>
- Aubrey, R. F. (1977). Historical development of guidance and counseling and implications for the future. *Personnel and Guidance Journal*, 55(6), 288–295.

- <https://doi.org/10.1002/j.2164-4918.1977.tb04991.x>
- Azar, K., Lockhart, S. H., Shen, Z., Romanelli, R., Brown, S., Smits, K., & Pressman, A. (2021). *Disparities among racially/ethnically marginalized groups in the COVID-19 pandemic persist regardless of statewide shelter-in-place policies: An analysis from northern California*. Oxford University Press. <https://doi.org/10.1093/aje/kwab191>
- Belser, C. T., Shillingford, M. A., & Joe, J. R. (2016). The ASCA model and a multi-tiered system of supports: A framework to support students of color with problem behavior. *The Professional Counselor*, 6(3), 251–262. <https://doi.org/10.15241/cb.6.3.251>
- Blake, M. K. (2020). Other duties as assigned: The ambiguous role of the high school counselor. *Sociology of Education*, 93(4), 315–330. <https://doi.org/10.1177/0038040720932563>
- Bohanon, H. S., Wu, M.J., Kushki, A., LeVesseur, C., Harms, A., Vera, E., Carlson-Sanei, J., & Shriberg, D. (2021). The role of school improvement planning in the implementation of MTSS in secondary schools. *Preventing School Failure: Alternative Education for Children and Youth*, 65(3), 230–242. <https://doi.org/10.1080/1045988X.2021.1908215>
- Braun, G., Kumm, S., Brown, C., Walte, S., Tejero Hughes, M., & Maggin, D. M. (2018). Living in tier 2: Educators' perceptions of MTSS in urban schools. *International Journal of Inclusive Education*, 24(10), 1114–1128. <https://doi.org/10.1080/13603116.2018.1511758>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Bryman, A., & Cramer, D. (2011). *Quantitative data analysis with IBM SPSS 17, 18, & 19: A guide for social scientists* (1st ed.). Routledge.
- California Education Code §49600 (1987 & rev. 2022). <http://leginfo.legislature.ca.gov/>
- California MTSS, Huff, B., Blanchard, S., Berdan Lozano, J., Sarkissyan, T., Fischbacher, L., & Cazares Minero, M. (2021). *Pilot phase 2A participation year 2 executive summary: CA Multi-Tiered System of Support (CA MTSS) pilot program*. UCLA Center for the Transformation of Schools. <https://transformschoools.ucla.edu/research/ca-mtss-pilot-phase-2a-participation-year-2-summary/>
- Campbell, C., & Dahir, C. A. (1997). *The national standards for school counseling programs*. American School Counselor Association.
- California Association of School Counselors. (2020). California Association of School Counselors. <https://schoolcounselor-ca.org/>
- CASC. (2023). California standards for the school counseling profession 2023. California School Counselor Association. <https://irp.cdn-website.com/7b4c483c/files/uploaded/CASC+Standards+2023+FINAL+-+Digital+Copy.pdf>
- Catlin, G., & Epstein, S. (1992). Unforgettable experiences: The relation of life events to basic beliefs about self and world. *Social Cognition*, 10(2), 189–209. <https://doi.org/10.1521/soco.1992.10.2.189>
- California Department of Education. (2022, March 28). *Multi-Tiered System of Supports*. <https://www.cde.ca.gov/ci/cr/ri/>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334. <https://doi.org/10.1007/BF02310555>
- Dahir, C. A. (2004). Supporting a nation of learners: The role of school counseling in educational reform. *Journal of Counseling & Development*, 82(3), 344–353.

- <https://doi.org/10.1002/j.1556-6678.2004.tb00320.x>
- Downey, D. B., von Hippel, P. T., & Broh, B. A. (2004). Are schools the great equalizer? Cognitive inequality during the summer months and the school year. *American Sociological Review*, 69(5), 613–635. <https://doi.org/10.1177/000312240406900501>
- Edwin, M., & Bahr, M.W. (2023). Multi-Tiered System of Supports—Interventionist Beliefs Scale: Development and initial validation with school counselors. *Journal of Psychoeducational Assessment*, 417(7), 748–763. <https://doi.org/10.1177/07342829231184293>.
- Epstein, S. (2003). Cognitive experiential self-theory of personality. T. Millon & M. Lerner (Eds.), *Handbook of psychology: Personality and social psychology* (5th ed., p. 159-184). John Wiley & Sons.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford University Press.
- Fishbein, M., & Ajzen, I. (1975). *Beliefs, attitudes, intentions, and behavior*. Addison-Wesley.
- Gazmararian, J., Weingart, R., Campbell, K., Cronin, T., & Ashta, J. (2021). Impact of COVID-19 pandemic on the mental health of students from 2 semi-rural high schools in Georgia. *Journal of School Health*, 91(5), 356–369. <https://doi.org/10.1111/josh.13007>
- Geiger, S. N., & Oehrtman, J. P. (2020). School counselors and the school leadership team. *Professional School Counseling*, 23(1), 1-9. <https://doi.org/10.1177/2156759X20903566>
- Gladding, S. T. (2013). *Counseling: A comprehensive profession* (7th ed.). Pearson.
- Goldhaber, D., Kane, T., McEachin, A., Morton, E., Patterson, T., & Staiger, D. (2022). *The consequences of remote and hybrid instruction during the pandemic* (Working Paper No. 30010). National Bureau of Economic Research. <https://doi.org/10.3386/w30010>
- Goodman-Scott, E. C., Edirmanasinghe, N. A., Moe, J., & Boulden, R. (2022). Assessing the influence of multi-tiered systems of support on school counselors' perceptions of school counseling activities: Results of a national study. *Professional School Counseling*, 26(1), 1–10. <https://doi.org/10.1177/2156759X221138232>
- Guttman, L., (1944). A basis for scaling qualitative data. *American Sociological Review*, 9(2), 139–150. <https://doi.org/10.2307/2086306>
- Hatch, T., & Chen-Hayes, S. F. (2008). School counselor beliefs about ASCA national model school counseling components using the SCPCS. *Professional School Counseling*, 12(1), 34–42. <https://doi.org/10.1177/2156759X0801200104>
- Hatch, T., Poynton, T. A., & Perusse, R. (2015). Comparison findings of school counselor beliefs about ASCA national model school counseling program components using the SCPCS. *SAGE Open*, 1–10. <https://doi.org/10.1177/2158244015579071>
- Hatch, T., Triplett, W., Duarte, D., & Gomez, V. (2019). *Hatching results for secondary school counseling: Implementing core curriculum, individual student planning, and other tier one activities*. Corwin.
- Jack, R., Halloran, C., Okun, J. C., & Oster, E. (2021). *Pandemic schooling mode and student test scores: Evidence from US states* (NBER Working Paper No. 29497). <https://doi.org/10.3386/w29497>
- Johnston, R., Jones, K., & Manley, D. (2018). Confounding and collinearity in regression analysis: A cautionary tale and an alternative procedure, illustrated by studies of British voting behaviour. *Quality & Quantity*, 52, 1957–1976. <https://doi.org/10.1007/s11135-017-0584-6>
- Knabe, A. P. (2012). *Applying Ajzen's theory of planned behavior to a study of online course adoption in public relations education* (186) [Doctoral dissertation, Marquette

