Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Date | Jun 7 (Fri) - Jun 9 (Sun), 2024
How To | Webinars with ZOOM

Host
Sungkyunkwan University Social Sciences Korea (SSK)  
<Prevention and Intervention of Self-injury and Suicidal Behaviors in Adolescents>
Jeonbuk National University BK21  
<Training Specialists in Psychological Services for the Ultra-Aged Society>

Sponsor
Ministry of Education  NRF  National Research Foundation of Korea  SKKU College of Education
We are delighted to invite everyone to the 2024 SKKU Traumatic Stress Center International Conference jointly organized by Sungkyunkwan University Social Sciences Korea (SSK) <Prevention and Intervention of Self-injury and Suicidal Behaviors in Adolescents>, the Jeonbuk National University BK21 <Training Specialists in Psychological Services for the Ultra-Aged Society>, the Korean Trauma Association, and the Korea Educational Therapy Association.

The conference, under the theme 'Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly' aims to address the urgent issues of our society related to mental health concerns arising from the aftermath of the COVID-19 pandemic.

As the world continues to navigate the changes brought about by COVID-19, we find ourselves living lives that resemble pre-pandemic normalcy. However, the repercussions due to the long shadow of the COVID-19 pandemic still remains as a significant global challenge in mental health aspects. Therefore, our international conference will address the worsening crisis indicators by focusing on various issues such as the negative impacts of COVID-19, epidemic risk perception, psychosocial problems, emotional instability, school maladjustment, and school non-attendance in order to create a forum for discussing crisis prevention and intervention strategies that can support people of all ages, from youth to the elderly.

Since crisis indicates both danger and opportunity, we believe providing a platform to develop targeted and contextually appropriate prevention and postvention based on the latest evidence will enable better management of various crises in future.

We hope the 2024 SKKU Traumatic Stress Center International Conference will provide an enriching opportunity for professors, researchers, and students from both domestic and international backgrounds to come together and grow as experts and scholars in the field of psychology, education, mental health, and other social sciences.

Director, SKKU Traumatic Stress Center
Chairman, Counseling Council for University Student
PI, Social Sciences Korea (SSK)
<Prevention and Intervention of Self-injury and Suicidal Behaviors in Adolescents>
Lee, Dong Hun
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<td>8:40–9:00</td>
<td>Registration and Intake</td>
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Host: Lee, Hwa Jung (PostDoc. Fellow, Sungkyunkwan Univ., Korea)

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<tr>
<td>9:00–9:10</td>
<td>Opening Speech</td>
<td>Lee, Dong Hun</td>
<td>Director, Traumatic Stress Center/Chairman, Counseling Council for University Student, Prof., Sungkyunkwan Univ., Korea</td>
</tr>
<tr>
<td>9:10–9:40</td>
<td>Welcome Speech</td>
<td>Kim, Jae Hyoun</td>
<td>Vice President, Sungkyunkwan Univ., Director, Data Science Education Center, Korea</td>
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<td></td>
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<td>Ko, Jang Wan</td>
<td>Dean, College of Education, Sungkyunkwan Univ., Korea</td>
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<tr>
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<td>Cheon, Seong Moon</td>
<td>President, Korea Educational Therapy Association, Prof., Dept. of Applied Psychology, Pukyong Nat’l Univ., Korea</td>
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Session 1. COVID-19 Pandemic and Mental Health

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<tr>
<td>9:40–10:05</td>
<td>Epidemic Risk Perception, Perceived Stress, and Mental Health during COVID-19 Pandemic</td>
<td>Houchao Lyu</td>
<td>Prof., Faculty of Psychology, Southwest Univ., China</td>
</tr>
<tr>
<td>10:05–10:30</td>
<td>Psychological Effects of COVID-19: An International Comparative Study of Japan and Korea</td>
<td>Miho Takahashi</td>
<td>Prof., Dept. of Clinical Psychology, Graduate School of Education, The Univ. of Tokyo, Japan</td>
</tr>
<tr>
<td>10:30–10:55</td>
<td>Psychosocial Adaptation in Household Transmission of SARS-CoV-2 Infections</td>
<td>Chayannan Jaide</td>
<td>Lecturer, Ramathibodi School of Nursing, Mahidol Univ., Thailand</td>
</tr>
<tr>
<td>10:55–11:20</td>
<td>Discussion</td>
<td>Lee, Tae Kyoung</td>
<td>Assistant Prof., Faculty of Child &amp; Adolescent Psychology and Development, Sungkyunkwan Univ., Korea</td>
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11:20–13:00 Lunch Time

Session 2. Prevention of Self-injury and Suicide

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<tr>
<td>13:00–13:25</td>
<td>The Role of Time Perspectives in Suicidal Prevention and Psychopathology</td>
<td>Alexander Unger</td>
<td>Associate Prof., East-Asia Institute Ludwigshafen Univ. of Business and Society, Germany</td>
</tr>
<tr>
<td>13:25–13:50</td>
<td>Research Trend Analysis of Suicide among Adolescents in South Korea</td>
<td>Han, Yoonsun</td>
<td>Associate Prof., Dept. of Social Welfare, Seoul Nat’l Univ., Korea</td>
</tr>
<tr>
<td>13:50–14:16</td>
<td>Mental Health of Multicultural Adolescents According to Mother’s Nationality and Suicidal Ideation</td>
<td>Kim, Boyoung</td>
<td>Associate Prof., Dept. of Psychology, The Catholic Univ., Korea</td>
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<tr>
<td>14:15–14:30</td>
<td>Break Time</td>
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<tr>
<td>14:30–14:55</td>
<td>Understanding Dominant Predictors of Suicidal Behaviors among Youth from Low- and Middle-Income Countries</td>
<td>Hayoung Donnelly</td>
<td>PostDoc. Fellow, Dept. of Psychiatry, Univ. of Pennsylvania, US</td>
</tr>
<tr>
<td>15:45–16:10</td>
<td>Discussion</td>
<td>Yoon, Anderson Sungmin</td>
<td>Assistant Prof., Faculty of Social Welfare, Sungkyunkwan Univ., Korea</td>
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<tr>
<td>9:00–9:25</td>
<td>Psychosocial Adaptation from a Virtue Perspective</td>
<td>Kim, Jeong Han</td>
<td>Associate Prof., Dept. of Rehabilitation Services and Counseling, Univ. of Texas-Rio Grande Valley, US</td>
</tr>
<tr>
<td>9:25–9:50</td>
<td>Educational Practices for Children Who Are Not Attending School - Case Study of “School of Diversified Learning”</td>
<td>Hiroki Tajima</td>
<td>Junior Associate Prof., Education Support &amp; Research Center for All Children, Tokyo Gakugei Univ., Japan</td>
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<tr>
<td>9:50–10:15</td>
<td>Support for School Non-attendance at “Educational Support Centers” in Japan</td>
<td>Shuko Esumi</td>
<td>Junior Associate Prof., Faculty of Education, Tokyo Gakugei Univ., Japan</td>
</tr>
<tr>
<td>10:15–10:45</td>
<td>Break Time</td>
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<tr>
<td>10:45–11:10</td>
<td>The Patterns of Life Satisfaction among Korean Young Carers</td>
<td>Kim, Seong Hee</td>
<td>Research Fellow, Yonsei Univ., Korea</td>
</tr>
<tr>
<td>11:35–12:00</td>
<td>Discussion</td>
<td>Yoon, Sun Kyung</td>
<td>Assistant Prof., Faculty of Psychology, Sungkyunkwan Univ., Korea</td>
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<tr>
<td>12:00–14:00</td>
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<td>14:00–14:25</td>
<td>Developing a Single Session Synchronous Mental Health Intervention using Chat in Thailand</td>
<td>Nattasuda Taepheanta</td>
<td>Dean, Faculty of Psychology, Chulalongkorn Univ., Thailand</td>
</tr>
<tr>
<td>14:25–14:50</td>
<td>The Effects of Gaming on Reducing Anxiety and Depression</td>
<td>Cho, Moon-Heum</td>
<td>Associate Prof., Dept. of Instructional Design, Development &amp; Evaluation, Syracuse Univ., US</td>
</tr>
<tr>
<td>14:50–15:15</td>
<td>Usability of a Suicide Risk Awareness Mobile App in South Korea</td>
<td>Hwang, Seokwon</td>
<td>Visiting Research Scholar, Dept. of Instructional Design, Development &amp; Evaluation, Syracuse Univ., US</td>
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<tr>
<td>15:15–15:40</td>
<td>Discussion</td>
<td>Ro, Ji Na</td>
<td>Associate Prof., Faculty of Education, Sungkyunkwan Univ., Korea</td>
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<td><strong>Session 1. Understanding Self-harm and Death</strong></td>
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<tr>
<td>9:00–9:20</td>
<td>A Two-Panel Delphi Study on Risk Factors of Adolescent Suicide in South Korea</td>
<td>Lee, Sangin</td>
<td>Ph. D. Candidate, Jeonbuk Nat'l Univ., Korea</td>
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<td></td>
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<td>Lee, Young Soon</td>
<td>Prof., Dept. of Psychology, Jeonbuk Nat'l Univ., Korea</td>
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<tr>
<td>9:20–9:40</td>
<td>Counselors' Perspective on Preventing Suicide in Korean Adolescents</td>
<td>Kim, Young Ae</td>
<td>Doc. Student, Sungkyunkwan Univ., Korea</td>
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<td>Lee, Dong Hun</td>
<td>Director, Traumatic Stress Center/Chairman, Counseling Council for University Student, Prof., Sungkyunkwan Univ., Korea</td>
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<td>9:40–10:00</td>
<td>Cluster Types by the Level of Death Anxiety and Meaning in Life: Group Differences in Death Acceptance and Psychological Well-being</td>
<td>Choi, Ji Soo</td>
<td>Master's degree, Jeonbuk Nat'l Univ., Korea</td>
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<td>Lee, Young Soon</td>
<td>Prof., Dept. of Psychology, Jeonbuk Nat'l Univ., Korea</td>
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<tr>
<td>10:00–10:20</td>
<td>A Meta Study of Non Suicidal Self Injury of Adolescents and Protective Factors</td>
<td>Kim, Keun-Ki</td>
<td>Graduate Student, The Catholic Univ., Korea</td>
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<tr>
<td>10:20–10:40</td>
<td>Discussion</td>
<td>Lee, Hwa Jung</td>
<td>PostDoc. Fellow, Sungkyunkwan Univ., Korea</td>
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<tr>
<td>11:00–11:20</td>
<td>Efficacy of Grief Interventions for Prolonged Grief in College Student Populations: A Scoping Review</td>
<td>Shin, Jiyong</td>
<td>Doc. Student, Univ. of Iowa, US</td>
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<td>11:20–11:40</td>
<td>Patterns and Predictors of PTSD during the COVID-19 Pandemic among Trauma-Exposed Individuals: A Latent Class Analysis</td>
<td>Kim, Ye Jin</td>
<td>Doc. Student, Sungkyunkwan Univ., Korea</td>
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<td>Lee, Dong Hun</td>
<td>Director, Traumatic Stress Center/Chairman, National College Counseling Center Association, Prof., Sungkyunkwan Univ., Korea</td>
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<td>11:40–12:00</td>
<td>Time Perspective and Trauma: Exploring the Impact of Time Perspective on Healing and Resilience</td>
<td>Jung, Hayoung</td>
<td>Doc. Student, Univ. of Iowa, US</td>
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<td>13:20–13:40</td>
<td>The Relationship between Discrimination Victimization Experience and Quality of Life among Older Adults: The Double Mediating Effect of Emotional Dysregulation and Self-compassion</td>
<td>Kim, Min Ki</td>
<td>Master's degree, Jeonbuk Nat'l Univ., Korea</td>
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<td>Lee, Young Soon</td>
<td>Prof., Dept. of Psychology, Jeonbuk Nat'l Univ., Korea</td>
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<tr>
<td>13:40–14:00</td>
<td>Discussion</td>
<td>Jeong, Milim</td>
<td>PostDoc. Fellow, Jeonbuk Nat'l Univ., Korea</td>
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<td>Kim, Ye Jin</td>
<td>Doc. Student, Sungkyunkwan Univ., Korea</td>
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<td>14:40–15:00</td>
<td>Effect of College Students’ Perfectionistic Self-Presentation on SNS Addiction Tendency: Moderated Mediating Effect of Social Support through Loneliness</td>
<td>Ha, Jeong Eun</td>
<td>Doc. Student, Pukyung Nat’l Univ., Korea</td>
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<tr>
<td>15:00–15:20</td>
<td>The Relationship Between Adult ADHD Tendencies and Academic Procrastination in College Students: The Mediating Effect of Self-Control</td>
<td>Son, Seunga</td>
<td>Masters, Pukyung Nat’l Univ., Korea</td>
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<td>15:20–15:40</td>
<td>Parental, individual, and peer factors associated with smartphone addiction in South Korean adolescents based on Self-determination Theory</td>
<td>Kim, Mi Na</td>
<td>Graduate student, The Catholic Univ., Korea</td>
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<tr>
<td>15:40–16:00</td>
<td>Eustress-Distress Academic Scale</td>
<td>Thoriq Muhammad Syamil</td>
<td>Undergraduate Student, Airlangga Univ., Indonesia</td>
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<td>Choi, Jae Hyeok</td>
<td>Faculty Member, International Business Management Program, Department of Management, BINUS Business School, Bina Nusantara University, Indonesia</td>
</tr>
<tr>
<td>16:00–16:20</td>
<td>Discussion</td>
<td>Kim, Seong Hee</td>
<td>Research Fellow, Yonsei Univ., Korea</td>
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Recent Evidence and Future Directions for Crisis Prevention and Intervention:
From Youth to Elderly

