WHAT’S WELL-BEING? OPERATIONALIZING AND DEVELOPING A TEACHER WELL-BEING INTERVENTION DURING THE COVID-19 PANDEMIC

AN ABSTRACT

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BY

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Abstract

Teachers faced unprecedented challenges during the COVID-19 pandemic, including coping with the stressor of the novel virus, adjusting and incorporating evolving Centers for Disease Control (CDC) guidelines for in-person teaching, balancing an increased workload, and concerns over personal and family safety and well-being (Horace Mann, 2020; CDC, 2020). Not surprisingly, teachers have reported increased stressors, including increased workload, stress and burnout (Zhou & Yao, 2020), poor work-life balance, and decreases in support (Braun et al., 2020) and overall well-being (Eryilmaz & Basal, 2020). This study developed from a school-based consultation relationship, focused on supporting teachers. The study utilized a mixed methods single-case approach to co-construct a definition of teacher well-being and develop and progress monitor well-being interventions. Using ecological conceptual framework (1977) and the Participatory Culture Specific Intervention Model (PCSIM: Nastasi et al., 2004), this study integrated teacher voices in conceptualizing and operationalizing well-being, developing school-based interventions, and data analyses. Focus groups were conducted to develop a shared understanding of well-being. Data were used to develop a quantitative measure for biweekly ratings of well-being to monitor teacher well-being and intervention effectiveness. Visual analyses and Tau-U effect sizes were used to examine the relationship between school-based interventions and well-being. Results demonstrated immediate positive effects on teacher well-being following implementation of school-based interventions. Furthermore, these effects were sustained across timepoints. Importantly, qualitative data supported quantitative results.

Keywords: teacher, wellbeing, stress, supports, COVID, coronavirus, COVID-19, 2019-ncov, school-based mental health, mental health, supports, wellbeing, staff
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Dedication

To my family: This is for you.
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To my parents Rebecca Jimenez - Gutierrez and Joaquin Gutierrez, I would not be here if it were not for your unwavering support. Mom, I remember all of the time you spent at our school, taking us to libraries, sports practices, music lessons, and all of the bedtime stories. Old man, I remember sitting on your workbench in the garage reading aloud as you helped me sound out words, Saturday’s working on math, and all of the museums, hiking, and bike rides. Without you both, Diego and I would not be where we are today.

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To Chloe, it was the best of times; it was the worst of times… but we’re done! I most treasure our summer swimming, international doughnut day scavenger hunt, and you sharing Moss Point with me. Come August, let’s see what else is in store.

To Ms. Georgann and Mr. Darren Dufour, you were my home away from home. Thank you for inviting me into your home, welcoming me into your family, and introducing me to pistachio cake. You made my last few years in New Orleans some of the best times in the city.

To Reed, thank you for supporting me, going on adventures in New Orleans and Omaha, and teaching me how to use Excel and Visio. Without your help this dissertation would still be in progress! I look forward to where we go next!
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Introduction

The novel coronavirus emerged in Wuhan China, December 2019 (Lin, 2020; Zhang et al., 2020), identified as the COVID-19 virus by the World Health Organization (World Health Organization, 2020) and declared a pandemic by March 2020. In response, the United States implemented a series of mitigation efforts including “stay at home order,” requiring non-essential workers to stay in their homes and reduce contact with others, aimed at reducing the spread of the virus (Centers for Disease Control and Prevention: CDC, 2020). As a result, school buildings around the world were closed to protect students, staff and teachers. In response, teachers were required to quickly pivot to online instruction and emergency remote teaching (Hodges et al., 2020; Lepp et al., 2021).

This abrupt shift required teachers to quickly adapt. Specifically, teachers were required to continue educating their students, using new technologies and instructional methods, and began to support the well-being of students, families and their communities (Betz, 2020; Kaden, 2020; Lester et al., 2020; Stachteas & Stachteas, 2020). Although it is too early to assess long-term impacts of COVID-19, researchers are assessing the acute effects of the pandemic.

Overwhelmingly, teachers reported increased levels of stress and workload when adjusting to the use of technology- remote teaching and on-line instruction- including
concern over students accessing the curriculum at home (Cullinane & Montacute, 2021; Schuck & Lambert, 2020). Gudmundsdottir and Hathaway (2021) found 92% of US teachers did not have previous online teaching experience which contributed to increased levels of stress during the transition to on-line teaching. Trust and Whalen (2020) found teachers lacked both preparation and support in using technology to design quality instruction during the transition to distance learning and that 61% of teachers felt overwhelmed with all the online learning tools and resources available.

In addition to technological stressors, teacher well-being and work-related stress have also been addressed in pandemic related literature. Kim and Asbury (2020, p. 1070) described the insecurity at the beginning of the distance learning period as “like a rug had been pulled from under you”. In addition to the stress experienced during the transition period, teachers reported the overall increase in workload (MacIntyre et al., 2020) as the main source of stress. Results indicated that the loss of control over work, the blurred lines between home and work, and the irregular working hours were stressful for teachers when working from home. As found by Trust and Whalen (2020), teachers perceived work stress as related to insufficient preparation for online teaching and lack of support for teachers’ online teaching. Furthermore, the addition of new responsibilities in the workplace impacted their personal lives negatively, reducing their work-life balance, and time with their social supports, affecting overall teacher well-being (MacIntyre et al., 2020; Trust & Whalen, 2020).

Teacher well-being has emerged as a prominent area of study in recent years, given that teacher attrition is an ongoing and steadily increasing issue. Ingersoll and
colleagues (Ingersoll, 2001; Ingersoll et al., 2012) found that up to 30% of elementary and secondary school teachers leave the profession after three years of service and up to 50% leave after five years. Additionally, some studies suggest that up to 40% of teachers leave the profession in under five years of teaching (Kilgallon et al., 2008; Le Cornu, 2013; Pillay et al., 2005). Furthermore, Moeller et al. (2018) found 85% of teachers reported that work-life balance was affecting their ability to teach. Reducing the impacts of work stress in teaching has been the focus of much research in education.

Furthermore, teacher well-being has also been identified as a predictor of student well-being and academic achievement (Kim, 2020; Primdahl et al., 2021; Sadler et al., 2009). Teachers with deficits in well-being (i.e., poorer stress management and emotion regulation) are likely to be less emotionally available to their students, experience greater stress in teacher-student interactions (Burić et al., 2019), and have students who report decreased well-being and academic achievement (Aloe et al., 2014; Babinčáková & Bernard, 2020; Bibou et al., 1999; Steinhardt et al., 2011;). Importantly, student outcomes can also negatively impact teacher well-being, creating a cyclical relationship between teacher and student well-being. This teacher-student dynamic is fluid, with well-being and student outcome varying over time and impacting the relationship between teachers and their students (Gist & Mitchell, 1992; Kellam et al., 1994) and adding to existing stress and burnout.

Teacher well-being has been studied from the perspective of burnout (Acton & Glasgow, 2015), described as experiencing exhaustion, cynicism, and inefficacy resulting from chronic emotional and interpersonal job stressors (Braun et al., 2020; Maslach et al.,
Studies have demonstrated that teachers’ feelings of burnout are associated with multiple negative outcomes including irritability, low self-efficacy, diminished job performance, attrition, and peer burnout (Brouwers & Tomic, 2000; Herman et al. 2018). Prior to the pandemic, teacher burnout was steadily increasing (Braun et al., 2020; Burić et al., 2019); however, since the pandemic, teachers have reported overall increases in workload, and professional and personal stressors, leading to higher levels of overall stress and burnout. The current study seeks to understand how teachers conceptualize and operationalize teacher well-being and their experiences during the pandemic. The project aims to understand how teachers conceptualize well-being and how their experiences during the COVID-19 pandemic affected their understanding of well-being; specifically, how teachers coped with changing health and safety guidelines, and adapted to new teaching modes and technologies. Additionally, the results of the study will be disseminated to the participating school to guide further decision making.

**Conceptual Framework**

The fundamental framework for the current study is rooted in guiding principles of the Participatory Culture-Specific Intervention Model (PCSIM; Nastasi et al., 2004) which is theoretically grounded in Bronfenbrenner’s (1977) Ecological Systems Theory and utilizes mixed methods research to facilitate implementation, adaptation, and cultural grounding within a systems framework.

*Ecological Systems Theory.* Bronfenbrenner’s (1977) Ecological Systems Theory emphasizes the importance of intersecting levels of context in the life of an individual, specifically here, teachers. The theory describes the individual at the center, surrounded
by the immediate influences of family, classroom, and co-workers, including fellow
educators, staff, and administrators, which make up the microsystem. The mesosystem
forms the interactions and connections between microsystems. The next layer of
influence is the exosystem, comprised of structures that indirectly influence the
individual such as a partner’s workplace or child’s school. The outer layer, or
macrosystem, is made up of larger societal and cultural norms and expectations. The
chronosystem refers to the context of time and acknowledges the impacts of time period
and historical context. The Ecological Systems Theory acknowledges that individuals
influence and are influenced by institutions and individuals outside of themselves. In the
case of teacher well-being, the teacher’s experiences with family and the workplace
affect functioning across contexts and may be further influenced by societal and cultural
zeitgeist. Throughout the pandemic, teachers were tasked with balancing responsibilities
across microsystems while navigating the larger societal and governmental mandates.
Professionals need to be able to integrate the different perspectives, values, and
experiences of the systems surrounding teachers to understand the multiple factors
influencing their well-being and help develop interventions that can be used across
contexts.

**PCSIM.** The PCSIM (Nastasi & Hitchcock, 2015) is a 10-phase research-
intervention framework to facilitate culturally and contextually relevant systems change
through collaborative consultation with key stakeholders. The 10 phases include system
entry (phases 1-3), model development (phases 4-6), program development (phases 7-9),
and program continuation (phase 10). Table 1 specifies the phases, activities, and expected outcomes using PCSIM to develop programming in schools.

Figure 1

*Participatory Culture-Specific Intervention Model (PCSIM) Applied to Creating Programs to Support Teacher Well-Being*

<table>
<thead>
<tr>
<th>PCSIM Phase</th>
<th>Activities</th>
<th>Expected Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System Entry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Phase 1</strong></td>
<td>Examine existing theory, research, practice &amp; policy related to promoting teacher well-being</td>
<td>Reviewing literature, school practices, and relevant policy documents (e.g., school, state, national) Identify evidence-based practices for supporting teacher well-being, reviewing existing school-wide policies and procedures for teachers (e.g., coaching, professional development, support for well-being).</td>
</tr>
<tr>
<td><strong>Phase 2</strong></td>
<td>Learning the culture of the school and teacher population</td>
<td>Data collection (e.g., observation, interviews, questionnaires, archival documents) about values, norms, and practices related to psychological well-being of teachers Begin to understand the culture within the context and its influence on stakeholders including policies and programming that help promote teacher well-being.</td>
</tr>
<tr>
<td><strong>Phase 3</strong></td>
<td>Forming partnerships with school stakeholders</td>
<td>Develop partnerships and relationships with stakeholders, outline parameters of partnership Develop partnership with stakeholders to build acceptable and sustainable programming for teacher well-being.</td>
</tr>
<tr>
<td><strong>Model Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Phase 4</strong></td>
<td>Identifying school’s goal(s) related to teacher well-being</td>
<td>Using information gathered in System Entry, and in collaboration with partners, identify goals related to supporting teacher well-being Shared goals related to teacher well-being to guide work in subsequent phases</td>
</tr>
<tr>
<td><strong>Phase 5</strong></td>
<td>Conducting formative research to understand personal and contextual factors related to teacher well-being</td>
<td>Gathering data on key concepts, existing systems and its needs, and available resources. Data collection through observations, interviews, questionnaires, rating scales and other norm-referenced measures, archival data, school records. Comprehensive overview of culture and context specific key constructs (e.g., teacher stressors, supports, overall well-being) related to promoting teacher well-being; Includes identifying system needs, and resources implement and evaluate the program</td>
</tr>
</tbody>
</table>
**Phase 6**  
**Developing context- and culture-specific (local) model for promoting teacher well-being**  
In collaboration with partners, use information from Phases 1-5 to develop a culture- and context-specific model for supporting teacher well-being  
Develop a model for teacher well-being that will guide subsequent activities

**Program Development**

**Phase 7**  
**Developing teacher well-being program**  
Using the model developed in Phase 6, design a teacher well-being program that includes teacher support activities, changes in policies and practices; implementation, monitoring, and evaluation of teacher well-being  
Develop a detailed plan (e.g., activities, those responsible, timeline, resources) for program implementation including the roles of administration, staff training, consultation process, implementation, evaluation, adaptations, securing resources

**Phase 8**  
**Adapting teacher well-being program to varying needs**  
With partners, plan adaptations for using data relevant to the teacher population, and in consultation with implementers. Adaptation continues during Phase 9 using formative data.  
Program plans to fit across individuals, culture, contexts within the school; with attention to maintaining core components.

**Phase 9**  
**Implementing and evaluating teacher well-being program**  
Program implemented by school team, using plans from Phase 7/8; review of formative data to monitor implementation and make adaptations; collect evaluation data using plans developed in Phase 7; consider needs and resources related to sustainability and capacity building.  
Changes in school practices and policy that support improving teacher well-being; evidence of program success; data base for evaluation and dissemination.

**Phase 10**  
**Building capacity and translating program**  
Phases 1-9 facilitate sustainability and capacity building, through staff training, ensuring acceptability and working with administrators to ensure resources, and program effectiveness.  
Plans for program sustainability including development of manual to facilitate program continuation and translation.

Table adapted from Nastasi et al., 2004; Bell et al., 2015

Based in Participatory Action Research (PAR), PCSIM emphasizes the role of relationships and collaboration with stakeholders throughout the consultation process to ensure acceptability, including addressing the degree of cultural fit between the intervention and context, linking theory and research to co-construct and implement culture-specific and sustainable interventions. The PCSIM is iterative and often returns to previous phases, when needed, and may at times, include simultaneously occurring
phases. The key elements include the involvement of key stakeholders as partners throughout the process, as depicted in Figure 2. The current project has been developed in collaboration with an elementary charter school as part of an ongoing school-university partnership to support psychological well-being within the system using PCSIM.

![Figure 2: The model includes 10 phases of program development, starting from existing research, theory, practice, and policy and concludes with capacity building and translation. The process is iterative and recursive and involves continual reflective application of research to inform program design, implementation, adaptation, and evaluation. The goal of PCSIM is to develop acceptable, sustainable, and culturally grounded (e.g., culturally constructed or culture-specific) interventions in partnership with key stakeholders (e.g., researchers, developers, implementers, recipients, administrators. From “Mixed Methods Research and Culture-Specific Intervention: Program Design and Evaluation”, by B.K. Nastasi and J.H. Hitchcock, 2015. Sage. P.40. From Nastasi, Moore, and Varjas, (2004, p.54). Copyright 2004 by the American Psychological Association Adapted with permission.](image)

**Literature Review**

This literature review provides an overview of the current literature addressing the COVID-19 pandemic, subsequent “shelter-in-place” orders, and evolving guidelines and their impact on teacher well-being. Articles published between the March 2020 shut down and May 2021 were included in this review and in consideration of COVID-19’s global
impact, international empirical articles were included. Studies were identified utilizing databases: PsycInfo, ProQuest, PubMed, Web of Science, and EBSCO Research Databases using a combination of the following keywords: Teacher, well-being, COVID, coronavirus, COVID-19, 2019-ncov, school-based mental health, mental health, supports, wellness, and staff.

Articles included in the literature review focus on the experience and perspectives of teachers and their well-being at the beginning of the COVID-19 pandemic and utilize cross-sectional designs, focused on assessing current-levels of functioning at a single time point. Current findings identify concerns related to the global functioning of teachers (Bushwell, 2020) including adjusting to the abrupt shift in teaching settings (Hodges et al., 2020; Kim, 2020; Carver & Shanks, 2021), confidence with technological competencies and training for on-line teaching (Hodges et al., 2020; Börnert-Ringleb et al., 2021), the role of existing stressors and burnout (Eden, 2020; Lin, 2020; Talidong & Toquero, 2020), administrative support (Bassett & Taberski, 2020; Goodwin & Shebby, 2020; Tang et al., 2020), and perspectives of personal and family safety and well-being (Trinidad, 2020; Dayal & Tiko, 2020).

**Teacher Burnout**

Research has found that steadily increasing teacher stress levels have become a problem in school systems across the country. Teachers have demonstrated one of the highest levels of occupational stress with approximately 60-70% of teachers reporting some symptomatology (Bermejo-Torro et al., 2016) and estimates suggest that up to 40% of teachers leave the field in under five years (Le Cornu, 2013; Pillay et al., 2005), often
identifyi

Researchers have conceptualized teacher stress as a transactional process, in that the amount of stress that is experienced is based both on the individual’s perception and their access to resources (Acton & Glasgow, 2015). Therefore, stress levels vary across individuals depending on their perceptions and coping abilities (Lambert et al., 2009). However, several factors have been consistently identified as stressors for teachers including workload, lack of resources, decreased work-life balance, and poor professional relationships with colleagues (Center & Callaway, 1999; Pithers & Soden, 1998; Giallo & Little, 2003; Clunies-Ross et al., 2008). Importantly, a variety of negative outcomes have been associated with these stressors, including negative attitudes about work, experiencing more negative emotions, poorer relationships with colleagues (Bibou-Nakou et al., 1999; Yoon, 2004) and are associated with a variety of mental health symptoms (e.g., irritability, inattention, anxiety, depression and withdrawal) (Earley & Bubb, 2004). To reiterate, teacher stress trends were identified as problems before COVID-19 and were further exasperated by the pandemic.

Researchers agree that prolonged exposure to occupational stress increases the likelihood individuals will develop burnout which is characterized by the development of feelings of emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach et al., 1996; Ciraldo, 2020; Bassett & Taberski, 2020). Emotional exhaustion involves feelings of being emotionally overextended and experiencing feeling drained by contact with others-across domains (e.g., in-person and on-line), including family, students, and colleagues (Maslach et al., 1996; Bassett &
Taberski, 2020). Depersonalization refers to impersonal and detached attitudes towards others (Maslach et al., 1996; Bassett & Taberski, 2020) and reduced personal accomplishment is associated with a decline in feelings of pride and competence in one’s work (Bibou-Nakou et al., 1999). Therefore, understanding of the adverse effects of stressors on teachers, current research seeks to specifically identify the factors related to teacher functioning and well-being in the context of the pandemic.

Kurtz (2020) and Truzoli et al. (2021) investigated the effects of the pandemic on teacher well-being, including school closures, online learning, and quarantine. In line with previous research, teachers reported an increase in workload, decrease in social support, increase in negative emotions such as depression and anxiety and overall decrease in morale. Importantly, results indicated that 31% of teachers reported a decrease in teacher morale and 32% of teachers reported that they were likely to leave the teaching profession even if they were unlikely to do so prior to the pandemic. These results are striking, suggesting that a large percentage of teachers are contemplating leaving the profession due specifically to pandemic related stressors.