- University]. e-Publications@Marquette.
https://epublications.marquette.edu/dissertations_mu/186
- Lambie, G. W., & Williamson, L. L. (2004). The challenge to change from guidance counseling to professional counseling: A historical proposition. *Professional School Counseling, 8*(2), 124–131. <https://www.jstor.org/stable/42732614>
- Largent, E. A., Persad, G., Mello, M. M., Wenner, D. M., Kramer, D. B., Edmonds, B. T., & Peek, M. (2021). Incorporating health equity into COVID-19 reopening plans: Policy experimentation in California. *AM J Public Health, 111*(8), 1481–1488.
<https://doi.org/10.2105/AJPH.2021.306263>
- Lauterbach, A. A., Harrington, K., Yakut, A. D., & Krezmien, M. (2018). School counselor knowledge, beliefs, and practices related to the implementation of standards-based comprehensive school counseling in the United States. *Journal of School-Based Counseling Policy and Evaluation, 1*(1), 1–16. <https://doi.org/10.25774/hhc-x195>
- Liu, C.-W., & Chalmers, R. P. (2018). Fitting item response unfolding models to Likert-scale data using mirt in R. *PLoS ONE, 13*(5). <https://doi.org/10.1371/journal.pone.0196292>
- Minkos, M. L., & Gelbar, N. W. (2020). Considerations for educators in supporting student learning in the midst of COVID-19. *Psychology in the Schools, 58*(2), 416–426.
<https://doi.org/10.1002/pits.22454>
- Murata, S., Rezeppa, T., Thoma, B., Marengo, L., Krancevich, K., Chiyka, E., Hayes, B., Goodfriend, E., Deal, M., Zhong, Y., Brummit, B., Coury, T., Riston, S., Brent, D. A., & Melhem, N. M. (2021). The psychiatric sequelae of the COVID-19 pandemic in adolescents, adults, and health care workers. *Depression and Anxiety, 38*(2), 233–246.
<https://doi.org/10.1002/da.23120>
- National Research Council. (2001). *Knowing what students know: The science and design of educational assessment*. National Academy Press. <https://doi.org/10.17226/10019>
- Orange County Department of Education. (2020). *Guide to understanding California MTSS*. <https://ocde.us/MTSS/Documents/CA%20MTSS%20Guide.pdf>
- Olsen, J., Parikh Foxx, S., & Flowers, C. (2020). A confirmatory factor analysis of the school counselor knowledge and skills survey for multi-tiered systems of support. *The Professional Counselor, 10*(3), 376–392. <https://doi.org/10.15241/jo.10.3.376>
- Paek, I. (2002). *Investigations of differential item functioning: Comparisons among approaches, and extension to a multidimensional context* (3082356) [Doctoral dissertation, University of California, Berkeley]. ProQuest. <https://escholarship.org/uc/item/3kq7v1rr>
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage.
- Patrikakou, E., Ockerman, M. S., & Feiker Hollenbeck, A. (2016). Needs and contradictions of a changing field: Evidence from a national response to intervention implementation study. *The Professional Counselor, 6*(3), 233–250. <https://doi.org/10.15241/ep.6.3.233>
- Pérusse, R., Goodnough, G. E., Donegan, J., & Jones, C. (2004). Perceptions of school counselors and school principals about the national standards for school counseling programs and the transforming school counseling initiative. *Professional School Counseling, 7*(3), 152–161. <https://www.jstor.org/stable/42732557>
- Sailor, W., Skrtic, T. M., Cohn, M., & Olmstead, C. (2021). Preparing teacher educators for statewide scale-up of multi-tiered system of support (MTSS). *Teacher Education and Special Education, 44*(1), 24–41. <https://doi.org/10.1177/0888406420938035>
- Savitz-Romer, M., Rowan-Kenyon, H. T., Nicola, T. P., Alexander, E., & Carroll, S. (2021).

- When the kids are not alright: School counseling in the time of COVID-19. *AERA Open*, 7(1), 1–16. <https://doi.org/10.1177/23328584211033600>
- Schweiger, W. K., Henderson, D. A., McCaskill, K., Clawson, T. W., & Collins, D. R. (Eds.). (2007). *Counselor preparation: Programs, faculty, trends* (13th ed.). Routledge.
- Shertzer, B., & Stone, S. C. (1981). *Fundamentals of guidance* (4th ed.). Houghton Mifflin.
- Sink, C. A., & Yillik-Downer, A. (2001). School counselors' perceptions of comprehensive guidance programs: A national survey. *Professional School Counseling*, 4(4), 278–288. <https://www.jstor.org/stable/42732267>
- Sullivan, A., Miller, F., McKeve, N., Muldrew, A., Hansen-Burke, A., & Weeks, M. (2020). Leveraging MTSS to advance, not suppress, COVID-related equity issues. *Communiqué*, 49(1), 1–29. <https://link.gale.com/apps/doc/A635067587/AONE?u=anon~869834d1&sid=googleScholar&xid=55cf1340>