2024 SKKU Traumatic Stress Center
International Conference Materials
Opening Speech

Welcome, distinguished professors, researchers, and colleagues from around the globe. It is my great pleasure to see you all here today.

This year, the 2024 SKKU Traumatic Stress Center International Conference convenes under the theme, 'Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly'.

While the COVID-19 pandemic has receded, our society is now facing the new wave of the Fifth Industrial Revolution, marking a transition from the Fourth. In these times of rapid change, we still find ourselves navigating through various crises, including impact of COVID-19 pandemic on mental health, self-injury and suicide, death, trauma, and grief. Our collective mental health well-being faces unprecedented challenges across all demographics.

Today, we bring together academics and researchers from diverse fields—social psychology, clinical psychology, counseling psychology, rehabilitation psychology, social welfare, nursing, education, school non-attendance, and instructional design—representing nations worldwide to examine these difficulties from a multicultural perspective. Our goal is to discuss and disseminate effective strategies for crisis prevention and intervention, exploring avenues toward a brighter future.

Throughout the conference, we will showcase the latest global research on diverse crises, proposing concrete, evidence-based strategies for addressing these issues. It is our sincere hope that the knowledge and experiences shared during the conference will enhance the academic and professional practices of psychologists, educators, mental health experts, and other social scientists, thereby fostering positive change within our societies.

I extend my heartfelt gratitude to all who have played a role in bringing this event to life. Let us seize this opportunity to ensure the SKKU Traumatic Stress Center International Conference serves as a pivotal moment in advancing our proactive and future-oriented efforts.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Welcome Speech

Kim, Jae Hyoun
Vice President, Sungkyunkwan Univ., Director, Data Science Education Center, Korea

Congratulation on the opening of the 2024 SKKU traumatic Stress Center International Conference!

I am Jae Hyoun Kim, the Vice President of Sungkyunkwan University.

I believe this conference is an important occasion for understanding the various issues our society faces post-COVID and for exploring solutions to these challenges. It is a valuable opportunity for distinguished professors, experts, and scholars from around the world to come together, share their wisdom, and through discussion, discover new insights and innovative approaches.

Globally, the rapid evolution of artificial intelligence (AI) technology stands as one of the most dynamic and impactful developments in contemporary society. AI endeavors to reshape our lifestyles and professional landscapes, empowering machines to learn, reason, and address challenges akin to human capabilities.

For a better and more innovative future, AI technology is already contributing to solving social issues and developing educational programs. It is being utilized in educational platforms, in teaching and learning design, and in the development of tools, using AI technologies and educational big data.

In light of the latest research deliberated upon at this esteemed gathering, I anticipate this event will serve as a seminal milestone in seamlessly integrating AI and IT technologies within the realm of mental health. By synergizing AI with the realms of social science and education, we aim to confront and resolve a spectrum of social challenges.

I am aware that the SKKU Traumatic Stress Center at Sungkyunkwan University is currently undertaking a Social Sciences Korea (SSK) project titled "AI-based Application Development for Prevention and Intervention of Self-injury and Suicidal Behaviors in Adolescents". I sincerely hope this conference will facilitate the successful progress of the project.

Once again, I extend my warmest congratulations, gratitude, and hopes for the success of the SKKU Traumatic Stress Center’s conference.
Distinguished guests, esteemed colleagues, and all participants of the conference,

Good morning!

As the Dean of the College of Education, I welcome everyone attending this wonderful international conference today. The conference theme is 'Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly'. This conference will address the urgent issues of our society related to mental health concerns arising from the aftermath of the COVID-19 pandemic.

As you know, we have faced numerous changes and challenges across society in the wake of the COVID-19 pandemic. One of the most pressing issues has been the mental health of students. The dramatic increase in depression, anxiety, self-harm, and suicide among young students has become a critical societal issue beyond merely individual problems.

In light of these challenges, we need a fresh approach to addressing school mental health and associated social issues. Our current SSK project is poised to make a substantial contribution to solving these problems over the next decade. We are confident that this project will play a crucial role, and it will require your wisdom and efforts to succeed.

This international conference brings together experts from around the world to analyze our situation and seek practical solutions. By sharing diverse opinions and experiences, we can find better ways to address these issues. Your active participation and discussions will be the key to the success of this conference, and I believe that through this, our students will have a healthier and brighter future.

We now have many distinguished keynote speakers, invited speakers, and SSK researchers at this conference.

I’d like to especially thank our distinguished keynote speakers, Prof. Alexander Unger from Univ. of Business and Society, Germany,

Prof. Houchao Lyu from Southwest Univ., China,
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Prof., Miho Takahashi from The Univ. of Tokyo, Japan, and Dean, Nattasuda Taepchant from Chulalongkorn Univ., Thailand.

I’d also like to thank invited speakers, Dr. Chayannan Jaide from Mahidol Univ., Thailand Dr. Hiroki Tajima and Prof. Shuko Esumi from Tokyo Gakugei Univ., Japan Dr. Hwang, Seokwon from Syracuse Univ., US and Dr. Hayoung Donnelly from Univ. of Pennsylvania, US

I’d also like to thank, Prof., Kim, Jeong Han, Univ. of Texas - Rio Grande Valley, US Prof., Cho, Moon-Heum from Syracuse Univ., US Prof., Han, Yoonsun from Seoul Nat’l Univ., Korea Prof., Kim, Boyoung from The Catholic Univ., Korea

Once again, I extend my deepest thanks to everyone here today, and I hope this conference will yield meaningful results.

Thank you.
Good afternoon, ladies and gentlemen,

I would like to express a warm welcome to all participants of the 2024 Traumatic Stress Center International Conference, co-organized by Sungkyunkwan University Graduate School of Social Science, Jeonbuk National University, the Korean Trauma Association, and the Korea Educational Therapy Association.

My name is Seong Moon Cheon, and I’m a professor of Counseling Psychology at Pukyong National University. I would like to thank Prof. Dong Hun Lee for inviting me to this conference, and extend a heartfelt welcome to all of you who are here today. Your interest and enthusiasm make this program more enriching and meaningful.

Modern society is facing mental health issues as a serious challenge. In particular, the COVID-19 pandemic has had a negative impact on society as a whole, which in turn has had a serious impact on individual mental health. In this program, we have invited renowned experts to address these post-COVID-19 social issues and the psychological difficulties, with a focus on exploring crisis prevention and intervention strategies through in-depth discussion and lively exchanges. We hope this will be a valuable time for you to learn and to learn from each other through active participation and vibrant discussion.

We hope that all attendees will have a meaningful and fruitful time, and we look forward to your interest and participation in this three-day academic program. I would like to thank all those who have organized this conference, Prof. Dong Hun Lee for inviting me, and I would like to express my sincere gratitude to the scholars and experts who have come from all over the world to participate in this discussion.

We hope that this international conference will promote interest in providing mental health support not only in post-COVID-19 Korean society but also for people around the world, and ultimately play an important role in building a happier and more prosperous modern society.

Thank you.
DAY 1 - 2024. 6. 7. Fri.
Session 1. COVID-19 Pandemic and Mental Health
Epidemic Risk Perception, Perceived Stress, and Mental Health during COVID-19 Pandemic

Houchao Lyu
Prof., Faculty of Psychology, Southwest Univ., China

<Abstract>

The aim of the present study was to investigate relationships among epidemic risk perception, perceived stress, mental health (depression and anxiety), future time perspective and confidence in society during the novel coronavirus disease (COVID-19) pandemic in China. Especially, we wonder that whether perceived stress mediates associations between epidemic risk perception and mental health and that whether future time perspective and confidence in society moderate the link between perceived stress and mental health. This cross-sectional study was conducted among 693 Chinese adults aged 18–60 years. The results showed that epidemic risk perception was positively related to perceived stress, depression, and anxiety.

The correlations between epidemic risk perception and depression and anxiety were reduced when perceived stress was included, suggesting that perceived stress mediated these relationships. Moreover, the boundary conditions for the associations among perceived stress, depression, and anxiety were found in the study. Specifically, positive future time perspective could buffer the negative effects of perceived stress on depression, and confidence in society could weaken the negative effects of perceived stress on anxiety. Based on these findings, practical guidance and theoretical implications are provided for the public to maintain mental health during COVID-19 pandemic. Limitations and future directions are also discussed.

Key words: future time perspective, confidence in society, coronavirus disease (COVID-19), epidemic risk perception, perceived stress, anxiety, depression
긍정적인 미래 시간 관점은 지각된 스트레스가 우울에 미치는 부정적인 영향을 완화할 수 있으며, 사회에 대한 신뢰는 지각된 스트레스가 불안에 미치는 부정적인 영향을 약화시킬 수 있다. 이러한 연구 결과를 바탕으로, COVID-19 팬데믹 동안 대중의 정신 건강을 유지하기 위한 실질적인 지침과 이론적 함의를 제공한다. 한계점과 향후 연구 방향도 논의되었다.

키워드: 미래 시간 관점, 사회에 대한 신뢰, 코로나바이러스 질병 (COVID-19), 전염병 위험 인식, 지각된 스트레스, 불안, 우울
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

2024 SKKU Traumatic Stress Center International Conference

Epidemic Risk Perception, Perceived Stress, and Mental Health During COVID-19 Pandemic

Prof. Houchao Lyu

Faculty of Psychology, Southwest University, Chongqing, China
Time Psychology Research Center, Southwest University, Chongqing, China

June 7, 2024
Sungkyunkwan University Social Sciences Korea

1. INTRODUCTION

- The novel coronavirus disease (COVID-19) pandemic has spread across the globe. Owing to its rapid and extensive transmission, high infectivity, and lack of specific treatment so far, it has posed great threat to people's mental and physical health.

