THE IMPACT OF GRATITUDE INTERVENTIONS ON DEPRESSION AND STRESS LEVELS IN KOREAN AMERICAN ADOLESCENTS

UNIVERSITY OF HAWAIʻI AT MĀNOA SCHOOL OF NURSING AND DENTAL HYGIENE

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Abstract

Problem Statement: Korean American (KA) adolescents encounter unique cultural and psychological challenges that heighten their vulnerability to depression and stress. Although there is increasing recognition of these risks, culturally tailored interventions addressing their specific mental health needs remain limited. Gratitude-based interventions have demonstrated effectiveness in improving psychological outcomes; however, their applicability and impact among KA adolescents remain underexplored. This study aims to examine the effectiveness of daily gratitude practices on depression, stress, and gratitude levels among KA adolescents, with the goal of informing culturally sensitive strategies to enhance adolescent mental health.

Purpose: This study aims to evaluate the effectiveness of daily gratitude interventions in reducing depression and stress levels among Korean American (KA) adolescents. Findings will offer evidence-based insights into the therapeutic benefits of gratitude practices, informing the development of culturally tailored mental health strategies to support this underserved population.

Methods: A single-group pretest-posttest design was employed involving Korean American (KA) adolescents aged 12 to 18. Participants completed a daily gratitude journaling intervention over a one-week period, during which they recorded three things they were grateful for each day and composed one gratitude letter. Levels of depression, stress, and gratitude were assessed using validated psychological instruments administered both before and after the intervention.

Results The study included 15 Korean American adolescents with a mean age of 14.9 years. Following the gratitude intervention, participants demonstrated statistically significant reductions in depression and perceived stress, as well as increased levels of gratitude.

Conclusion: The results demonstrate that daily gratitude journaling and gratitude letter writing intervention may serve as effective therapeutic complements in reducing depression and stress levels while enhancing positive emotions among Korean adolescents. These findings highlight the value of culturally tailored gratitude-based practices in promoting adolescent mental health and emotional well-being.

TABLE OF CONTENTS

List of Table

List Of Graphs

The Impact of Gratitude Interventions on Depression and Stress Levels In Korean American Adolescents

In today's fast paced and challenging world, stress and depression have become significant concerns for adolescents navigating the complexities of growing up. Adolescence is a period of a major life change, involving significant physical changes, cognitive, and psychological maturation, and shifts in social interactions with peers and family (Blackmore,2012). Youth depression has emerged as a critical public health issue. In 2023, approximately 1 in 5 U.S adolescents aged 12-17 experienced a major depressive episode, consistent with previous years (MHA,2023). Furthermore, 31.9% of adolescents in this age group received mental health treatment, an increase from prior year (SAMHSA, 2024). These findings highlight the ongoing mental health challenges faced by adolescents in the U.S., significantly increase the risk of adverse health and social outcomes, including the development of psychopathology, suicidal behavior, and long-term unemployment (W.Y. Chung et al., 2009; Fergusson et al., 2007). Furthermore, depression remains a major risk factor for suicide, which accounts for more than one-third of adolescent deaths nationwide and is the second leading cause of death among youth aged 10-19 years (Grossberg & Rice, 2023; Heron, 2021). Adolescent depression is closely related to non-suicidal self-injury and substance use as well as negatively affecting the developmental trajectories of affected youth (Mangione et al., 2022).

Korean immigration to United States has increased markedly and now more than 1.8 million Korean Americans lived in the United States, accounting for 8% of Asian Americans (USCB, 2021). According to research, 40-60% of Korean Americans adolescents suffer from depression symptoms, however first generation Korean American parents don't consider mental health to be significant, and study findings show that they feel a stigma toward seeking

psychiatric mental health treatment (Kim&Im.,2015). As first-generation Korean American immigrants acculturate to life in the U.S., they tend to display increased positive affect, which correlates with lower depression scores (Kim et al., 2013). However, this pattern does not extend to Korean American second-generation adolescents. Korean American adolescents reported experiencing less enjoyment in life compared to their American peers (Kim et al., 2013). Higher levels of acculturative stress in Korean American adolescents have been linked to stress factors such as the parent-child acculturation gap, acculturative stress, experiences of discrimination, bullying, interpersonal relationship challenges at school, and limited English proficiency (G. Kim et al., 2011). Additionally, the pressure to excel academically and the cultural dissonance from KA parents who may hold more strong traditional Asian values can lead to intergenerational conflicts between Asian American parents and their children (Qin, 2008). These issues create further difficulties for some Korean American adolescents, adding complexity to their psychological adjustment.

The growing awareness of stress and depression's impact on KA adolescents has led to a stronger emphasis on developing preventive strategies and adaptive coping mechanisms for managing stress and depression (G.Kim et al.,2011; Kim et al.,2014; Zimmer-Gembeck & Skinner,2011). Traditional approaches, such as medication management, cognitive behavioral therapy interventions, and counseling continue to be fundamental. However, there is still a gap in identifying interventions specifically tailored to the unique needs of KA adolescents, especially considering that many KA parents hold strong stigmas toward mental health treatment. These stigmas are due to several factors, including denial of child’s behavior, fear of family disempowerment, and mistrust of public mental health service (Park et al.,2022). Parents also lack information about available services and face logistical difficulties in accessing them (Park

et al.,2022). Communication challenges and concerns about language barriers further complicate the situation, additionally, there is general mistrust in psychotropic medications (Park et al.,2022). This cultural stigma can create additional barriers to KA adolescents seeking help they need. Recent research suggests that gratitude interventions are effective in reducing stress and enhancing well-being, offering an alternative that might be more culturally acceptable (Diniz et al., 2023). Gratitude has been examined through various perspectives, including emotion, attitude, moral virtue, habit, personality trait, and coping response (Emmons & McCullough, 2003). An improvement in anxiety and depression symptoms in patients who participate in gratitude intervention (Diniz et al.,2023). For KA adolescents, promoting gratitude may offer a valuable tool for enhancing resilience and improving overall well-being. Gratitude interventions, such as gratitude journaling, where individuals actively recognize and appreciate the positive aspects of their daily lives, have been shown to be effective (Emmons & McCullough, 2003; Wood et al., 2010). Studies have shown that individuals with higher gratitude levels enjoy better psychological well-being, including increased happiness, stronger relationships, more positive emotions, fewer negative emotions, enhanced resilience and greater life satisfaction (McCullough et al., 2002; Sun and Kong, 2013; Diniz et al., 2013; Wood et al., 2010; Emmons & Mishra, 2011). Given the unique challenges faced by KA adolescents, incorporating gratitude practices could be especially valuable in improving the psychological well-being within this population.

Problem Statement

Korean American (KA) adolescents experience unique cultural and psychological challenges that place them at a higher risk for mental health issues, including depression and stress (Kim et al., 2016). Despite increasing awareness of the mental health disparities within this

population, there remains a lack of culturally tailored interventions that address their specific needs. Existing literature suggests that gratitude interventions may improve psychological well-being by fostering resilience, reducing negative emotions, and enhancing life satisfaction (Shapiro et al., 2011; Wood et al., 2010). However, there is limited research on the effectiveness of gratitude interventions within the KA adolescent community. This study seeks to fill that gap by investigating how gratitude practices influence mental health outcomes in KA adolescents, with the goal of developing culturally relevant strategies for reducing stress and depression within this vulnerable group.

PICOT

In Korean American adolescents aged 12-18 yrs. (P), does the implementation of gratitude intervention exercises (I) result in a significant improvement in depression, and stress levels (O) within 1 week (T)?

Purpose and Objectives

The purpose of this evidence-based project is to evaluate the effectiveness of daily gratitude intervention in reducing depression and stress levels among Korean American (KA) adolescents. This project aims to contribute to existing literature by exploring the potential benefits of incorporating gratitude-based interventions into the academic and personal lives of KA adolescents. By examining the effects of gratitude exercises, the study contributes to the development of strategies aimed at improving mental health outcomes among minority adolescents, particularly within the Korean American community.

Conceptual Framework

This study is based on the theoretical framework of Martin Seligman's positive psychology which focuses on enhancing well-being through the PERMA model (Positive

emotion, Engagement, Relationships, Meaning, and Accomplishment), and emphasizes the importance of positive emotions, strength, and virtues to enhance overall mental health (Seligman, 2011).