Though the current literature does not specifically use the term burnout, researchers are identifying acute pandemic-related stressors contributing to the experience of negative emotions such as, fear, anxiety, depression and withdrawal (Kast et al., 2021; Kim & Asbury, 2020; König et al., 2020; Li et al., 2020; Stachteas & Stachteas, 2020; Truzoli et al., 2021). Researchers (Kurtz, 2020; Marek et al., 2021; Truzoli et al., 2021) have found that teachers have endorsed a considerably higher workload and higher levels of stress transitioning from face-to-face learning to remote
learning. Importantly, informed by previous research, burnout is characterized by prolonged higher levels of stress and workload as well as a work life imbalance, as the pandemic stretches on, acute stressors become chronic and begin to impact overall functioning and well-being.

**Operationalizing Teacher Well-being**

To address the emotional and mental health needs of teachers during the COVID-19 pandemic, existing frameworks, models and measures were adapted to quickly respond to the developing crisis (Eaton & Turner, 2020; Lin, 2020). However, discrepancies in the definition of teacher well-being are evident across the research. Teacher well-being has been broadly conceptualized and defined across the literature, remains very loosely operationalized (Browning & Romer, 2020; Diener et al., 1998; Eryilmaz & Basal, 202; Ryan & Deci, 2001), and rarely includes teachers in the construction process. Variations in the inclusion and operationalization of teacher well-being were evident in the articles included in the literature review. Of note, articles in this literature review, including the operationalization of teacher well-being were limited to three articles.

Clearly defining well-being has been difficult, given the spectrum of accepted definitions in the existing literature. For example, the World Health Organization (WHO; 1999, 2019) defines well-being as “a state of wellbeing in which every individual realizes [their] own potential, can cope with the normal stresses of life, can work productively and fruitfully and is able to make contribution to [their] community,” while, one of the most widely accepted definition of well-being, subjective well-being, is defined as happiness,
or more specifically with life and the experience of positive emotions (Diener et al., 1998). The WHO (1999, 2019) incorporates the role of functioning and productivity while subjective well-being emphasizes the role of positive emotion and happiness.

Subjective well-being is a broad measure of well-being, measuring general, overall well-being (Ryan & Deci, 2001). However, researchers have questioned the limitations and validity of subjective well-being, suggesting that measures tend to provide insight into the functioning of the individual at the time of testing (Jayawickreme et al., 2012). To address the concerns with the measurement of subjective well-being, researchers pivoted to include the concept of human flourishing in the literature (Huppert & So, 2013; Jayawickreme et al., 2012; Straumer & Vittersø, 2012). Human flourishing has been defined as “open, engaged, and healthy functioning” (Ryan & Deci, 2011, p.47) and as the “combination of feeling good and functioning effectively” (Huppert & So, 2013, p.6). As defined, human flourishing is broader than subjective well-being in that it focuses on the day-to-day functioning and incorporates the happiness and positive emotions measured in subjective well-being. For example, one could be unhappy about a certain circumstance, while functioning well in their broader life (Ryan & Deci, 2011). Therefore, a teacher may be unhappy with their teaching, use this emotion as a catalyst to adapt their method, resulting in happiness. The teacher’s use of their negative experience and emotions to adjust their teaching suggest positive functioning even as the underlying and situational emotion was negative.

Browning and Romer (2020) use the term “well-being” to refer to a set of foundational skills, habits, and competencies that promote physical, mental and social-
emotional health and overall wellness. Eryilmaz and Basal (2021) utilized subjective well-being to develop coping strategies. Both studies sought to promote teacher well-being during the pandemic but utilize different definitions of teacher well-being highlighting that discrepancies in defining of teacher well-being still persist.

Operationalization of well-being in the reviewed literature was sparse and inconsistent resulting in studies using differing definitions of well-being. Additionally, the role of teachers in exploring and defining teacher well-being was not clear. Furthermore, the current research addressing the impact of COVID-19 on teachers did not offer additional insight into teacher well-being and their overall functioning during the pandemic.

**Teacher Well-being in the Classroom**

To accommodate the new “stay-at-home” governmental mandates, school districts shifted to online or hybrid instruction (CDC, 2020; Moreland et al., 2020). This shift left teachers scrambling to adapt their existing instructional strategies to a new platform (Carver & Shanks, 2021; Marek et al., 2021; Park & Kim, 2020). Hodges et al. (2020, p.8) defined this abrupt shift as emergency remote teaching and highlighted the importance of differentiating between a planned shift to remote teaching and “a temporary shift of instructional delivery to an alternative delivery mode due to crisis circumstances.” Previous research has shown that planned shifts, which include training and practice opportunities, tend to result in more positive teacher experiences (Marshall et al., 2020). However, teachers who are new to the instructional platform tend to report increased workloads, and a variety of challenges related to using the technology,
communication with students, organizing synchronous sessions, and measuring student outcomes (Choi & Park, 2006; Conceição, 2006). However, teachers with some on-line teaching experience reported difficulties with adapting and adjusting to the changing conditions. Therefore, the extraordinary circumstances teachers faced during the pandemic prevented them from making a normal transition to remote education and resulted in higher levels of stress (Hodges et al., 2020; Marshall et al., 2020).

During the early days of the pandemic, teachers reported an increased concern for students, increased workload, and stressors accessing technology including, transitioning from face-to-face to online teaching, lesson planning, assessing student learning and (Kaden, 2020; Marshall et al., 2020). Teachers noted overall concerns for their student’s well-being during the pandemic including their physical health and safety and interruption in schooling. Furthermore, teachers reported experiencing stressors related to effectively supporting their student’s social emotional well-being, catching up on missed instruction, and effectively teaching students across modalities. Interestingly, student well-being and outcomes were largely reported as impacting teacher well-being.

**Teacher Well-being and Student Well-being**

The teacher-student relationship is dynamic, is impacted by both teachers and students and is critical to the development and evolution of teacher-student relationship. Interpersonal theory provides one explanation for this dynamic, suggesting the interplay of teacher and student interactions result in behavioral and dynamic shifts over time (Pennings et al., 2018). Interpersonal complementarity suggests that behaviors exhibited by an individual are associated with a similar behavioral pattern for another individual
and can occur bi-directionally (Mainhard et al., 2012; Pennings et al., 2018). In this case, the behavior of a teacher impacts the behavior of a student and vice versa.

Furthermore, research supports a link between teacher well-being and student outcomes. Teacher well-being has widespread effects on school climate and student well-being (Browning & Romer, 2020) and teachers reporting increased burnout and reduced effectiveness in the classroom demonstrated declines in their well-being (Tschannen-Moran & Hoy, 2007). Hoy and Spero (2005) link teachers’ views of their effectiveness in the classroom to student outcomes noting that teachers who perceive deficits in their skill set led them to feel less effective and as having less control over their students’ outcomes.

In line with current research, teachers are reporting deficits in their ability to utilize the technology for remote instruction, their ability to effectively teach students, and their ability to support and promote student outcomes. Therefore, if teachers are experiencing greater levels of burnout, stress, and negative emotions and decreased overall well-being, as well as increased feelings of ineffectiveness, they may not be able to adequately support their student’s well-being or academic achievement.

In addition to experiencing stressors in the classroom, many teachers noted that their personal circumstances made it even more difficult to shift from in-person to online instruction ranging from lack of reliable internet access to caring for and helping their own children with on-line instruction and learning their own instruction strategies for remote learning. By better understanding their experiences, recommendations and interventions can be developed and implemented to help schools prepare for future emergencies and provide better support for their overall well-being.
Teacher Well-being Out of the Class

Teachers have lives and obligations beyond the classroom. They are parents, partners, siblings, and friends and have responsibilities and worries independent of the classroom. Amidst adjusting to emergency remote teaching, teachers juggled concerns for their own personal safety and the safety of their families, adjusted to updating guidelines and mandates, and navigated life during a pandemic.

In addition to the challenges faced at school and in the virtual classroom, teachers were required to balance their own partners, children, familial responsibilities and safety concerns. Roman (2020), surveyed teachers and found that teachers reported an overall negative effect of COVID-19 on their work-life balance and relationships, at home and at school.

Dayal and Tiko (2020) explored how teachers experienced balancing home and school life. Overall, teachers reported increased stressors in school and home responsibilities and noted that schools and administration were not prepared for the emergency transition to remote learning. Furthermore, teachers reported feeling worried about their personal lives, family health, employment, and family dynamics as a result of quarantine. Moreover, teachers reported concerns with effectively teaching their students and the impacts of the pandemic on their professional lives. Overall, teachers reported an increasingly unbalanced work-life balance, increased workload, and increase in global worry. As a result, teachers are burnt out.
Teacher Well-being Interventions

Teacher well-being interventions have primarily focused on improving coping and emotional regulation skills to mitigate burnout and promote subjective well-being. The field has shifted toward utilizing a strengths-based lens when addressing well-being, highlighting the importance of emphasizing positive functioning, and thriving physically, mentally, socially, and professionally (Huppert, 2009; Kern et al., 2014). Currently, well-being literature has shifted to include teachers in the development and implementation of teacher well-being interventions as well as the integration of recommendations to promote well-being.

Lester et al. (2020) included teachers in the development of a system-wide teacher well-being intervention. Results indicated that integrating teachers in the research process and implementing the program at a systems level incorporated well-being into multiple levels of the school culture. The findings of Lester et al. (2020) highlight the importance of collaborating with teachers and staff when developing and implementing interventions to ensure acceptability and sustainability of well-being programming.

When teachers feel valued, respected and supported, they report increased levels of well-being. As previously mentioned, teachers with higher levels of well-being are more effective educators and supports for student development and well-being. Therefore, administrators should be invested in building sustainable systems for supporting teacher well-being, especially in the context of the response to the COVID-19 pandemic.
Limitations of Research on Teacher Well-Being during COVID

Articles published in response to the pandemic concentrated around the impacts of online teaching on stress levels, workload, and technological competencies. In line with decades of research, teachers overwhelmingly reported increased levels of stress and symptoms related to burnout such as increased negative emotion such as, fear, anxiety, depression, and withdrawal (Capone & Petrillo, 2018; Burić et al., 2019; Braun et al., 2020). Teacher stress was impacted by adjusting to remote learning, adapting to new instructional strategies, balancing an increased workload, and a decrease in work-life balance. Overall, teachers reported a decrease in their well-being and endorsed thinking about leaving teaching.

Despite decades of research, well-being has not been consistently operationalized. Past and current research vary on their definitions ranging from subjective well-being to human flourishing. Importantly, articles do not often include operationalizations of the concept. Furthermore, teachers have not been included in co-constructing and operationalizing teacher well-being.

The effects of COVID-19 on teacher well-being have not, as of this literature review, been studied longitudinally. Teachers reported on their well-being using cross-sectional research and provided data on their present level of functioning. As the literature was limited to studies published from March 2020 to May 2021, this review focuses on the experiences of teachers at the initial stages of the pandemic and includes recommendations addressing specific stressors such as the transition to on-line teaching. However, the current literature does not clearly operationalize teacher well-being or
include long-term effects of the pandemic, implementation of brief well-being interventions, effectiveness of interventions on teacher well-being during the pandemic or include teachers in the development of recommendations and supports for their own well-being.

**Limitations of the Methodology**

Well-being has been studied extensively and has remained broadly conceptualized and defined and very loosely operationalized (Browning & Romer, 2020; Diener et al, 1998; Eryilmaz & Basal, 2021; Ryan & Deci, 2001). Importantly, definitions of well-being have been consistently extrapolated and used in the teacher well-being literature. However, these studies rarely include teachers in the definition construction process. Despite this, the definitions have endured and have been utilized by researchers investigating teacher well-being (Eaton & Turner, 2020; Eryilmaz & Basal, 2021; Lin, 2020). Because of this, concerns with operationalization have emerged, including how well-being is conceptualized and operationalized in the context of teacher well-being. Presently, teacher well-being research has typically been implemented using a top-down approach, where researchers select and assign a well-being definition, select the corresponding measures, and develop recommendations. Overall, teachers are absent from the process.

Extant literature on well-being has typically skewed towards quantitative research designs (Diener et al., 1998; Ryan & Deci, 2001) with few studies implementing qualitative methods (Tam, 2020; Lester et al., 2020; Kim & Asbury, 2020). Quantitative research is important in providing objective and measurable data and provides
opportunities to compare teacher well-being across populations and is widely regarded as more rigorous when compared to qualitative research. However, quantitative data do not fully capture the experiences of teachers.

Furthermore, teacher well-being research has been primarily limited to cross-sectional research, looking at teacher well-being at a single point in time. Understandably, cross-sectional research is more efficient and requires less time collecting data and is able to provide a snapshot on teachers’ current level of functioning. However, if the goal is to understand factors affecting teacher well-being to ultimately provide interventions and supports, utilizing a longitudinal design can help provide a more complete picture of teacher well-being across a time period. Moreover, to more effectively understand teacher well-being teachers need to be included and active in the research process.

Toward a Shared Understanding of Teacher Well-being

The current literature addressing teacher well-being, burnout, and stressors provide the foundation for future research. The research has added to the literature, demonstrating increases in teacher stress and burnout, and a decrease in overall well-being during the pandemic. However, we are no closer to operationalizing and understanding well-being as it relates to teachers. Teachers were not including the research process; did not co-construct a definition of well-being; were not asked for recommendations and supports; and were not involved in the development and implementation of a well-being intervention monitored longitudinally.
Our understanding teacher well-being could be enhanced by research based in participatory action research, actively involving and collaborating with teachers during the research process. Including the development of the research project, operationalizing terminology and identifying and setting the goals of the project. Additionally, utilizing a mixed methods research-quantitative and qualitative methods- during data collection and analysis, provide researchers with multiple perspectives as well as a deeper, richer and better understanding of teacher well-being. Furthermore, participatory approaches incorporate teachers throughout the research project ensures that teachers are the main focus and supporting their well-being the ultimate goal, thus facilitating recommendations for teachers by teachers.

**Problem Statement**

We know that teachers are reporting decreases in their overall well-being (Eryilmaz & Başal, 2020), are experiencing and reporting higher burn out rates, increased workload (Braun et al., 2020), higher levels of negative emotions and more negative internalizing symptoms (Burić et al., 2019) including more depressive symptoms, lower rates of job satisfaction and higher levels of negative emotions toward their students (Capone & Petrillo, 2018). However, extant literature has not utilized a consistent conceptualization or operationalization of teacher well-being. Furthermore, research investigating teacher well-being has not included teachers in the operationalization of teacher well-being nor the development of interventions promoting well-being. Lastly, current research has not explicitly asked teachers what resources, supports, or interventions would best support and fit their needs.
Purpose of the Present Study

The current study utilized de-identified archival data from an elementary charter school in a Southern U.S. urban community, collected during an organizational consultation project conducted as part of an ongoing school-university partnership to support psychological well-being within the system. The project first set out to co-construct a definition of teacher well-being through teacher meetings and focus groups and to understand the impact of COVID-19 on well-being. Additionally, the project sought to develop a measure of teacher well-being using the information from teacher focus groups to identify domains of functioning that map onto their perceptions of well-being. Furthermore, during focus groups, teachers were explicitly asked about the interventions and resources they needed to feel supported. Utilizing this information, consultants developed a brief, evidence-based well-being intervention to best meet the needs of the teachers. The teacher well-being measure was used to track teacher well-being, across time, to determine intervention effectiveness, progress monitor, and gather narrative teacher feedback. By collecting data at several time points over the year, this project helped us understand how teacher well-being varied over time and intervention effectiveness. Narrative components allow teachers to further expand on the factors impacting their well-being, including both stressors and supports. Rather than studying well-being cross-sectionally, this project provides an ongoing assessment to address the variability in how teachers feel across time (Jayawickreme et al., 2012). By comparing well-being at multiple time points, this project provides a bi-weekly, longitudinal
measure of teacher well-being including baseline measures and ongoing measures of well-being rather than cross-sectional, one-time measurements.

To best understand teacher well-being, this study uses a mixed methods design (QUAL + QUANT) (Creswell & Plano Clark, 2017). A mixed methods approach provides a more thorough understanding than existing quantitative studies on teacher well-being and well-being interventions. The use of qualitative data in the project combines teacher and administrative perspectives including teacher narratives about how administration could best support teachers. These qualitative data complement the quantitative data and are integrated to address the research questions. Overall, this study adds to the knowledge base by co-constructing a definition of teacher well-being, explicitly asking for teacher recommendations to promote and support their well-being, and longitudinally monitor teacher well-being.

Methods

This study utilized a mixed methods single-case design to provide an in-depth analysis of teacher well-being. Mixed methods research (MMR) includes quantitative and qualitative elements (Tashakkori & Teddlie, 2010; Nastasi et al., 2021). Although quantitative research is imperative to establishing causal links between practices and outcomes (Shadish, 2002), the shift toward culturally and contextually relevant practices have illuminated the limitations of quantitative research in informing change in specific settings, with specific populations (Brown et al., 2017). Qualitative and mixed methods research designs have been recognized in their ability to address this gap within school-based consultation (Nastasi & Hitchcock, 2015; Nastasi et al., 2021). The application of
mixed methods research supports exploring questions about what works, why, when, and with whom (Nastasi et al., 2021). The use of MMR interacts with and in enhanced by PCSIM which parallels the use of collaboration in consultation practice with stakeholders to identify problems and develop, implement and evaluate interventions. Integrating PCSIM and MMR ensures that stakeholders are partners in the consultation and research processes to maximize the expertise and perspectives necessary for an integration of qualitative and quantitative methods to ensure mutual understanding of co-constructed phenomena.

Furthermore, this study qualifies as a mixed methods single-case ethnographic phenomenological study, whereby single case experimental and qualitative case study methodologies are integrated to answer research questions (Onghena, Maes, & Heyvaert, 2019) from a cultural point of view. A case study is a research-based, in-depth exploration of a phenomenon through integrating multiple perspectives and methodologies to generate an in-depth understanding of a specific topic (Simons, 2009). Ethnography is the study of culture and context and refers to both a research process and its end product. According to Creswell and Creswell (2005), ethnographic designs are qualitative research procedures for describing, analyzing, and interpreting a culture’s patterns of behavior, beliefs, and languages that develop over time. This includes analysis of experiences, relationships, development and implementation of intervention.

This study utilized a “phenomenological approach,” or a natural setting for gathering meaningful data on experiences with teacher well-being. The primary aim of the study was to co-construct a definition of teacher well-being, through engaging stakeholders in the research process, to inform interventions for teachers. Through focus
groups and well-being analysis, the project provided a holistic view of teacher well-being.

**Research Questions**

1. How are teacher’s conceptualizing and operationalizing well-being?
2. What are teachers’ experiences regarding the impact of COVID on their well-being?
3. What are teachers’ perspectives on well-being supports?
4. What is the impact of a brief intervention on teacher well-being?