- Perceiving and avoiding risks are natural instincts of living beings. Risk perception is the core variable that induces psychological and behavioral responses among people in public crisis events, and exerts significant influences on both daily life decisions and behaviors (Slovic, 2000; Erdem and Swait, 2004; Li et al., 2009).

- The core of risk perception is the threat posed by uncertainties about the environment (Cho and Lee, 2006).

- The psychological resilience theory (Luthar et al., 2015) holds that individuals can successfully cope with stress and maintain mental health even in the face of adversity, because internal and external protective factors can alleviate the negative effects of stress on individuals.
• As a kind of important belief in the future, future time perspective (FTP) refers to an individual’s thought, feeling, and action tendencies toward the future (Lyu, 2014; Lyu and Huang, 2016).

• Confidence in society refers to the positive expectation that society, based on its past performance, has its future under control (Keller et al., 2011).

• In summary, the aim of the research is to investigate the mediating effect of perceived stress on the relationship between epidemic risk perception and mental health (anxiety and depression), and examine the moderating effect of FTP and confidence in society on the relationship between perceived stress and mental health.

2. MATERIALS AND METHODS

2.1 Participants and Procedure

• we recruited participants via wjx.cn, a reliable Chinese online platform for data collection and randomly distributed questionnaire links in the participant pool. The data collection began on February 6, 2020. A week later, 701 participants answered the questionnaires.

• The samples of the present study were mainly from Henan Province (32.6%), Shandong Province (28.6%), and Chongqing city (29.9%), accounting for 91% of the total samples. Only 17 participants were from Wuhan, Hubei Province, and the remaining 45 participants were scattered in other Chinese cities.

• Among all participants, 62.0% were females and 38.0% were males. Moreover, 29.9% were between 18 and 25 years old, 18% were between 26 and 30 years old, 22.7% were between 31 and 40 years old, 21.2% were between 41 and 50 years old, and 8.2% were between 51 and 60 years old. Also, 82.4% of participants received at least a college degree.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

2.2 Measures

- **Epidemic Risk Perception.** One single item was used to measure epidemic risk perception. Participants were asked to evaluate the perceived risk of infection during the outbreak of COVID-19. Ratings were given on a 10-point Likert scale (1 = not at all threatening, 10 = extremely threatening). In this study, the average score of epidemic risk perception of all participants was 6.03 (SD = 2.26).

- **Perceived Stress.** The perceived stress scale-10 (PSS-10; Cohen et al., 1983) was used to measure the extent to which respondents feel that their stress is unpredictable, uncontrollable, and overwhelming. It comprises 10 items that allow five responses in a Likert scale: never (0), almost never (1), sometimes (2), often (3), and very often (4). Total scores range from 0 to 40, with higher scores indicating greater perceived stress. Cronbach’s alpha with the current sample was 0.85.

- **Mental Health.** Anxiety and depression were used as indicators of mental health.

- **Future Time Perspective.** Future time perspective was assessed by the future subscale of Time Attitude Scale (TAS, Worrell et al., 2013).

- **Confidence in Society.** Confidence in society was assessed by the general confidence scale developed by Keller et al. (2011). The scale has six items rated on a seven-point Likert scale (1 = totally disagree, 7 = totally agree). Higher scores indicate higher levels of confidence in society. In this study, Cronbach’s alpha score of the scale was 0.89.

3. RESULTS and DISCUSSION

### TABLE 1 | Means, SDs, and correlations.

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<td>-</td>
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<td>0.85</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>2. Perceived stress</td>
<td>0.19**</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Future positive</td>
<td>-0.07</td>
<td>-0.54**</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Future negative</td>
<td>0.10*</td>
<td>0.48*</td>
<td>-0.58**</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Confidence in society</td>
<td>-0.07</td>
<td>-0.41**</td>
<td>0.53**</td>
<td>-0.34**</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Anxiety</td>
<td>0.29**</td>
<td>0.82**</td>
<td>-0.30**</td>
<td>0.30**</td>
<td>-0.26**</td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Depression</td>
<td>0.17**</td>
<td>0.73**</td>
<td>-0.53**</td>
<td>0.48**</td>
<td>-0.46**</td>
<td>0.71**</td>
<td>0.84</td>
<td></td>
<td></td>
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<td>8. Gender</td>
<td>0.06</td>
<td>0.08*</td>
<td>-0.01</td>
<td>0.04</td>
<td>0.03</td>
<td>0.06</td>
<td>0.03</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Age</td>
<td>0.11**</td>
<td>-0.23**</td>
<td>0.12**</td>
<td>-0.01</td>
<td>0.13**</td>
<td>-0.02</td>
<td>-0.18**</td>
<td>-0.25**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>10. Education level</td>
<td>-0.04</td>
<td>-0.04</td>
<td>0.03</td>
<td>-0.10**</td>
<td>-0.01</td>
<td>0.06</td>
<td>-0.06</td>
<td>0.03</td>
<td>-0.05</td>
<td>-</td>
</tr>
<tr>
<td>M</td>
<td>6.03</td>
<td>2.68</td>
<td>3.69</td>
<td>2.38</td>
<td>5.32</td>
<td>1.29</td>
<td>1.82</td>
<td>0.38</td>
<td>3.59</td>
<td>4.04</td>
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<tr>
<td>SD</td>
<td>2.26</td>
<td>0.68</td>
<td>0.78</td>
<td>0.83</td>
<td>1.19</td>
<td>0.42</td>
<td>0.48</td>
<td>0.49</td>
<td>1.36</td>
<td>0.90</td>
</tr>
</tbody>
</table>

N = 622.
Cronbach’s alphas are presented on the diagonal in italics.
Gender: 0 female, 1 male; Education: 1 vocational school, 2 technical secondary school, 3 high school, 4 vocational/junior college, 5 undergraduate, 6 graduate; Age: 1 18-25 years, 2 26-30 years, 3 31-40 years, 4 41-50 years, 5 above 51 years.
*p < 0.05, **p < 0.01.
TABLE 2 | Results of regression analysis.

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th>Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>−0.02 (0.04)</td>
<td>0.031 (0.04)</td>
</tr>
<tr>
<td>Age</td>
<td>−0.19 (0.04)**</td>
<td>−0.050 (0.04)</td>
</tr>
<tr>
<td>Education level</td>
<td>−0.06 (0.04)</td>
<td>−0.074 (0.04)*</td>
</tr>
<tr>
<td>Predictor</td>
<td></td>
<td></td>
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<tr>
<td>Epidemic risk perception</td>
<td>0.19 (0.04)**</td>
<td>0.28 (0.04)**</td>
</tr>
<tr>
<td>F</td>
<td>11.95**</td>
<td>17.42**</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.07</td>
<td>0.06</td>
</tr>
</tbody>
</table>

N = 693.
Statistics reported are standardized regression coefficients (and SEs).
*p < 0.05, **p < 0.01.

TABLE 3 | Path analysis results on depression and anxiety.

<table>
<thead>
<tr>
<th></th>
<th>Perception stress</th>
<th>Depression</th>
<th>Anxiety</th>
</tr>
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<tbody>
<tr>
<td>Model 1</td>
<td></td>
<td></td>
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<tr>
<td>Control variables</td>
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<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.02 (0.03)</td>
<td>−0.04 (0.02)</td>
<td>0.02 (0.03)</td>
</tr>
<tr>
<td>Age</td>
<td>−0.18** (0.03)</td>
<td>−0.02 (0.03)</td>
<td>−0.18** (0.03)</td>
</tr>
<tr>
<td>Education level</td>
<td>−0.01 (0.03)</td>
<td>−0.02 (0.02)</td>
<td>−0.01 (0.03)</td>
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<td>Predictors</td>
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<tr>
<td>Epidemic risk perception</td>
<td>0.16** (0.03)</td>
<td>0.04 (0.03)</td>
<td>0.16** (0.03)</td>
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<tr>
<td>Perceived stress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future positive</td>
<td>0.62** (0.03)</td>
<td>0.67** (0.04)</td>
<td></td>
</tr>
<tr>
<td>Future negative</td>
<td>0.10** (0.03)</td>
<td>0.03 (0.04)</td>
<td></td>
</tr>
<tr>
<td>Confidence in society</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future positive × perceived stress</td>
<td>−0.15** (0.03)</td>
<td>−0.06 (0.04)</td>
<td></td>
</tr>
<tr>
<td>Future negative × perceived stress</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Confidence in society × perceived stress</td>
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</tr>
</tbody>
</table>

N = 693.
Statistics reported are standardized regression coefficients (and SEs).
*p < 0.05, **p < 0.01.

FIGURE 1 | Interactive effects of future positive and perceived stress on depression.

FIGURE 2 | Interactive effects of confidence in society and perceived stress on anxiety.
4. CONCLUSION

- The present study demonstrated that risk perception of COVID-19 was significantly correlated with depression and anxiety.
- Perceived stress was established as a mediator of epidemic risk perception and depression/anxiety.
- Future time perspective was found to moderate the effect of perceived stress on depression and social confidence was found to moderate the effect of perceived stress on anxiety.
Psychological Effects of COVID-19: An International Comparative Study of Japan and Korea

Miho Takahashi

Prof., Dept. of Clinical Psychology, Graduate School of Education, The Univ. of Tokyo, Japan

<Abstract>

This study reports an international comparative study regarding the effects of COVID-19 on mental health in Japan and Korea with longitudinal data conducted with Professor Lee Dong Hun of Sungkyunkwan University. The results showed that depression and anxiety decreased with the passage of time in both country. The cultural differences are shown that Japan showed higher levels of loneliness and lower levels of life satisfaction compared to South Korea. It will be related that social support was effective in Japan. It also suggested that the difference of infection of COVID-19 may have an impact on the mental health in both countries. From the results it is suggested that we have to consider the differences in the original COVID-19 infection status as well as the differences in the culture of the country for future support.

<초 록>

Background

- COVID-19 has spread worldwide and had a serious permanent impact (Sameer et al., 2020; Worldometer, 2021).

- Caused serious social problems, including worsening physical health and increased psychological stress (Khan et al., 2021).

- Urban lockdowns have caused high psychological stress, and secondary social problems have been reported as a result of these lockdowns.

- Typical problems noted include loneliness and psychological stresses such as depression and anger (Brooks et al., 2020; Losada-Baltar et al., 2021; Mazza et al., 2020; Sameer et al., 2020; Tang et al.)
Previous studies

• Active research on the psychological stress-related effects of COVID-19 has been conducted mainly in China and European nations (Pappa et al., 2020).
  ➤ Lockdown

• The number of new cases in Japan and South Korea is small compared to the United States, Europe, and Southeast Asian countries.
  ➤ Mild lockdown

• However, studies of adults in Japan and South Korea are now suggesting that significantly negative effects appear (Sameer et al., 2020; Sugaya et al., 2020).
  ➤ Needs for international research to identify psychological stress.

Purpose

• Examine the impact of the pandemic of COVID-19 on psychological stress in Japan and South Korea.