Table 1
Survey Items for USIS, Part 1: High School Counselor Beliefs about the Importance of
(Tier 1) Universal Supports

#	Item	Facet
Q1	A districtwide high school counseling curriculum focused on building academic skills delivered to all students is essential since COVID-19.	CC
Q2	A districtwide high school counseling curriculum focused on graduation requirements delivered to all students is essential since COVID-19.	CC
Q3	A districtwide high school counseling curriculum focused on exploring college and career possibilities delivered to all students is essential since COVID-19.	CC
Q4	A districtwide high school counseling curriculum focused on college admissions preparation delivered to all students is essential since COVID-19.	CC
Q5	A districtwide high school counseling curriculum focused on building social skills delivered to all students is essential since COVID-19.	CC
Q6	A districtwide high school counseling curriculum focused on mental health and well-being delivered to all students is essential since COVID-19.	CC
Q7	Individualized 4-year academic planning for all students is essential since COVID-19.	IP
Q8	Individualized course selection planning for all students is essential since COVID-19.	IP
Q9	Individualized postsecondary planning for all students is essential since COVID-19.	IP
Q10	Individualized academic strengths and interests identification is essential since COVID-19.	IP
Q11	Individualized goal setting for all students is essential since COVID-19.	IP
Q12	District/schoolwide transition-to-high school events are essential since COVID-19.	SE
Q13	District/schoolwide postsecondary pathways events are essential since COVID-19.	SE
Q14	District/schoolwide college fairs are essential since COVID-19.	SE
Q15	District/schoolwide mental health awareness events are essential since COVID-19.	SE
Q16	District/schoolwide cultural diversity education events are essential since COVID-19.	SE
Q17	District/schoolwide parent education events focused on academic support resources are essential since COVID-19.	PE
Q18	District/schoolwide parent education events focused on postsecondary pathways are essential since COVID-19.	PE
Q19	District/schoolwide parent education events focused on college planning are essential since COVID-19.	PE
Q20	District/schoolwide parent education events focused on social-emotional development are essential since COVID-19.	PE
Q21	District/schoolwide parent education events focused on mental health support resources are essential since COVID-19.	PE

Note. Facets: Counseling Curriculum, Individualized Planning, Schoolwide Events, Parent Events)
 (Outcome Space: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree)

Table 2
Survey Participant Demographics

Participant Demographic	Frequency	Percent
Gender		
Female	79	78.2%
Male	22	21.8%
Race/Ethnicity		
Asian	1	1.0%
Black/African American	3	3.0%
Hispanic or Latino/a/x	37	36.6%
White	54	53.5%
Prefer to self-describe: Italian American	1	1.0%
Prefer to self-describe: Middle Eastern	1	1.0%
Prefer not to state	4	4.0%
Age		
Younger than 30	6	5.9%
30–39	32	31.7%
40–49	34	33.7%
50–59	20	19.8%
60–69	7	6.9%
70 or older	1	1.0%
Prefer not to state	1	1.0%
Ever employed as a school counselor in CA		
Yes	101	100.0%
Currently employed as a school counselor in CA		
Yes	101	100.0%
Years worked as a school counselor		
Less than 1 year	6	5.9%
1–4 years	17	16.8%
5–9 years	20	19.8%
10–19 years	37	36.6%
20 years or more	21	20.7%
Highest degree earned		
Bachelor's degree	1	1.0%
Master's degree	99	98.0%
Ed.D. or Ph.D.	1	1.0%
Graduate program CACREP-accredited		
Yes	55	54.5%
No	12	11.9%
I don't know	34	33.7%
ASCA membership		
Yes	67	66.3%
No	34	33.7%
CASC membership		
Yes	54	53.5%
No	47	46.5%

Table 3
Survey Participant School Community Demographics

Participant School Community Demographics	Frequency	Percent
County/Community Type		
Rural	19	18.6%
Suburban	60	58.8%
Urban	23	22.5%
Type of High School		
Comprehensive public high school	90	89.1%
Charter high school	3	3.0%
Continuation or alternative public high school	5	5.0%
Private high school	2	2.0%
Other: COSA (Counselor on special assignment)	1	1.0%
Student Enrollment of School		
300 or fewer	3	3.0%
301-600	6	5.9%
601-1,000	6	5.9%
1,001-2,000	37	36.6%
2,001 or more	49	48.5%
Students Qualify for Free and Reduced Lunch		
10% or less	11	10.8%
11% - 25%	17	16.7%
26% - 50%	23	22.5%
51% - 75%	19	18.6%
More than 75%	32	31.4%
Students in Foster Care		
Less than 1%	45	45.0%
1% - 5%	43	43.0%
6% - 10%	11	11.0%
11% - 25%	1	1.0%
Students Experiencing Homelessness		
Less than 1%	31	31.0%
1% - 5%	50	50.0%
6% - 10%	13	13.0%
11% - 25%	6	6.0%
Students in ELD		
10% or less	40	39.6%
11% - 25%	39	38.6%
26% - 50%	12	11.9%
51% - 75%	9	8.9%
More than 75%	1	1.0%
Student-to-Counselor Ratio		
250-to-1 or lower	9	9.0%
251-to-1 – 609-to-1	87	87.0%
610-to-1 or higher	4	4.0%

Table 4**Summary of Quantitative Findings for USIS Part 1***Facet of Practice 1: School Counseling Curriculum*

Item	Strongly Disagree (0)	Disagree (1)	Neutral (2)	Agree (3)	Strongly Agree (4)	Missing Values	Median
Q1	0 0%	5 4.4%	8 7.1%	31 27.4%	69 61.1%	0 0%	4.0
Q2	0 0%	0 0%	8 7.1%	30 26.6%	75 66.4%	0 0%	4.0
Q3	0 0%	0 0%	5 4.4%	25 22.1%	83 73.5%	0 0%	4.0
Q4	0 0%	3 2.7%	9 8.0%	48 42.5%	53 46.9%	0 0%	3.0
Q5	0 0%	3 2.7%	11 9.7%	26 23.0%	73 64.6%	0 0%	4.0
Q6	0 0%	1 .9%	4 3.5%	21 18.6%	87 77.0%	0 0%	4.0