Gratitude, a key positive emotion, plays a central role in this model by fostering a shift from negative thoughts and focusing on the positive aspects of life. Research shows that gratitude interventions, such as journaling or expressing gratitude in letters, help adolescents reframe their experiences and develop a more positive outlook, thereby reducing symptoms of depression and stress (Emmon & McCullough, 2003). These gratitude interventions encourage greater mindfulness and presence in the moment, which enhance engagement in daily activities and boost overall well-being (Seligman, 2011). Furthermore, gratitude strengthens relationships by promoting prosocial behavior and social bonding, which are essential for mitigating feelings of isolation and loneliness commonly associated with depression (Wood et al., 2010). Gratitude also helps adolescents find meaning in their lives, allowing them to connect more deeply with their values and sense of purpose (Seligman, 2011). By recognizing their achievements and focusing on what they are grateful for, adolescents gain a greater sense of accomplishment and self-worth, reducing feelings of inadequacy and hopelessness (Gable & Reis, 2010).

The unique experiences of the KA adolescent population, including acculturative stress, identity conflicts, and high academic and familial expectations, are important contextual factors that can exacerbate mental health challenges (Choi,2009; Kim, 2011). These stressors may also affect their overall resilience and coping mechanisms. Integrating gratitude practices into mental health interventions aligns with Seligman's emphasis on fostering flourishing and they can significantly improve KA adolescents' emotional resilience and well-being by promoting a shift in perspective from focusing on challenges to appreciating positive elements in life, contributing

to lower levels of depression and anxiety, and increasing positive feelings and emotions (Diniz et al., 2023). This framework suggests that gratitude not only enhances immediate emotional well-being but also contributes to the development of long-term coping strategies that are culturally appropriate. These strategies align with the values of KA communities, which emphasize family support, community cohesion, and intergenerational respect (Choi,2009; Kim, 2011). The findings of this study may contribute to the broader understanding of culturally sensitive mental health interventions and the role of gratitude in enhancing psychological resilience among minority KA adolescents.

Synthesis of Evidence

Search Method

Based on the focus of this study, a literature search was conducted to explore the impact of gratitude journaling on depression and stress management in Korean American adolescents. The search utilized PubMed and the Cumulative Index to Nursing and Allied Health Literature (CINAHL), guided by the study's PICOT question. Boolean operators (AND/OR) were employed to combine search terms, and the advanced search option was used to refine the results. The Boolean phrases and search strings included: (adolescence OR adolescents OR teenagers OR teen OR youth OR "Korean American") AND (depression OR stress OR mental health OR stress management) AND (gratitude or thankfulness or gratefulness). No specific time frame or research design limitations were applied in order to capture a broad range of relevant studies.

The search resulted in 72 publications, all of which were reviewed for relevance. Publications that focused solely on adults or those unrelated to research questions were excluded. Additionally, literature that did not address mental health and gratitude was eliminated. The

search was not restricted by region, academic journals, or participant gender. Although the search was open to global studies, relevant results came from the United States, Israel, and China. However, no research was found specifically on Korean American adolescents. Articles that included adolescent populations were if they discussed participation in gratitude-related interventions or the use of gratitude scales in relation to mental health. After reviewing the remaining articles for relevance, 7 publications were selected and evaluated using the Johns Hopkins Nursing Evidence-Based Practice (EBP) Levels of Evidence rating system. Table 1 outlines the Johns Hopkins Nursing EBP levels of evidence and presents the quality ratings for the most pertinent publications utilized in the development and implementation of this project.

Table 1.

Johns Hopkins Nursing EBP Levels of Evidence and Number of Relevant Articles

Number of Articles (Total of 72)

Johns Hopkins Nursing EBP: Levels of Evidence	Number of Articles (Total of 7)
Level I: Experimental study randomized controlled trial (RCT) Systematic review of RCTs, with or without meta-analysis.	
Level II: Quasi-experimental Study. Systematic review of a combination of RCTs and quasi experimental, or quasi-experimental studies only, with or without meta-analysis.	2
Level III: Non-experimental study. Systematic review of a combination of RCTs, quasi-experimental and non-experimental, or non-experimental studies only, with or without meta-analysis. Qualitative study or systematic review, with or without meta-analysis	5
Level IV: Opinion of respected authorities and/or nationally recognized expert committees/consensus panels based on scientific evidence. Includes: - Clinical practice guidelines - Consensus panels	

Level V: Based on experiential and non-research evidence. Includes:
- Literature reviews
- Quality improvement, program, or financial evaluation - Case reports
- Opinion of nationally recognized expert(s) based on experiential evidence

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Literature Synthesis

The impact of gratitude on mental health has been explored extensively in various cultural contexts and populations. Studies conducted in various cultural contexts and settings in China, Israel, and United States indicate that gratitude plays a protective role in buffering adolescents from the negative effects of anxiety, depression, and trauma (Bono et al., 2017; Bono et al., 2020; Israel-Cohen et al., 2015; Jiang, 2022; Stoeckel et al., 2015; Wang et al., 2019; Zhu & Shek, 2021). In particular, these studies show how mindfulness, coping flexibility, and dispositional gratitude contribute to better psychological outcomes, with varying degrees of effectiveness depending on the population studied. While the evidence base is strong, there remains a noticeable gap in understanding how gratitude interventions influence depression and stress levels among Korean American adolescents, calling for culturally specific research to explore these interventions further.

The existing literature relies primarily on non-experimental designs, such as longitudinal studies, daily diary studies, cross-sectional analysis, and moderated mediation models. The inclusions of diverse cultural context such as Chinese adolescents (Wang et al., 2019) and Israeli youth (Israel-Cohen et al., 2015) offer a broad understanding of gratitude's protective role in mental health in youth, though these studies may not fully represents the unique challenges faced by immigrant groups like Korean American adolescents, and the generalizability of findings across different cultural contexts remains a limitation (Wang et al., 2019; Israel-Cohen et al., 2015). Some studies rely heavily on self-reported measures, which may introduce bias, yet the

longitudinal designs of studies like Bono et al. (2017) offer stronger causal insights into gratitude's impact over time. Those studies were categorized as Level II-III based on the Johns Hopkins Nursing Evidence Based Practice rating system (Dang & Dearholt, 2018). Despite the reliance on self-report data which introduces limitations, the use of validated tools such as the Gratitude Questionnaire (GQ-6), Perceived Stress Scale (PSS) and Patient Health Questionnaire-9 (PHQ-9), support the reliability and validity of the findings across different adolescent populations.

Key Themes in the Evidence

- Gratitude as a Protective Factor

    Across multiple studies, gratitude is consistently shown to buffer against depression and stress, acting as a protective factor. Wang et al. (2019) found that gratitude mediated the effects of coping flexibility, leading to reductions in anxiety and depression among Chinese adolescents. Similarly, Jiang (2022) demonstrated that gratitude, measured through daily journaling, improved well-being and reduced negative effect during the COVID-19 pandemic. Israel-Cohen et al. (2015) investigated Israeli youth exposed to missile attacks and found that gratitude mediated the relationship between trauma exposure and PTSD symptoms by enhancing life satisfaction and reducing negative emotions. Similarly, Zhu and Shek (2021) found that gratitude moderated the relationship between cyberbullying and depression in rural Chinese children.

- Enhanced Social Behavior and Family Relationships

    Gratitude's impact goes beyond individual mental health to positively influence social interactions and family dynamics. Bono et al. (2017) found that over a four-year

period, gratitude in adolescents significantly reduced antisocial behaviors while promoting prosocial tendencies. This suggests that gratitude not only helps mitigate internalizing issues like depression but also fosters positive behaviors, which can be crucial for adolescents dealing with complex social challenges. A gratitude intervention may also contribute to improving peer interactions and fostering stronger connections within their social environment.

Furthermore, Stoeckel et al. (2015) explored the role of gratitude in managing family stress, particularly when adolescents face the challenge of parental illness. Their study, The Adolescent Response to Parental Illness: The Influence of Dispositional Gratitude, revealed that adolescents with higher levels of dispositional gratitude exhibited greater emotional resilience and psychological well-being. These findings highlight gratitude's importance in helping adolescents cope with family-related stress, which could be particularly relevant to the study, as many Korean American adolescents may face cultural or familial expectations that contribute to stress. Gratitude interventions may thus offer a valuable tool for enhancing both social behavior and emotional well-being within family contexts.