  ➤ designed as a collaborative research project between Japan and Korea with a longitudinal quantitative survey

1. changes in psychological stress over time
2. examine the factors that influence the psychological stress of individuals from both individual and societal perspectives.
3. discuss the psychological impact from a cultural perspective
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

**Methods**

- **Data collection**
  web-based survey

- **Participants and Period**
  
  **Research 1:** 1,000 adults in Japan and Korea at March to April in 2023
  
  **Research 2:** follow-up survey to the same study participants at September to November in 2023

- **Variables**
  
  demographic variables
  
  mental symptoms (depression, anxiety), Life satisfaction
  
  social related variables (loneliness)
  
  buffering factors (support, life career resilience)

**Participants**

<table>
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<th>N1</th>
<th>N2</th>
<th>N1</th>
<th>N2</th>
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<tr>
<td>Divorced</td>
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<tr>
<td>Living alone</td>
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<tr>
<td>Living with partner</td>
<td>30</td>
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</tr>
<tr>
<td>Number of COVID-19 infected friends</td>
<td>53</td>
<td>53</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>Number of COVID-19 infected 2 times or more</td>
<td>7</td>
<td>7</td>
<td>7</td>
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</tr>
</tbody>
</table>

More office workers in Korea, but more housewives/unemployed in Japan. Korea has more experience with COVID19, while Japan has less.
Results: Two-way ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Time1 South Korea</th>
<th>Time1 Japan</th>
<th>Time2 South Korea</th>
<th>Time2 Japan</th>
<th>Country</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression (PHQ-9)</td>
<td>M 0.56</td>
<td>0.52</td>
<td>M 0.50</td>
<td>0.48</td>
<td>2.45</td>
<td>6.07 *</td>
</tr>
<tr>
<td></td>
<td>SD 0.02</td>
<td>0.02</td>
<td>SD 0.02</td>
<td>0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety (GAD)</td>
<td>M 0.76</td>
<td>0.66</td>
<td>M 0.50</td>
<td>0.48</td>
<td>5.92 *</td>
<td>92.64 ***</td>
</tr>
<tr>
<td></td>
<td>SD 0.02</td>
<td>0.02</td>
<td>SD 0.02</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life satisfaction (SWLS)</td>
<td>M 3.67</td>
<td>3.03</td>
<td>M 3.68</td>
<td>3.19</td>
<td>147.61 ***</td>
<td>2.87</td>
</tr>
<tr>
<td></td>
<td>SD 0.04</td>
<td>0.04</td>
<td>SD 0.05</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loneliness (ULS-3)</td>
<td>M 1.65</td>
<td>2.38</td>
<td>M 1.64</td>
<td>2.38</td>
<td>820.01 ***</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>SD 0.02</td>
<td>0.02</td>
<td>SD 0.03</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001

Depression and anxiety decreased over time. Life satisfaction and loneliness differed between countries, with lower loneliness and higher life satisfaction in Korea.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

### Hierarchical multiple regression analysis: Depression

<table>
<thead>
<tr>
<th></th>
<th>South Korea (M=2000)</th>
<th></th>
<th>Japan (M=2000)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step1</td>
<td>Step2</td>
<td>Step1</td>
<td>Step2</td>
<td>Step1</td>
<td>Step2</td>
<td>Step1</td>
<td>Step2</td>
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<tr>
<td></td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
</tr>
<tr>
<td>Time1 AGE</td>
<td>-0.08 ***</td>
<td>-0.08</td>
<td>-0.01</td>
<td>-0.14 ***</td>
<td>-0.12 ***</td>
<td>-0.09 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic status</td>
<td>0.01</td>
<td>0.04</td>
<td>0.06 *</td>
<td>-0.11 ***</td>
<td>-0.05 ***</td>
<td>-0.09 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COVID experience</td>
<td>-0.17 ***</td>
<td>-0.11 **</td>
<td>-0.14 ***</td>
<td>-0.13 **</td>
<td>-0.11 **</td>
<td>-0.13 **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COVID: Afraid</td>
<td>0.85 ***</td>
<td>0.32</td>
<td>0.31</td>
<td>0.17 ***</td>
<td>0.31</td>
<td>0.03 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Stress</td>
<td>0.26</td>
<td>0.17</td>
<td>0.17</td>
<td>0.36 ***</td>
<td>0.36 ***</td>
<td>0.39 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loneliness (ULS-B)</td>
<td>0.36</td>
<td>0.17</td>
<td>0.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Support (MPMSS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Career Resilience</td>
<td>-0.06</td>
<td>-0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R²: 0.17 ***; 0.36 ***; 0.35 ***; 0.38 ***; 0.39 ***; 0.92 ***; 0.92 ***; 0.92 ***; 0.95 ***; 0.95 ***; 0.95 ***; 0.95 ***

* p<.05; ** p<.01; *** p<.001

In Japan, social support is a buffer factor for depression at Time 1. In Korea, COVID19 infection and anxiety effects on depression, even at Time2.

### Hierarchical multiple regression analysis: Anxiety

<table>
<thead>
<tr>
<th></th>
<th>South Korea (M=2000)</th>
<th></th>
<th>Japan (M=2000)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step1</td>
<td>Step2</td>
<td>Step1</td>
<td>Step2</td>
<td>Step1</td>
<td>Step2</td>
<td>Step1</td>
<td>Step2</td>
</tr>
<tr>
<td></td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
</tr>
<tr>
<td>Time1 AGE</td>
<td>-0.01</td>
<td>0.03</td>
<td>0.05</td>
<td>0.05</td>
<td>0.03 ***</td>
<td>0.09 ***</td>
<td>0.06 *</td>
<td>0.06 *</td>
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<tr>
<td>Economic status</td>
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<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.03</td>
<td>0.01</td>
<td>0.03</td>
</tr>
<tr>
<td>COVID experience</td>
<td>-0.16 ***</td>
<td>-0.13 ***</td>
<td>-0.13 ***</td>
<td>-0.13 ***</td>
<td>-0.13 ***</td>
<td>-0.13 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COVID: Afraid</td>
<td>0.81 ***</td>
<td>0.36 ***</td>
<td>0.37 ***</td>
<td>0.37 ***</td>
<td>0.37 ***</td>
<td>0.37 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Stress</td>
<td>0.25 ***</td>
<td>0.23 ***</td>
<td>0.23 ***</td>
<td>0.23 ***</td>
<td>0.23 ***</td>
<td>0.23 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loneliness (ULS-B)</td>
<td>0.25</td>
<td>0.18 ***</td>
<td>0.18 ***</td>
<td>0.18 ***</td>
<td>0.18 ***</td>
<td>0.18 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Support (MPMSS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Career Resilience</td>
<td>-0.06</td>
<td>-0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R²: 0.26 ***; 0.26 ***; 0.26 ***; 0.26 ***; 0.26 ***; 0.26 ***; 0.26 ***; 0.26 ***

* p<.05; ** p<.01; *** p<.001

Regarding anxiety in Time 1, social support is effective in Japan, while life career resilience is effective in Korea.
**Hierarchical multiple regression analysis: Life satisfaction**

<table>
<thead>
<tr>
<th>Time1</th>
<th>South Korea (N=1000)</th>
<th>Japan (N=1000)</th>
<th>Step1</th>
<th>Step2</th>
<th>Step3</th>
<th>Step4</th>
<th>Step5</th>
<th>Step6</th>
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<tbody>
<tr>
<td></td>
<td>β</td>
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<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
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<td>β</td>
</tr>
<tr>
<td>AGE</td>
<td>3.03 ***</td>
<td>3.07 **</td>
<td>-0.02</td>
<td>0.11 ***</td>
<td>0.03 **</td>
<td>-0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Economic status</td>
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<td>0.34 ***</td>
<td>0.02 **</td>
<td>0.28 ***</td>
<td>0.24 ***</td>
<td>0.17 ***</td>
<td>0.17 ***</td>
<td>0.17 ***</td>
</tr>
<tr>
<td>COVID-experience</td>
<td>-0.05 **</td>
<td>-0.30 ***</td>
<td>-0.04</td>
<td>-0.81</td>
<td>-0.61</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>COVID-Afraid</td>
<td>-0.04</td>
<td>-0.02</td>
<td>-0.04</td>
<td>-0.81</td>
<td>0.04</td>
<td>-0.12 ***</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Perceived Stress</td>
<td>-0.09 **</td>
<td>-0.10 ***</td>
<td>0.03</td>
<td>-0.27 ***</td>
<td>0.28 ***</td>
<td>0.28 ***</td>
<td>0.28 ***</td>
<td>0.28 ***</td>
</tr>
<tr>
<td>Loneliness (GSS-3)</td>
<td>-0.36 ***</td>
<td>0.01</td>
<td>-0.32 ***</td>
<td>0.07 ***</td>
<td>0.07 ***</td>
<td>0.29 ***</td>
<td>0.29 ***</td>
<td>0.29 ***</td>
</tr>
<tr>
<td>Social Support (MPSRS)</td>
<td>0.03 **</td>
<td>0.02</td>
<td>0.01</td>
<td>-0.12 ***</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Life-Course Resilience</td>
<td>0.03 **</td>
<td>0.03</td>
<td>0.01</td>
<td>-0.12 ***</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
</tbody>
</table>

| At Time1 in Japan, life satisfaction has negative relationship with loneliness. At Time 2 in Japa, Covid experience and afraid effects on life satisfaction. |

**Discussion**

1. **Influence of time**
   - Depression and anxiety decreased over time (Time1 → Time2).

2. **Country differences**
   - Life satisfaction and loneliness differed between countries.

**lower loneliness and higher life satisfaction in Korea**

**higher loneliness and lower life satisfaction in Japan**
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- **The effects of culture**
  At Time1, in Japan, social support is a buffer factor for depression and anxiety, and loneliness also affects life satisfaction at Time1.
  - Japanese feels relatively high loneliness originally, where social support can be effective.
  At Time1, social support is effective on anxiety in Japan, while life career resilience is effective in Korea.
  - Japan is more socially oriented toward others when anxious, while Korea is more independent in coping.

- **The effects of experience of COVID19**
  In Korea, COVID19 infection and anxiety effects on depression, even at Time2.
  - Influence of high rate of incidence in Korea.
  In Japan, COVID19 affected effect on life satisfaction, even at Time 2.
  - Influence of low rate of incidence in Japan.

**Prospects**

1. **Future support**
   - Need to respond according to the culture of the country of origin as well as the real-life experiences of the infection situation, etc.
   - Need to increase social support and resilience tailored to the country’s situation

2. **Future research**
   - Further analysis using SEM (Structural Equation Modeling)
   - Need qualitative study through interviews
Thank you for your attention
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Psychosocial Adaptation in Household Transmission of SARS-CoV-2 Infections

Chayannan Jaide
Lecturer, Ramathibodi School of Nursing, Mahidol Univ., Thailand

<Abstract>

The COVID-19 caused by SARS-CoV-2 has significantly affected the global population, especially those experiencing mental health issues. Household settings are important transmission venues for SARS-CoV-2. Alterations in family dynamics and routines contribute to psychosocial impact within households, influencing the maintenance of difficulties, including development in children. Limited studies have examined household transmission and children’s psychological difficulties in low- and middle-income countries. Thus, the present study aims to explore and investigate the relationship between family difficulties due to COVID-19, family functioning, resilience, and children’s psychological difficulties. Participants include families with children aged 0 months to 18 years who tested positive for COVID-19. The study will involve online surveys and in-depth interviews to understand the complex interplay between psychological factors and social interactions in the context of household SARS-CoV-2 transmission. Results will provide insights for public health strategies and interventions to promote mental well-being and psychosocial adaptation during and after challenging times.