Facet of Practice 2: Individualized Planning

Item	Strongly Disagree (0)	Disagree (1)	Neutral (2)	Agree (3)	Strongly Agree (4)	Missing Values	Median
Q7	0 0%	6 5.3%	9 8.0%	33 29.2%	64 56.6%	1 .9%	4.0
Q8	0 0%	4 3.5%	12 10.6%	36 31.9%	60 53.1%	1 .9%	4.0
Q9	0 0%	0 0%	8 7.1%	48 42.5%	54 47.8%	3 2.7%	3.0
Q10	0 0%	6 5.3%	12 10.6%	46 40.7%	46 40.7%	3 2.7%	3.0
Q11	0 0%	1 .9%	15 13.3%	45 39.8%	48 42.5%	4 3.5%	3.0

Table 4 (Continued)*Facet of Practice 3: Schoolwide Events*

Item	Strongly Disagree (0)	Disagree (1)	Neutral (2)	Agree (3)	Strongly Agree (4)	Missing Values	Median
Q12	0 0%	0 0%	9 8.0%	44 38.9%	54 47.8%	6 5.3%	4.0
Q13	0 0%	1 .9%	8 7.1%	49 43.4%	49 43.4%	6 5.3%	3.0
Q14	0 0%	4 3.5%	15 13.3%	48 42.5%	40 35.4%	6 5.3%	3.0
Q15	0 0%	0 0%	3 2.7%	35 31.0%	68 60.2%	7 6.2%	4.0
Q16	0 0%	4 3.5%	5 4.4%	37 32.7%	58 51.3%	9 8.0%	4.0

Facet of Practice 4: Parent Education Events

Item	Strongly Disagree (0)	Disagree (1)	Neutral (2)	Agree (3)	Strongly Agree (4)	Missing Values	Median
Q17	0 0%	2 1.8%	5 4.4%	41 36.3%	56 49.6%	9 8.0%	4.0
Q18	0 0%	3 2.7%	8 7.1%	44 38.9%	48 42.5%	10 8.8%	3.0
Q19	0 0%	4 3.5%	11 9.7%	45 39.8%	42 37.2%	11 9.7%	3.0
Q20	0 0%	1 .9%	9 8.0%	37 32.7%	55 48.7%	11 9.7%	4.0
Q21	0 0%	0 0%	5 4.4%	37 32.7%	60 53.1%	11 9.7%	4.0

Table 5**Effect of Explanatory Variables on USIS Scale Scores for Regression Model 2**

Variable	Unstandardize d Regression Coefficient (B)	Standar d Error (B)	Standardize d Regression Coefficient Beta	t	Sig.
(Constant USIS Scale Score)	.950	.530		1.793	.076
Urbanicity of school community	.717	.413	.188	1.737	.086
Percentage of students qualify free/reduced lunch	-.049	.362	-.015	-.134	.894
Years worked as a school counselor	-.017	.511	-.004	-.033	.974
CASC membership	.105	.354	.033	.295	.769
Gender identity of school counselor	.440	.418	.114	1.053	.295
Ethnicity/race identity of school counselor	.017	.353	.005	.048	.962
Age of school counselor	.041	.436	.012	.093	.926

Table 6**Item Parameter Estimates, Standard Errors, and Mean Square Weighted Fit and t Statistics for the USIS Scale**

Items	<u>Variables</u>		<u>Weighted Fit</u>		
	Estimate	Error	Infit Mean Square	Confidence Interval	Infit t
Q1	0.012	0.180	1.05	(0.73, 1.27)	0.4
Q2	-0.396	0.213	1.15	(0.71, 1.29)	1.0
Q3	-0.823	0.258	0.94	(0.68, 1.32)	-0.4
Q4	0.251	0.188	1.14	(0.75, 1.25)	1.0
Q5	-0.007	0.176	1.12	(0.73, 1.27)	0.8
Q6	-0.891	0.260	1.06	(0.65, 1.35)	0.4
Q7	0.185	0.174	1.22	(0.74, 1.26)	1.6
Q8	0.300	0.172	1.09	(0.75, 1.25)	0.7
Q9	-0.047	0.216	0.96	(0.74, 1.26)	-0.3
Q10	0.647	0.173	0.89	(0.75, 1.25)	-0.9
Q11	0.523	0.177	1.08	(0.75, 1.25)	0.6
Q12	0.013	0.208	1.05	(0.74, 1.26)	0.4
Q13	0.119	0.209	0.88	(0.74, 1.26)	-0.9
Q14	0.820	0.175	0.99	(0.75, 1.25)	-0.0
Q15	-0.906	0.323	0.98	(0.73, 1.27)	-0.1
Q16	-0.070	0.207	0.96	(0.73, 1.27)	-0.2
Q17	-0.186	0.226	0.95	(0.73, 1.27)	-0.3
Q18	0.292	0.197	0.86	(0.74, 1.26)	-1.1
Q19	0.611	0.183	0.88	(0.74, 1.26)	-0.9
Q20	0.043	0.201	1.03	(0.73, 1.27)	0.3
Q21	-0.489*	0.259	0.97	(0.72, 1.28)	-0.1