- Mindfulness and Emotional Regulation

The daily practice of gratitude has been shown to have long-term benefits for emotional well-being (Neff & Germer,2013). Gratitude is linked to increased happiness, life satisfaction, and reduced negative emotions in both adolescents and adults, even during times of global crisis (Jiang,2022). Several studies highlight how the integration of mindfulness and gratitude fosters greater emotional resilience, with participants reporting lower stress and improved well-being after engaging in mindfulness-based interventions.

Bono et al. (2017) investigated how gratitude fosters prosocial behaviors, such as helping others, while reducing antisocial behaviors like aggression and rule-breaking over time. These findings are especially prevalent in educational settings, where school-based mindfulness programs have been shown to promote positive emotional outcomes (Bono et al.,2020). By integrating gratitude into the daily school routine, this intervention led to reduced levels of stress and anxiety, while improving peer relationships. This study shows that gratitude practices can be easily implemented in school settings to promote mental well-being (Bono et al., 2020).

- Similarities and Differences Across Literature

The studies reviewed share a common goal of understanding gratitude's impact on well-being, but they differ in their specific focus areas. Some concentrate on internal mental health outcomes, such as depression and stress, while others focus on external social behaviors like antisocial and prosocial tendencies. For instance, Wang et al. (2019) and Israel-Cohen et al. (2015) emphasized mental health improvements, whereas Bono et al. (2017) highlighted gratitude's role in reducing antisocial behavior and increasing prosocial behavior. Methodologically, the approaches vary significantly, ranging from longitudinal designs (Bono et al., 2017) to cross-sectional analyses (Israel-Cohen et al., 2015) and daily diary methods (Jiang, 2022). Longitudinal studies provide stronger evidence regarding long-term effects, while daily diary methods capture immediate changes, showing the advantages and limitations of each approach in understanding gratitude's impact over time.

In terms of results, gratitude consistently emerges as a positive factor for both mental health and social behavior across the studies but variations in outcomes arise due to differences in cultural context and study focus. For example, Jiang (2022) demonstrated that gratitude had

broad benefits across the lifespan during a global crisis like the COVID-19 pandemic, while Zhu and Shek (2021) specifically examined gratitude in the context of cyberbullying among rural Chinese children, showing that gratitude helped mitigate the negative effects of this particular stressor. Wang et al. (2019) point to coping flexibility as a key mechanism whereas Israel-Cohen et al. (2015) emphasized emotional regulation as the primary way gratitude affects well-being. These differences suggest that the effectiveness of gratitude may depend on the specific challenges or cultural contexts of the population being studied, highlighting the importance of culturally tailored interventions.

- Gaps in Evidence

The literature reveals a significant gap regarding the impact of gratitude interventions on minority populations, especially Korean American adolescents. While current research provides a solid understanding of gratitude's general benefits, it lacks specific insights into how gratitude operates in culturally distinct settings. Few studies have examined the unique stressors experienced by adolescents from immigrant families or those managing bi-cultural identities. Moreover, the research on culturally adapted gratitude interventions is limited, with most studies focusing on broader populations or specific groups such as Chinese or Israeli adolescents. This gap indicates a need for further exploration of how gratitude interventions can be effectively tailored to address the mental health challenges faced by minority adolescents. The literature lacks studies focused on Korean American adolescents, a group that may experience unique cultural pressures. Future research should explore how gratitude and mindfulness interventions might address the unique cultural pressures faced by this population. Although gratitude has been shown to reduce mental health symptoms, more research is needed to understand its long-term effects over extended periods. The predominant reliance on non-experimental designs limits the

ability to draw definitive causal conclusions. Future studies should prioritize RCTs to establish more robust evidence on the causal relationship between gratitude and mental health outcomes.

- Conclusions

The body of literature consistently demonstrates the positive effects of gratitude interventions on both mental health and social behavior. However, the mechanisms through which gratitude influences well-being differ across studies, ranging from coping flexibility to emotional regulation. While the overall findings support the effectiveness of gratitude in reducing stress, anxiety, and depression, the applicability of these interventions across different cultural contexts remains underexplored. The literature lacks sufficient research on minority populations and culturally specific interventions, highlighting the need for more studies that address the diverse experiences of adolescents from various backgrounds.

- Strengths and Weaknesses of Evidence

  Strengths: Literature provides strong support for the use of gratitude as a tool for improving mental health and coping with stress. The variety of methodologies, including longitudinal designs and daily journaling, offers a comprehensive view of gratitude's benefits.

  Weaknesses: A key weakness is the lack of cultural diversity in studies. Most research focuses on non-U.S. populations, with limited applicability to Korean American adolescents. Additionally, the reliance on self-reported measures in some studies introduces potential biases that may limit the accuracy of the findings.

Methods

Project Design

This doctoral project utilizes a single-group pretest-posttest design to examine the effectiveness of daily gratitude journaling in reducing stress levels and depression among Korean

American adolescents aged 12-18. The design involves the collection of data at two points in time: before the intervention (pre-test) and after the intervention (post-test). This approach allows for an examination of the changes in psychological well-being within the group following the implementation of the gratitude exercise.

Ethical Considerations

This study was conducted in adherence to the highest ethical standards, particularly given the involvement of minors. Informed consent was obtained from the parents or legal guardians of all participants, and assent was sought from the adolescents themselves. The informed consent and assent forms were provided in both English and Korean to accommodate language preferences and ensure that participants fully understood the study's purpose, procedures, risks, and the voluntary nature of participation.

Confidentiality was strictly maintained throughout the research process. All data collected, including pretest and posttest questionnaires as well as gratitude journals, was securely stored in a locked location with access restricted to authorized research personnel only. Data was anonymized by removing personal identifiers to protect participant privacy, and all information was used solely for the purposes of this study. No data was shared with third parties, and participants were reassured that their responses would remain confidential. The study involved assessing sensitive mental health conditions such as depression, gratitude and stress levels of minority. Should any participant have expressed distress or exhibited signs of significant mental health concerns, referrals to qualified mental health professionals in the community be provided. Furthermore, participants were informed that their responses would be confidential and be used only for study purposes. By following these ethical considerations, the study aimed to safeguard the rights, well-being, and privacy of all participants involved.

Institutional Review Board (IRB) approval from the University of Hawai'i was not required for this project, as all project activities focused on evidence-based practice change and quality improvement. I had undergone comprehensive training in research ethics and adherence through the Collaborative Institutional Training Initiative (CITI), as well as training in patient privacy protections under the Health Insurance Portability and Accountability Act (HIPAA).

Participants

Approximately nineteen Korean American adolescents, aged 12-18 years, were initially recruited from Korean community organizations in Federal Way, Washington. Inclusion criteria included self-identification as Korean American, being within the specified age range, the ability to read and understand English, and parental or guardian consent for participation. Exclusion criteria consisted of a diagnosis of severe mental illness (SMI) or cognitive impairment that could have limited ability to participate in the intervention, as well as concurrent participation in another mental health intervention or gratitude activities during the study period. Ultimately, the study concluded with 15 participants, as only fifteen out of the original nineteen attended the follow up post-intervention assessment.

Setting

The study took place in the gymnasium of a regional Korean church located in Federal Way, a Korean community in Washington state. Pre-intervention assessment was conducted on February 14th, 2025, while the post-intervention assessment was completed on February 21st,2025, following a week of intervention. Participants were recruited from this community-based setting, offering easy access to the target population of Korean American adolescents aged 12-18 years.

Data Collection

Pre-intervention

Nineteen Korean American adolescents were recruited for the study. Informed consent was obtained from the participants' guardians/parents prior to assessment, either in paper form or electronically via email. Additionally, participants were asked to provide their assent, and baseline demographic information, including gender and age, were collected.

Before the intervention begins, baseline assessments (pre-tests) were conducted in a secure, private environment. These include Patient Health Questionnaire-9 (PHQ-9) (Kroenke et al., 1999), Perceived Stress Scale (PSS) (Cohen et al., 1983), and Gratitude Questionnaire-Six Item (GQ-6) (McCullough et al., 2002). No personal identifying information was collected to ensure participant confidentiality, but a unique identifier was assigned to track individuals across the study. On the first day of the pre-test, participants were provided with pre-test assessments, along with daily journal and letter template. They received detailed instructions on how to complete the daily gratitude journals and write a letter of gratitude.