**Personal Experiences and Background**

The current teacher well-being project evolved from a school-university partnership implementing student well-being programming prior to school shutdowns following the COVID-19 pandemic. Following the initial school closures in March 2020, we conducted an online needs assessment, which included students, teachers, parents, staff, and administrators focusing on identifying areas of functioning in need of support. Teachers who participated in the assessment reported increased levels of stress and decreased well-being. The lead researcher then worked with the well-being team to begin developing a conceptualization of teacher well-being and interventions to address teacher well-being. However, the team noticed variability in the conceptualization of teacher well-being. This study seeks to engage teachers in co-constructing a definition of well-being.

Importantly, in qualitative research, acknowledgement that analysis is not conducted with accepted neutrality, but is influenced by our own values, beliefs, and experiences. Therefore, being self-reflexive about my positionality allows me to be
transparent about my background and experiences that come along with me on this consultative project.

I am a Latina, cisgender woman from a predominantly Mexican community on the West Coast of the United States. I am currently a graduate student in School Psychology with an interest in international work, participatory action research, and developing and maintaining consultative relationships with stakeholders with goals to implement sustainable culture-specific programming. I have brief classroom experience as a paraprofessional in a self-contained classroom for students with complex medical needs and low-instance disabilities. However, the majority of my experiences and my training have been as a graduate student in a city in Southeast Louisiana. My theoretical orientation is rooted in the ecological systems theory (Bronfenbrenner, 1977); the importance of considering an individual’s context and experiences. Important to the context of this study, the vast majority of my experiences in school have been as a practicum student of a graduate program with a focus on implementation of evidence-based interventions, multi-tiered systems of support, and systems-level consultation.

**Context of the Study**

This project is part of the Promoting Psychological Well-Being Globally (PPWBG) project aimed at promoting well-being utilizing culture-specific methodology. Data collection at the elementary charter school in this study is part of an ongoing partnership with the PPWBG project. Through ongoing collaboration, the need to support teacher well-being was identified as a school need and this project emerged. Importantly, this project was conceptualized over Zoom and data were collected via Zoom and online data collection tools.
Data for this study were collected in two phases by school personnel during ongoing consultation as part of the PPWBG project and were accessed as de-identified archival data for this study. During Phase 1, data collected from consultation with administrators were used to inform intervention goals and strategies. Furthermore, focus groups were identified as initial steps to develop a shared understanding of well-being and to ask teacher what supports they need. As part of Phase 2, administration wanted to implement a brief well-being intervention, with teacher collaboration, and monitor teacher well-being, over time. Therefore, in utilizing a phased approach, consultants facilitated the focus groups in phase 1 and developed a teacher well-being measure and brief intervention in phase 2.

In collaboration with teachers, utilizing teacher focus groups, questions assessing teacher well-being were created to collect data on domains of well-being that teachers reported as integral to their well-being as well as sources of stressors and support. The measure was developed to provide a standardized quantitative index to monitor well-being over time. Importantly, questions incorporating self-reflection and narrative components were integrated into the measure. Teachers completed this measure on a bi-weekly basis. Aggregate data from the questionnaires were analyzed and presented to administrators to inform data-based decision-making including intervention effectiveness and adaptation. Furthermore, the meetings provided an opportunity to consult with administration to address any questions arising from the data collection and decision-making process.
Site Context

This study was conceptualized, developed, and implemented in a well-funded school in the context of a well-run local charter network, in a city in Southeast Louisiana. Teacher, staff, and administrative turnover is minimal and teachers, on average, have more than three years of teaching experience. Furthermore, the school has maintained an active consultative partnership with universities with goals to better develop systems and programs addressing student well-being. Throughout the consultative process, administration remained open and receptive to feedback and teachers, despite their workload, participated in the project. Additionally, the school had the resources (financial and time) to integrate supports into their systems. I acknowledge the very privileged and unique setting where this consultative project was developed and implemented and feel it is important to specifically address the context before continuing this manuscript.

This study utilized de-identified archival qualitative and quantitative data collected by school personnel and consultants as part of the PPWBG project from a K-5th grade elementary charter school in a Southern US city. Administrators identified teacher well-being as an area in need of support, especially in response to the COVID-19 pandemic. Therefore, administrators asked for consultation on a teacher well-being intervention that could be implemented and utilized remotely, in accordance to current CDC COVID-19 guidelines. De-identified data for the study were accessed from the school with administrator permission and IRB approval and include administrator consultation sessions, grade-level teacher meetings, teacher focus group responses, and bi-weekly well-being ratings.
Sample

According to school administration and district guides, the school serves about 671 students in kindergarten to fifth grade and employs 26 kindergarten through fifth grade general education teachers and 35 additional instructional, support, and special education staff. The school serves a predominately White student population at 58.9%. The remaining student body are broken down as follows, 23.3% identify as Black or African American, 7.7% as Hispanic/Latino, 6.5% as two or more races, 3.4% as Asian or Asian/Pacific Islander, 0.1% as Native Hawaiian or Other Pacific Islander, and 0.1% as American Indian or Alaska Native. Fifteen percent of the students qualify for few or reduced-price lunch, a proxy for socioeconomic status. The gender distribution is 51% female and 49% male. Eighty-eight percent of fulltime teacher are certified and 95.8% of teachers have 3 or more years of experience. Overall, the student to teacher ratio is 18:1. According to state a mandated academic performance measure (Louisiana Education Assessment Program (LEAP), intended to measure student and school performance, 98% of students scored at or above the proficient level for math and 100% scored at or above the proficient level for reading.

Participants and Recruitment

Twenty-six K-5 general education teachers were introduced to the project at grade-level meetings over Zoom. The researcher presented the project, its process and overall goal beginning with focus groups and ending with interventions. Teachers were asked for their immediate feedback, willingness to participate, and initial acceptability of the project. Teachers provided preliminary well-being reports and intervention
recommendations. However, formal recruitment procedures were implemented whereby teacher provided their name and email to sign-up for focus groups.

Teachers were asked to sign-up for teacher focus groups via an online sign-up tool. Of the 26 general education teachers, 21 signed up to participate in initial focus groups and 9 attended. Immediately prior to the scheduled focus groups, a power outage occurred at the elementary school. Of the teachers participating in the focus groups, 100% were female, 67% identified as White, 25% identified as Black/African American, and 8% identified as Asian or Asian/Pacific Islander. Additionally, an administrator, whose role includes teacher and student support actively consulted with the lead investigator on implementing teacher interventions.

**Data Collection**

Data for this study include both qualitative and quantitative de-identified archival data collected during the 2020-21 school year, depicted in Table 1 and Figure 2; and were accessed with permission from the school and approved by the Tulane Institutional Review Board (IRB).

<table>
<thead>
<tr>
<th>Source of Data Collected</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator Meeting Consultation Notes</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Teacher Focus Groups</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Global Ratings of Teacher Well-Being</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Member Check-in’s</td>
<td>Qualitative</td>
</tr>
</tbody>
</table>
Figure 3
*Timelines depicting chronological order of consultation and data collection.*

**Phase 1 Timeline**

<table>
<thead>
<tr>
<th>Consultation Conceptualization</th>
<th>7.13</th>
<th>Administrator Meeting</th>
<th>9.1</th>
<th>Grade-level Teacher Meetings</th>
<th>10.10</th>
<th>Member Checks following Focus Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.02</td>
<td></td>
<td>Administrator Meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Phase 2 Timeline**

<table>
<thead>
<tr>
<th>TimePoint 1 Admin Meeting &amp; Member Check-in</th>
<th>3.2</th>
<th>TimePoint 3</th>
<th>3.20</th>
<th>TimePoint 4</th>
<th>4.14</th>
<th>TimePoint 6 Admin Meeting &amp; Member Check-in</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.29</td>
<td></td>
<td>TimePoint 2</td>
<td>3.17</td>
<td>Administrator Meeting &amp; Member Check-in</td>
<td>3.31</td>
<td>TimePoint 5</td>
</tr>
</tbody>
</table>

*Note:* Numbers in the figure refer to dates (e.g., 7.02 refers to July 2).

**Measures**

*Teacher Focus Groups.* Teacher focus groups were conducted via Zoom to co-construct a definition of teacher well-being and develop a measure of well-being that could be utilized to collect data longitudinally. Focus groups were recorded to ensure accurate transcription. Focus groups were the first phase of the project and formed our foundational understanding of well-being. Teachers discussed their perceptions of teacher well-being, the COVID-19 pandemic followed by recommendations for administrators on how to best support their well-being. All of the teachers (26) were invited to participate in the focus groups, twenty-one expressed interest and nine participated due to technological difficulties and schedule conflicts. Three focus groups were conducted, 30-minutes in duration with 3 teachers participating in each. Usually, data collection and analysis are iterative in qualitative studies, meaning that data are analyzed when collected and new
focus groups are conducted until a point of saturation of new themes and ideas is reached (Strauss & Corbin, 1998). This study utilized archival data of completed focus groups and analyses were conducted following data collection; saturation of themes was still reached during analysis.

The focus groups consisted of all female teachers, 67% identified as White, 25% identified as Black/African American, and 8% identified as Asian or Asian/Pacific Islander. Overall, the demographics of the focus groups were representative of the population of teachers at this school.

**Global Ratings of Teacher Well-Being.** Teacher well-being ratings were collected bi-weekly between January 2021 and May 2021. A 10-item scale developed from the teacher focus groups was used to assess teacher’s global ratings of well-being, including stress, work-life balance, and sources of support. The teacher self-report measure was developed through teacher focus groups, administrative consultation meetings and member checks with teacher to ensure domains of well-being were included in the measure. Administrators were in agreement with the domains of well-being. Furthermore, the survey items were written and presented to teachers and administrators to ensure comprehension and cultural fit to the school context.

Teachers completed the survey bi-weekly, rating their well-being based on their experiences over the previous two weeks. The survey (Appendix A) is composed of ten items, with teachers rating (on a 1-10 scale) self-reported domains of well-being including, work-life balance (“I am satisfied with the balance between work and personal life”), stress (“Rate your stress level”), overall well-being (“Rate your overall well-being”), and perceived administrative support (“I feel like administration is supporting
my well-being”). Furthermore, the measure included three open-ended questions that provided the opportunity for continued qualitative data collection: What are some factors that affected your stress level? What are factors contributing to your well-being (e.g., coping strategies, social supports)? What are some supports administration is providing? Additionally, the measure concluded on a self-reflective activity that asked teachers to “identify one personal success in teaching that occurred during that past two weeks.” Responses to open-ended questions were analyzed qualitatively.

Archival Administrator Consultation Meeting Notes. Notes were collected during consultation sessions with administrators. Administrators were asked about purpose of the project, consultative role and overall goals of the project. Additionally, the meeting served to understand the existing systems and supports and their ability to support the development and implement teacher well-being interventions. The administrators were also asked about supports they provide to promote teacher well-being. The principal, assistant principal, school counselor, director of special education, and consultation team participated in this meeting. The school counselor worked closely with the research as part of the consultation relationship to review Global Ratings of Teacher Well-being.

Managing and organizing data. Following the consultation process, the PPWBG team were given access to archival data from the consultation (focus group recordings and meeting notes) for further analysis; the project was approved by Tulane IRB as part of the PPWBG project. Recordings of focus groups were transcribed by undergraduate research assistants in the PPWBG lab and the lead researcher. Transcriptions were saved in password protected files in the PPWBG lab online database.
The focus group data were then analyzed by a coding team – lead researcher and a research assistant.

**Data Analysis**

*Mixed Methods Data Analysis.* This study utilizes both quantitative and qualitative archival data to answer the primary research question. The project utilizes a mixed method iterative multistrand single-case design. Multistrand designs require: (a) mixing qualitative and quantitative research methods across two or more research phases and (b) integrating qualitative and quantitative data during analysis (Tashakkori & Teddlie, 2010; Nastasi & Hitchcock, 2015). Iterative designs involve mixing quantitative and qualitative methods recursively throughout the research project, with earlier research phases influencing decisions about later phases (Nastasi & Hitchcock, 2015). Single-case designs allow researchers to investigate phenomena in-depth to provide rich description and understanding and may also be used as initial phases of research studies (Broadbent et al., 2002). Research suggests that multistrand MMR research is best equipped to approach implementation, adaptation, cultural grounding, and systemic factors in intervention research.

Phase 1 of the current project focused on qualitatively co-constructing a definition of teacher well-being using focus groups and phase 2 focused on quantitatively monitoring teacher well-being over time. Quantitative and qualitative data will be given equal emphasis and will be kept independent through data collection and analysis. Results of the qualitative and quantitative data will be presented in phase order as Phase 1 provides our foundational and shared understanding of teacher well-being and informed
the development of our teacher well-being measure; Phase 2 focuses on monitoring teacher well-being, over time. The quantitative and qualitative data complement each other and provide a comprehensive and rich depiction of teacher well-being. Figure 4 depicts this mixed method iterative multistrand design.

**Figure 4.** The proposed inclusive framework for conceptualizing, designing, and critiquing mixed methods research designs. The key features of the cycle are (a) the centrality of partnership and collaboration with stakeholders; (b) the cyclical nature of research from conceptualization to application (c) the iterative nature of the cycle, depicted by the central arrows (reflecting the potential return to earlier stages based on outcomes of subsequent stages; e.g., data inference leads back to more data collection); and (d) the ongoing mixing and attempts at integrative qualitative and quantitative perspectives, methods, and data at each stage in the cycle (depicted as QUAL ↔ QUAN). From “Mixed Methods Research and Culture-Specific Intervention: Program Design and Evaluation”, by B.K. Nastasi and J.H. Hitchcock, 2015. Sage. p.40. From Nastasi et al. (2004, p.54). Copyright 2016 by SAGE.

**Qualitative Data Analysis.** To best capture teacher voices and minimize researcher interpretation, qualitative research relies on transcription and coding (Creswell, 2009; Saldana, 2016). Analysis of the focus group was conducted using an inductive process, whereby codes and themes emerge from the verbatim transcription of the teacher’s voices. The coding team focused on the individual and shared definitions
and experiences of teacher well-being and how the teachers gave meaning to those experiences.

Coding was completed by two researchers. First, each researcher familiarized themselves with the focus group transcriptions. Subsequently, the researchers met and discussed what they had read and begin open coding. Open coding refers to examining each transcript sentence by sentence and comparing, conceptualizing, and categorizing the data (Strauss & Corbin, 1998). The team engaged in consensus coding, independently generating codes for groups of text, and discussing their categorization until consensus was reached. Analysis of the GTWBM narratives followed the same coding process. New codes were used and defined as they emerged. The coding team then grouped the open codes into predominant themes. To ensure validity of selected codes, coders were required to discuss inductive codes if they disagreed on themes. Complete consensus needed to be met for an inductive code to be retained. As such, coders engaged in ongoing conversations about how to better organize specific narratives and/or how to better label a group of narratives as a theme.

**Ensuring Trustworthiness of Qualitative Data**

Steps were taken throughout the data collection coding process to ensure the trustworthiness of qualitative analysis. Trustworthiness results from naturalistic inquiry and is the extent to which a researcher has confidence in the findings of the study through the use of multiple methods, we can increase the credibility, transferability, dependability, and confirmability of the study results (parallels of reliability, validity, and objectivity in quantitative research). *Credibility* is equivalent to internal validity, and measures whether the questions in your study measure what they were written to measure
and whether the findings are representative to the reality as the population sees it.

Transferability is similar to generalizability and external validity and is concerned with the extent the findings of the study are generalizable or transferable to the target population. Additionally, through providing detailed descriptions of methods and processes, readers can make determinations regarding the transferability of the results to other populations of interest. Dependability mirrors reliability and measures whether the results yield the same outcome across administrations and accounts for stability and change in naturally occurring phenomena. Lastly, confirmability reflects objectivity, ensuring an objective viewpoint to control for subjectivity through carefully documenting the extent to which bias is controlled throughout the process. Through including and integrating participants across study phases, we can reduce bias and increase objectivity.

Techniques and processes are further detailed below.

As the research was part of a multi-year participatory consultation process, partnerships had been developed between the research team and school stakeholders through the participatory consultative relationship. Prolonged engagement and persistent observations increase credibility of results through increasing the time spent and data-collection when observing within the context. Through increasing the amount of time spent and the depth of data collected through continuous data collection, the probability that findings are based on minimal information and time spent within the population decreases. Additionally, through continuing data collection, we are able to investigate salient factors and distinguish between typical and atypical information. Through an extended period of engagement with stakeholders at the school, the researcher developed
an in depth understanding of the school culture related to student, teacher, parent, and administrator perspectives.

Through the use of triangulation, data collection, analysis, and interpretation were based on multiple methods, investigators, and theories. Inclusion of stakeholders throughout the process ensures that multiple perspectives are considered throughout the process. Multiple members of the team will review the same data to guarantee several sources of inquiry. A research assistant was oriented, trained, and supervised to assure fidelity to process and consensus on codes. Multiple methods of data collection were utilized including meetings, focus groups with teachers, and Global Teacher Well-Being Measures to provide a comprehensive understanding of teacher well-being at the school.

Through the integration of multiple sources of data, objectivity and reliability increase.

The consultative relationship included active participation of stakeholders and inclusion of their voices, opinions, and school culture throughout data collection and analysis. However, despite the establishment of this partnership, continuous engagement, collaboration, and stakeholder input was imperative to the development, implementation, data-collection, and analysis process. Through regular meetings and conversations, teachers, administrators, and support staff remained actively engaged in sharing their experiences related to teacher well-being.

Trustworthiness includes controlling for biases. Implementing strategies to identify, acknowledge, and control for biases should be integrated throughout the inception and implementation of the study. One such strategy, peer debriefing, suggests having conversations with neutral peers about data collection, process, and analysis to ensure multiple perspectives throughout. Integrating stakeholders and group members
ensures accurate interpretations. *Member checking* will be used to confirm interpretations of teacher well-being focus groups and Global Teacher Well-Being Measures. After analysis, coding and data interpretation, the research team disseminated findings to stakeholders to ensure accuracy of interpretation. Following member checks, researchers will incorporate feedback and suggestions into further analysis. As representatives of the target population, stakeholders are able to confirm the accuracy of the data and interpretations developed by the coding team. Moreover, stakeholders offered valuable information about the school context and additional interpretations throughout data analysis. Through the process, the researcher should ensure the accurate depiction of the unique experiences and perspectives of the participants (Nastasi & Schensul, 2005). Peer debriefing also enhances the consistency and validity of coding (Nastasi & Schensul, 2005; O’ Cathain & Thomas, 2004). The inclusion of stakeholders provides guidance on that sought to strengthen the analysis and interpretation of the qualitative data.