Keywords: Psychosocial impact, family functioning, resilience, household SARS-CoV-2 transmission

<초 록>


키워드: 심리사회적 영향, 가족 기능, 회복력, 가정 내 SARS-CoV-2 전파
Psychosocial Adaptation in Household Transmission of SARS-CoV-2 Infections

Chayannan Jaide, PhD, RN
Mahidol University, Thailand
Email: chayannan.jad@mahidol.edu

Outline

• Overview of SARS-CoV-2 infection
• Psychosocial impacts and adaptation
• The VERDI-MU project: Case example
• Summary
Recent Evidence and Future Directions for Crisis Prevention and Intervention:
From Youth to Elderly
2024 SKKU Traumatic Stress Center International Conference

Is the SARS-CoV-2 Over?

Number of COVID-19 cases reported to WHO (cumulative total)
5 January 2020 – 12 May 2024 (WHO, 2024a-b)

Cumulative total = 775,481,326
+32,524 increase on previous 7 days

Note: Numbers may not be accurate due to
- Stopped or changed the frequency of reporting
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Number of COVID-19 deaths reported to WHO (cumulative total)
5 January 2020 – 12 May 2024

Cumulative total = 7,049,376
+293 increase on previous 7 days

Note: Numbers may not be accurate due to
- Decreased testing and sequencing

Trends of COVID-19 cases in Thailand (DOC, 2024; WHO, 2024c)

5-11 May, 2024

- New cases (hospitalization)
- Pneumonia
- Intubated cases
5-11 May, 2024

11 ราย
(เฉลี่ย 1.5/วัน)

104 ราย

12-18 May, 2024

16 ราย
(เฉลี่ย 2/วัน)

120 ราย

- New deaths (case / day)
-Deaths ➔ more in younger age group

What We Have Done?

Psychosocial impacts & adaptation

Family functioning

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COVID-19-Related Disruption in Thailand

The changes in family functioning and family happiness during the COVID-19 pandemic: The situation in Thailand

Nita Limnane, Thanyada Pratation, Prajarasni Weeraj

Background: The effects of the COVID-19 pandemic on family well-being and functioning were generally a concern for healthcare providers in many countries.

Objectives: To explore the changes in family functioning and family happiness during the pandemic in Thailand and to investigate factors associated with the changes in family happiness.

Methods: This was a cross-sectional study conducted between November and December 2020. Online questionnaires regarding family functioning, family happiness, domestic violence, and COVID-19-related experiences were used.

Results: A total of 465 participants were included in this study. The perceived family happiness slightly decreased from 8.19 (pre-pandemic score) to 7.62 (post-pandemic score). In contrast, the general family functioning (SCORE-15 index), strength, and communication subscale scores after the onset of the COVID-19 pandemic were significantly lower than those of the pre-pandemic period. Moreover, the prevalence of verbal and physical violence significantly reduced during the pandemic. In addition, the change in family functioning was the strongest factor associated with the change in family happiness.

Conclusion: In general, family functioning slightly improved; however, perceived family happiness decreased during the pandemic. In addition, the change in family functioning was the strongest factor associated with the change in family happiness.

Family atmosphere and family functioning before and after the COVID-19 pandemic

<table>
<thead>
<tr>
<th></th>
<th>Mean (95% BCa CI)</th>
<th>Bootstrap P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>Verbal violence, N (%)</td>
<td>349 (72.5) [68.2, 76.3]</td>
<td>249 (51.3) [46.7, 56.0]</td>
</tr>
<tr>
<td>Physical violence, N (%)</td>
<td>69 (14.3) [11.1, 17.4]</td>
<td>39 (6.2) [4.1, 8.4]</td>
</tr>
<tr>
<td>Perceived family happiness</td>
<td>8.19 [8.01, 8.36]</td>
<td>7.62 [7.43, 7.81]</td>
</tr>
<tr>
<td>Family functioning index (SCORE-15)</td>
<td>2.22 [2.16, 2.38]</td>
<td>2.18 [2.13, 2.34]</td>
</tr>
<tr>
<td>Strength subscale</td>
<td>1.98 [1.93, 2.06]</td>
<td>1.94 [1.89, 2.02]</td>
</tr>
<tr>
<td>Difficulty subscale</td>
<td>2.40 [2.33, 2.48]</td>
<td>2.40 [2.31, 2.48]</td>
</tr>
<tr>
<td>Communication subscale</td>
<td>2.28 [2.22, 2.35]</td>
<td>2.20 [2.13, 2.27]</td>
</tr>
</tbody>
</table>
Factors associated with changes in perceived family happiness

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beta [95% BCa CI]</strong></td>
<td><strong>P-value</strong></td>
</tr>
<tr>
<td>Age</td>
<td>0.02 [0.004, 0.03]</td>
</tr>
<tr>
<td>Female</td>
<td>-0.14 [-0.48, 0.22]</td>
</tr>
<tr>
<td>Family happiness score before the pandemic</td>
<td>-0.20 [-0.29, -0.13]</td>
</tr>
<tr>
<td>Changes in SCORE—15 index</td>
<td>-1.60 [-2.67, -1.13]</td>
</tr>
<tr>
<td>Close persons died of COVID—19</td>
<td>-0.29 [-0.66, 0.01]</td>
</tr>
<tr>
<td>Financial problems</td>
<td>-0.29 [-0.52, -0.06]</td>
</tr>
<tr>
<td>Number of COVID—19—related experiences</td>
<td>0.70 [-0.09, 1.61]</td>
</tr>
<tr>
<td>Constant</td>
<td>0.70 [-0.10, 1.58]</td>
</tr>
</tbody>
</table>

↓ Family functioning → ↓ capacity to adapt to stress
↓ happiness

Psychosocial Impacts

**Physical Impact**
- Sleep disorder
- Lack of nutritional food supply
- Neglect of other family members’ health

**Psychological Impact**
- Depression, lonesome
- Mourning
- Trauma, post-traumatic stress
- Anticipative grief, distress
- Anxiety, worry, anger
- Fear

**Social Impact**
- Stigma
- Discrimination
- Rejection

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- Women have greater impacts than men due to:
  - More responsibilities
  - Unsatisfied with their couple relationship
  - Child care difficulty
  - Lack of time

- Psychosocial Impacts → capacity to adapt to stress → children's psychological difficulties

(Morgananto, Windolf, & Zhu, 2023)

Psychosocial Adaptation

Supportive factors for a better adaptation

- Family resilience and stress management
- Social support (couple, community, providers, social media)
- Open communication
- Self-care practice and healthy lifestyle
- Seeking help

(Marzill et al., 2021)
Summary

COVID-19 pandemic → Family functioning → Family happiness

(other factors)

- demographic data
- social - economic determinants of health
- others

(Razza, Haq, & Sajjad, 2020)

- Psychosocial impacts (the best predictor) → capacity to adapt to stress

Clinical outcomes (examples)
- Serious complication
- Hospitalization
- Long-term physical health conditions
- Substantial negative mental health
- Children’s psychological difficulties
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Household Transmission of SARS-CoV-2 Infections

- Thailand reported a COVID-19 case outside of China (January 2020)

- “Vaccine breakthrough infection” can still occur

- Omicron variant → increased hospitalization rate in pediatric population

- Transmission within families → the epidemic of many respiratory viruses (e.g., influenza, RSV)

- Limited studies on household transmission and psychosocial effects → pediatric population in LMICs

- Part of the study (Bangkok vs Chiang Mai, Thailand) → building upon the ongoing RECOVER household study in the Netherlands

- Families with children aged < 18 years (index case) who tested positive for COVID-19 (ATK)

- Confirmed using SARS-CoV-2 RT-PCR test within 48 hours

- At least 1 family member with confirmed PCR or antigen “negative"

- Experience in caring for cohabiting family members with SARS-CoV-2 infection
Variants of concern (VOCs) distributions

**Key points:**

- The ongoing mutations of the virus (similar to other part of the world)
- Recently, the dominant COVID-19 strain → IN.1

**Resource:** The VERDI-MU project

---

**Transmission characteristics:**

- Index cases get infected from friends, contagious siblings or gardians → silently spread infection to cohabiting family members

- Recognized symptoms: Fever, rash, cough, GI symptoms, fatigue

- Hospitalisation due to complications, especially in infant and premature infant

- All infected cases → local infections
Psychological difficulties arise partly from

- Genetic evolution of SARS-CoV-2
- Clinical symptoms, child disabilities, other complications
- Family size, the age of children, and comorbidities among cohabiting family members

<table>
<thead>
<tr>
<th>CHR Subj</th>
<th>N</th>
<th>L</th>
<th>IC</th>
</tr>
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<tbody>
<tr>
<td>10.88</td>
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<td>17.39</td>
</tr>
</tbody>
</table>

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Narrative responses to questions

A: The greatest impact from COVID-19 transmission within family on mental health and well-being?

“I experienced regret because I was the first family member to be infected with COVID-19. I did my best to prevent the spread. But, finally, other family members became infected.”

“I felt quite anxious because we have two little kids in our home. As I said, I ended up transmitting the virus to them.”

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A: Challenges during the household transmission

“I faced some difficulties in caring for my kids ..... they are still young and need close monitoring of the condition. I fear about potential complications in children like MIS-C (Multisystem Inflammatory Syndrome in Children)“

A: What is helping you deal with this impact?

“I enjoyed music, cooking, and ensured I got sufficient sleep. My husband always stood by me and helped in caring for our kids. “

A: Thoughts on COVID-19 now as an endemic (declared by the Thai government on October 2022)

“I feel more relaxed now than during the pandemic ..... but the virus continues to mutate, I cannot rely on the situation .... I still follow preventive measures and stay cautious because of the uncertain future (many unknowns). “

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Summary

- SARS-CoV-2 → a genetic drift over time
- Some changes → disease severity, therapeutic medicines, diagnostic tools, other public health and social measures
- Still see critically ill patients
- Still many unknowns

Take Home Messages

- Psychosocial impacts ↓ adaptation ↑ compared to during the pandemic
- Remains a cause of concerns in parents having child with SARS CoV-2 infection
- Family → very physical and psychological vulnerabilities → needs are not fulfilled
- Psychosocial effects → a long-term impact on families and children
- A need to continuously capture experiences, especially family having children with SARS CoV-2 infection → future pandemic planning and pathway design
- Complimenting and adjusting public health and social measures
Reference


Recent Evidence and Future Directions for Crisis Prevention and Intervention:
From Youth to Elderly

Thank You for Your Attention
DAY 1 - 2024. 6. 7. Fri.
Session 2. Prevention of Self-injury and Suicide
The Role of Time Perspectives in Suicidal Prevention and Psychopathology

Alexander Unger
Associate Prof., East-Asia Institute Ludwigshafen Univ. of Business and Society, Germany

Abstract

In my presentation I will give an overview of findings dealing with the association of time perspectives to suicidal ideation. I will respond to the question if time perspective therapy is efficient for reducing suicidal ideations.

Van Beek et al. (2010) showed by comparing clinical (under treatment) and non-clinical participants, that four time perspectives of the Zimbardo Time Perspective Inventory (ZTPI) by Zimbardo and Boyd (1999) are correlated to suicidality. Past Negative and Present Fatalistic perspectives were identified as problematic, whereas Past Positive and Future can prevent from suicidal ideation. In accordance with the hypothesized existence of a balanced time perspective Yufit (1977) understood suicidality as substantially influenced by distorted or unbalanced time perspectives. Accordingly, time perspective-based therapy has the potential for a wide range of psychopathological domains.