Table 7
Internal Consistency Reliability Coefficients

Scale	Coefficient Values I	
	Cronbach's alpha	Person Separation
USIS	0.84	0.847

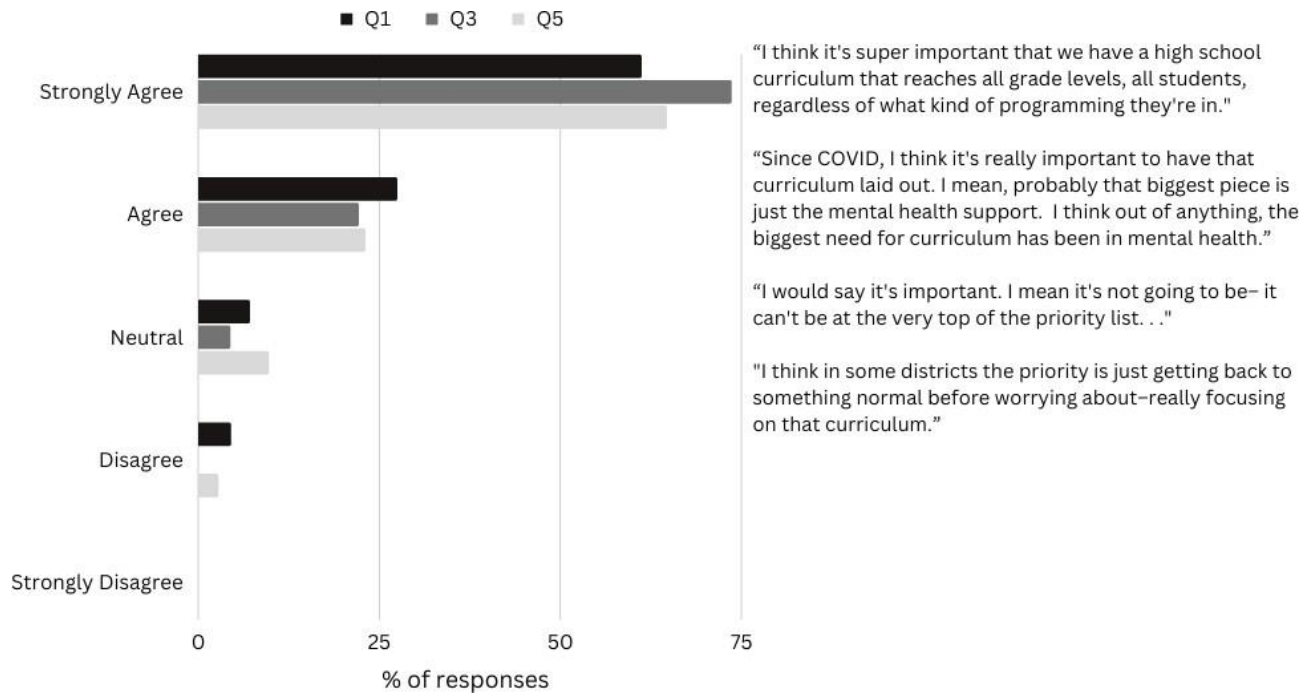


Figure 1

Side-by-Side Analysis of the Importance of School Counseling Curriculum Delivered to All Students