Detailed records are imperative when beginning the qualitative research process. To assist in the development and formulation of codes, methods, data-collection, and analysis, researchers often maintain meticulous records. *Audit trails* involve keeping systematic records and documentation of processes, data collection, analysis, and coding schemes. Furthermore, audit trails provide step-by-step rationale for decisions made throughout the process. Audit trails provide information that should guide and help understand the underlying logic of the study. Additionally, incorporating reflexive journaling into the study helps document researcher thought processes throughout. *Reflexive journaling* consists of including reflective thoughts throughout the process. As in the case of field notes, reflexive journaling includes documenting impressions, biases,
concerns, adaptations, and next steps; these entries can be utilized when writing up the consultation process, methodology, and dissemination for stakeholders. In this research, methods of ensuring trustworthiness included school staff, researchers, and members of the coding team to promote comprehensive, dependable, and credible analyses.

**Quantitative Data Analysis.** In addition to qualitative analysis of Global Teacher Well-Being Measure narratives, the Global Teacher Well-Being Measure (GTWBM) response data assessed teacher well-being, longitudinally and assessed effectiveness of implemented teacher well-being interventions. GTWBM were completed bi-weekly by teachers and included domains of functioning related to teacher well-being. GTWBM data were continuously collected throughout the implementation of the intervention.

Teacher well-being scores were calculated as a composite by averaging scores across the items on the GTWBM and descriptive statistics were calculated for GTWBM. These descriptive statistics provided insight into teacher well-being across multiple time points.

Further analyses are identified and detailed in subsequent *Mixed Methods Single-Case Design* section to provide context and rationale for statistical analyses.

**Mixed Methods Single-Case Design.** A mixed methods single-case study design integrates quantitative and qualitative methodology throughout the data collection and results to provide a comprehensive analysis of the case (Creswell & Plano Clark, 2017). Single-case design studies provide in-depth investigations of phenomena and track outcome variables across timepoints and generally use visual analysis of data to systematically compare baseline and intervention phases (Ryan & Filene, 2012). For the purpose of this investigation, qualitative data were collected from focus groups and
GTWBM narratives which provided an in-depth investigation of teacher well-being and quantitative data were collected through the GTWBM which provided quantitative, statistical analyses to establish functional relationships and intervention effectiveness.

This study utilized a repeated single-case A-B design. This design involves repeated measurement of outcome variables throughout a non-intervention baseline phase (A) followed by the intervention phase (B); ten weeks of a brief well-being intervention collected through 5 timepoints. During the baseline phase, teachers completed the GTWBM prior to the intervention phase. The GTWBM was then administered biweekly throughout the semester. In addition to the quantitative data of well-being collected by the GTWBM, narrative responses were coded to provided supplemental qualitative data on well-being.

**Baseline.** Baseline data were collected following the development of the GTWBM which was informed by teacher focus groups. Teachers completed the baseline measure online, anonymously. While establishing a stable baseline through 3 data collection timepoints is the gold standard in single-case research, because the project developed from a school-based consultative relationship, this was not possible in this study. Ethical concerns resulting from teachers self-reporting increased levels of distress, need of intervention and the consultation relationship prevented establishing a stable baseline.

**Intervention.** The intervention consisted of integrating a self-reflective and journaling component to the GTWBM. Participants were asked to reflect on the experiences of the previous two weeks and “Identify one personal success in teaching” and “Factors contributing to your well-being (e.g., coping strategies, social supports).
Additionally, the GTWBM provided teachers the opportunity to ask administrators for school-based supports. Administration implemented teacher requests such as providing coffee and snacks, increased preparation time and eliminated professional development requirements, and hired more substitute teachers to offset the additional workload.

Data analysis. Visual analysis was used to examine trend, variability and points of interest in the data followed by examination of the immediacy of effect, consistency of data patterns, and overlap of data between baseline and intervention phases (Horner et al., 2005; Kratochwill et al., 2010). Mean scores are used to report the level, trend is evaluated by determining whether the datapoints are increasing or decreasing, and immediacy of effect is demonstrated by a visible shift in level following intervention implementation (Gage & Lewis, 2013; Parker & Brossart, 2003; Shadish, 2002). Further, when changes in level are in the desired direction, immediate, apparent, and maintained across timepoints, effects are attributed to the intervention. Visual analysis remains the gold standard by which single-case designs are most commonly analyzed and are used to determine whether the is a functional relationship between the intervention and outcome (Byiers et al., 2020; Manolov et al., 2014). When the changes in level are in the desired direction, are immediate, observable, and maintained, a relationship is assumed. Next, the visual analysis was supplemented with quantitative analysis methods evaluating the magnitude of the intervention effect.

Though no consensus has been met on which statistical methods are optimal for analyzing data from Single-case research designs, Tau-U effect size methods have been most utilized and recommended due to their flexibility, and application to “real-world” single-case data (Brossart et al., 2014; Parker et al., 2011). Tau-U is a nonparametric rank
order correlation statistic, which has been utilized in single-case designs (Parker et al., 2011; Vannest & Ninci, 2014), adjusts for changes in level and trend and yields effect sizes. Tau-U is particularly useful with smaller data sets, maintains nonoverlap in the evaluation of a treatment and uses all the data in the design (Parker et al., 2011).

Importantly, interpretation of Tau-U is dependent on context, and stakeholder needs (Parker et al., 2011; Vannest & Ninci, 2014). Overall, Tau- U gives us a way to better understand the effects of the predictor variables on the response variable (Byiers et al., 2020; Parker et al., 2011; Vannest & Ninci, 2014). The Tau-U analysis allows for the examination of treatment effects within and between phases. Specifically, for single-case research that include baseline and treatment phases (AB), there are possible types of pairwise comparisons in a tau calculation include: (1) a B phase score compared with another B phase score, and (3) an A phase score compared with a B phase score. Scores in the A phase describe the dependent variable before treatment whereas, the information in phase B describes the dependent variable after treatment in introduced. Similarly, comparisons across phases provide additional information about relationships across and between phases. For example, for B-to-B comparisons, earlier scores are compared with later scores and described as either concordant (increasing), discordant (decreasing), or tied. Therefore, B-to-B comparisons together form the trend within phase B.

Additionally, A-to-B comparisons measure overall concordance or discordance between phases and describe the degree to which phase B is generally increasing (concordant), decreasing (discordant), or similar (tied) to phase A (baseline). To interpret results of Tau-U analyses, we need to remember that Tau-U illustrates the effect of treatment on within-phase trend and between-phase differences in single case research studies to
analyze whether there are consistent trends both in and across phases. Results of Tau-U indicate whether treatment/intervention had effects on scores and will demonstrate the match between visual analyses and statistical analyses. Furthermore, the Tau-U coefficients can indicate whether treatment scores in phase B increased over baseline scores in Phase A noting an intervention effect.

Though visual analysis is the traditional method of quantitative analysis in single-case research, statistical methods bolster the findings when research includes quantitative data. When combined with qualitative analyses, mixed methods single-case research designs provide in-depth analyses of phenomena through the perspective of stakeholders as well as object quantitative measures that assess the causal relationship among interventions and outcomes.

**Qualitative and Quantitative Integration.** Teacher responses from the focus groups and GTWBM narratives were analyzed, coded and considered alongside the quantitative GTWBM data to gain a further understanding of the factors impacting teacher well-being. This triangulation provided the opportunity to gain more data on the experiences of teacher well-being including specific stressors and support and offered a more comprehensive understanding of teacher well-being.

**Results**

Results of data are presented in phase order, beginning with Phase 1- analyzing focus groups to address research questions 1-3, (1) How are teacher’s conceptualizing and operationalizing well-being? (2) What are teachers’ experiences regarding the impact of COVID on their well-being, and (3) What are teachers’ perspectives on well-being supports? Importantly, research question 3 is included in Phase 1 and analyses of Phase 2 which focus on the analysis of the GTWBM and answer (4) What is the impact of a brief
intervention on teacher well-being through visual and statistical analyses? Qualitative data are integrated throughout the results section to fully present the experiences of teachers and illustrate the consistency of themes identified in the focus groups throughout data collection using the GTWBM.

**Qualitative.** Qualitative data collection incorporated teacher focus group, administrator and teacher meeting transcripts, and GTWBM narratives and focused on answering (1) How are teachers’ conceptualizing and operationalizing well-being? (2) What are teachers’ experiences regarding the impact of COVID on their well-being? (3) What are teachers’ perspective on well-being supports?

**Teacher well-being.** Teachers defined teacher well-being as:

> Well-being is overall, feeling good about the work we’re doing. Being able to feel like we are successful at what we do and like our work is fulfilling and sustainable.

Teacher’s defined teacher well-being across focus groups and member checks. Teachers collaborated with researchers to develop a conceptualization and shared understanding of teacher well-being, as experienced and defined specifically to their context. Through their active participation, teachers collaboratively operationalized well-being to best represent their lived experiences. The following illustrates the process.

**Teacher focus groups.** Using inductive analysis, teacher focus transcripts were analyzed to identify several key themes and are shown in Figure 5. Additionally, items of the Global Teacher Well-being Measure were included to demonstrate how Themes identified from the focus groups were used to develop a quantitative measure of well-being, shown in Figure 6. The open codes, all direct quotes from participants, are included to provide context for Theme and highlight teacher voices. Importantly, member checking sessions with teachers were conducted regularly to ensure accurate
representation of teacher voices, enhance trustworthiness of coding and provide stakeholder perspective throughout data collection and analysis. Additionally, member checks confirmed the comprehensiveness of inductive categories and any additional emerging themes. The themes represent teacher understanding of well-being, their experiences with COVID, and their perceptions of well-being supports. Six themes emerged, (1) Stress, (2) Balance, (3) Supports, (4) Admin-support, (5) Teaching effectiveness, (6) Support Students. All Themes represented domains of teachers’ lives that affected their well-being.
Figure 5

Open codes and themes identified from the focus groups

- "Spend quality time with my family"
  - Themes: Relationships important to teacher well-being
- "Schedule a time to run"
  - Themes: Activity that promotes well-being
- "I don't spend time with my family. My husband has picked up the slack"
  - Themes: Involvement in family activities and responsibilities
- It's impossible to maintain a health balance"
  - Themes: The importance of work-life balance
- "I feel like we're on a hamster wheel running for our lives"
  - Themes: Increased responsibility
- "I feel like crying. I'm so overwhelmed"
  - Themes: Level of stress reported by teachers
- "I feel like stress can affect your immune system"
  - Themes: Perceptions of the effect of stress on physical health
- "Teachers feel like their hands are tied and don't feel supported."
  - Themes: Teachers feel they are alone at school
- "Admin is doing the best they can"
  - Themes: Teachers perceptions of administrative support
- "The children are not receiving the best from me"
  - Themes: Teachers perception of their current teaching effectiveness
- "I don't feel like I am doing the best I can"
- "Teaching in-person and online, it's impossible to support them both. I can't pay attention to my screen and to kids in my class."
  - Themes: Ability to support students while simultaneously teaching in-person and virtual students
- "I can't catch up on all my work and I think about work while I'm in the classroom. I feel I can't really support my students like I used to"
  - Themes: Teacher perceptions of being able to complete work and support students
The first Theme, “Stress” described how teachers experience and cope with stress and its impact on their well-being. The second Theme “Balance” referred to the perception of the effect of work-life balance on their well-being. The third Theme “Supports” represents the activities and relationships that positively impact their well-being. The fourth, fifth, and sixth Themes “Admin- Support,” “Teaching Effectiveness,” and “Support Students” describe the teachers’ perception of sources of stress related to administration and school-level factors, and their perceptions of their ability to teach and support their students during COVID. These Themes are further discussed and include excerpts from the focus groups to illustrate each theme.
**Stress.** Teachers emphatically spoke about the impact of COVID on their well-being, namely with increased overall stress. Teachers reported “Stress” as feeling overwhelmed, feeling disconnected, personally and professionally, feeling powerless and an overall lack of control, and feeling unsafe, physically. Teachers reported stress around physical health noting “I feel like stress can affect your immune systems. So, I mean knowing that you know, we try to kind of control our stress level, but I mean, I think that’s the biggest thing that for me is happening is that the idea of everything is more
stressful.” Teachers are reporting that COVID in general is stressful and they feel more stress when trying to navigate and control that stress. Primarily, teacher spoke about stress as pervasively affecting how teachers are experiencing the stress, reporting “I feel like crying, I’m so overwhelmed,” and “the stress is so shocking.” Teachers reported increased levels of stress that correlated with more responsibilities around implementation of COVID protocols, increased teacher workload including lesson preparation to address safety protocols and impact of distance learning, and stress around their own family’s safety during COVID. Importantly, teachers reported pre-pandemic stressors as impacting teacher well-being noting “obviously, there’s always a challenge regardless of COVID, but I feel like with COVID it is increasingly difficult.” Teachers consistently noted that existing stressors and their impact on well-being were further exacerbated by COVID describing current teacher responsibilities as “impossible to challenging.” Additionally, teachers report feeling the most positive when their students are not in the classroom noting “I look forward to PE every week because it’s the only time the children leave my room. It’s 45 minutes that I get the room to myself.” They state that during this time, they are “able to catch up on work that has piled up. Before the pandemic we had recess and lunch. Now we have none of those times. We’re always in the classroom together.” Teachers report dissatisfaction with the COVID mitigation procedures such as classroom “pods” (i.e., students are limited to interactions with classmates) because those breaks disappeared.

Furthermore, teachers reported student parents as stressors. Noting that “parents are upset that schedules keep changing and COVID protocols are changing but we can’t do anything about that. It’s just frustrating when you’re already overwhelmed and a
parent calls or is on Zoom and is yelling at you.” Therefore, teachers are reporting Stress having to navigate the relationship between parents when they are not able to address the parent concerns. In addition, this compounded stress was noted to carryover to other contexts and affect how teachers function at home and in other personal relationships. For example, a teacher specifically reported “feeling like a crappy mom and crappy teacher” which aligns with reports of feeling like inadequate parents, partners, and teachers. Teachers consistently reported feeling “barely having any time to spend with family” across focus groups. Overall, teachers reported stressors as contributing to lack of connection with their family but also described this familial disconnection as an additional stressor. More importantly, throughout focus groups, member checks, and teacher meetings, teachers reported poor overall well-being stating, “I’ve cried twice the first week back in class,” “I’m always on the verge of tears,” “I feel helpless,” and “I feel unstable.” In describing their experiences with COVID, teachers highlighted the importance of Stress on their well-being and emphasized the negative effects of COVID on their lives as a whole. Teachers further underscore the pressure they are facing to meet all school and home demands.

**Balance.** Teachers further expanded on their conceptualization of well-being and identify the importance of Balance to teacher well-being. Teachers define Balance as “having free time at home to spend with family,” “a work-life balance”, “a balance of that social emotional component to feel that they are successful at what they’re doing”, and “a balance of teaching responsibilities where you don’t have to teach in-person and on-line at the same time.” Teachers emphasized the importance of maintaining Balance to their well-being across contexts. However, they note that currently, there is no Balance,
and often teachers have “no free time,” are “working on the weekends, like I’m going to work two hours then I’m going to eat and work another two hours,” and are “working two jobs, with our entire classroom and entire online classroom.” Interestingly, teachers did not indicate they wanted to eliminate simultaneous in-person and online classes but noted “we could use help preparing materials for the packets we send home to online students.” Teachers requested extra help to help Balance out the responsibilities across teaching modalities. Importantly, this theme of Balance was present across all focus groups and teachers culminating with “It’s too much to ask of teachers.” Teachers reported that this lack of Balance contributed to their level of overall stress and decrease in well-being. One teacher summarized the focus groups sentiments stating, “It feels near impossible to maintain a healthy balance and like to reset, you are forcing yourself to step away and choose to do something else knowing that you’re not finished with what you were working on, but otherwise, you know, you’re going to drain yourself trying to be done with it.” Teachers are aware of the effects their professional responsibilities are having on their personal life, relationships, and well-being and have insight into the importance of “Taking a break.” However, teachers report feeling like “you have to force yourself to take a break” and “you keep thinking about all the work you still have to do.” As we often see, teachers are able to identify the importance of self-care when experiencing chronic stressors however, we also see that teachers are reporting feeling that they are unable to postpone their professional responsibilities even as they note feeling that “breaks are helpful and taking time to be with family makes you feel better.” This insight aided in the transition to identifying supports and resources to better support teachers. Importantly, including how administration could aid in supporting teachers.
Additionally, this demonstrates despite all the stressors reported, teachers are identifying environmental supports mitigating the effects of stressors and bolstering their well-being.

**Supports.** Teachers readily spoke about their current stressors and the impact to their well-being. However, throughout the focus groups teachers reported Supports that mitigated the effects of COVID, increased responsibilities, professional stressors, and lack of Balance—even if briefly. Teachers described Supports as “things that make you feel better, even for a little bit,” “fitting things in that you like to do,” “ways they can help me with prepping for my class,” and “spending some time with my family and not working and planning.” Teachers consistently described Supports in both professional and personal contexts. While teachers highlighted supportive relationships with their families, teachers also reported professional supportive relationships with fellow teachers. Teachers noted that professional Supports at work were “check-in’s with other teachers,” “having time to catch up with other adults between the new pod schedules,” and “having an in-house sub help with material prep like copying and stapling.” Teachers described these very brief, informal check-ins as supportive while at school and emphasized their importance with the new schedules limiting in-person interaction with other individuals, students and adults, during the school day. Teachers emphasized the Support they felt when interacting with others face-to-face reporting “you just don’t have that same feeling when you are on Zoom.” The importance of increasing those in-person interactions in the school environment further underscores the importance of maximizing those at home. However, as previously illustrated, teachers report that oftentimes, professional responsibilities extend over into the home. As teachers spend more time completing these professional tasks at home, they reduce the number of positive
interactions they are experiencing at home. Teachers are aware of this as well, noting “every evening working and planning and “working again”, comments by my husband,” “I haven’t spent much time with my kids since we went back, and I feel like crying.” However, teachers are reporting that activities such as cooking “help keep my minds off of all the things I have to do because I can’t burn the food.” Teachers are choosing to identify activities such as cooking, as Supports because “they distract me for at least a little bit.” Interestingly in, activities such as cooking, that require full immersion and focus, or mindfulness, were considered supports. These references to activities requiring full immersion provided the researcher with information on potential well-being Supports and interventions. Furthermore, teachers noted that Supports include intentionally spending time engaging in activities they enjoy doing stating, “it’s been very helpful for me to set up a time to go for a jog,” “I need to remind myself to just breathe.” Teachers have identified Supports from their experiences as activities and relationships that positively impact their well-being. Importantly, teachers have identified the mechanisms that make these activities Supports, such as how immersive the experience is. Additionally, teachers reported that check-ins with their fellow teachers, in-person interactions, and help with professional responsibilities were considered Supports. These Supports were further investigated to identify how teachers perceived administration during COVID.