초 록

본 발표에서는 자살 충동과 시간 관점의 연관성에 관한 연구 결과를 개괄적으로 설명할 것이다. 특히 시간 관점 치료가 자살 충동을 감소시키는 데 효율적인지에 대해 알아보고자 한다.

The Role of Time Perspectives in suicidal prevention and psychopathology

Dr. Alexander Unger, East Asia Institute, Ludwigshafen, Germany

Overview:

1.) Theory of Time Perspective
2.) The Results of the correlational study by van Beek et al. (2003)
3.) Time Perspective and PTSD
4.) Empirical Studies about Time Perspectives and Suicidal Ideation
5.) Conclusions
(1) Zimbardo's Time perspective Inventory (ZTPI)

- It has been shown that five independent time perspectives (Zimbardo & Boyd, 1999) and their combinations are responsible for well-being but also dysfunctional behavior.

- Specific combinations will lead to well-being and high levels of self-control,

- whereas other combinations will lead to dysfunctional behavior and poor achievement in self-control
The five dimensions according to Zimbardo & Boyd (1999)

Past Negative
Past Positive
Present Hedonistic
Present Fatalistic
Future

Past Negative

- Overall a high Past Negative orientation has predominantly disadvantages and can be characterized by
- --minor self-respect
- --a weak personality
- -- still stuck in a negative past and therefore often discouraged to develop a positive present and future orientation
Past Negative

- less close friends, and were less satisfied by their interpersonal relationships (cf. Zimbardo & Boyd, 1999, p. 1281).
- Consequently they show a high emotional instability

Past Positive

- Those individuals scoring high at the Past Positive dimension
- -- were more satisfied,
- -- more successful
- -- are more healthy
- -- they show fewer tendencies for aggressive behavior, proneness to depression and show a higher level of emotional stability.
Present Hedonistic

- -- show tendency for immediate gratification
- -- low persistence in self-control
- -- high social orientation / seek for affiliation with similar minded persons ("party-oriented")
- -- enhanced risk behavior (e.g. smoking,
- alcohol abuse, risky car driving)

Present Fatalistic

- -- is characterized by resignation.
- -- they assume that they have no influence on their own life.
- -- Instead, they assume that all is determined by external forces like fade, society or other more powerful persons
Future

- high tendency for delayed gratification
- high persistence in self-control
- enhanced working and learning achievement
- good health

Independence of the 5 dimensions

- All five dimensions show independent factorial structure (Zimbardo & Boyd, 1999)

- E.g. that a High Future Orientation is not necessarily connected to a Low Hedonistic Orientation
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Zimbardo Time Perspective Inventory (ZTPI)

- Past Positive (PP)
- Past Negative (PN)
- Present Fatalistic (PF)
- Present Hedonistic (PH)
- Future (F)

Balanced Time Perspective
Balanced Time Perspective (BTP)

High scores on positive ZTPI subscales & low scores on negative ZTPI subscales

Associated with:
- Decreased negative affect
- Higher life satisfaction
- Happiness
- Positive affect
- Psychological need satisfaction
- Self-determination
- Vitality
- Gratitude
- Positive mood
- Morningness
- Emotional intelligence
- Psychological well-being
- Mindfulness
- Increased cortisol secretion during exposure to stressful experiences

(Zhang, Howell, and Stolarski, 2013)

( Olivera-Figueroa, et al., 2015)

Unbalanced Time Perspective

High scores on negative ZTPI subscales & low scores on positive ZTPI subscales

Associated with:
- Negative affect
- PTSD Symptoms
- Anxiety Symptoms
- Depression Symptoms
- Decreased cortisol secretion during exposure to stressful experiences

(Zhang, et al., 2013; Zimbardo, et al., 2012)

(Olivera-Figueroa, et al., 2015; Lopez-Cordova, 2015)
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Measurements of Time Perspective Profiles

- Calculated by: Deviation from the Balanced Time Perspective (DBTP) coefficient
- Measures the distance of each individual from the assumed optimal TP profile
- The farther a DBTP value is from zero, the more misbalanced an individual’s TP profile is.

\[ DBTP = \sqrt{(oPN-ePN)^2 + (oPP-ePP)^2 + (oPF-ePF)^2 + (oPH-ePH)^2 + (oF-eF)^2} \]

(Zhang, Howell, and Stolarski, 2013).

Time perspective and psychopathology:

- Van Beek et al. (2010) argue
- Time perspective is associated to clinical psychology and psychiatry,
- Following the argumentation of Livesley (2003) a lack of historicity and continuity can be regarded as a core feature of personality pathology.
- This deficit has been also linked to depression and suicidality.
Time perspective and psychopathology:

- “The hopelessness in depressed suicidal patients appears to consist of two factors: preoccupation with the negative past and a lack of a positive future” (van Beek et al. (2003, p. 365)

Time perspective and psychopathology:

MacLeod et al. (1993, 1997) observed, that parasuicidal people are impaired in their ability to generate positive future thoughts.
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Time perspective and psychopathology:

The Results of the study by van Beek et al. (2003)

<table>
<thead>
<tr>
<th>ZTPI SIPP-IIB</th>
<th>PastNeg</th>
<th>PastPos</th>
<th>PresFas</th>
<th>PresHed</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Control</td>
<td>-.77***</td>
<td>.45***</td>
<td>-.42***</td>
<td>.01</td>
<td>.15</td>
</tr>
<tr>
<td>Identity Integration</td>
<td>-.83***</td>
<td>-.48***</td>
<td>-.49***</td>
<td>.12</td>
<td>.09</td>
</tr>
<tr>
<td>Responsibility</td>
<td>-.71***</td>
<td>.36***</td>
<td>-.48***</td>
<td>-.18</td>
<td>.27*</td>
</tr>
<tr>
<td>Relational Functions</td>
<td>-.69***</td>
<td>.58***</td>
<td>-.33***</td>
<td>.08</td>
<td>.02</td>
</tr>
<tr>
<td>Social Concordance</td>
<td>-.52***</td>
<td>.26*</td>
<td>-.28*</td>
<td>-.03</td>
<td>.06</td>
</tr>
<tr>
<td>BDI-II total score</td>
<td>.84***</td>
<td>-.64***</td>
<td>.39***</td>
<td>-.24</td>
<td>-.08</td>
</tr>
<tr>
<td>BDI-II suicidality</td>
<td>.78***</td>
<td>-.58***</td>
<td>.46***</td>
<td>-.05</td>
<td>-.27*</td>
</tr>
</tbody>
</table>

Note: PastNeg = Past Negative, PastPos = Past Positive, PresFas = Present Fatalistic, PresHed = Present Hedonistic.
***p < .01, **p < .05, *p < .01, 2 tailed; 'p < .05, 2 tailed.
### Table 1. Correlations between ZTP, SIPP-IIB and the BDI-II, whole sample (N = 76)

<table>
<thead>
<tr>
<th>ZTP SIPP-IIB</th>
<th>PastNeg</th>
<th>PastPos</th>
<th>PresFat</th>
<th>PresHed</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Control</td>
<td>-.77***</td>
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</tr>
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***p < .01, 2 tailed; **p < .05, 2 tailed.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Time perspectives and Big-5

Table 1. Correlations between ZTPI, SIPP-IIB and the BDI-II, whole sample (N = 76)

<table>
<thead>
<tr>
<th>ZTPI</th>
<th>PastNeg</th>
<th>PastPos</th>
<th>PresFat</th>
<th>PresHed</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIPP-IIB</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Control</td>
<td>-.77**</td>
<td>.45***</td>
<td>-.42***</td>
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</tr>
<tr>
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<td>-.49***</td>
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<td>.58***</td>
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<td>.08</td>
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<td>.26*</td>
<td>-.28</td>
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<td>-.24</td>
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<tr>
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<td>-.05</td>
<td>-.27**</td>
</tr>
</tbody>
</table>

Note: PastNeg = Past Negative, PastPos = Past Positive, PresFat = Present Fatalistic, PresHed = Present Hedonistic.
***p < .001, 2 tailed; **p < .01, 2 tailed.

Time perspectives and Big-5

Table 2. Correlations between ZTPI and NEO-PI scales, whole sample (N = 76)

<table>
<thead>
<tr>
<th>ZTPI</th>
<th>PastNeg</th>
<th>PastPos</th>
<th>PresFat</th>
<th>PresHed</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEO-PI</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Neuroticism</td>
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<td>-.44***</td>
<td>.48***</td>
<td>-.12</td>
<td>.00</td>
</tr>
<tr>
<td>Extraversion</td>
<td>-.68**</td>
<td>.53***</td>
<td>-.33***</td>
<td>.34***</td>
<td>.00</td>
</tr>
<tr>
<td>Openness</td>
<td>-.17</td>
<td>.23*</td>
<td>.10</td>
<td>.30***</td>
<td>-.12</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.20</td>
<td>.17</td>
<td>-.09</td>
<td>-.06</td>
<td>.01</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-.71***</td>
<td>.48***</td>
<td>-.58***</td>
<td>-.09</td>
<td>.44***</td>
</tr>
</tbody>
</table>

Note: PastNeg = Past Negative, PastPos = Past Positive, PresFat = Present Fatalistic, PresHed = Present Hedonistic.
***p < .001, 2 tailed; **p < .01, 2 tailed.
Conclusion

- Van Beek et al. (2010) study delivers first supporting results for an association between
  - TP and Psychopathology in general
  - TP and suicidal ideation

TP-Therapy and PTSD

- Support is also coming from the development of a TP-based therapy of PTSD by Sword, Sword & Zimbardo
TP-Therapy and PTSD

- It is necessary to balance the client’s time perspectives when biased.

- Therefore, a past positive and future positive TP needed to be promoted.

- Work on breaking out of negative TPs and develop the ability to move fluidly between positive TPs.

- Enable the ability to re-construct a more compassionate past, enjoy a more satisfying present and future and thereby achieve an optimal TP balance. (Sword, Sword, & Zimbardo, 2004)
Time perspectives and suicide ideation and empirical studies

- We will review some empirical findings in the following testing the association between time perspectives and suicide ideation.
- Is Time perspective therapy an effective measure?

Karayuğ et al. (2022): The Mediating Role of Time Perspective in the Relationship between Chronotype and Suicide in Bipolar Disorder

Suicide and bipolar disorder (BD) is related to the chronotype.

Is there a relationship between Time perspectives and Suicide for patients with bipolar disorder (BD)?
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Karaytuğ et al. (2022)

**Suicide and bipolar disorder (BD) is related to the chronotype.**

**Is there a relationship between Time perspectives and Suicide for patients with bipolar disorder (BD)?**

- **Study 1:**
  - The Young Mania Rating Scale (YMRS)
  - The Hamilton Depression Rating Scale (HDRS)
  - The Beck Scale for Suicidal Ideation (BSSI)
  - The Zimbardo Time Perspective Inventory (ZTPI)
  - The Morningness–Eveningness Questionnaire (MEQ)

**Participants**

- 163 patients with BD
- 95 healthy controls

**4 depressive episodes**
- 5 manic episodes
- 4 PD

**Totally 13 patients were excluded**

**150 patients with BD**

**84 healthy controls**

- 5 refused to fill out the forms
  - 3 MDD
  - 2 GAD
  - 1 OCD

**BD:** Bipolar disorder
**PD:** Personality disorder
**MDD:** Major depressive disorder
**GAD:** Generalized anxiety disorder
**OCD:** Obsessive-compulsive disorder
Karaytuğ et al. (2022) present their results as following:

"In summary, past negative TP (Model 1), past positive TP (Model 2), present hedonistic TP (Model 3), and future TP (Model 5) were found to play a full mediator role in the relationship between chronotype and suicidal ideation."
Karaytuğ et al. (2022) present their results as following:

“In summary,
past negative TP (Model 1),
past positive TP (Model 2),
present hedonistic TP (Model 3),
and future TP (Model 5)

were found to play a full mediator role in the relationship between chronotype and BSSI, because the effect of chronotype on the mediator (path a) and mediator on BSSI (path b) was found to be significant, but the effect of chronotype on BSSI (path c’) was not significant.