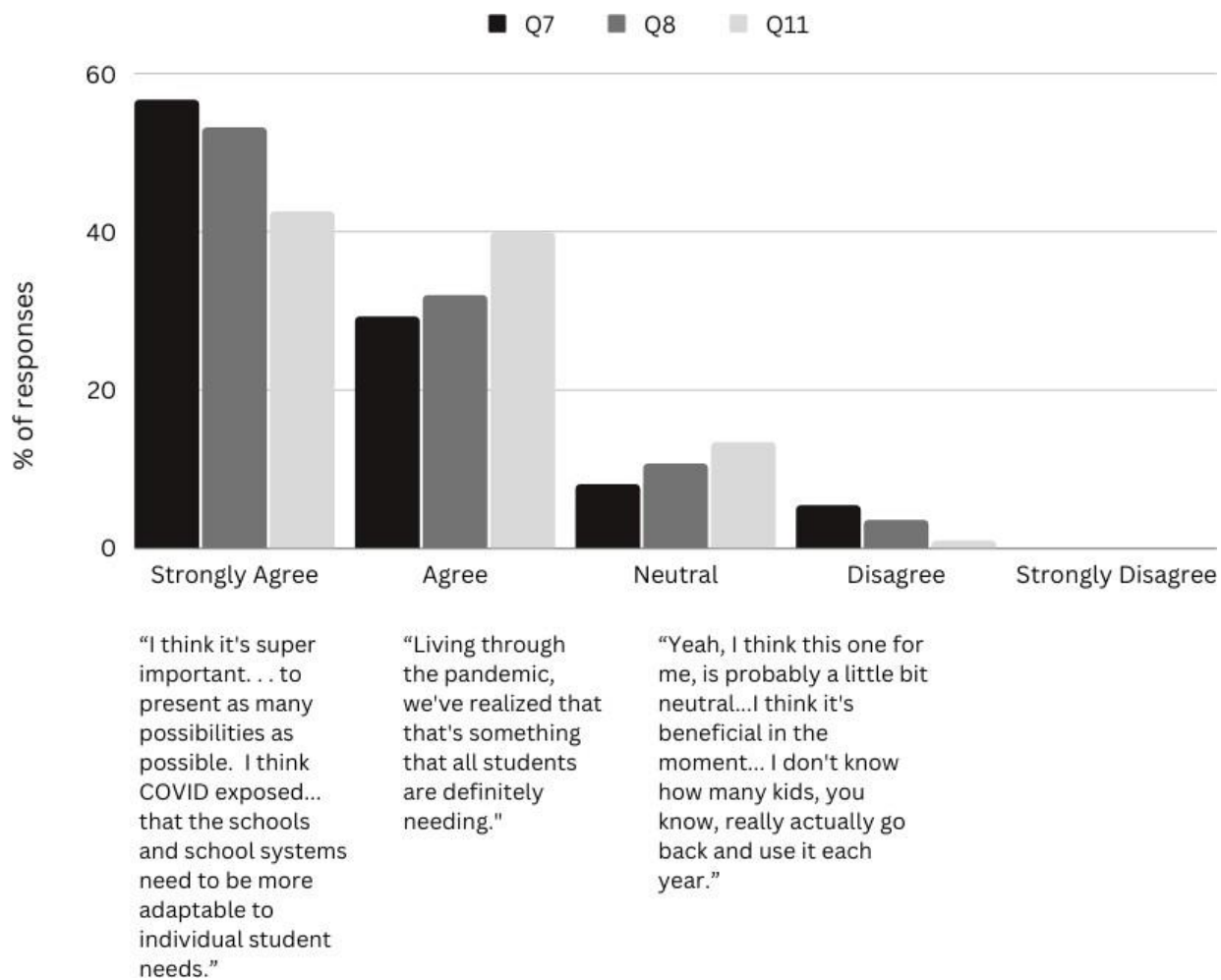
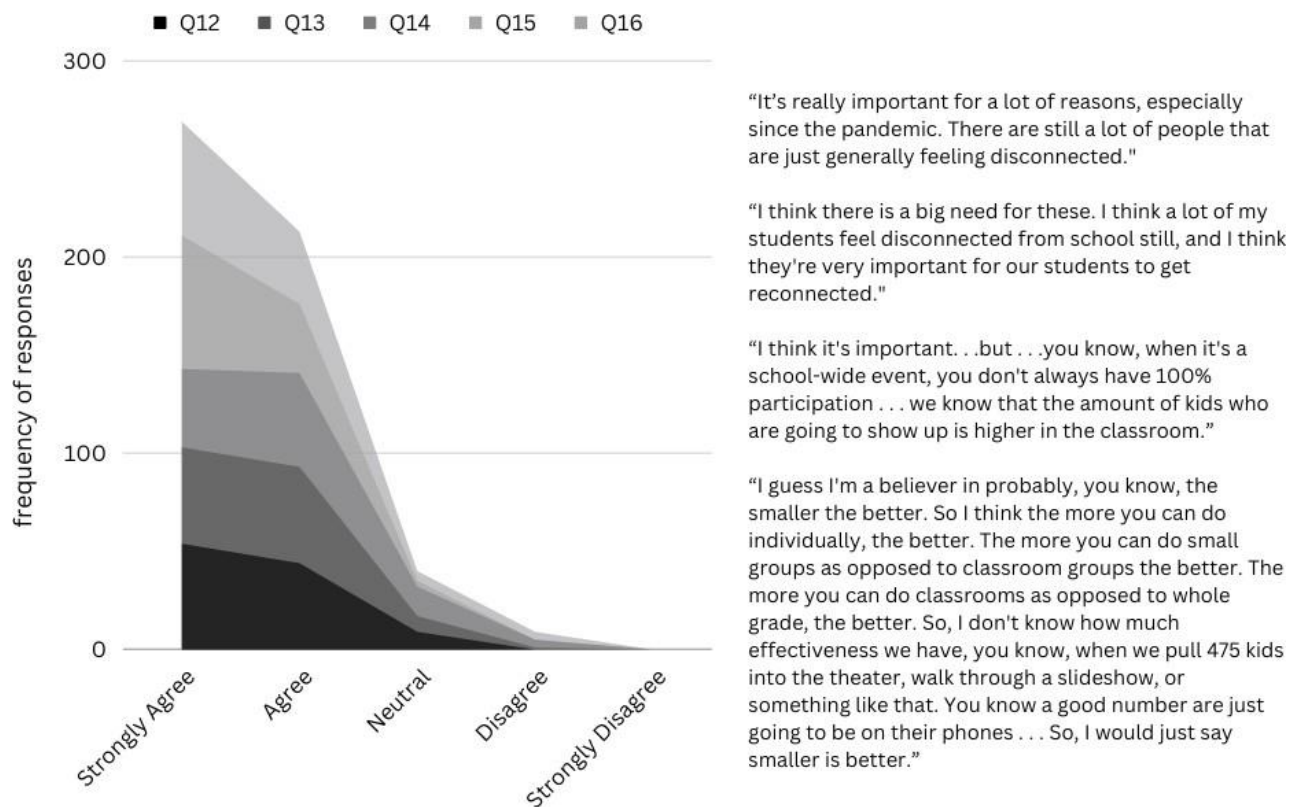
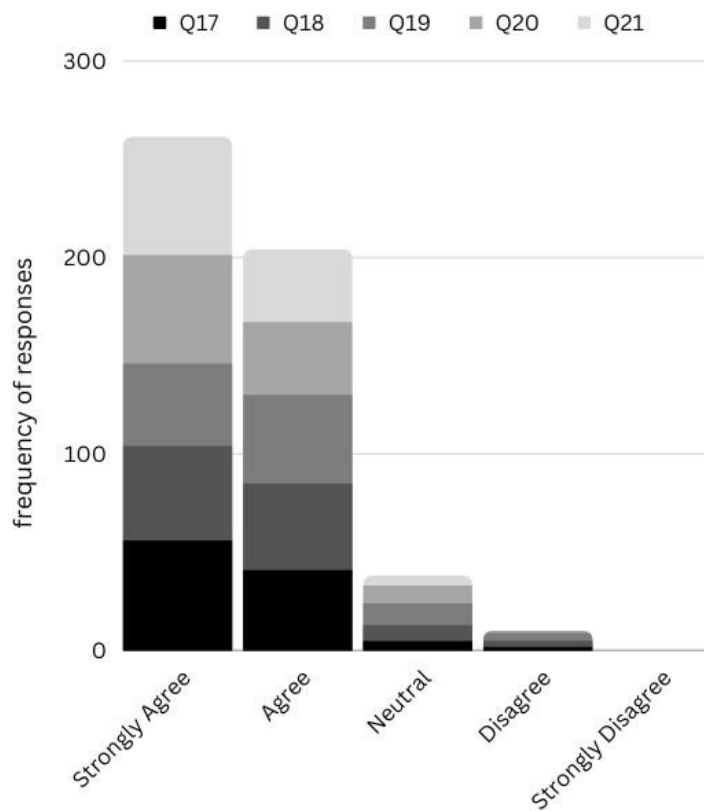


Figure 2

Side-by-Side Analysis of the Importance of Individualized Student Planning Delivered to All Students

**Figure 3**

Side-by-Side Analysis of the Importance of Schoolwide Events Delivered to All Students



"Absolutely, the economic disparity [makes these events important]. We have a really interesting population where half of my families are wealthy and the other half are struggling to get by. . . And these events are in some ways an equalizer. . . That is absolutely needed. Always, and especially now, since COVID."

"It's important . . . parents are such a valuable resource, and in order to, you know, just get to a multi-tiered system of support, teachers and counselors— we can't do anything without parent buy-in. And really, it's a beautiful thing when we have all three factors or stakeholders coming in together to support the student. Because if we're all on the same page, it's like the student can't fall through the cracks."

"I think those needs have definitely increased. The hard part is if we try to move away from that [college focus] as a counseling group, and do more in that [wellness, social-emotional] space we get a little bit of heat and push back . . . So it's tough to, you know, work around that sometimes."