Intervention

Participants were engaged in a daily gratitude exercise for one week, in addition to a one-time gratitude letter writing activity. Each day, they were asked to write down three things they are grateful for, and they were also instructed to write a single letter of gratitude during the week. The study conducted entirely on paper, with all questionnaires, including pretest and posttest assessments, as well as gratitude journals and letter writing, completed in physical form. This paper-based approach ensured that all participants, regardless of their access to technology or familiarity with digital tools, could fully participate in the study. Throughout the week, reminder

texts were sent to participants to encourage continued engagement with the activities. However, adherence to the intervention was not directly monitored.

Post-Intervention

On February 21st, 2025, fifteen participants attended, while 4participants did not show up. Fifteen participants completed post-test assessments. Participants who completed both the pre-test and post-test series received a compensation gift, a gratitude journal book.

Data collection tools

The data collection process for this study focused on assessing three key mental health outcomes: depression, stress and gratitude. These were measured using validated self-report assessment tools to evaluate the changes in participants' mental health before and after the gratitude intervention. The data-collection tools used in this study includes

- Patient Health Questionnaire-9 (PHQ-9) (Kroenke et al.,1999)
- Perceived Stress Scale (PSS) (Cohen et al.,1983)
- Gratitude Questionnaire-Six Item (GQ-6) (McCullough et al., 2002)

The Patient Health Questionnaire-9 (PHQ-9) (Kroenke etal.,1999) is a standardized tool widely used for screening and assessing depression severity, with specific relevance for identifying symptoms consistent with Major Depressive Disorder (MDD). PHQ-9's effectiveness in screening depression symptoms has been well-documented across various populations, including adolescents (Kroenke et al., 2001) By measuring both the pre- and post-test stages in depression levels over the course of a gratitude intervention, the PHQ-9 will measure the effectiveness of this practice in reducing depression symptoms.

Similarly, the Perceived Stress Scale (PSS) (Cohen et al.,1983) is a well-established measure that assesses the subjective perception of stress, emphasizing how unpredictable,

uncontrollable, and overloaded individuals perceive their lives to be (Cohen et al.,1983). The PSS uses a 10-item self-report measure to assess the degree to which situations in one's life are perceived as stressful. Scores range from 0 to 40, with higher scores indicating higher perceived stress. Given that KA adolescents often report higher levels of perceived stress due to academic pressures, social dynamics, and family issues, the PSS will be crucial for evaluating how gratitude journaling may influence stress perception. Change in PSS scores from pre- to post-test would suggest that gratitude practice helps KA adolescent feel more in control and less overwhelmed, indicating positive effects on stress management and emotional resilience.

Gratitude Questionnaire-Six Item (GQ-6) (McCullough et al., 2002) is a brief and reliable measure designed to assess individual differences in trait gratitude, which refers to the dispositional tendency to recognize and appreciate the positive aspects of life (McCullough et al.,2002). GQ-6 is a brief six-item self-report measure to assess one's disposition towards experiencing gratitude in daily life. Total scores range from 6 to 42, with higher scores indicating greater levels of gratitude. Research has found that individuals with higher levels of gratitude tend to experience greater well-being and lower levels of depression and stress (Emmons & McCullough, 2003). The GQ-6 helps to assess the baseline level of gratitude in participants before they begin gratitude practice and measure any changes in gratitude levels after the intervention. The GQ-6 helps establish whether gratitude practice has a direct impact on adolescents' overall gratitude disposition, which may, in turn, influence both their depression and stress levels. By using these three measures, study provides a comprehensive understanding of how gratitude practice may influence both psychological distress (depression and stress) and psychological growth (gratitude), offering valuable insights into the potential benefits of this practice for adolescent mental health.

The data collection approach involved administering these tools at two time points: before the intervention (pre-test) and after the one-week gratitude intervention (post-test). The pretest provided baseline measures of each participant's depression, stress and gratitude level, while the posttest enables an evaluation of changes following the intervention. The data collection was structured with a clear timeline to ensure consistency. The responses were manually entered into an Excel spreadsheet to facilitate comparison of pre-test and post-test results for each participant. Each participant's data was anonymized by assigning unique identifiers to ensure privacy and confidentiality. To comply with HIPAA and IRB regulations, all paper-based assessments were securely stored in a locked cabinet, accessible only to the research team. Electronic data, stored in an Excel spreadsheet, was password-protected and saved on secure servers. Upon completion of the study, all data was retained in accordance with the University of Hawaii School of Nursing guidelines. Paper records were then destroyed, and the electronic data was securely archived.

Data Analysis

To assess the effects of gratitude intervention on depression, stress, and gratitude levels, a paired t-test was conducted. This statistical test allows for the comparison of means from the same group of participants at two different points in time; before (pre-test) and after (post-test) the intervention. Paired t-test analysis the changes within participants' scores over time, as it accounts for individual variations in pre-test and post-test measures. All analysis were manually entered and a significant level of $p<0.05$ was set for all tests.

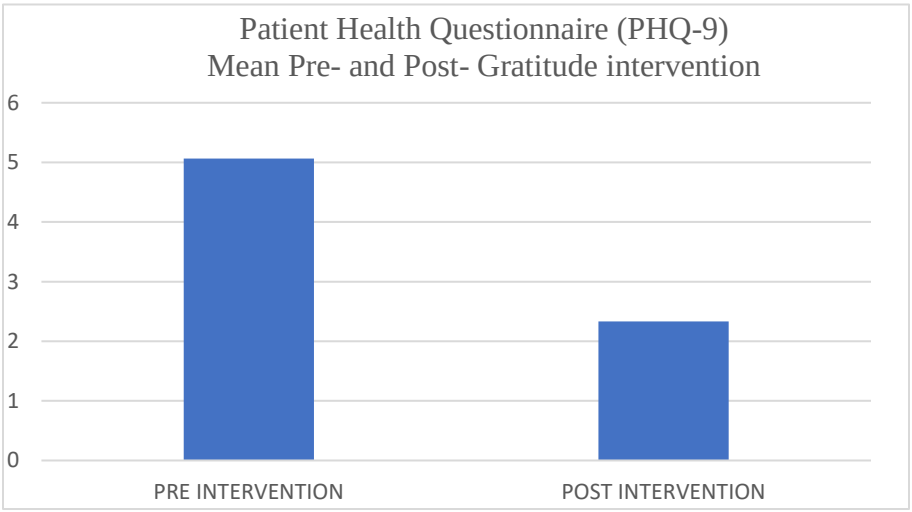
Result

Of the 19 participants initially recruited, 15 attended the post-intervention assessment and were included in the analysis. Participants consisted of 40% males (n=6) and 60% females (n=9),

with a mean age of 14.9 years. The average PHQ-9 score decreased from 5.07 at baseline to 2.3 post-intervention, indicating a significant reduction. The t-statistic of 2.88 exceeded the critical value of 2.14 (for a two-tailed test with df = 14 and $\alpha = 0.05$), leading to the rejection of the null hypothesis. The p-value of 0.012, which is below the 0.05 significance level, further supports this conclusion. These results suggest that the intervention may have had a meaningful impact, as indicated by the potential reduction in depression scores at post-test.