Karaytuğ et al. (2022) present their results as following:

However,

present fatalistic TP (Model 4)

was found to partially mediate the relationship between chronotype and suicidal ideation.
Ariapooran et al. (2016): Relationship between Social Support, Time Perspective and Suicide Ideations in Patients with Multiple Sclerosis

Ariapooran et al. (2016)

The sample of the current study consisted of female and male patients with MS in Nahavand and Malayer, Iran (N=88).

Is there an influence of Social Support and Time perspectives on Suicide Ideations in Patients with Multiple Sclerosis?

- Measurement instruments:
  - 1). Beck Scale for Suicidal Ideation
  - 2). Multidimensional Scale of Perceived Social Support (MSPSS)
  - 3). Zimbardo’s Time Perspective Inventory (ZTPI)
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Results:

Table 3. Summary of regression analysis with enter method for SI scores by TP and SS dimensions

<table>
<thead>
<tr>
<th>Prediction variables</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>Sig (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Support from family</td>
<td>-0.424</td>
<td>0.219</td>
<td>-0.184</td>
<td>-1.936</td>
<td>0.057</td>
</tr>
<tr>
<td>Social Support from friends</td>
<td>-0.640</td>
<td>0.335</td>
<td>-0.190</td>
<td>-1.909</td>
<td>0.060</td>
</tr>
<tr>
<td>Social Support from significant other</td>
<td>-0.601</td>
<td>0.258</td>
<td>-0.229</td>
<td>-2.323</td>
<td>0.023</td>
</tr>
<tr>
<td>PN</td>
<td>0.516</td>
<td>0.336</td>
<td>0.170</td>
<td>1.536</td>
<td>0.129</td>
</tr>
<tr>
<td>PP</td>
<td>-0.381</td>
<td>0.104</td>
<td>-0.354</td>
<td>-3.657</td>
<td>0.001</td>
</tr>
<tr>
<td>F</td>
<td>-0.082</td>
<td>0.094</td>
<td>-0.097</td>
<td>-0.881</td>
<td>0.381</td>
</tr>
</tbody>
</table>
Ariapooran et al. (2016): Relationship between Social Support, Time Perspective and Suicide Ideations in Patients with Multiple Sclerosis

- Summary of Main Results:
- Social support is an inhibiting factor for suicide ideations
- PP and F were negatively related to suicide ideations
- PN was positively related to suicide ideations
- No relations was observed for PF and PH.

⇌ PH immediate gratification of needs and higher risk of drug use
⇌ social component

Laghi et al. (2008). Suicidal ideation and time perspective in high school students

- N=3700 Italian adolescents
- Measures:
  - Italian validated version for adolescents
  - Measurement of suicidal ideation
  - psychopathological symptoms (General Global Index)
  - Self-esteem (Rosenberg Self-esteem Scale (RSE))
  - Demographics

- RESULTS:
  - 9.2% of the sample reported severe suicidal ideation during the past two weeks
  - 7.6% reported moderate suicidal ideation.
  - Based on these group differentiations the authors conducted a discriminant function analysis
Laghi et al. (2008). Suicidal ideation and time perspective in high school students

- N=3700 Italian adolescents
- Measures:
  - Italian validated version for adolescents
  - Measurement of suicidal ideation
  - Psychopathological symptoms (General Global Index)
  - Self-esteem (Rosenberg Self-esteem Scale (RSE))
  - Demographics

- RESULTS:
  - 9.2% of the sample reported severe suicidal ideation during the past two weeks
  - 7.6% reported moderate suicidal ideation.
  - In order determine factors of influence on being grouped to those with severe, moderate and no suicidal ideations.

Laghi et al. (2008). Suicidal ideation and time perspective in high school students: RESULTS:

- Function 1 was to determine between the groups with severe vs. no suicidal ideations.
- Function 2 separated moderate from severe ideations.

- Function 2 was mostly explained by Future and Hedonistic Present,
- And number of friends (social support)
Lee et al. (2016). Examining the Relationship Between Past Orientation and US Suicide Rates: An Analysis Using Big Data-Driven Google Search Queries
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Table 4. Regression results (Lee et al., 2016, p.7)

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Coef</td>
<td>SE</td>
<td>P &gt; t</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Unemployment</td>
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</tr>
<tr>
<td>rate</td>
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<tr>
<td>Gun coefficient</td>
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<td>GSP</td>
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<tr>
<td>Population</td>
<td>1.151</td>
<td>0.173</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>growth rate</td>
<td></td>
<td></td>
<td></td>
</tr>
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Lee et al. 2016

- Main Results:
  
  *relationship between past orientation and suicide rate was confirmed*

- Conclusions:
  
  *the results are very illustrative, but the aspect of causation is unsolved*

- Limitations and Future research:
  
  *Future studies need to investigate the causal relationship between past orientation and suicide rate.*
Tat-Yeung James Kuan & Li-Fang Zhang (2020): Thinking styles and time perspectives

- How are time perspectives related to the thinking styles?
- Sample: $n=451$ secondary school students from Hong Kong
- Thinking Styles Inventory-Revised II (TSI-R2)
- the Zimbardo Time Perspective Inventory (ZTPI)
- TP and intellectual styles or thinking styles “[... ] should be related. It is likely that the way in which a person emphasises the past, present, and future relates to how one prefers to utilise his or her abilities and therefore leading to different outcomes. For instance, a person who prefers to prioritise his/her tasks at hand is likely to value the future.”
Tat-Yeung James Kuan & Li-Fang Zhang (2020):

Thinking styles and time perspectives

Sternberg’s Theory of mental self-government

- many ways in which people self-govern
- different thinking styles (Type 1 and 2)
  - intellectual styles = umbrella term
  - learning styles
  - cognitive styles
  - thinking styles

Positive values

Past-Positive, Present-Hedonistic, and Future TPs

Past-Negative and Present-Fatalistic

Negative values
Results and Conclusions

- Academic stress was identified as a contributing factor for a recent high number of adolescent suicide cases in Hong Kong (Committee on Prevention of Student Suicides, 2016).
- The assumed association between TPs and Thinking Styles was confirmed.

Conclusions

- Although it has been shown that time perspective predicts adolescent suicidal ideation (Lagli, Balocco, Alessio, & Gurrieri, 2009), existing studies that were carried out in other Asian countries with similar academic competitiveness, such as South Korea and Japan, were rarely conducted with secondary school students and did not examine all aspects of time perspectives.
- Moreover, it would be important to find ways to help these students under stress to become more successful learners if direct interrelationship between intellectual styles and time perspectives could be understood as an outcome of the present study.
Van Beek et al. (2009, p.1)

“We based the training on cognitive behavioural approaches of hopelessness, worrying, and future perspectives, given the theories of Beck, McLeod and others, concerning the lack of positive expectations characteristic for many suicidal patients. In collaboration with each participant in the training individual positive future possibilities and goals were challenged”.
Van Beek et al. (2009, p.1)

Methodology:

- Evaluation of the effects by measuring the suicide ideation (as primary outcome measure).
- The study took place in Dutch psychiatric including regular inpatients and outpatients, which were representative for treatment settings in this clinic.
- A Randomized controlled trial (RCT) with two conditions was applied: TAU (Treatment as Usual) versus TAU plus the training.

First assessment was taken directly after the treatment. Several follow up measurements were taken after 1 year.

Results

- Overall significant therapeutical effects of the TP-component were reported.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Summary of the empirical Studies

• Across a several studies with different samples from different countries we can conclude that time perspectives are associated with suicidal ideation.

Conclusion:

• 1. A TP related therapy can be evaluated as an effective prevention measure for suicide ideation.
• 2. this is valid for therapeutical and preventive approaches.
• 3. more empirical testing can support the refinements for corresponding therapeutical and preventive approaches.

• Thank you very much!
• Dr. Alexander Unger; contact: alunger@web.de
Research Trend Analysis of Suicide among Adolescents in South Korea

Han, Yoonsun

Associate Prof., Dept. of Social Welfare, Seoul Nat’l Univ., Korea

Abstract

Defined as the act of deliberately inflicting fatal self-injury with the intention of death, suicide stands as a leading cause of death among adolescents in South Korea. This study analyzed 486 peer-reviewed articles published in Korean from 1992 to 2022 to explore adolescent suicide dynamics and related factors across individual, familial, school, peer, and neighborhood domains. Data analysis involved four stages: preprocessing text, tokenization, conducting unigram frequency analysis to identify co-occurring keywords, and bigram frequency analysis to examine word pair connections. Key findings included the frequent appearance of terms like “family,” “peer,” “school,” “social,” and “prevention” concerning adolescent suicide. Additionally, research emphasis has shifted from individual/psychopathological views to social/preventive approaches over the past 30 years. The study suggests a need to focus on protective factors and a strength-based approach to better understand and prevent adolescent suicide in conducting research and implementing South Korea’s suicide prevention policies.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Research Trend Analysis of Suicide among Adolescents in South Korea

Yoonsun Han, Hayoung Donnelly, Suna Kim, & Dong Hun Lee

2024.06.07

Presenter: Yoonsun Han PhD, Department of Social Welfare, Seoul National University

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- Adolescent Suicide in South Korea
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02 METHODS
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03 RESULTS
- Unigram Analysis
- Bigram Analysis

04 CONCLUSION
- Limitations
- Implications
INTRODUCTION

Adolescent Suicide: A Global Agenda

Suicide is defined as the act of deliberately inflicting fatal self-injury with the intention of death

Suicide attempt: self-harm that does not necessarily result in death
Suicide ideation: thinking about, considering, or planning suicide

Suicidal behaviors is a prevailing global health concern; It is foremost contributor to mortality among adolescents and young adults on a worldwide scale. (Al-Habib S. & Fonseca Pimentel, 2021).
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

INTRODUCTION

Adolescent Suicide in South Korea: Prevalence

Suicide is predominant cause of death among adolescents in South Korea and is increasing.

![Graph showing trends in adolescent deaths by suicide from 2012 to 2021.](image)

Source: Statistics Korea

INTRODUCTION

Adolescent Suicide in South Korea: Prevalence

Male/Female Composition

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
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<tr>
<td>Male</td>
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</table>

Suicide Method

- Other: 5%
- Substance poisoning: 5%
- Suicide by hanging: 34%
- Other poisoning: 2%
- Drowning: 5%
- Suffocation: 18%

Source: Statistics Korea
Adolescent Suicide in South Korea: Risk Factors

**Individual factors**
- e.g., Previous suicide attempt, anxiety and stress, depression, gender differences

**Family factors**
- e.g., Family history of suicide, mental disorders, limited family support, parental abuse, family dysfunction, strained parent-youth relationships, parental conflicts, domestic violence

**School/Peer factors**
- e.g., Beginning of academic year, academic stress, negative peer relationships, peer victimization, bullying

**Regional/Macro factors**
- e.g., rural, social fragmentation, limited access to health care services
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

INTRODUCTION

Research Trend Analysis: Salience

National-level policy efforts
The 5th Basic Plan for Suicide Prevention (2023 - 2027) is currently in place.