"I definitely see the value and the importance of it. I just don't know how important parents think they are in the scheme of everything else they're dealing with during or since COVID. I just don't know."

Figure 4

Side-by-Side Analysis of the Importance of Parent Education Events

Strongly Believe/ Believe	School Counseling Curriculum <i>"I think what makes it really important is making sure that all students are getting the information. All students deserve access to grade-specific information, and the best and most comprehensive way to get it is to provide it through classroom curriculum. Otherwise, you risk missing some students, some groups. That's an important part of the MTSS Tier 1 process, the lessons that you provide."</i> Individualized Planning <i>"Living through the pandemic, we've realized that that's something that all students are definitely needing. We are getting so many questions, just a lack of understanding of"</i>
Neutral	School Counseling Curriculum <i>"I would say it's important. I mean it's not going to be— it can't be at the very top of the priority list, because you just really don't have time to put all your resources into that, you know, because of the emergency room type setting here."</i> Individualized Planning <i>"Yeah, I think this one for me, is probably a little bit neutral . . . I would say it's aspirational. I think it's beneficial in the moment, because it gets them to think about planning, not just for the sophomore year, but also options that will be available to them as juniors and seniors. The challenge for us has been coming back to it. We really have not figured out a way, or you know, a method for continually returning to that with each scheduling cycle. So it's useful if they go back to it. I don't know how many kids, you know, really actually go back and use it each year."</i> Schoolwide Events <i>"I think it's important. . .because obviously the information that we're sharing we feel is important. . .you know, when it's a school-wide event, you don't always have 100% participation . . .So that's why I think we've gone to the length of—we go into the classrooms so that way we can reach them. And then there's way, way less students that don't get it because we are able to do that. And so that's kind of been like something that we've done, as opposed to 'okay, we're gonna have these workshops'. I mean, we still have open workshops and things like that. But we know that the amount of kids who are going to show up is higher in the classroom."</i> Parent Education Events <i>"The turmoil or whatever you want to call it—I think those needs have definitely increased. The hard part is if we try to move away from that [college focus] as a counseling group, and do more in that [wellness, social-emotional] space and less of you know, college info nights, and come learn more about the SAT and ACT and test optional and blah blah blah, we get a little bit of heat and push back of like, 'Stay in your lane. . . that's the information we want.' So it's tough to, you know, work around that sometimes."</i>

Figure 5

High School Counselor Range of Beliefs in Importance of Universal Supports Facets of Practice

Skeptical	School Counseling Curriculum <i>"I don't know if it's been long enough for us to really be able to think about all those things. I think we're still in this stage of like trying to get back to something normal. I think last year, being our first year back on campus, it was just kind of like a "what are we doing?" type of thing. So it's definitely important but like, probably like a 5 out of 10 right now. It's definitely important, but I don't know how that's really been the priority. I think in some districts the priority is just getting back to something normal before worrying about—really focusing on that curriculum."</i> Individualized Planning None Schoolwide Events <i>"I guess I'm a believer in probably, you know, the smaller the better. I think the more you can do individually, the better. The more you can do small groups as opposed to classroom groups the better. The more you can do classroom as opposed to whole grade, the better. I don't know how much effectiveness we have, you know, when we pull 475 kids into the theater, walk through a slideshow, or something like that. You know a good number are just going to be on their phones. They're not necessarily going to be processing or gaining from the instruction or the service that we're providing. So I would just say smaller is better."</i> Parent Education Events <i>"I would say, yes, it's important. It's important, but at the same time I feel like it's really only the parents who are involved or privileged, and the students that have parents who are involved that attend these things right now. And so, I don't know that it's really marketing itself for students whose parents maybe have a language barrier or maybe they work 2 or 3 jobs, and they're just not able to spend that time like some other parents are . . . Also, this is the first year back [since COVID] that I've done parent events, and a lot of people still don't want to go around large crowds. So we're seeing very small numbers of parents when we hold our events still. So I think, yeah, it is important as a counselor. We need to get out there, but I think people are still a little bit afraid or they have a lot going on . . . I definitely see the value and the importance of it. I just don't know how important parents think they are in the scheme of everything else they're dealing with during or since COVID. I just don't know."</i>
-----------	---

Figure 5 (Continued)