Table 2. *PHQ-9: t-Test: Paired Two Sample for Means*

	PRE PHQ-9	*POST PHQ-9*
Mean	5.066666667	2.33333333
Variance	24.78095238	7.38095238
Observations	15	15
Pearson Correlation	0.690115177	
Hypothesized Mean Difference	0	
df	14	
t Stat	2.881694593	
P(T<=t) one-tail	0.006035375	
t Critical one-tail	1.761310136	
P(T<=t) two-tail	0.01207075	
t Critical two-tail	2.144786688	



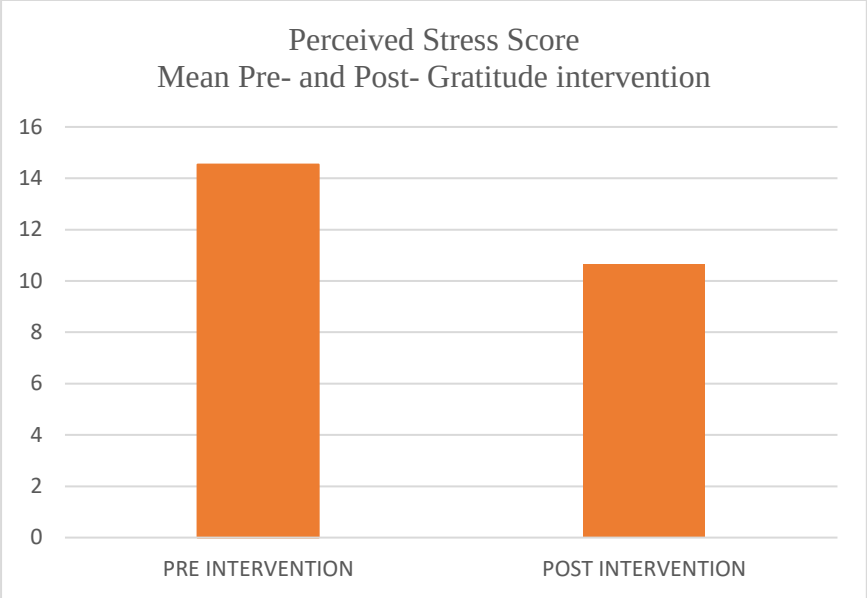
Graph.1. Patient Health Questionnaire; Depression Scale Results

The analysis of the Perceived Stress Scale (PSS) scores showed a significant reduction from pre-test to post-test. The t-statistics of 2.41 exceeded the t-critical value of 2.14, indicating a statistically significant difference between the two sets of scores. The two-tailed p-value of 0.030, which is below the 0.05 threshold, further supports rejecting the null hypothesis, suggesting that the intervention had an effect. Additionally, the one-tailed p-value of 0.015 confirms a significant reduction in perceived stress in the expected direction. The Pearson correlation of 0.53 indicates a moderate positive relationship between pre-test and post-test scores. Overall, the mean PSS score decreased from 14.53 in the pre-test to 10.67 in the post-test, suggesting that intervention may have contributed to a potential reduction in perceived stress among participants.

Table 3.

Perceived Stress Score t-Test: Paired Two Sample for Means

	PRE PSS	*POST PSS*
Mean	14.53333	10.66667
Variance	51.98095	25.09524
Observations	15	15
Pearson Correlation	0.533312	
Hypothesized Mean Difference	0	
df	14	
t Stat	2.411886	
P(T<=t) one-tail	0.015087	
t Critical one-tail	1.76131	
P(T<=t) two-tail	0.030174	
t Critical two-tail	2.144787	



Graph 2. Perceived Stress Score Results

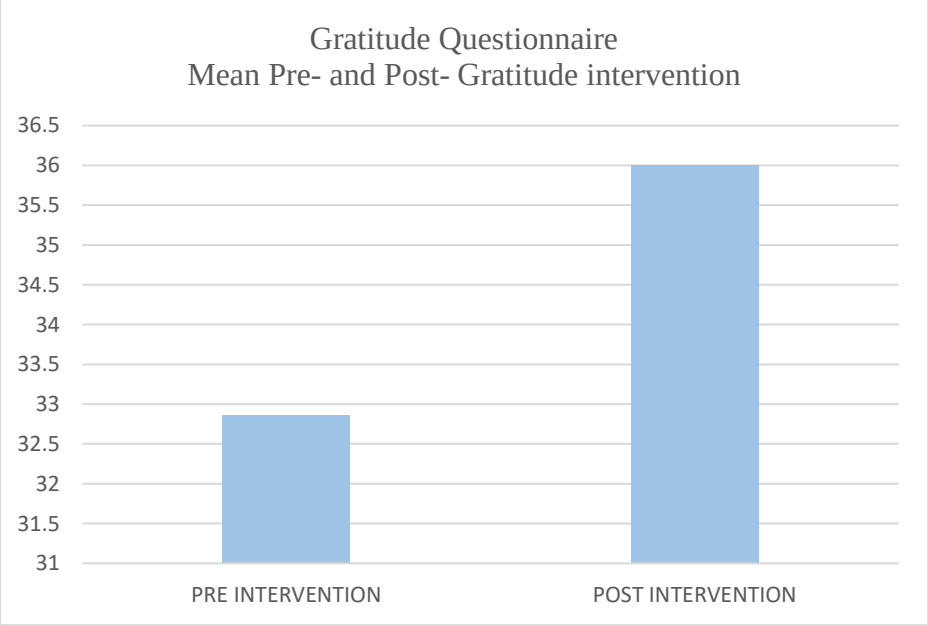
The analysis of the GQ6 (Gratitude Questionnaire 6) scores revealed a statistically significant increase from pre-test to post-test. The t-statistic of -3.30, indicating a negative difference, shows that the post-test gratitude scores were higher than the pre-test scores, with the pre-test mean (32.87) being lower than the post-test mean (36). Since the absolute value of the t-statistic (3.30) exceeds the t-critical value of 2.14, we can reject the null hypothesis, suggesting a significant difference between the pre-test and post-test gratitude scores. The two-tailed p-value of 0.0053, which is less than the 0.05 significance level, further supports rejecting the null hypothesis, indicating a strong statistical difference. The one-tailed p-value of 0.0026 also supports the finding of a significant difference in the hypothesized direction (increase in gratitude scores). Additionally, the Pearson correlation of 0.76 demonstrates a strong positive relationship between the pre-test and post-test scores, suggesting that changes in one score are closely linked to changes in the other.

The findings suggest that the gratitude interventions may have contributed to an improvement in gratitude level, indicated by a potential increase in GQ-6 among participants.

Table 4.

GQ-6: t-Test: Paired Two Sample for Means

	PRE GQ6	*POST GQ6*
Mean	32.86667	36
Variance	22.98095	31.85714
Observations	15	15
Pearson Correlation	0.762926	
Hypothesized Mean Difference	0	
df	14	
t Stat	-3.29643	
P(T<=t) one-tail	0.00265	
t Critical one-tail	1.76131	
P(T<=t) two-tail	0.0053	
t Critical two-tail	2.144787	



Graph 3. The Gratitude Questionnaire Score Results

Discussion

This study examined the impact of one-week gratitude interventions on depression, stress, and gratitude levels in Korean American adolescents. The findings provide compelling evidence that the intervention had a significant positive effect on all three variables.

Specifically, the PHQ-9 (depression) scores showed a notable reduction from a mean of 5.07 at baseline to 2.33 post-intervention, indicating a significant decrease in depressive symptoms. The statistical analysis, with a t-statistic of 2.88 and a p-value of 0.012, confirms the efficacy of the intervention in reducing depression, supporting the hypothesis that brief interventions focused on gratitude can effectively improve mental health. This finding aligns with previous research that highlights the benefits of gratitude interventions in alleviating depressive symptoms by fostering positive thinking patterns (Emmons & McCullough, 2003; Seligman et al., 2005).

Similarly, the Perceived Stress Scale (PSS) scores showed a significant decrease, from a mean of 14.53 to 10.67, with a t-statistic of 2.41 and a p-value of 0.030. The moderate correlation ($r = 0.53$) between pre- and post-test scores emphasizes that the observed reduction in stress was meaningfully linked to the intervention. This result supports existing literature that suggests gratitude interventions help reduce stress by fostering emotional resilience and promoting better coping mechanisms (Froh et al., 2011; Lambert et al., 2012).

Additionally, the Gratitude Questionnaire 6 (GQ6) scores showed a significant increase from a mean of 32.87 at baseline to 36 post-interventions, with a t-statistic of -3.30 and a p-value of 0.0053. The strong positive correlation ($r = 0.76$) between pre-test and post-test scores presents the robust effect of the gratitude intervention in enhancing gratitude levels. This is consistent with the literature, which shows that gratitude exercises can enhance positive

emotions and foster a mindset that improves coping with adversity (Froh et al., 2011; Emmons & McCullough, 2003).

These findings have important implications for the role of Doctor of Nursing Practice (DNP) professionals in advancing mental health care. As DNP prepared nurses, particularly Advanced Practice Registered Nurses (APRNs), it is crucial to develop, implement, and evaluate evidence-based interventions that promote the mental well-being of underserved populations. This study demonstrates how a simple, low-cost, and brief intervention can yield significant improvements in depression, stress, and gratitude among adolescents, a vulnerable group within the Korean American community. Incorporating such interventions into routine clinical practice aligns with DNP Essential V; Health Care Policy by advocating for accessible, culturally competent interventions that reduce mental health disparities and improve outcomes for diverse populations (American Association of Colleges of Nursing, 2006).