**Administrative Support.** Teachers perceived administration as both sources of stress and supports. Teachers described “Administrative Support” as “administration is asking how we are doing,” “administration is talking with parents,” “administration is doing the best they can.” Teachers reported divergent perspectives of administrative
support with some teachers reporting that “administration is doing the best they can under the circumstances” and other teachers “feel like their hands are tied and don’t feel supported.” When asked why they felt administration was doing the best they could, teachers reported feeling like “administration has a lot on their plate too and I don’t think they’re doing this to make us miserable.” Teachers reported empathizing with administration and noted that “administration is asking what they can do, and this project is helping us too.” Teachers described administration check-in’s as support and viewed the current project as administrations attempt to increase supports. However, as previously mentioned, other teachers reported feeling overwhelmed with administration and did not feel supported as they transferred back into the school environment. Teachers noted lack of communication when transferring back into in-person learning “I was getting not much communication and felt like kind of out of the loop.” Teachers described this uncertainty as contributing to the stress and affects their perception of administration. Furthermore, teachers reported parents as stressors and felt like “administration is trying their best to buffer parent complaints about the changing schedule and COVID protocols.” Teachers appreciated that administration recognized the added pressure of parent complaints over procedures they had no control over. Teachers further explained that administrative sources of stress included expectations of teachers through the increased workload, changing schedules, updating protocols, technological literacy, hybrid models of teaching, and lack of breaks during the workday to maintain the pod system of limiting interaction. Interestingly, when asked about the increased workload both all teachers reported that they were “not sure there’s anything they [administrators] could be doing.” Furthermore, teachers described not feeling supported
with the resources they need to effectively teach “I feel like we didn’t have the training to transition to GoogleClass or Zoom, especially at the beginning and when the internet crashes, the online kids kind of just hangout until we comeback online.” Teachers highlighted the difficulty transitioning from in-person to distance learning, primarily at the beginning of the pandemic and noted continued difficulty. This is particularly stressful when teaching through on-line modalities while simultaneously teaching in-person. Following that theme, teachers reported that the increased workload including the in-person and online class model was not sustainable and needed administrative adjustment. This “hybrid model” was reported to be a primary stressor for teachers as they report “it’s two jobs and it’s completely unsustainable. I am burnt out and its only October,” “it’s like I am work 60 to 80 hours a week. Last night I was done working at 11:00pm. Then, I have to wake up early to get to work early to finish up. I don’t know how much longer I can keep going,” “Administration is asking what they can do but I feel like this hybrid model is one of the reasons we’re struggling. We need help and they’re not helping.” Teachers consistently reported that administration can help support their well-being by providing technological supports, and aids in preparing for hybrid learning. However, some teachers associate the administrative check-ins with supports and feel that administration is also feeling increased pressure and stress during COVID. Importantly, most teachers reported needing the most support from administration in class preparation, hybrid learning, and implementation of procedures that provide hands-on support for teachers at school. Most teachers asked for in-class support from in-house substitutes managing in-person and online students and prepping materials for classwork, homework, and online packets. Overall, teachers identified as administration as their
largest supporters and stressors but noted that administration had the ability to implement system wide supports to help decrease their workload and promote their well-being.

**Teaching Effectiveness.** Teachers have identified feelings of teaching effectiveness as impacting their well-being. They note “I don’t feel like I’m doing the best I can for my students. I work so many hours, but I feel like a terrible teacher.” The teachers consistently reported that how they felt about their work impacted how they felt overall. They reported “When kids are having fun and I see they get the material, I feel good! I’m just not getting that right now. I feel like the kids are struggling to grasp the material and I feel like it’s because I’m not doing the best job teaching it.” Teachers linked their Teaching Effectiveness to how they felt about themselves and their well-being. While teachers did not describe themselves as teaching effectively, they consistently described the feelings of shortcomings in the classroom. During member checks, teachers agreed on identifying this Theme as “Teaching Effectiveness” and used direct quotes to describe how they felt about their teaching at that time. As such, “Teaching Effectiveness” primarily focuses on how teachers were feeling ineffective but striving for effectiveness. Teachers adamantly reported that “The children are not receiving the best from me,” and “I put so much effort into planning and it still feels half baked.” Teachers noted feeling overwhelmed with the time spent on class preparation and not experiencing those same teaching outcomes. They noted that both their children and their students were not receiving the best from them and this negatively impacted their well-being. This was most prevalent when teachers reflected on hybrid models reporting that “I am trying my best to create engaging lessons and there are happy moments for sure, but there is just a disconnect from what we’re used to.” Moreover, teachers reported
feeling that “teaching during COVID has made me realize that I loved teaching, but I just don’t love it now.” As teachers re-evaluate their profession noting “you go into teaching to help kids learn and grow and I don’t feel like that’s happening right now,” it impacts how teachers are experiencing teaching, stressors and responsibilities, and this further affects their levels of stress and overall well-being. To add to dissatisfaction with their current roles, teachers reported more disconnect and less effectiveness for students who attended class virtually. They noted that “the separation through Zoom takes away the human connection component. At least in class I can see my students in class but with the online kids, I feel further away.” Therefore, teachers are feeling ineffective at multiple levels. They feel they are not meeting their responsibilities as teachers and parents, and furthermore, they are not meeting their own expectations. Overall, teachers report feeling stress and dissatisfaction with their ability to support their students.

**Support Students.** Going hand-in-hand with “Teaching Effectiveness,” teachers reported their ability to support students as contributing to their well-being. Similar to “Teaching Effectiveness,” teachers are reporting reduced capacity in supporting students and their responses focus on those limitations. Throughout their responses, they note their ability to be “a good teacher is being able to support your students in the classroom.” This idea of a “good teacher” resonated with others in the focus group and teachers noted that “I feel like being a good teacher means I can teach them and make them feel better when something happens. I try to have a good relationship with my students but this year, I can’t.” Teachers are dissatisfied with their ability to perform up to their pre-pandemic standards and report this as impacting their well-being. Additionally, teachers define “Support Students” as “helping students transition back into in-person class,” “having a
personal connection with students,” and “being able to give students undivided attention.” Teachers described supports through a pre pandemic lens and reported a desire to return to “normal.” Some teachers noted that “supporting students used to be easy, you can give a hug or a high five,” “students used to support each other when they played together or shared things, snacks.” However, this support is no longer an option. Teachers noted “I never realized how many times you get close to students. Now we have to social distance, wear a mask, and not touch each other and you notice it.” Teachers have to go back to the drawing board to rethink and redesign their lessons to best fit the current needs of the students and their needs following distance learning. Similar to “Teaching Effectiveness,” teachers reported that their ability to “Support Students” is tied to their well-being. They consistently report feeling as if they are unable to perform their duties to the same pre pandemic standards. Importantly, teachers recognized that administration was not setting pre pandemic expectations; teachers were setting their own pre pandemic standards. Furthermore, teachers reported that their ability to support their students were impacted by the COVID mitigation procedures. Teachers stated difficulty supporting students through masks and face shields as it “lacks human connection.” Teachers understand the importance of the mitigation procedure but also highlight some impacts to the student/teacher relationship. Moreover, teachers report that hybrid teaching impacts their ability to provide students undivided attention and stated that “one of the biggest challenges is having in-person and virtual students at the exact same time.” Teachers are aware that their increased responsibilities are having a negative impact on their teaching and well-being as they note “It’s incredibly challenging and it’s not really a good solution for anyone.” Teachers discussed associations between their perceived ability to Support
Students and Teaching Effectiveness as affecting how they feel about themselves and their well-being. They note that they feel more positively when experiencing a positive student interaction during the day. This offers support for bolstering teacher well-being through integrating opportunities for positive interactions with positive outcomes throughout the teacher’s day. However, despite their overall dissatisfaction with their abilities to Support Students, teachers report motivation to continue teaching and see COVID as an obstacle they can overcome with the proper support and resources from administration.

**Administrator Consultation Meeting Notes.** Following similar procedures to the teacher focus group coding, inductive analyses were conducted to identify several key themes from administrator meeting transcripts. Importantly, member checking sessions with administrators were conducted regularly to ensure accurate representation of their voices, enhance trustworthiness of coding and provide stakeholder perspective throughout data collection and analysis. Similar to teacher focus groups, open codes - direct quotes from participants, are included to provide context for Themes. Four main Themes were identified from administrator meetings (1) Stress, (2) Workload, (3) “I don’t know what to do”, and (4) Interventions. Themes are shown in Figure 7. The goal of administrator meetings was to understand administrator perspectives of teacher well-being, identify areas where administration feel they were able to support teachers. Additionally, these meetings served to disseminate information gathered from teacher meetings including ideas on implementation of interventions.
Workload. “I don’t even know how we’re all surviving this mountain of work.”

Administration conceptualized “Workload” as “the amount of work teachers have to do to prep, teach, grade, and abide by COVID guidelines,” “the hours teachers put in at school and at home to get ready to teach, in-person kids and online kids,” “teachers having to prepare for both in-person and virtual students.” Throughout consultation, administration continuously reported the most concern with the overall increase in workload noting that teachers were particularly “struggling” under the additional responsibilities. Furthermore, they were aware that the “current workload and pace that teachers are working can’t last forever, teachers are going to really struggle.” Administration stated, “we know that all of this extra work and pressure is really
stressing teachers out and impacting their well-being.” Administration identified a clear link between the increase in workload and stress and teacher well-being.

**Stress.** Administrators consistently reported concerns with the level of teacher stress. They acknowledged increased teacher stress in response to increased workload, teaching demands, and overall context of COVID. Administrators reported conceptualizing “Stress” as teachers “having too much on their plate,” “feeling like they can’t catch up,” and “having so many more responsibilities.” While teachers conceptualized Stress in terms of emotional impact, administration focused on the factors contributing to that emotional impact such as increased responsibility and workload. Administration stated that “we want to focus on what is actually causing teacher stress, like hybrid teaching and maintaining pods, because we can physically help with those.” Administration was not ignoring the emotional impact of Stress but was focusing on those visibly salient factors which can be more easily manipulated and adapted. The researchers capitalized on this willingness to accommodate teacher requests for support throughout the consultation relationship and administration consistently reported support for additional resources and interventions for teachers. Furthermore, administration noted that teachers had previously reported stress as having an impact on their teaching, quality of their relationships with their students – a theme highlighted by teachers during the focus groups- and overall well-being. Administrators stated, “we see that teachers are stressed out and struggling but, all of these COVID procedures have to be implemented and we need to use the guidelines set by the CDC,” “teachers are telling us that they are feeling stressed at home and at work,” “teachers are burnout, stressed out, and thinking about leaving.” Administration reported concerns with these persistent feelings of stress
and burnout and feared that teachers would leave. Therefore, administrators emphasized their commitment to developing ways to “lighten teacher’s loads” as a way to decrease this salient stressor. Furthermore, administration identified a link between increased teacher stress and decreasing teacher well-being. Noting “Teachers are not doing okay. We get some teachers who tell us they are crying, and we don’t want to put all this extra work on them and not help them. We need to help them, some way.” In response, administrators have provided increased emotional supports for both professional and personal issues noting “Teachers know that we’re available if they want to talk for any reason. We encourage them to talk to us so we can provide any support possible.” However, administration also acknowledges that they have to implement interventions that “get at the root of the problem, too much work and responsibility.” Furthermore, administration explicitly identified the link between workload, stress, and teacher well-being and were actively providing some interventions, through emotional support. Through administrator meetings we see that administration has listened to teachers, understood their concerns, were open to feedback, and were seeking additional supports to bolster their ability to support teachers. Importantly, administrators were seeking out supports and interventions when they did not know how to best help teachers.

“I don’t know what to do.” This theme was kept as an open code as researchers and stakeholders felt it best captured the administrator’s sentiments. Administrators understood that teachers were struggling under the Stress induced by COVID, additional workload, and other responsibilities and were empathetic to the teacher’s struggles. Administrators noted “We see our teacher’s struggling and we see they are exhausted, but I don’t know what else I can do. We want to help them, but we don’t know how to best
do that.” Administrators were adamant that they find ways to support teachers but did not have the answers themselves. Additionally, they reported that they often asked teachers how administration could best help, but they noted that teachers “really don’t tell us how we can help. We don’t know if they feel comfortable telling us.” Administrators identified a possible perceived power imbalance as a mechanism for teachers not feeling comfortable seeking support from administration. In response to this, administration sought outside consultants to help understand teacher’s experiences and seek teacher ideas for supports and interventions. Administration reported they continue “checking-in” with teachers to “make sure they know they are supported during the consultation process.” Administration described feeling “hopeful of the project because we can help teachers using their own ideas.” Importantly, administrators acknowledged their knowledge gaps, collaborated with researchers and teachers and were open and willing to implementing system-wide interventions. Overall, administrators were adamant about actively participating in the consultation process to best support teachers and provide them with interventions.

**Interventions.** Throughout the consultation process, administrators consistently reported on the importance of designing supports for teacher well-being noting that “we have to be thinking about teacher well-being. For every decision, we have to think how is this going to be impacting teacher well-being? “Administration conceptualized “Interventions” as “doing something to help teachers feel better,” “changing something or adding something that has a positive effect on someone,” and “some sort of activity or break that helps teachers cope with or be able to manage how they’re feeling.” Administrators agreed that overall interventions should have a positive effect on teachers
or should help teachers. However, consensus was not met on what intervention would best fit with the needs of the teachers. Ideas ranged from adding a professional development on well-being to scheduling breaks for teachers, to providing coffee and snacks. However, none had been implemented yet. Administrators noted their overall goal was to “make teacher well-being a priority” and “to make sure that teacher well-being is built into our school programming.” However, they also acknowledged that supports needed to be implemented in immediate response to current teacher well-being. Considering the circumstances, administrators reported more flexibility in intervention planning noting they were open to utilizing in-house substitute teachers to help with administrative work and preparation and give teachers more breaks, eliminate professional development requirements to give teachers additional time during the school day, and decrease the number of administrative meetings. Furthermore, administrators reported openness to teacher suggestions and ideas for additional supports.

**Teacher Meeting Notes.** Teacher meeting notes provided the researcher with more information regarding their perception of teacher well-being and supports and interventions. In this more informal setting, teachers were able to provide the researcher with more in-depth feelings about administration and how they were being supported at school. Furthermore, teachers used this time to brainstorm with each other on how administration could best support them including reducing professional development requirements and increasing the amount of help from in-house substitutes.

Member checking sessions with teachers were conducted regularly to ensure accurate representation of their voices, enhance trustworthiness of coding and provide stakeholder perspective throughout data collection and analysis. Similar to teacher focus
groups and administrator consultation meeting notes, open codes, direct quotes from participants, are included to provide context for Themes. Three main Themes were identified from teacher meetings (1) Stress, (2) Workload, (3) Interventions. Themes are shown in Figure 8. These meetings, following the teacher focus group focused on monitoring teacher well-being throughout the later part of the school year. During the meetings, teachers primarily focused on reported on the interventions implemented by administration and whether they were effective, and any additional supports needed based on their experiences following the previous check-in. Additionally, these meetings served to ensure a common understanding of their experiences and resource and support needs.

**Figure 8**

*Open codes and themes identified from Teacher Meeting Notes*

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**Stress.** Stress was present across reporters and data collection points. Teachers consistently report stress during focus groups and subsequent check-ins. However, as time progressed, teachers reported reductions in stress. Additionally, teacher stressors varied across timepoints. Interestingly, at initial teacher meetings, confidence with
technology, COVID and workload related to hybrid teaching were more salient and more related to teacher stress. However, as the school year progressed, teachers reported more stress around student academic achievement and the impact of COVID on learning. Teachers reported that students “were not meeting benchmarks” and they had to reconceptualize lessons to best fit the needs of the student. This led to the same feeling of increased responsibility and teachers noted they were “still working more hours than we should because we feel a responsibility to our students.” Teachers reported intervention implementation following focus groups and initial teacher and administrator meetings. Teachers noted that “administration is trying and working with us and that really helps us feel like they really want to help us.” Teachers reported that with administration listening and implementing some of the suggested supports such as eliminating professional development requirements, limiting administrative meetings, utilizing in-house substitute teachers to help with preparation, and providing additional breaks throughout the day, they were able to “catch up and get our heads above the water.” Teachers noted that administration had continued supporting their emotional well-being through “check-ins and office hours” but also, incorporated other targeted interventions that were focused on the factors impacting their well-being. Importantly, teachers reported that workload remained the same, more than previous years, but felt heard and supported at school.

**Workload.** Similar to Stress, Workload was present across reporters and timepoints, but trends demonstrated a decrease in saliency as the school year progressed. Importantly, this decrease became apparent following the implementation of some supports and interventions. (A timeline of intervention implementation and timepoints will be provided in the Quantitative and Qualitative Integration analysis section.)
Furthermore, teachers reported that “since we have help from our in-house subs, we have more hands-on-deck and we can use time we would’ve been making copies to grade. We don’t have any more professional development meetings on our early release days and now we get to use that time however we need.” Teachers reported that having more time and more physical help led to a more manageable workload as the schoolyear progressed. Furthermore, teachers feeling more support from administration following the implementation of their suggestions. Teachers stated, “we know they’re really listening to us and it feels like they really want to help us.” Teachers connected the decrease in workload, to a decrease in stress levels and increase in overall well-being. Teacher reported “there’s still a lot going on, but I think we are feeling better. A lot better than the beginning of the year.” Teachers overall, noted a decrease in workload as interventions were implemented across the schoolyear.

**Interventions.** Teacher meetings were identified as opportunities to continue monitoring teacher well-being through specific themes (i.e., stress and workload) and to have a space to develop intervention, support and resource suggestions and evaluate administration support and intervention implementation. Teachers utilized this time to check-in with other teachers and to collaborate on the development of additional intervention suggestions. More suggestions were developed directly following the focus groups and at the beginning of the schoolyear, while later meetings were centered around the interventions that had been implemented and evaluation of administrative support. Teachers reported wanting the interventions implemented at the beginning of the schoolyear to continue and noted concern for the upcoming schoolyear. However, teachers reported hopefulness following the responsiveness of administration to their
concerns and suggestions during the year. Teachers reported feeling as if “administration worked with us this year and it felt good to have that partnership.” Teachers noted that the collaborative relationship led them to feel supported and heard by administration and had a positive effect on their well-being.

**Narratives of the Global Teacher Well-being Measure (GTWBM).** Teachers completed bi-weekly measures of well-being, including narratives of factors affecting stress and well-being and identifying supports and success in teaching. Similar to previous qualitative analyses, open codes - direct quotes from participants, are included to provide context for Themes. Two main Themes were identified from the Narratives of the GTWBM (1) Stress and (2) Supports. Themes are shown in Figure 9. The goal of the GTWBM narratives was to provide teachers with the opportunity to elaborate on quantitative ratings, identify supports and have a space to engage in self-reflection and journaling when asked to identify success in the previous 2-weeks. Importantly, during analysis, narratives of the GTWBM were impacted by the timepoint. It is important to consider, teachers were prompted to respond specifically about Stressors and Supports. Therefore, the Themes identified from their responses were consistent with this prime.