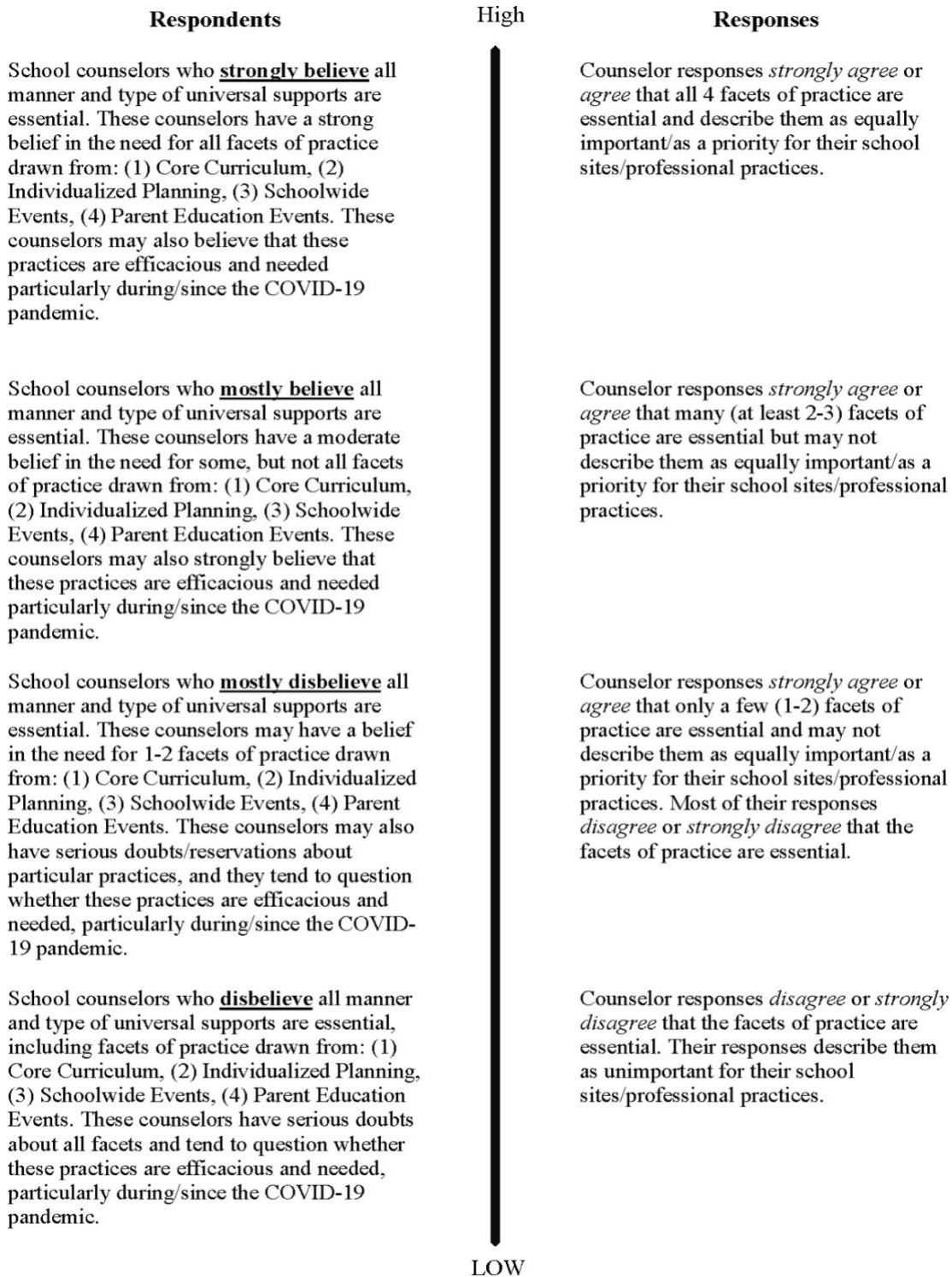


Figure 6

Construct Map of school counselors' range of beliefs in the importance of universal supports

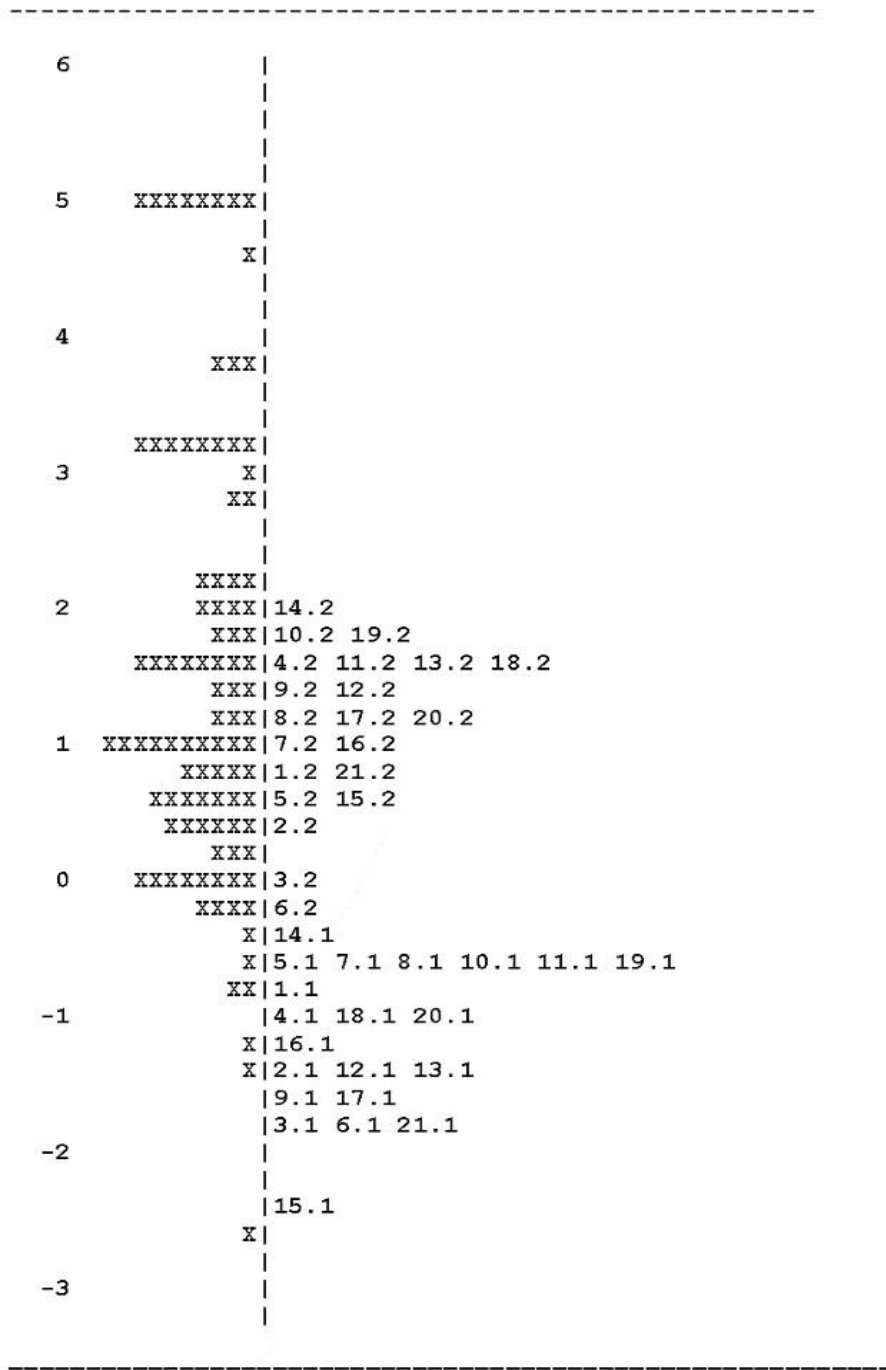


Figure 7

Wright Map of Person Proficiencies and Item Thresholds for the USIS Scale

Each X on the Wright map represents 1.2 cases