The APRNs' role extends beyond clinical practice to leading innovation and advocating for change. As clinicians and leaders in healthcare, APRNs can use this evidence to advocate for integrating gratitude interventions into broader mental health programs for adolescents, especially in community settings where access to mental health resources may be limited. The positive outcomes from this study suggest that a brief intervention like this could serve as a sustainable model for improving adolescent mental health, particularly in communities where traditional psychotherapy or pharmaceutical treatments may not be immediately accessible.

For future innovation, it would be valuable to explore the long-term effects of gratitude interventions on mental health and assess their feasibility as a routine part of adolescent health care.

Additionally, understanding the potential for digital platforms (such as smartphone apps or online therapy) to deliver these interventions could enhance their accessibility and scalability. Sustainability measures would involve integrating gratitude practices into school-based mental health programs, after-school community programs, or even healthcare settings to provide continuous support for adolescent mental health.

The findings of this study highlight the value of brief, culturally sensitive interventions in improving mental health outcomes in underserved populations. The results suggest that such interventions, particularly those that foster emotional well-being through positive psychology, have the potential to be an effective and sustainable tool in mental health promotion. As part of the APRN's role in leadership, there is an opportunity to advocate for and implement these practices, thereby advancing the DNP Essentials II (Organizational and Systems Leadership) and Essential VIII (Advanced Nursing Practice). Future research should explore further innovations that leverage low-cost, brief interventions to foster long-term mental well-being in diverse populations.

Limitation

This study has two primary limitations: the short duration of the intervention and the small sample size. The gratitude intervention lasted only one week, which may not have been enough time for participants to fully internalize and consistently apply the gratitude practices. A longer duration could potentially lead to more sustained improvements in depression, stress, and gratitude levels.

Additionally, the small sample size of 15 participants limits the generalizability of the findings. A larger sample would provide more reliable and statistically robust results, allowing for a clearer understanding of the intervention’s effectiveness across a broader population.

Conclusion

This study demonstrates that a one-week gratitude intervention shows promise in potentially reducing depression and stress and enhancing gratitude among Korean American adolescents. Adolescents in Korean American communities often face unique cultural pressures and stigma around openly seeking mental health services, creating barriers to accessing traditional therapeutic interventions. Gratitude interventions, characterized by their simplicity, accessibility, and non-threatening nature, offer a culturally sensitive alternative that resonates strongly within this population. Unlike more direct clinical approaches that may prompt resistance or refusal from parents or adolescents due to cultural stigma, gratitude practices—such as journaling and letter-writing—align naturally with Korean cultural values emphasizing introspection, gratitude, and positive emotional expression.

Despite extensive existing research demonstrating gratitude interventions' efficacy within adult populations, adolescent-focused studies, especially among Korean American adolescents, remain limited. By specifically addressing this gap, this study contributes valuable evidence supporting the suitability and acceptability of gratitude-based methods for this culturally distinct adolescent population. While the small sample size and brief intervention period limit generalizability, the significant findings highlight gratitude interventions' potential to be effectively integrated into broader mental health programs targeting adolescents in underserved and culturally diverse communities.

For Advanced Practice Registered Nurses (APRNs) and mental health professionals working with adolescent populations, these findings highlight gratitude interventions' potential as practical, cost-effective, and culturally aligned strategies to enhance emotional well-being. Moving forward, further studies with larger samples and longer durations are recommended to

substantiate these preliminary findings and examine the sustained impact of gratitude interventions. Ultimately, culturally tailored gratitude interventions may play a pivotal role in reducing mental health disparities, fostering resilience, and promoting emotional health among Korean American adolescents.

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Appendix A: Literature Matrix

APA Reference	Title	Purpose	Measures used/Instrument	Study Design	Level of Evidence John Hopkins	N (sample size)	Setting/Location	Intervention(I)	Outcome (O)	Limitations (i.e. validity, bias, and reliability)	Quality of Evidence Newcastle-Ottawa scale for nonrndomized trials
Wang, X., Li, X., Zhang, D., & Sun, H. (2019). Gratitude as a protective factor against anxiety and depression among Chinese adolescents: The...	Gratitude as a Protective Factor Against Anxiety and Depression Among Chinese Adolescents: The Mediating Role of Coping Flexibility	The purpose of this study was to investigate the role of gratitude as a protective factor against anxiety and depression in Chinese adolescents and...	Self-Rating Anxiety Scale (SAS) and the Self-Rating Depression Scale (SDS), respectively. Gratitude was assessed using the Gratitude Questionnaire...	Non-experimental, cross-sectional design	Level III	The study recruited 800 Chinese adolescents aged 12-18 from multiple secondary schools in China.	China,	Research did not involve a structured intervention like a clinical trial. Instead, the study explored the natural relationships between gratitude,	The results indicated that higher levels of gratitude were associated with lower levels of anxiety and depression among Chinese adolescents....	One of the main limitations of this study was its cross-sectional design, which limits the ability to infer causality between gratitude, coping...	The study was evaluated using the Newcastle-Ottawa Scale (NOS) for assessing the quality of non-randomized studies. The study scored highly in terms...
Stoeckel, M., Weissbrod, C., & Ahrens, A. (2015). The adolescent response to parental illness: The influence of dispositional gratitude. Journal of...	The Adolescent Response to Parental Illness: The Influence of Dispositional Gratitude	How dispositional gratitude—a stable, personality-like trait reflecting a general tendency to recognize and respond to the positive aspects of...	Patient Health Questionnaire-9 (PHQ-9) for depression and the Generalized Anxiety Disorder-7 (GAD-7	Cross-sectional design	Level III	250 adolescents aged 12-18 years who were living with at least one parent diagnosed with a chronic illness, such as cancer, heart disease, or a...	United States	As this study focused on dispositional gratitude, it did not implement a structured intervention. Instead, it measured adolescents' natural levels of...	The study found that adolescents who exhibited higher levels of dispositional gratitude reported lower levels of depression and anxiety compared to...	One limitation of the study is the cross-sectional design, which restricts the ability to infer causality between dispositional gratitude and...	
Jiang D. (2022). Feeling Gratitude Is Associated With Better Well-being Across the Life Span: A Daily Diary Study During the COVID-19 Outbreak. The...	Feeling Gratitude Is Associated With Better Well-being Across the Life Span: A Daily Diary Study During the COVID-19 Outbreak	Relationship between gratitude and well-being during the COVID-19 pandemic, focusing on how gratitude may serve as a protective factor across...	Generalized Anxiety Disorder Scale (GAD-7) and the Patient Health Questionnaire-9 (PHQ-9).	Observational, non-experimental	Level III	Sample of 1,200 participants spanning different age groups, from adolescents to older adults. Participants were recruited through online platforms...	China		The study found that participants who reported higher levels of daily gratitude experienced better overall well-being compared to those with lower...	The main limitation of the study is its reliance on self-report measures, which may introduce biases such as social desirability or inaccurate...	The Newcastle-Ottawa Scale (NOS) was used to assess the quality of the study. The study scored well in terms of selection, as it included a large and...
Giacomo Bono, Jeffrey J. Froh, David Disabato, Dan Blalock, Patrick McKnight & Samantha Bausert (2017): Gratitude's role in adolescent antisocial...	Gratitude's Role in Adolescent Antisocial and Prosocial Behavior: A 4-Year Longitudinal Investigation	The primary aim of this 4-year longitudinal study was to investigate how gratitude influences both antisocial and prosocial behaviors in adolescents...	GQ-6	Longitudinal design, following a cohort of adolescents over a 4-year period	Level II	700 adolescents aged 11-15	United States	The study did not involve intervention but instead explored the natural role of dispositional gratitude in shaping behavior. Participants...	The primary outcomes of interest were antisocial behaviors (e.g., aggression, rule-breaking, lying) and prosocial behaviors (e.g., helping others,	One limitation of the study is the reliance on self-report measures for both gratitude and behaviors,	The study was evaluated using the Newcastle-Ottawa Scale (NOS) for longitudinal studies and scored highly in terms of selection and follow-up, given...
Israel-Cohen, Y., Uzefovsky, F., Kashy-Rosenbaum, G., & Kaplan, O. (2015). Gratitude	Gratitude and PTSD Symptoms Among Israeli Youth Exposed to	The aim of this study was to investigate the role of gratitude in mitigating Post-Traumatic Stress	Child PTSD Symptom Scale (CPSS), a widely validated tool for measuring	Cross-sectional design,	Level III	400 Israeli youth aged 12-18 who had experienced missile attacks in their local communities.	Israel. Conflic zone	While this study did not involve a formal intervention, it focused on the natural expression	The study found that higher levels of gratitude were associated	One of the main limitations of the study is the reliance on self-report measures, which can be prone to	The study was assessed using the Newcastle-Ottawa Scale (NOS) for cross-sectional studies. It scored highly in selection, as the sample was clearly...