As such, similar Themes were present across the timepoints, but content of the responses varied depending on the time of the schoolyear. Themes are analyzed below.
Figure 9

Open codes and themes identified in Global Teacher Well-being Measure (GTWBM)

**Stress.** Similar to teacher meeting notes, Stress was referenced across respondents and timepoints. Importantly, Stress and Workload were consistently present alongside each other and therefore were bundled into Stress for this analysis. Specifically, teacher member checks confirmed that bundling in this Theme was appropriate noting “it’s hard to pull those apart. We’re feeling the majority of the Stress because of the Workload.” Additionally, teachers reported that Stress affected their overall level of well-being commenting “There isn’t time to record all the things that are wrong or stressing me out right now. I feel like my well-being now is worse than ever. I feel like I don’t get a chance to feel good about something.” As previously stated, Stressors varied across timepoints ranging from initial reports of Stress around navigating new classroom technologies, workload, and hybrid courses to Stress around state testing, student achieving benchmarks, and workload. Furthermore, teachers identified how workload impacted their personal lives noting “The workload is so intense and I’m sacrificing my personal life to keep work up to standard” and “Working late into the evenings and on the weekends causes me to be stressed that I am not giving my family or myself enough quality time. My unavailability definitely causes conflict with my family and friends.” Therefore, teachers are explicitly reporting that their professional workload is directly
impacting their personal lives, negatively, leading to increase stressors. Teachers identified difficulties with workload prior to the pandemic but emphasized the significant workload increase following COVID. And most impactful, teachers noted the quality of their personal relationships with their friends were most important to their perception of well-being. However, during member checks teachers noted that personal relationships also functioned as Supports and asserted that Stress with workload be a Theme and personal relationships be furthered explored as Supports. Teachers noted this delineation because workload related Stress was present across timepoints from baseline narratives to final timepoints at the end of the school year. Furthermore, Teachers commented on support from administration stating, “a listening ear and helping with teaching strategies are huge helps” and “Wednesday afternoons off are a huge help!” However, though teachers reported support from administration and intervention implementation, Stress remained throughout the school year and was primarily tied to workload.

**Supports.** Teachers reported supports across personal and professional contexts. Teachers reported feeling supports through social relationships with friends and family and interestingly, teachers reported the emotional support provided by administration through “check-ins and just asking how we are doing” were at times supporting teacher well-being. Teachers reported knowing that administration was interested in their functioning and well-being was a Support commenting “They poll us on how we feel,” “they support us with everything we need. They listen and care,” and “surveys like this check-in, stopping and reflecting on the questions you posed, was helpful.” Teachers reported positive perceptions of administration seeking outside consultation on teacher well-being noting that “they’re trying hard to find ways to best support us” and
“administration is looking to really help us and making teacher well-being a priority. This work matters.” However, teachers also acknowledged that “they are doing everything they can, but it doesn’t affect my daily work level much.” Teachers note that they “check-ins and emotional supports” are appreciated and offer some support but report overall that the workload and responsibilities remain an area in need of Support. Furthermore, the workload related Stress most impacted their personal relationships which affected the level of Support teachers received from their friends and family. Teachers reported “my friends and family are keeping me going,” and “social supports are keeping my rating from being a 1” however, teachers also reported “working long hours and feeling stress about conflict with my friends and family and other family stresses really just stress me out more.” Their most important supports were being negatively impacted by their profession. Teachers understood the correlation between the workload and stress and the quality of their personal relationships. They reported “I have so much work, I stay up late and don’t spend any time with my family, they always say “oh, you have work again.”” Furthermore, teachers report that with COVID restrictions they are not able to meet with friends or those outside of their immediate household and look forward to reconnecting with family and friends. Teachers describe this isolation from others as impacting their stress levels and well-being and note that their workload is contributing to the isolation. Therefore, their primary recommendations for administrative support were around reductions in workload and responsibilities. Through these GTWBM narratives and teacher meetings, teachers asked for technological support, increased utilization of in-house substitutes teachers, temporary elimination of professional developments on Wednesdays, increased opportunities for breaks throughout
the school-day, and snacks in the teacher breakroom. These recommendations were made throughout the school year as teachers reflected on their experiences to formulate new and appropriate interventions. As previously mentioned, administration was supportive and open to all teacher recommendations and these interventions were implemented throughout the school year. As interventions were implemented, teachers began reporting “I have not done schoolwork the last two evenings as home. I have watched a movie with my husband after kids are in bed.” Teachers began reporting a better balance as their workload decreased and a return to spend time with their social supports. This shift from reports of strained personal relationships to reports of re-engaging with their social supports were reflected across multiple respondents. Importantly, teachers reported feeling greater Support both at home and at school.

**Themes from teacher and administrator data.** This section integrates results from teacher focus groups, administrator consultation meeting notes, teacher meeting notes and teacher narratives from the GTWBM. Each data source was analyzed independently and are integrated here. Importantly, as previously noted, findings for each data source were presented to stakeholders to ensure accurate interpretation and understanding. Similar member checks were conducted during the integration portion of the analysis.

A few prominent themes, presented in Figure 10, were identified across the teacher focus group, teacher meetings, teacher narratives on the GTWMB, and administrator consultation meetings. (1) Stress, (2) Balance/Workload, and (3) Support/Interventions. While teacher focus groups looked primarily at defining teacher well-being, subsequent teacher meetings, GTWBM, and administrator consultation meetings
focused on providing ongoing supports for teachers. Therefore, not all Themes found in the focus groups were represented across other data sources. Moreover, teacher focus groups informed the development of the GTWBM. Therefore, the Themes found after integrating the multiple data sources were more focused on providing supports and implementing adaptations and new interventions, as needed.

**Figure 10**  
*Open codes and themes identified from teacher and administrator data*

**Stress.** Featured prominently across all data collection, Stress was identified as having a direct impact on teacher well-being and teachers and administrators both endorsed Stress as negatively impacting teacher well-being. In particular, both groups explicitly stated the relationship between Stress and Workload and teacher well-being, especially at the beginning of the year. Teachers noted that their overall Stress was tied to their “overwhelming” workload, “working into the evenings,” and “feeling like I’m drowning in work.” Teachers were Stressed out the amount of work and the effects on their personal relationships. “Too much time at school and my family is suffering because of it.” Teacher were experiencing high levels of Stress across contexts due to their professional responsibilities. Teachers consistently reported feelings “being burnout”
such as, “not feeling like I am doing a good enough job at work and not having enough time to get everything I want done in my personal life; not sleeping well so I am tired and lack motivation.” Teachers were reporting Stress across all data collection timepoints. Administrators expressed understanding for teachers and their challenging and stressful nature of their jobs. Particularly during the transition back into the classroom following COVID. This understanding led to administrative responsiveness to teacher recommendations and implementation of supports to address teacher’s primary workload stressor.

**Balance/Workload.** Previously identified in teacher focus groups, a sense of Balance was important to teacher well-being. While this concept was present across other data sources, Workload was used to explicitly identify the source affecting Balance and Workload was used in administrative and teacher meeting note analyses. Consensus between stakeholders was met when identifying and naming Themes. In this integration, it was agreed that Balance and Workload be discussed as the same Theme. Teachers emphasized the importance of maintaining Balance to their well-being across contexts. However, they note that currently, there is no Balance, citing Workload as most limiting Balance. Additionally, teachers reported that Workload most directly led to greater levels of Stress and decreases in well-being. Though reported consistently across teachers, one teacher best illustrated this relationship between Workload, Balance, Stress, and well-being:

*I am stressed that we do not have enough time in the day to prepare what is required to teach the kids. That’s where late nights come into play. Every night and the weekend work comes into play. Every. Single. Weekend. I live exhausted and feel like I can’t ever catch up on sleep. If I choose to not work at night, then it just moves to the to do the next day which is already full before that day starts. So that night I may get the rest but when I wake up the next morning I am already*
stressed because I pushed something to the next day that has to get done. Our jobs have daily to do lists as well as long term to do lists. Pushing a daily task to the next day can mean a smooth lesson or complete insanity.

-GTWBM narrative

Importantly, administrators were aware that teachers were feeling overwhelmed with the Workload and lack of Balance. They noted that the pace at which teachers were working was not sustainable and were actively seeking support in implementing Supports for teachers. This theme reflected a common understanding of the importance of maintaining a Balance between professional and personal responsibilities on well-being, as well as the importance of administration in implementing Supports for teachers.

**Support/Interventions.** Similar to “Balance/Workload,” teachers and administrators recommended that these Themes be reported together. Teachers noted that the focus group theme of “Support” mapped on well to “Interventions” found in teacher and administrator meetings and GTWBM narratives. Teachers state that Supports and Interventions “go hand-in-hand” to best meet their needs noting that “sometimes feeling supported could be an intervention.” Administration understood the need for Support and implemented schoolwide “check-in’s and open-door policies” to provide emotional support. As teacher reported, feeling supported was an intervention and they stated support for these “check-in’s and open-door policies.” However, teachers also identified a need for Supports and interventions targeting Workload, at school. Administrators remained responsive and open to teacher recommendations and per teacher and administrative support, interventions were implemented, particularly following teacher meetings. As a result, teachers began reporting improvements in Workload/Balance. However, teachers also reported social Supports at-home from family and friends. Teachers emphasized the importance of these relationships to their well-being and noted
the negative effects of their Workload. Importantly, teachers felt isolated from these supports due to this Workload/Balance and as such did not have access to the relationships that had previously been supportive. However, following interventions at school targeting Workload, teachers reported more access to these social Supports. Narratives and reports indicate teachers spent more time with family and friends after administration implemented interventions recommended by teachers. Together, the implementation of interventions and utilization of teacher recommendations resulted in improved outcomes for teachers. Importantly, teachers and administration collaborated to implement Supports and interventions that best met the needs of the teachers, at school which then allowed teachers to access those crucial social Supports at-home.

**Qualitative Summary.** Teacher’s defined well-being simply. Using the focus groups and member checks, teachers consistently came back to their definition of well-being. Teachers acknowledged that the definition of well-being seems simple but noted that maintaining well-being is anything but. Additionally, they reported concerns about continued support from administration after defining the concept. They noted “if we make it too short or simple, people might think that well-being is easy or that it doesn’t matter.” However, in the context of the school and ongoing administrative support, teachers reached a consensus on well-being.

“Well-being is overall, feeling good about the work we’re doing. Being able to feel like we are successful at what we do and like our work is fulfilling and sustainable.”

Teachers reported that Stress most impacted teacher well-being. However, this relationship was found to be more complicated. Workload/Balance was found to directly influence teacher’s perception of Stress and as Workload increased, teachers more often
reported higher levels of Stress across focus groups, meetings, and narratives. Furthermore, teachers noted that Supports/Interventions at times, mitigated the effects of Stress and decreased their Workload, leading to lower levels of Stress and improved overall well-being. Through qualitative analyses, teachers identified these relationships and developed recommendations to best directly support them in their context. Furthermore, it is important to recognize that administration was very open and willing to implement these interventions, especially reducing Workload demands due to the present context of COVID.

Administrators reported increased Supports and Interventions following concerns of burnout, which were acknowledged by both teachers and administrators. Consistent with previous research, during focus groups, teachers reported that levels of stress and burnout were present before the pandemic (Braun et al., 2020; Zhou & Yao, 2020) but significantly increased after COVID. Though not many teachers explicitly stated they were “burnout” they often reported feeling symptoms identified as burnout such as, feeling overwhelmed, higher levels of stress, less effective in teaching, lack of motivation, and increase in negative emotions (Eryilmaz & Basal, 2020; Kim & Asbury, 2020; MacIntyre et al., 2020; Trust & Whalen, 2020). Administration reported concern for the number of teachers reporting these feelings and identified an urgent for implementation of well-being supports.

**Quantitative.** Phase 2 of the project focused on answering (4) What is the impact of intervention on teacher well-being?” Quantitative analyses were selected based on study design and data collection using visual and statistical analyses. The Global Teacher
Well-Being Measure scores were used to assess teacher well-being longitudinally and assess the effects of teacher well-being interventions.

The GTWBM data were collected, anonymously from each participant using an online data collection tool, every two weeks. The GTWBM was developed to reflect the domains of well-being teachers identified during focus groups (i.e., work-life balance, stress level, administrative support, teaching effectiveness, and student support). Overall Well-being was measured through asking directly about overall well-being. To adjust for data anonymity, GTWBM scores were analyzed as a composite after averaging scores across the items on the GTWBM. Therefore, the data were analyzed as N=1. Aggregates were calculated for GTWBM (refer to Table 2) by averaging ratings across respondents. Averages were graphed and used in visual analyses and further effect size statistical analyses.

Table 2
Descriptive Statistics for Global Teacher Well-being Measure

<table>
<thead>
<tr>
<th>Domain</th>
<th>Baseline</th>
<th>Intervention</th>
<th>Baseline</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)</td>
<td>Range</td>
<td>M(SD)</td>
<td>Range</td>
</tr>
<tr>
<td>Overall Well-being</td>
<td>3.58 (2.02)</td>
<td>0 – 7</td>
<td>6.28 (.801)</td>
<td>5.80 – 6.61</td>
</tr>
<tr>
<td>Stress Level</td>
<td>7.50 (1.56)</td>
<td>5 – 10</td>
<td>6.52 (.273)</td>
<td>6.16 – 6.93</td>
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<tr>
<td>Work-Life Balance</td>
<td>2.33 (1.23)</td>
<td>0 – 4</td>
<td>5.03 (.312)</td>
<td>3.67 – 5.63</td>
</tr>
<tr>
<td>Admin Support</td>
<td>6.50 (1.44)</td>
<td>5 – 10</td>
<td>8.14 (.288)</td>
<td>7.68 – 8.39</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>6.63 (1.26)</td>
<td>7 – 9.5</td>
<td>7.45 (.258)</td>
<td>7.20 – 7.84</td>
</tr>
<tr>
<td>Support Students</td>
<td>7.73 (1.07)</td>
<td>7 – 10</td>
<td>7.89 (.201)</td>
<td>7.67 – 8.22</td>
</tr>
<tr>
<td>In-Class</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Support Students Online</td>
<td>6.00 (.853)</td>
<td>5 – 7</td>
<td>6.184 (.664)</td>
<td>5.45 – 6.4</td>
</tr>
</tbody>
</table>

Note. M (Mean) and SD (Standard Deviation)

**Visual analysis.** Visual analysis was conducted as an initial method to provide an overall description of collected data to determine overall effects (Barlow et al., 2009;
Kazdin, 1982) and to determine if there was evidence of a relationship between the intervention implementation and teacher well-being and the strength of that relationship. Visual analysis included the examination of (1) between-phase patterns and (2) minimal overlap of data between phases to determine any evidence of basic effect (i.e., positive change) at a minimum of three distinct time points (Kratochwill et al., 2010). As a stable baseline was not established prior to the intervention phase, no baseline analyses (i.e., trend, pattern, or within phase comparisons) were conducted. This decision was made following teacher reports of significant stress levels and low well-being during teacher focus groups, teacher meetings, and first GTWBM time point. Therefore, no stable baseline was established, and no additional analyses were conducted.

The intervention phase - consisting of the five data collection timepoints – were analyzed for patterns (within and between phase) of teacher scores. Within phase patterns incorporated level (i.e., mean), trend (i.e., slope) and variability (i.e., range and standard deviation), while between phase patterns consisted of the immediacy of treatment effects and overlap of data between phases. The baseline data point and intervention phase data were compared to determine if the teacher well-being interventions were associated with changes in teacher ratings on the GTWBM. Specifically, if teachers reported increased teacher well-being, work-life balance, and decreased stress levels. A basic effect was demonstrated if one phase of data patterning (within the intervention phase) was visibly different than what would be expected when comparing to the baseline data. A more convincing basic effect was characterized by immediate changes, fewer overlapping data points, and consistent in data patterning. It was expected that there would be an
immediate shift in level following the initial implementation of teacher well-being interventions.

Visual analysis results for each domain of teacher well-being measured by the GTWBM are discussed. Figure 11 presents combined domains across time points. Data for Student Support Online was limited to baseline through Timepoint 2; no online modalities were offered following Timepoint 2. Results are further discussed for each domain in addition to figures depicting baseline and intervention phases. Additional statistical analyses for non-overlap effect sizes (i.e., Tau-U) are included in table for each domain of teacher well-being.

**Figure 11**

*GTWBM Combined*

![Graph showing overall well-being aggregate from the GTWBM during baseline and intervention phases.](image)

**Overall Well-being.** Figure 12 illustrates the reported level of Overall Well-being aggregate from the GTWBM during baseline and intervention phases. Based on visual inspection and comparison of means from baseline to intervention phase, the data indicate an increase in Overall Well-being via the aggregate across reporting teachers.
When comparing baseline and intervention levels, mean levels of reported Overall Wellbeing were higher during the intervention phase when compared to baseline (3.58 to 6.28). Additionally, positive trends were observed in the intervention phase demonstrating improvement in Overall Well-being with a slight decrease in reported Overall Well-being at Time3. However, following Timepoints demonstrate a significant improvement in Overall Well-being when compared to baseline.

Figure 12

GTWBM: Overall Well-being

Overall, visual analyses indicate basic effects during the intervention phase as indicated by mean level changes from baseline to intervention, an observable shift in trend during the intervention phase, and an immediacy effect from baseline to intervention. Therefore, additional statistical analyses were conducted to further investigate the impact of intervention on teacher well-being.
Analyses of data overlap across phases were also calculated to examine the impact of the intervention on Overall Well-being using Tau-U (i.e., non-overlap with baseline) nonparametric effect sizes. Table 3 depicts the nonparametric effect size values for Overall Well-being comparing baseline to intervention phase. Results from baseline to intervention phases indicate that the overall, all intervention phase scores increased over baseline phase scores. This statement also agrees with visual analysis results. Similar to correlations, Tau-U effect sizes are range between -1 and 1 (Brossart et al., 2018). Furthermore, based on the tentative Tau-U effect size magnitudes suggested by Parker and Vannest (2009; weak effects: 0 – 0.65; medium effects: 0.66 – 0.92; large or strong effects: 0.93 – 1.00), large effects (1.00) between baseline and intervention were found.

Table 3

<table>
<thead>
<tr>
<th>Value</th>
<th>Score</th>
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<tr>
<td>Tau-U</td>
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<tr>
<td>z-score</td>
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<td></td>
</tr>
<tr>
<td>p-value</td>
<td>0.038*</td>
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</tbody>
</table>

Note. *p is significant at <.05

Summary of visual analysis results for Overall Well-being. Visual analysis and nonparametric effect size results suggest that interventions implemented by administration had a basic effect on teacher well-being. However, a stable baseline was not established, and an intervention removal phase was not included. Nevertheless, visual analyses, additional statistical analyses, and teacher report, indicated improved Overall Well-being following intervention implementation by administration.