and PTSD symptoms among Israeli youth exposed to missile...	Missile Attacks: Examining the Mediation of Positive and Negative Affect and Life...	Disorder (PTSD) symptoms among Israeli youth who...	PTSD in youth. Gratitude was measured using the Gratitude Questionnaire...					of gratitude among adolescents.	with lower PTSD symptoms among Israeli youth exposed to missile attacks. Adolescents...	social desirability bias and inaccuracies in...	
Bono, G., Mangan, S., Fauteux, M., & Sender, J. (2020). A new approach to gratitude interventions in high schools that support student...	A New Approach to Gratitude Interventions in High Schools That Supports Student Wellbeing	The purpose of this study was to introduce and evaluate a new approach to gratitude interventions specifically tailored for high school students,	Student Well-Being Scale and the Perceived Stress Scale (PSS)	Quasi experim ental design:	LEVEL II	500 high school students from five different schools across various urban and suburban areas	United States	The intervention consisted of daily gratitude exercises, which were integrated into the school's morning routine or advisory periods. Students in the...	The study found that students in the intervention group reported higher levels of well-being compared to those in the comparison group. Specifically,	One limitation of the study was the lack of randomization in assigning students to the intervention and comparison groups, which may have introduced...	
Zhu, X., & Shek, D. T. (2021). The roles of gratitude and mindfulness between cyberbullying perpetration and depression among children in rural...	The Roles of Gratitude and Mindfulness Between Cyberbullying Perpetration and Depression Among Children in Rural China: A Moderated Mediation Model	To explore the relationship between cyberbullying perpetration and depression in children, specifically in rural China, and to examine how gratitude...	The primary outcome of interest was depression, measured using the Children's Depression Inventory (CDI), a widely recognized tool for assessing...	Cross-sectiona l design	Level III	800 children from rural areas in China, aged 10-15 years.	China,	Though the study was not an intervention,	The study found that cyberbullying perpetration was significantly associated with higher levels of depression among children. However, the...		

Appendix B : The Patient Health Questionaire-9 (PHQ-9)

Instructions: How often have you been bothered by each of the following symptoms during the past **two weeks**? For each symptom put an **"X"** in the box beneath the answer that best describes how you have been feeling.

	(0) Not At All	(1) Several Days	(2) More Than Half the Days	(3) Nearly Every Day
1. Feeling down, depressed, irritable, or hopeless?	☐	☐	☐	☐
2. Little interest or pleasure in doing things?	☐	☐	☐	☐
3. Trouble falling asleep, staying asleep, or sleeping too much?	☐	☐	☐	☐
4. Poor appetite, weight loss, or overeating?	☐	☐	☐	☐
5. Feeling tired, or having little energy?	☐	☐	☐	☐
6. Feeling bad about yourself – or feeling that you are a failure, or that you have let yourself or your family down?	☐	☐	☐	☐
7. Trouble concentrating on things like school work, reading, or watching TV?	☐	☐	☐	☐
8. Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you were moving around a lot more than usual?	☐	☐	☐	☐
9. Thoughts that you would be better off dead, or of hurting yourself in some way?	☐	☐	☐	☐

In the **past year** have you felt depressed or sad most days, even if you felt okay sometimes?
☐ Yes ☐ No

If you are experiencing any of the problems on this form, how **difficult** have these problems made it for you to do your work, take care of things at home or get along with other people?

☐ Not difficult at all ☐ Somewhat difficult ☐ Very difficult ☐ Extremely difficult

Has there been a time in the **past month** when you have had serious thoughts about ending your life?
☐ Yes ☐ No

Have you **EVER**, in your WHOLE LIFE, tried to kill yourself or made a suicide attempt?
☐ Yes ☐ No

***If you have had thoughts that you would be better off dead or of hurting yourself in some way, please discuss this with your Health Care Clinician, go to a hospital emergency room or call 911.*

Office use only: **Severity score:** _____

Modified with permission by the GLAD-PC team from the PHQ-9 (Spitzer, Williams, & Kroenke, 1999), Revised PHQ-A (Johnson, 2002), and the CDS (DISC Development Group, 2000)

Appendix C: The Gratitude Questoinnaire-6

The Gratitude Questionnaire – Six Item Form (GQ-6)

The Gratitude Questionnaire-Six-Item Form (GQ-6) is a six-item self-report questionnaire designed to assess individual differences in the proneness to experience gratitude in daily life.

McCullough, M. E., Emmons, R. A., & Tsang, J. (2002). The grateful disposition: A conceptual and empirical topography. Journal of Personality and Social Psychology, 82, 112-127.

Instructions: Using the scale below as a guide, write a number beside each statement to indicate how much you agree with it.

1 = strongly disagree
2 = disagree
3 = slightly disagree
4 = neutral
5 = slightly agree
6 = agree
7 = strongly agree

____1. I have so much in life to be thankful for.
____2. If I had to list everything that I felt grateful for, it would be a very long list.
____3. When I look at the world, I don't see much to be grateful for.
____4. I am grateful to a wide variety of people.
____5. As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history.
____6. Long amounts of time can go by before I feel grateful to something or someone.

Scoring: Compute a mean across the item ratings; items 3 and 6 are reverse-scored.

Appendix D: Perceived Stress Scale

Perceived Stress Scale

A more precise measure of personal stress can be determined by using a variety of instruments that have been designed to help measure individual stress levels. The first of these is called the **Perceived Stress Scale**.

The Perceived Stress Scale (PSS) is a classic stress assessment instrument. The tool, while originally developed in 1983, remains a popular choice for helping us understand how different situations affect our feelings and our perceived stress. The questions in this scale ask about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to count up the number of times you felt a particular way; rather indicate the alternative that seems like a reasonable estimate.

For each question choose from the following alternatives:
0 - never 1 - almost never 2 - sometimes 3 - fairly often 4 - very often

_____ l. In the last month, how often have you been upset because of something that happened unexpectedly?

_____ 2. In the last month, how often have you felt that you were unable to control the important things in your life?

_____ 3. In the last month, how often have you felt nervous and stressed?

_____ 4. In the last month, how often have you felt confident about your ability to handle your personal problems?

_____ 5. In the last month, how often have you felt that things were going your way?

_____ 6. In the last month, how often have you found that you could not cope with all the things that you had to do?

_____ 7. In the last month, how often have you been able to control irritations in your life?

_____ 8. In the last month, how often have you felt that you were on top of things?

_____ 9. In the last month, how often have you been angered because of things that happened that were outside of your control?

_____ 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Appendix E: Parents/Guardian Consent From (English)

Parents / Guardian CONSENT FORM

Study Title: Investigating the Impact of Gratitude on Depression and Stress Levels in Korean American Adolescents

Principal Investigator: Hanna Bang, APRN, PMHNP-BC

Institution: University of Hawaii at Manoa

Study Location: Federal Way Mission Church, Federal Way, WA

Dear Parent/Guardian,

Your child is invited to participate in a research study conducted by Hanna Bang, APRN, PMHNP-BC. The purpose of this study is to explore how daily gratitude journaling may affect depression and stress levels in Korean American adolescents aged 12-18. Research has shown that Korean Americans face a higher prevalence of mental health challenges, such as depression and stress, compared to other groups. This study seeks to understand whether practicing gratitude can help mitigate these issues within the Korean American adolescent community.

Study Procedures

If you agree to allow your child to participate, they will be asked to:

1. **Complete Gratitude Practice**: Your child will be provided with a journal template to record daily thoughts of gratitude for 7 days and one time gratitude letter writing.
2. **Attend a 30-minute assessment session**: A meeting and clinical assessment will be conducted on two each day: pre gratitude practice intervention and post intervention. This assessment will evaluate depression, stress and gratitude levels before and after the journaling intervention.
3. **Receive daily reminders**: To encourage journaling, your child may receive daily reminder messages. (optional)

Confidentiality and Data Usage

All information collected during the study will remain strictly confidential. Your child's name or any

personal identifiers will not be disclosed. Only statistical results will be reported, and no individual details will be shared. Personal information will be stored securely and used solely for research purposes.

Potential Benefits

Previous studies have shown that gratitude practices can benefit mental health by reducing feelings of depression and stress. Given the high mental health challenges in the Korean American community, this study may help participants discover effective strategies for managing their mental health, particularly through the practice of gratitude.

Cost and Compensation

Participation in this study is voluntary, and there is no cost involved for the assessments or materials provided. Additionally, the gratitude journal book will be provided as a gift to all participants.

Risks

There are no known risks associated with participation in this study. If, at any time, your child feels uncomfortable, they are free to withdraw from study without any penalty or effect on their future care.

Voluntary Participation

Your child's participation is entirely voluntary. You are free to decline or withdraw your child from study at any point without consequences.

Contact Information

If you have any questions about the study or would like further information, please feel free to contact Hanna Bang at 254-258-5243 or email BangPsych@gmail.com. You may also contact the research team at the University of Hawaii at Manoa for any concerns about the study's conduct.

By signing below, you agree that you have read and understood the information provided and consent for your child to participate in the study.

Child's Name: _____

Parent/Guardian's Name: _____

Signature: _____

Date: _____

Appendix F: Parents/Guardian Consent From (Korean)

부모 동의서

연구 제목: 감사(Gratitude)가 한인 청소년의 우울 및 스트레스 수준에 미치는 영향 조사

연구 책임자: 한나 방 (Hanna Bang), APRN, PMHNP-BC

소속 기관: 하와이대학교 마노아 캠퍼스 (University of Hawaii at Manoa)

연구 장소: Federal Way Mission Church, Federal Way, WA

학부모/보호자님께,

귀하의 자녀가 한나 방(APRN, PMHNP-BC)이 진행하는 연구에 참여할 기회를 갖게 되었습니다.
본 연구의 목적은 12-18 세 한인 청소년들이 일상적인 감사 일기 쓰기를 통해 우울 및 스트레스 수준에 어떤 영향을 받는지를 탐구하는 것입니다.
연구에 따르면, 한인들은 다른 집단보다 정신 건강 문제(예: 우울 및 스트레스)의 발생률이 더 높은 것으로 나타났습니다.
본 연구는 감사 실천이 한인 청소년들의 정신 건강을 개선하는 데 도움이 될 수 있는지를 알아보고자 합니다.

연구 절차

귀하께서 자녀의 연구 참여에 동의하시면, 자녀는 다음과 같은 활동을 하게 됩니다:

감사 실천 활동

- 연구 참여자는 7 일 동안 감사 일기 작성 및 한 번의 감사 편지 쓰기를 수행합니다.

30 분 평가 세션 참석

- 연구 시작 전과 종료 후, 각각 한 번씩 총 두 번의 임상 평가가 진행됩니다.
- 이 평가는 자녀의 우울, 스트레스, 감사 수준을 측정하는 데 사용됩니다.

일일 알림 메시지 수신 (선택사항)

- 연구 참여를 독려하기 위해 자녀에게 일일 감사 일기 작성 알림이 전송될 수 있습니다.

비밀 보장 및 데이터 활용

본 연구에서 수집된 모든 정보는 철저히 비밀이 보장됩니다.
자녀의 이름이나 개인 신상 정보는 연구 보고서에 포함되지 않으며, 연구 결과는 통계 자료로만 보고됩니다.
모든 개인 정보는 안전하게 보관되며, 연구 목적 외에는 사용되지 않습니다.

잠재적 혜택

기존 연구에 따르면, 감사 실천은 정신 건강에 긍정적인 영향을 미쳐 우울감과 스트레스 수준을 낮추는 효과가 있는 것으로 밝혀졌습니다.
본 연구는 한인 청소년들에게 감사 실천이 정신 건강 관리에 도움이 될 수 있는지를 탐색하는 기회를 제공합니다.

비용 및 보상

- 본 연구 참여는 완전히 무료이며, 모든 평가 및 자료 제공에 어떠한 비용도 발생하지 않습니다.
- 또한, 연구에 참여하는 모든 학생들에게 감사 일기 책이 선물로 제공됩니다.

위험 요소

본 연구 참여에 따른 특별한 위험 요소는 없습니다.
연구 진행 중 자녀가 불편함을 느낄 경우, 언제든지 연구에서 자유롭게 철회할 수 있으며, 이로 인한 어떠한 불이익도 없습니다.

자발적 참여

자녀의 연구 참여는 전적으로 자발적입니다.
귀하는 언제든지 참여를 거부하거나 철회할 수 있으며, 이에 따른 어떠한 불이익도 없습니다.

문의 사항

연구에 대한 질문이 있으시거나 추가 정보가 필요하시면,
한나 방(Hanna Bang) (전화: 254-258-5243, 이메일: BangPsych@gmail.com)으로 연락해 주시기 바랍니다.
또한, 연구 진행에 대한 우려 사항이 있으시면 하와이대학교 마노아 캠퍼스 연구팀에 문의하실 수도 있습니다.

본 동의서에 서명하시면, 귀하께서 연구에 대한 정보를 충분히 이해하셨으며, 자녀가 연구에 참여하는 것에 동의함을 의미합니다.

자녀의 이름: _____
학부모/보호자의 이름: _____
서명: _____
날짜: _____

Appendix G: Participant Consent & Profile From

Participant Profile Survey Form

Study Title: The Impact of Gratitude Interventions on Depression and Stress Levels in Korean American Adolescents

Confidentiality Notice: All information provided in this survey will be kept confidential and used only for research purposes. Your identity and personal details will not be shared or published.

1. Personal Information

Number: _____

(please remember those number for post intervention)

Age: _____

Gender:
- [ ] Male
- [ ] Female
- [ ] Other: _____

Ethnicity (Check all that apply):
- [ ] Korean
- [ ] Other (Please specify): _____

City/Town of Residence: _____

2. General Information

Do you have any prior experience with journaling?
- [ ] Yes
- [ ] No
- If yes, how often do you journal? _____

Do you currently have or have you had any challenges with depression or stress?
- [ ] Yes
- [ ] No
- If yes, please explain: _____

Do you currently take any medications for mental health (depression, stress) or are you in therapy?
- [ ] Yes
- [ ] No
- If yes, please specify medication(s) and/or type of therapy:

_____

Have you participated in any gratitude-based activities before (such as gratitude journaling or practicing gratitude in daily life)?

- [ ] Yes
- [ ] No

Would you like to receive daily text message reminders to write in your gratitude journal?

- [ ] Yes
- [ ] No
- If yes, please provide your phone number for reminders: _____

3. Contact Information

Phone Number (optional): _____

Thank you for your participation in this study!

Appendix H: Gratitude Journal and Letter Template

Gratitude Journal: 7-Day Reflection

List three things you're grateful, thankful for today.

Day 1:

- Date: _____

1. _____
2. _____
3. _____

Day 2:

- Date: _____

1. _____
2. _____
3. _____

Day 3:

- Date: _____

1. _____
2. _____
3. _____

Day 4:

- Date: _____

1. _____
2. _____
3. _____

Day 5:

- Date: _____

1. _____
2. _____
3. _____

Day 6:

- Date: _____

1. _____
2. _____
3. _____

Day 7:

- Date: _____

1. _____
2. _____
3. _____

Gratitude Letter

Now that you've completed your 7-day gratitude journal, take a moment to write a letter expressing gratitude to someone who has had a positive impact on your life. This can be a family member, friend, colleague, or anyone who has supported or inspired you.

_____

This journal and gratitude letter form will guide you through a week of reflection and give you an opportunity to express appreciation to someone special at the end of the week.

If you have any questions regarding gratitude activities, please reach out to Hanna Bang 254-258-5243

Gratitude Letter

To: _____

From: _____

Dear _____,

I wanted to take a moment to express my gratitude to you. Over the past week, I've been reflecting on the things I am thankful for, and you have been on my mind.

Here are a few things I am especially grateful for:

1. _____
2. _____
3. _____

You have made a significant impact on my life by _____. I appreciate the way you _____.

Thank you for being such a positive influence and for everything you do.

With gratitude,

_____

_____