Stress level. Figure 13 illustrates the Stress levels across baseline and intervention phases. Again, a stable baseline was not established prior to intervention phase and
therefore, baseline analyses cannot be conducted. Based on visual analyses and comparison of mean from baseline to intervention phase, the data indicate a reduction of Stress levels following implementation of interventions at school. As presented in Table 4, mean scores between baseline and intervention for Stress levels demonstrated (7.50 - 6.52) a decrease in stress level following the implementation of school-based interventions. Level changes were present following intervention implementation. Additionally, immediate level shifts were noted and visible at the first intervention Timepoint. Further decreases in Stress level continued in subsequent Timepoints.

Figure 13

*GTWB: Stress Level*

Based on overall visual analyses, a basic effect is demonstrated by mean level changes from baseline to intervention, an observable shift in trend during the intervention phase, and an immediacy effect from baseline to intervention. Therefore, additional
statistical analyses were conducted to further investigate the impact of intervention on Stress Level.

Follow-up analyses of data overlap across phases were also examined to determine the impact of the interventions on reported Stress Level as indicated by Tau-U nonparametric effect sizes. Table 4 illustrated the nonparametric effect size values for aggregate teacher scores from the GTWBM between baseline and intervention phases. Overall, results indicate that implementation of school-based interventions were effective in reducing Stress Levels from baseline to intervention phase. Based on the Tau-U effect size magnitudes, large effects (Parker & Vannest, 2009) on Stress level were demonstrated between baseline and intervention phases, with a significant decrease in reported Stress level following intervention implementation.

Table 4

<table>
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<tr>
<th>Nonparametric Effect Sizes for Stress Level (Tau-U)</th>
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</thead>
<tbody>
<tr>
<td>Value</td>
</tr>
<tr>
<td>Baseline to Intervention</td>
</tr>
<tr>
<td>Tau-U</td>
</tr>
<tr>
<td>z-score</td>
</tr>
<tr>
<td>p-value</td>
</tr>
</tbody>
</table>

*Note. *p is significant at <.05

**Summary of visual analysis results for Stress Level.** Visual analyses results suggest a basic effect with an overall decrease in reported Stress Levels following school-based intervention. Following visual analyses, non-overlap effects sizes confirmed large, significant effects of school-based interventions on Stress level. However, results do not meet all criteria to demonstrate basic effects as a stable baseline was not established and analyses were limited to aggregates of ratings.
Work-life balance. Figure 14 illustrates reported teacher Work-Life Balance across baseline and intervention phases. As previously highlighted, a stable baseline was not established prior to intervention phase and therefore, baseline analyses cannot be conducted. However, using visual analyses and comparison of mean from baseline to intervention phase, the data indicate an increase in Work-life Balance following the implementation of school-based interventions. Table 7 includes mean scores of baseline and intervention phases for Work-life balance (2.33 – 5.03) and demonstrate an increase in reported Work-life balance following intervention implementation. Of note, are the visible immediacy effects of the intervention with increases in Work-life Balance continuing across Timepoints. Additionally, level changes were present following the implementation of school-based interventions.

Figure 14

GTWBM: Work-Life Balance
Therefore, based on overall visual analyses, a basic effect is demonstrated by an increase in reported Work-life Balance from baseline to intervention phase. Additionally, noticeable immediacy effects and shifts in trend from baseline to intervention phase are present. Therefore, we can infer a possible basic effect through visual analysis for reported Work-life Balance.

Following identification of possible basic effects through visual analysis, follow-up analyses of data overlap across phases were also examined to determine the impact of the interventions on reported Work-life Balance as indicated by Tau-U nonparametric effect sizes. Table 5 illustrates the nonparametric effect size values for aggregate teacher scores from the GTWBM between baseline and intervention phases. Overall, results indicate that implementation of school-based interventions were effective in increasing Work-life Balance from baseline to intervention phase. Based on the Tau-U effect size magnitudes, large effects (Parker & Vannest, 2009) on Work-life Balance were demonstrated between baseline and intervention phases, with a significant increase in reported Work-life Balance following intervention implementation.

Table 5  
Nonparametric Effect Sizes for Work life balance (Tau-U)

<table>
<thead>
<tr>
<th>Value</th>
<th>Score</th>
<th>z-score</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tau-U</td>
<td>1.0</td>
<td>2.0701</td>
<td>0.038*</td>
</tr>
</tbody>
</table>

Note. *p is significant at <.05

**Summary of visual analysis results for Stress Work-life Balance.** Visual analyses results suggest a basic effect with an increase in reported Work-life Balance following school-based intervention. Confirming visual analysis results, non-overlap
effects sizes confirmed large, significant effects of school-based interventions on Work-life Balance. Importantly, because baselines were not established, results do not meet the requirements of establishing a causal relationship between school-based interventions and increases in Work-life Balance. However, teachers reported significant improvement through their narratives and teacher meetings. Nevertheless, quantitative results do not meet all criteria to demonstrate basic effects as a stable baseline was not established and analyses were limited to aggregates of ratings.

**Admin support.** Figure 15 illustrates perceptions of Administrative Support across baseline and intervention phases. A stable baseline was not established, affecting the ability to infer causality. However, through visual analyses and mean comparison from baseline to intervention phases, indicate a relatively stable trend across baseline and intervention phases. Interestingly, using mean comparisons from baseline to intervention (6.5 – 8.14), perception of administrative support decreased slightly from baseline to intervention phases. Additionally, Timepoint 2 suggests teachers as perceiving administrative support lower than during baseline.
Because results of the visual analysis do not demonstrate shift, trend, or immediacy effects, basic effects cannot be inferred. Therefore, no additional statistical analyses were explored as Tau-U nonparametric analyses are conducted following the presence of basic effects during visual analyses.

**Teaching Effectiveness.** Figure 16 illustrates teacher perception of their Teaching Effectiveness across baseline and intervention phases. A stable baseline was not established, affecting the ability to determine causality and intervention effects. However, through visual analyses and mean comparison from baseline to intervention phases, data indicate a relatively stable trend across baseline and intervention phases, with a slight increase in perceptions of Effectiveness at Timepoint3. Nevertheless, mean comparisons
from baseline to intervention (6.63–7.45) suggest an overall nonsignificant decrease in teacher perception of their Teaching Effectiveness from baseline to intervention phase.

Figure 16

*GTWBM: Teaching Effectiveness*

Because results of the visual analysis do not demonstrate shift, trend, or immediacy effects, basic effects cannot be inferred. Therefore, no additional statistical analyses were explored as Tau-U nonparametric analyses are conducted following the presence of basic effects during visual analyses.

*In-Class Student support.* Figure 17 illustrates teacher perceptions of their ability to Support Students: In-Class. Utilizing aggregates from the GTWBM during baseline and intervention phases, the graph illustrates perceptions at baseline and during the intervention phase. Based on visual inspection and comparison of means from baseline to
intervention phase, the data indicate increases in teacher perspectives of their ability to support students in the classroom.

Figure 17

*GTWBM: Support Students: In Class*

When comparing base line and intervention phases, mean levels of perceived ability to Support Students in the Classroom are higher during the intervention phase when compared to baseline (7.73 – 7.89). Visual analyses show a slight increase of teacher perception of their ability to Support Students in the Classroom following implementation of school-based interventions. Immediacy effects are evident at Timepoint 1 of the intervention phase following baseline. Following this level shift, scores remained stable across intervention Timepoints. Shift in trend was not
immediately observable. However, Timepoint 3 demonstrates slight increased perception of ability to Support Students in the Classroom.

Visual analyses indicate possibility of basic effects during the intervention phase as indicated by mean level changes from baseline to intervention and an immediacy effect from baseline to intervention. However, no shift in trend during the intervention phase was observed. However, additional statistical analyses were conducted to further investigate the impact of intervention on teacher perception of their ability to Support Students: In the Classroom.

Analyses of data overlap across phases were also calculated to examine the impact of the intervention on teacher perceptions of their ability to support students in the classroom using Tau-U (i.e., non-overlap with baseline) nonparametric effect sizes. Table 6 depicts the nonparametric effect size values for Support Students: In Class, comparing baseline to intervention phase. Results from baseline to intervention phases indicate a large, significant effect of school-based interventions on teacher perceptions of their abilities to Support Students in the classroom (tau-u = 1; p >.05). Tau-U results mirror visual analysis, including visible immediacy effects and level changes.

Table 6
Nonparametric Effect Sizes for Student Support: In Class (Tau-U).

<table>
<thead>
<tr>
<th>Value</th>
<th>Baseline to Intervention</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tau-U</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>z-score</td>
<td>2.0701</td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>0.038*</td>
<td></td>
</tr>
</tbody>
</table>

Note. *p is significant at <.05

Summary of visual analysis results for In-class Student Support. Visual analysis and nonparametric effect size results suggest that school-based interventions positively
impacted teacher perspectives of their abilities to Support Students: In Class. However, only immediacy effect and level shifts were present during visual analysis. Trend shift during the intervention phase were not present. Therefore, results do not meet the threshold of at least three demonstrations of a basic effect at a minimum of three distinct timepoints (Krachtowill et al., 2010) to conclude that the school-based interventions had an effect on teacher perspectives of the ability to Support Students in the classroom.

**Online Student Support.** Figure 18 illustrates teacher perception of their ability to Support Students attending class via Zoom, Google Classroom, and other modalities, across baseline and intervention phases. As previously outlined, a stable baseline was not established, affecting the ability to determine causality and intervention effects. Furthermore, online class was no longer offered following Timepoint 2, limiting the collection of longitudinal data. Immediacy effects are observable from baseline to intervention phase, however three consecutive data points were not collected. Figure 18

**GTWBM: Support Students: Online**

![Graph showing teacher well-being measures over time](image)
Because results of the visual analysis do not demonstrate shift, trend, or immediacy effects, basic effects cannot be inferred. Therefore, no additional statistical analyses were explored as Tau-U nonparametric analyses are conducted following the presence of basic effects during visual analyses.

**Summary of Quantitative Results.** Quantitative analyses of the GTWBM consisted of visual analyses including shifts in level and trend, and immediacy effects, followed by non-overlap effect sizes. Results of quantitative analyses demonstrate basic effects from school-based teacher interventions for teacher well-being including, positive effects on Overall teacher well-being, Work-life Balance, Stress Level, and Student Support: In Class. Findings of basic effects during visual analyses were followed by Tau-U non-overlap effect sizes.

Teachers reported an increase in Overall Well-being following the implementation of school-based interventions, with a significant level change and immediacy effect. Additionally, Overall teacher well-being remained consistent across timepoints following intervention implementation.

Furthermore, teacher’s reported increased Work-Life balance following interventions aimed at reducing teacher responsibilities unrelated to teaching such as administrative tasks, and meetings, and through additional utilization of in-house substitutes. Significant level changes and immediacy effects were observable through visual analysis and results of Tau-U suggest large effects sizes of school-based interventions.
Additionally, teachers reported reduction in Stress Levels including observable immediacy effects and shifts in level followed the implementation of school-based well-being. Tau-U non-overlap analyses mirrored results including large, significant effects.

Lastly, teachers reported feeling more Supportive of Students: In Class following school-based interventions that reduced non instructional workload. Reducing administrative responsibilities may have increased time spent on class preparation and instruction, leading to increased student performance; hybrid classes were discontinued following Timepoint 2.

Immediacy effect and shifts in level and trend were observed across domains and further statistical analysis demonstrated large effect sizes. Results of the visual analysis and Tau-U non-overlap analyses suggest a significant relationship between implementation of school-based well-being interventions and teacher reported well-being domains.

However, causality cannot be established due to data collection methods including anonymity of data and use of aggregates, and study design, lack of reversal and absence of an established baseline. Due to these limitations, results of quantitative analyses should not be analyzed in isolation. Integration of qualitative and quantitative data would provide a more complete picture of the effects of school-based interventions for teacher well-being.

**Qualitative and Quantitative Integration.** Integrating quantitative and qualitative provides a more in-depth analysis of (4) What is the impact of intervention on teacher well-being? Qualitative data from teacher focus groups, meetings, member checks and administrative meetings informed school-based intervention planning. Furthermore,
GTWBM narratives provided teacher’s the opportunity to reflect on and identify intervention effectiveness and recommend adaptations or additional supports. Quantitative data from the GTWBM provided longitudinal data on teacher well-being throughout the school-year. Importantly, Figure 19 simultaneously presents qualitative and quantitative data to illustrate the relationship between implemented school-based interventions and subsequent teacher well-being ratings. The following section briefly discusses the effects of school-based interventions on their well-being.

Through focus groups, teacher’s identified domains of functioning associated with teacher well-being and a well-being measure was developed. Following baseline data collection, interventions were immediately implemented as teachers reported significant concerns with overall well-being including increased Stress and Workload and decreased Work-Life Balance and Support.

Following implementation of school-based interventions after baseline testing immediate effects were observed. Teachers reported increased overall well-being, significant decrease in stress level and increased work life balance following increased administrative support through check-in’s, utilization of substitute teachers in classroom preparation and administrative support, implementation of the Teacher Well-being project and Wednesday early release days.

Furthermore, gains made immediately after initial implementation of interventions were sustained across timepoints, with additional interventions, remaining elevated throughout the year. Importantly, results of the statistical analyses demonstrating basic intervention effects were further confirmed by teacher reports including meetings, member checks and GTWBM narratives.
Teachers reported significant gains in overall well-being following implementation of school-based interventions. Additionally, results of statistical analyses were in line with qualitative teacher reports. Teachers noted increased well-being.

Additionally, teachers reported significant decreases in stress levels. In line with results of statistical analyses, qualitative data note that teachers reported administration implementation of interventions aimed at reducing teacher workload and stress levels. Additionally, teachers reported that administrative supports such as the well-being project and check-in’s positively impacted teacher well-being. Through utilizing in-house substitute teachers, reduction of additional meetings, and elimination of weekly professional development responsibilities, teachers reported significant reductions of stress level.

Moreover, teachers reported significant increases in work-life balance. Through reduction of workload and stress level, teachers noted improved work-life balance. Statistical analyses demonstrate significant increases in work-life balance and teacher narratives overwhelmingly support increased work-life balance following the implementation of school-based interventions. Teachers particularly reported support for limiting meetings, professional developments, utilization of substitute teachers to help with preparation tasks, and elimination of weekly professional developments. Teachers stated they were able to reduce the amount of time spent preparing for work at-home and increased time spent with their families and engaging in preferred activities.

Non-significant gains in administrative support were observed across the school-year. Though gains were statistically non-significant, qualitatively teachers reported improved administrative support across the intervention period. Teachers noted that
administrators regularly consulted with teachers, hosted. “check-in hours,” sought out teacher feedback, and implemented suggested interventions. Teachers reported high levels of administrative support at baseline, they reported increased support across the school-year. Therefore, though statistical analyses did not identify a significant intervention effect on perceived administrative support, teachers consistently highlighted the importance of administration in implementing school-based well-being interventions on their overall well-being.

Teacher perceptions of their teaching effectiveness remained at baseline levels. Teachers noted several concerns with their perceptions of their effectiveness in the classroom including students demonstrating difficulty transitioning back into the classroom, learning grade-level materials and performing on benchmark testing. Interestingly, decreases in effectiveness were reported following benchmark testing. Overall, per teacher narratives, teachers noted some relationships between their teaching effectiveness ratings and student performance in the classroom and teachers commented that students were demonstrating difficulty in the classroom.

Interestingly, teachers reported increases in their ability to Support Students in the classroom. Following implementation of interventions, a slight increase in trend was demonstrated from baseline to intervention. Though large intervention effect sizes were found, basic effects were not. Teacher narratives include increases in their ability to support students following interventions including utilization of substitute teachers, increase breaks, relaxation of COVID mitigation protocols and elimination of hybrid classes. The largest increase in teacher’s perceptions of their abilities to support students were visible following the elimination of hybrid classes. Therefore, decreasing teacher
workload and teaching responsibilities improved teachers’ abilities to Support their students.
Figure 19: GTWM ratings and Intervention
Finally, teachers reported the Global Teacher Well-being Measure itself was identified as an intervention. When completing the GTWBM, teachers often described the benefit of thinking about their well-being, reflecting on their stressors, supports, work-life balance, and teaching victories. Additionally, the focus groups and GTWBM demonstrated that administrators cared about the teachers, valued their input, and developed and implemented school-based interventions based on their reported needs. Importantly, teachers consistently reported “this project is helping me,” “teacher focus groups let me know administration cares,” and “thank you for asking.”

**Discussion**

Using ecological system theory frameworks, this study aimed to listen to stakeholder voices to understand how teachers conceptualize well-being including the factors that contribute to and impact well-being to better understand how to implement culturally and contextually relevant interventions to support teacher well-being in schools. Focus groups were conducted with 9 teachers at a charter elementary school in the South, however, 21 teachers continued to participate in longitudinal data collection through GTWBM. Responses were analyzed inductively, and Themes were identified across data sources. Three prominent themes (1) Stress, (2) Balance/Workload, and (3) Support/Interventions, were identified across teacher focus groups, teacher meetings, teacher narratives on the GTWBM, and administrator consultation meetings. The following section will focus on how these finding relate to the existing literature, the framing theories, limitations, and implications for future research.

**Findings in the Context of Existing Literature.** This study gave voice to teachers struggling to perform under the new expectations set after COVID. Results from the
current study are not surprising and closely mirror those of the extant research. Participating teachers reported increased stress, workload, negative affect, and decreased well-being. Similar findings were found prior to the pandemic (Bibou-Nakou et al., 1999; Earley & Bubb, 2004; Yoon, 2004), but rates of burnout including, increased anxiety and decreased morale have significantly increased since then (Kurtz, 2020; Kast et al., 2021; Truzoli et al., 2021). Additionally, though teachers have received messaging about self-care and well-being, well-being had not been operationalized and feasible and effective interventions were not prioritized. This study collaborated with teachers to define well-being and identify school-based interventions that best aligned with their understanding of well-being. Furthermore, this study provided teachers with the opportunity to express, in their own words, their experiences navigating teaching in a post-COVID world.

Kurtz (2020) and Marek et al. (2021) have found that teachers have endorsed considerably higher workloads and higher levels of stress transitioning from teaching modality to teaching modality. Unsurprisingly, participating teachers initially identified these periods of transition and uncertainty as contributing to increased levels of Stress. Importantly, teacher’s noted increased Stress when adapting to novel technology and teaching modalities. These findings were in line with Hodges et al. (2020) which noted shifts with unfamiliar technologies often add to workloads, as teachers adjust. Teachers noted initial adjustments to alternative teaching modalities contributed to increased Workload and Stress.

Per extant research, increased exposure to occupational stress increases the likelihood that individuals will develop burnout (Bassett & Taberski, 2020; Ciraldo, 2020). Participating teachers identified increased negative emotions, feelings of being
overwhelmed, unsupported, and ineffective in their teaching, all associated with burnout. Additionally, teachers reported they were burnout. Furthermore, as the year progressed, teachers reported chronic stressors. However, teachers reported improvements in Workload as interventions were implemented across the school-year.

Lester el al. (2020) highlighted the importance of collaborating with teachers when developing school-based interventions to ensure acceptability and sustainability. Furthermore, the literature has noted when teachers feel valued, respected, and supported, they report increased levels of well-being (Huppert, 2009; Kern et al., 2014). Participating teachers consistently reported feeling supported by administration “check-ins” and implementing teacher intervention recommendations. In line with previous research, teachers reported increased levels of well-being when administration asked, listened, and implemented school-based interventions. Furthermore, teachers appreciated administration’s effort to support them and included these observations in narratives. These findings are significant, as teachers reported increased support and well-being following initial administrative interventions consisting of “check-ins” and “asking us how we are doing.” This suggests school-based interventions can be simple and cost-effective and still be impactful.

Furthermore, collaborating with teachers and administration and integrating stakeholders throughout the process improved acceptability of well-being school-based interventions. Teachers reported positive effects of school-based interventions throughout the school-year. Additionally, school-based well-being programming became integrated at the system-level and teacher well-being was incorporated into school wellness initiatives.
Findings in the Context of Theoretical Framework. This study was conducted to include and elevate the voices of the stakeholders in research. The goal was to collaborate with teachers to develop a shared understanding of well-being and understand their experiences during COVID. Findings are conceptualized in the context of Bronfenbrenner’s Ecological Systems Theory.

Bronfenbrenner’s Ecological Systems Theory. Context is key. The present study occurred specifically in the aftermath of a pandemic, underlying the importance of the chronosystem. Public policy, policy changes and guidelines – macrosystem- were developed in response to COVID. As more was understood about COVID, guidance’s evolved and changed. Systems, such as schools -exosystems- were required to continuously adapt and adjust to these emerging guidelines. As was quickly apparent, schools were not prepared and demonstrated difficulty transitioning. Furthermore, this affected the expectations of stakeholders within the system – school – including increased workload and responsibilities.

The findings in the present study illustrate the interaction between systems beyond the individual teachers and show that experiences at school and home impact overall teacher well-being. Within their microsystems, teachers reported family, home, and school stressors and supports. Teachers reported family as integral to their well-being and identified both personal and professional relationships as impactful. Furthermore, teachers noted stressors across home, school, and relationships and were able to verbalize their effects across professional and personal contexts. These interactions form the mesosystem, whereby experiences at school impact functioning at-home and vice versa. Importantly, teachers explicitly reported the effect of increased workload on
relationships, noting poorer personal relationships. Additionally, teachers noted negative experiences at-home impacting their stress levels and performance at school; teachers consistently reported this bidirectional relationship between home and school. Within the context of the exosystem - the school system as a whole - teachers report increased stress and workload based on expectations set by the system. Administration identified these school-wide needs and sought system-wide consultation. These programmatic changes affected teachers experiences at school, improving their functioning both at school and at-home, Teachers similarly identified school-wide interventions as most impactful to their well-being. Ecological Systems Theory (1977) was evident throughout the study, stakeholders identified the effects of COVID, school expectations, and responsibilities across contexts. Focus groups, meetings, and narratives provided opportunities for teachers to reflect and articulate how their experiences across systems impact their well-being.

**Limitations**

Several limitations should be considered when evaluating the present study and its impact. The limitations presented in this section highlight directions for future research. Limitations include context of the data collection and analysis, study design, and internal and external validity.

**Context.** This study was conducted in the context of the COVID-19 pandemic and specifically, between July 2020 and May 2021. As such, all consultation, collaboration, and research activities strictly adhered to the COVID-19 mitigation factors outlined by the CDC, local public health authorities, and school specific guidelines. Therefore, the focus groups, teacher and administrative meetings, and GTWBM data collection were
conducted via Zoom and online data collection platforms. This completely remote research design focused on co-constructing, collaborating, and providing intervention for teach well-being through a consultative relationship. These adaptations may have impacted the relationship between the researcher and teachers, understanding of the phenomena, effectiveness of the intervention, and acceptability of the consultation relationship and resulting interventions.

**Consultation relationship.** Importantly, the research project emerged from a consultative relationship with the charter school. Needs for teacher well-being supports were identified March 2020 and the current study was developed following the need to understand teacher well-being, as well as the domains of functioning implicated in well-being. Furthermore, the need to implement interventions and monitor progress and effectiveness were central to the goals identified by administration. Therefore, the study was made possible because of a consultation team and university partnership. Additionally, the consultation team utilized participatory action research, particularly Participatory Culture Specific Model’s (PCSIM; Nastasi et al., 2000) of consultation which focused on developing contextually specific interventions through partnerships and collaboration with teachers and administrators. Importantly, PCSIM is founded on the development of relationships and trust between researchers and stakeholders. Because COVID mitigation procedures restricted on-campus access, these relationships were not fully developed, stakeholder trust was not assessed, and in-depth understanding of culture and context was not fully developed. This was highlighted as these relationships, cultural and contextual factors, and goals and values underly the interpretation of data and
subsequent interventions selected. Member checks and meetings were used to
counterbalance against this limitation.

**Study design.** The utilization of the AB design in this study is a limitation. There
is no randomization or replication of the baseline or intervention phases in the basic AB
design. Therefore, AB designs have problems with internal validity and generalizability
of results. Furthermore, they are weak in establishing causality because changes in
outcomes could be attributed to confounding variables such as, experience, learning, and
practice effects (Kazdin,1981; Kellett & Hardy, 2014; Onghena et al., 2019). In the
context of the study, intervention removal posed an ethical. Moreover, in AB designs, a
minimum of 3 timepoints or a stable level or rate of change need to be established within
the baseline phase before transitioning into the intervention phase. No stable baseline was
established in the current study. The study was conducted through a consultative
relationship and teacher reports of high levels of stress and intervention needs established
an ethical responsibility to provide interventions, services, and supports for teachers, as
soon as possible. Overall, a functional relationship between intervention and teacher
well-being improvements cannot be established because no stable baseline was
established, and reversal/withdrawal phases were not integrated into the study design.
However, for this specific school and context, teachers reported improved well-being
following the implementation of school-based interventions. As consultants, our main
goal was to develop and implement school-based teacher well-being interventions that
best fit the needs of the school. Findings of the project indicate overall improvement of
well-being across timepoints. Furthermore, the current study best illustrates how school
psychologists can implement interventions, monitor progress and engage in data-based decision-making when practicing in schools.

**Data Collection.** Furthermore, quantitative data regarding GTWB were collected anonymously. In collaboration with teachers and response to feedback received during member checks, GTWBM were collected anonymously. No identifying information were collected including, grade level, years teaching, race/ethnicity, gender, or subject material. Furthermore, teachers completed the GTWBM in an on-line survey format to guarantee anonymity. Therefore, scores and data cannot be attributed to individual participants. As such, data were aggregated and presented as averages across GTWBM questions across timepoints. No additional quantitative analyses were appropriate considering we are unable to attribute data to specific teachers.

**Aggregating scores.** As previously mentioned, data were presented as aggregates to present an overview of schoolwide teacher well-being. This was due to teacher request for anonymity but additionally, administration was interested in system-wide teacher well-being. The focus was on school-wide teacher well-being rather than individual teacher well-being. This creates limitations because we can only monitor teacher well-being across all teachers which may cause us to miss fluctuations, including improving and declining in individual teacher well-being. Additionally, aggregating across subjects limits the insight we can gather from individual teachers as it assumes homogeneity across the sample. This is important because teacher’s have different experiences both in and out of school. Additionally, outliers may skew overall teacher ratings across domains. For example, overly negative or positive ratings may affect aggregates, affect school-based interventions, and administrative supports. However, integrating qualitative
narratives and components to the study helped provide context to the quantitative results and aided in the interpretation of the data.

**Internal validity and Trustworthiness.** We are unable to infer causation due to the study design. First and foremost, we cannot assume causality due to the study design - absence of established baseline and reversal – data collection, teachers remained anonymous and data were analyzed as aggregates – an N of 1; limiting our ability to control for confounds. Therefore, it can only be stated the there is a relationship between teacher well-being and implementation of school-based teacher well-being interventions. This overall limit the impact of the quantitative findings. Despite the inability to infer causation, qualitative data provided additional information on factors impacting teacher well-being, including school and personal supports and stressors.

**Global Teacher Well-being Measure.** The teacher well-being measure was developing in consultation with school staff to reflect how teacher well-being was conceptualized by the teachers at this specific school. As identified through the ongoing consultative relationship, teacher well-being was identified by both teachers and administrators as needing additional supports and interventions. In fact, it was highlighted as a priority in consultation. Therefore, teachers and administrators were interested in actively participating and collaborating in the consultation process. As it was important to include stakeholder perspective in conceptualizing and measuring teacher well-being, creating a context-specific measure, the scale itself is not empirically validated, but it was appropriate for the context. Including this culturally and contextually appropriate measure that could be easily integrated into the school was a critical component of the participatory consultation model (Nastasi et al., 2004). For the purposes
of this project, the GTWBM provided consultants and administrators the information needed to best meet the needs of the teachers.

**Generalizability and Transferability.** Furthermore, the study design, data collection, and data analysis process have implications for the generalizability of the results of the study. Additionally, this was a mixed methods design utilizing qualitative methods which are designed for contextualized studies, and therefore has limited generalization to other settings. What studies such as this provide, is possibility of transferability. With the detailed description of the current context, researcher experiences, and methods, readers of the study have the necessary information to determine if the results are applicable to their own setting. Additionally, they are aware of the limitations of the quantitative design and are better able to plan for these pitfalls in their own consultation and research. Furthermore, this means that using the information and procedures provided, other researchers may transfer the process across settings – conducting focus groups – following the “end of COVID” and adjusting to life after the pandemic with teachers at this school or others.

Importantly, in the context of participatory action research, this project was ideally developed and implemented in a school with leadership support from the local charter network, school administrative support, sufficient resources, and teacher participation. This project was conducted under ideal conditions with administrative and teacher support. Additionally, the context of the school affects the transferability of the study design and generalizability of results. The school is well funded and resourced and maintains a consultative partnership with a school psychology graduate program.
Additionally, acceptability of the consultation occurred within the context of the return to school following the COVID-19 shutdown.

**Implications for Practice and Future Directions**

*Implications for practice.* As teachers continue to report increased levels of burnout including elevated stress and workload, negative emotions such as depressed mood and anxiety, school psychologists, administrators and stakeholders should aim to develop system-level teacher well-being interventions to best support the needs of their teachers.

The outcome of this research has important implications for developing school-based teacher well-being interventions. Specifically, developing school-based interventions that are dependent on the culture and context of the setting. Using consultation models such as the Participatory Culture-Specific Intervention Model, to build acceptable and sustainable systems-level interventions through building relationships, collaborating with teachers and other stakeholders should be used to identify and develop appropriate school-based interventions. Utilizing these consultation models, teachers are emphasized as integral to the intervention development process.

By aiming to develop system-level teacher well-being interventions, administration and support staff such as school psychologists can regularly collect data on teacher well-being to monitor teacher well-being, longitudinally. School psychologists can encourage administrators to use data-based decision-making using teacher data to implement or adapt teacher supports. Furthermore, through this data, teachers can be provided with additional consultation through school-based or community resources.
Additionally, depending on teacher well-being ratings, individual or system-level supports can be recommended to best fit the needs of the school.

Additionally, this work has implications for policy work on a larger scale. Often individual schools and districts are limited in their abilities to directly address teacher well-being by local, state, and federal educational policies but also by the availability of resources. To affect change at a broader systems level, policies addressing teacher well-being should be considered to create space and resources for districts and schools to prioritize teacher well-being. Importantly, as research has previously demonstrated, teacher well-being is linked with student well-being and academic achievement. Additional, considerations of the current climate of teaching, including teachers leaving the profession and a large number of vacancies, policy addressing teacher well-being and supports should be implemented universally. Furthermore, policies addressing teacher well-being create space and guidelines to implement teacher-specific programming.

**Future Directions.** The sample of teachers who participated in the focus groups identified as 100% female. To understand what other factors could be impacting their well-being, including occupational and personal stressors should include investigation and integration of research of the impact of role strain, which specifically analyses the roles, responsibilities, and expectations of women at home and in the workplace. These additional societal and cultural stressors may have an impact on how participating teachers were experiencing and navigating the additional responsibilities during COVID. Additionally, future research should seek to actively recruit teachers identifying as male, to identify differences, or similarities in experiences.
Future research should consider a multiple baseline design, addressing both internal validity and generalizability concerns as well as ethical and practical considerations of removing intervention components. Multiple baselines will aid in controlling for confounds and increase the likelihood of establishing causality of intervention effectiveness. Furthermore, future research should be focused on establishing a stable baseline, in accordance with the guidelines of single case research designs. A stable baseline, defined as no changes in level and/or trend, across collection timepoints, gives researchers a set point of reference of existing well-being to compare intervention effectiveness, longitudinally.

Furthermore, future research should include a validated teacher well-being measure. The teacher well-being was created in consultation with teachers utilizing focus groups and subsequent member checks. Therefore, the measure was valid in measuring teacher well-being as it related to the current context including the consultation relationships and the specific goals of teachers and administration. However, to improve generalizability and add to the teacher well-being literature, future research should utilize validated measures of well-being.

Additionally, future research should be conducted in-person. Within the context of COVID, virtual consultation was required to adhere to the mitigation policies implemented by the CDC. However, this limited access impacted relationship and trust building, as well as the ability to get an in-depth understanding of the culture of the school and stakeholders. Therefore, future research should be focused on in-person consultation to ensure that relationships are built, developed understanding of cultural
and context, and presence of consultants provide teachers and other stakeholders with opportunities for informal check-ins and other interactions.

**Conclusion**

Teacher burnout rates are higher than ever. Previous research has demonstrated steady and increasing burnout rates including increased stress, workload, depressive symptoms and decreasing feelings of effectiveness and satisfaction with teaching (Kim & Asbury, 2020; MacIntyre et al., 2020; Trust & Whalen, 2020). Burnout rates have risen at unprecedented rates following the pandemic (Braun et al., 2020; Bassett & Taberski, 2020) with one in four teachers reported contemplating leaving the field compared to one in six prior to the pandemic (Acton & Glasgow, 2015; Babinčáková & Bernard, 2020; Burić et al., 2019; Braun et al., 2020; Eden, 2020). Teachers have reported feeling overwhelmed, overworked, underpaid, less effective and not supported by administration (Bassett & Taberski, 2020; Bushweller, 2020; Lin, 2020; Taberski, 2020; Talidong & Toquero, 2020). Overall, teachers are reporting increased need for supports including administrative and school-based well-being interventions.

This study found similar reports of increased stressors and workload. Teacher focus groups, meetings and member checks identified increased amounts of stress and workload and decreased levels of work-life balance and overall well-being. Teachers reported feeling overwhelmed and stuck. However, teachers noted that administration was open to feedback and working toward supporting teachers through this time.

Teachers collaboratively operationalized teacher well-being and identified domains of functioning that impacted teacher well-being. Teachers identified Stress, Work Life Balance, and perceptions of teaching effectiveness including ability to support
students as most affecting their well-being. Using these themes, a culture and context dependent teacher well-being measure was used to longitudinally measure teacher well-being. Including spaces for teacher narratives, teachers were asked to identify stressors and supports as well as appropriate school-based interventions. Importantly, administration was receptive to and utilized teacher feedback to implement the needed school-based interventions. GTWBM data demonstrate overall improvement of teacher well-being across timepoints following initial implementation of well-being interventions. Additionally, gains in well-being were sustained and bolstered by continuous adaptation to well-being interventions. Particularly, teachers reported an increase in overall well-being, work life balance, and a decrease in stress. In sum, this study reveals the importance of developing a shared understanding of a phenomena in collaboration with teachers, actively incorporating teachers in developing interventions and including opportunities for teachers to provide ongoing feedback on their well-being and identify intervention needs.

Asking teachers about their well-being affects their well-being. Per the teachers who participated in this study, integrating teachers in the process when developing system-wide supports results in more effective school-based well-being interventions. Furthermore, teachers noted that opportunities for reflection through ongoing monitoring of their well-being enhanced their sense of well-being.

Future research should continue to explore the effects of school-based interventions on teacher well-being and identify effective interventions identified by teachers. This study illustrates the utility of consulting and collaborating with teachers and administrators to develop culturally and contextually dependent teacher well-being
interventions. Teachers identified interventions that were implemented by administration. Per GTWBM, teachers reported improvements in teacher well-being following the implementation of their suggested interventions. Furthermore, this study supports the benefits of school-based mixed methods research, utilizing qualitative and quantitative data to fully understand teacher well-being. This research provides support for the importance of utilizing a participatory consultation model, incorporating and actively collaborating with stakeholders to develop context-specific and culturally appropriate school-based interventions (Nastasi et al., 2000).
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Appendix A

Teacher Well-Being Focus Groups

1. How would you define teacher well-being?
2. What do you see as challenges to teacher well-being?
3. How has COVID impacted your well-being?
4. What is administration currently doing to support and promote your well-being?
5. Are these strategies being implemented effectively?
6. What are some supports and stressors you feel impact your well-being (Can be people)?
7. What do you need from administration to feel supported in your well-being?
8. How do you feel about this teacher well-being support process? Would you like to continue? Would you make any changes?
Appendix B:

Global Teacher Well-Being Questionnaire
Please take the time to reflect on the last 2 weeks and rate each question using the following 0-10 rating scale.

1. **I am satisfied with the balance between work and personal life.**
   
   0 = work-life was not balanced at all; seemed like work interfered with my personal life or personal life interfered with my work
   
   10 = work-life was well balanced; I feel like I had time and energy for both work and personal responsibilities/needs.

2. **Rate your stress level.**

   0 = no stress  
   10 = most stress I have ever felt

3. **What are some factors that affected your stress level?**

4. **Rate your overall well-being.**

   0 = My well-being is extremely poor  
   10 = My well-being is excellent

5. **What are factors contributing to your well-being (e.g., coping strategies, social supports)?**

6. **I feel like administration is supporting my well-being.**

   0 = Administration is not at all supportive  
   10 = Administration is the most supportive

7. **What are some supports administration is providing?**

8. **I feel like my teaching is effective and helpful to my students or I feel like I am effectively supporting and helping students.**

   0 = Not at all effective and helpful  
   10 = Most effective and helpful

9. **I feel like I can support my students.**

   a. **In-class**
   
   b. **on-line**

   0 = Not at all supportive  
   10 = Most supportive I can be

10. **Identify one personal success (in teaching or current role) that occurred during past two weeks:**

Any additional comments you would like to share?
Biography

Raquel Gutierrez is currently completing her clinical internship at the Munroe-Meyer Institute of Genetics and Rehabilitation in Pediatric Psychology in Omaha, Nebraska. She is a doctoral candidate in school psychology at Tulane University and has experience working with children, from diverse racial, ethnic, and linguistic backgrounds across community mental health, medical, and school settings. She is committed to providing comprehensive, strengths-based, and culturally responsive evaluations and to inform evidence-based treatment. Raquel is interested in collaborating across multi-disciplinary and inter-disciplinary teams to support and advocate for children and their families.