Evidence-based policy and research
Evidence-based policies are most effective when grounded in robust research
Importance of understanding patterns and trends in existing research on adolescent suicide

METHODS

Data Collection

Keywords: “suicide” + “adolescent”
N = 630

<Before 2000>
19 articles
from Google Scholar, DBpia

<2000 ~ 2022>
621 articles
from Korea Citation Index (KCI) database

Inclusion criteria
1) contained a Korean-language abstract
2) upper primary school to high-school students
3) addressed the issue of suicidality of adolescents

<1992 ~ 2022>
486 articles

Working data
METHODS

Data: Articles by Year

Average articles per year: 18.7
Maximum articles per year: 40 (year 2014)

METHODS

Data: Articles by Academic Field

Mean: 37.4
Median: 25
Maximum: 108
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METHODS

Analysis Strategy

Stage 1
- data pre-processing: cleaning and normalizing

Stage 2
- Data tokenized into unigrams & bigrams

Stage 3
- Unigram analysis and visualization

Stage 4
- Bigram analysis and visualization

Five distinct time periods:

RESULTS

Unigram Frequency for entire period (1992-2022)

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Unigram Network Analysis

- Adolescent suicide encompasses a spectrum of topics
- Suicide is often mentioned in the context of peer victimization, stress, depression, anxiety, and academics
- Risk-factors, as well as intervention efforts are salient

RESULTS

Bigram Frequency: Periods 1-5

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Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

RESULTS

Bigram Association Analysis

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METHODS

Bigram Association Analysis

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**DISCUSSION**

**Limitations and Conclusion**

<table>
<thead>
<tr>
<th>Limitation</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Published articles; Korean journals; Korean abstract</td>
<td>Shift to implementing a strength-based approach that detects unique protective factors of “reason-to-live”</td>
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<tr>
<td>Does not consider non-suicidal self-injury</td>
<td>Furnish scientific evidence to inform strategies for intervention against adolescent suicide</td>
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</table>

**THANK YOU**

Yoonsun Han  
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Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Mental Health of Multicultural Adolescents According to Mother’s Nationality and Suicidal Ideation

Kim, Boyoung

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Abstract

Previous studies examining the mental health and suicide behaviors of multicultural adolescents have yielded inconsistent findings when compared to their monocultural South Korean counterparts. This study aims to provide basic data on the mental health of multicultural adolescents whose mothers are foreign nationals and compare them with Korean monocultural adolescents. The study analyzed data from the Seventeenth Korea Youth Risk Behavior Web-based Survey, including mental health and health risk behaviors for 40,251 middle-high school students according to their mothers’ native country and the status of suicidal ideation. The study’s findings indicate that multicultural adolescents with foreign national mothers exhibited higher levels of suicidal ideation and a greater prevalence of health risk behaviors compared to monocultural South Korean adolescents.

Keywords: multicultural adolescents, suicide ideation, mother’s nationality

Abstract

다문화 청소년의 정신 건강과 자살 행동을 조사한 선행 연구들의 연구결과는 단일문화 한국 청소년들과 비교했을 때 일관성 없는 결과를 보여왔다. 따라서 본 연구는 외국인 출신 어머니를 둔 다문화 청소년의 정신건강에 대한 기본 데이터를 제공하여 이해하고자 한다. 본 연구는 17차 한국 청소년 위험행동 온라인 조사의 데이터를 분석하여 어머니의 출신 국가 및 자살사고 상태에 따라 40,251명의 중고등학생의 정신건강과 건강 위험 행동을 살펴보았다. 연구 결과, 다문화 청소년 중 외국인 출신 어머니를 가진 청소년들은 단일문화 한국 청소년에 비해 더 높은 수준의 자살사고를 보이며 건강 위험 행동이 더 많이 나타났다. 이러한 결과에 대한 함의와 한계 또한 논의하였다.
Mental health and Suicidal Ideation of Multicultural Adolescents in South Korea

The Catholic University of Korea

Boyoung Kim

Introduction

- South Korea's population of multicultural families has surpassed one million, marking a rapid transition toward a multicultural society.

- On the other hand, the rapid increase in the multicultural population can also be regarded as an increase in the psychological difficulties of adolescents from multicultural families. Previous studies have indicated that children from multicultural families often face challenges in establishing interpersonal relationships due to their limited proficiency in the Korean language, tend to exhibit lower participation in school activities, and are reported to have lower academic abilities than their peers (Oh, 2009).
Introduction

• In addition to the mental health and adaptation problems faced by multicultural youth, the issue of adolescent suicide in Korean society is also emerging as a major social problem.

• Given this importance, there have been several studies on the suicidal behavior of multicultural family adolescents. However, previous studies on multicultural adolescents have only focused on them as the target of the study, which failed to reveal appropriate differences between them and Korean adolescents.

Introduction

• Studies on the mental health and suicide behavior of adolescents categorizing multicultural family types into those with foreign-born parents, mothers who are foreign nationals, and fathers who are foreign nationals (Kim & Kim, 2014; Yu & Kim, 2015) suggested that there were no significant differences in suicidal thoughts and suicide attempts between adolescents from multicultural families and those from monocultural South Korean families.
Introduction

• Therefore, the purpose of this study is to provide basic data on the mental health of multicultural adolescents whose mothers are foreign nationals and who face various mental and environmental difficulties, and to compare them with Korean monocultural adolescents. In addition, we aim to provide more detailed basic data on mental health and clarify the differences between mental health considering suicidal ideation of multicultural adolescents by classifying them based on the presence or absence of suicidal ideation in conjunction with their mother’s nationality.

Method

• We use national data set from Seventeenth Korea Youth Risk Behavior Web-based Survey (2021 Kyrbs). The raw data was provided after submitting a pledge and a usage plan according to the procedure posted on the website of the Korean Disease Control and Prevention Agency. The raw data include only a unique number of participants and include no personal information of the subject. As anonymity and confidentiality are guaranteed during the research, the study received the IRB review exemption from Institutional Review Board of Catholic University of Korea.

• Mental health and health risk behaviors for 40,251 middle-high school students were analyzed according to their mothers’ native country and the status of suicidal ideation. The mother’s nationality of 39,137 students were Korean and the number of multicultural adolescents were 1,114. In terms of suicide ideation, 5148 students have experience, while the remaining 35,103 have no experience of suicide ideation.
Method

• First of all, for the purpose of the study, the sample was separated as a group including the mother's nationality and suicidal ideation experience status. Next, using SPSS 23.0, descriptive discriminant analysis was conducted to explain the differences of mental health variables and academic achievement of each group.

• The purpose of descriptive discriminant analysis is to understand the differences among groups, to reveal which variables best describe group differences (Sherry, 2006).

Results

Demographic characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
<th>N(%)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
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<td>Age</td>
<td></td>
<td>14,98(12-16)</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>Male</td>
<td>10229(47.8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>10202(52.2)</td>
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</tr>
<tr>
<td>Grade</td>
<td>Middle-1</td>
<td>10289(52.0)</td>
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</tr>
<tr>
<td></td>
<td>Middle-2</td>
<td>7977(39.7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle-3</td>
<td>7149(17.8)</td>
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</tr>
<tr>
<td></td>
<td>High-1</td>
<td>6346(13.1)</td>
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<td></td>
<td>High-2</td>
<td>5799(14.4)</td>
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<td></td>
<td>High-3</td>
<td>5088(12.6)</td>
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<tr>
<td></td>
<td>High</td>
<td>13925(34.5)</td>
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</tr>
<tr>
<td></td>
<td>Middle</td>
<td>23329(58.0)</td>
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<tr>
<td>Perceived academic achievement</td>
<td>Upper</td>
<td>5819(13.2)</td>
<td></td>
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<tr>
<td></td>
<td>Upper-Middle</td>
<td>10289(25.8)</td>
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<td></td>
<td>Middle</td>
<td>12350(30.7)</td>
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<td></td>
<td>Middle-Low</td>
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<td></td>
<td>Low</td>
<td>3555(8.8)</td>
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<td>Small city</td>
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<td></td>
<td>Rural</td>
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<td></td>
<td>Low</td>
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Results

Correlations among study variables
Note: **p < .01

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tr>
<td>1. Perceived Stress</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Loneliness</td>
<td>.475**</td>
<td></td>
<td></td>
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<tr>
<td>3. Depressive Mood</td>
<td>.354**</td>
<td>.421**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Perceived academic achievement</td>
<td>.074**</td>
<td>.068**</td>
<td>.030**</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.27</td>
<td>2.51</td>
<td>3.29</td>
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<tr>
<td>SD</td>
<td>.951</td>
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<td>Skewness</td>
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<td>.165</td>
<td>-.329</td>
<td>-.085</td>
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<tr>
<td>Kurtosis</td>
<td>-.269</td>
<td>-.613</td>
<td>1.015</td>
<td>-.301</td>
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Results

Means and Standard Deviations on the study variables for each group

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<tr>
<th>Variable</th>
<th>Multicultural</th>
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<th>Korean</th>
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<tr>
<td></td>
<td>Without</td>
<td>Suicide ideation</td>
<td>Without</td>
</tr>
<tr>
<td></td>
<td>ideation</td>
<td></td>
<td>ideation</td>
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<td>1. Perceived Stress</td>
<td>2.92 (1.88)</td>
<td>1.93 (1.82)</td>
<td>2.85 (1.90)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1.90 (1.79)</td>
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<tr>
<td>2. Loneliness</td>
<td>2.47 (1.98)</td>
<td>3.42 (1.00)</td>
<td>2.37 (1.93)</td>
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<td>2.47 (1.64)</td>
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<tr>
<td>3. Depressive Mood</td>
<td>2.95 (1.97)</td>
<td>2.19 (1.05)</td>
<td>2.80 (1.94)</td>
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<td></td>
<td></td>
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<td>2.08 (1.89)</td>
</tr>
<tr>
<td>4. Academic Achievement</td>
<td>2.14 (1.29)</td>
<td>3.07 (1.14)</td>
<td>2.88 (1.14)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.04 (1.19)</td>
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Results

**Discriminant function coefficient**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Standardized Canonical Discriminant Function Coefficients</th>
<th>Canonical Discriminant Function Coefficients</th>
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<td>1. Perceived Stress</td>
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<td>2. Loneliness</td>
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<td>4. Academic Achievement</td>
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Results

**Structure Matrix**

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<th>Group</th>
<th>Function 1</th>
<th>Function 2</th>
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<td>1. Perceived Stress</td>
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<td>2. Loneliness</td>
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<td>.428</td>
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<tr>
<td>4. Academic Achievement</td>
<td>-.130</td>
<td>.843*</td>
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</table>
Results & Discussion

• The results from the current study demonstrated that there is a significant difference between all groups categorized by the mothers' nationality and the history of trauma and/or suicidal ideation. The centroids offer valuable insights into the distinctive characteristics of the groups under scrutiny. Notably, Groups 1 and 3 are characterized by positive values for both Function 1 and Function 2, while Groups 2 and 4 exhibit negative values. To elaborate, this implies that the levels of loneliness, perceived stress, and changes in depressive mood experienced in the aftermath of the COVID-19 pandemic are positively associated with Groups 1 and 3, which encompass adolescents with suicidal ideation.

Results & Discussion

• Group 1 (3.14) and Group 2 (3.37) comprise multicultural adolescents who exhibit relatively lower perceived academic achievement compared to Group 3 (2.83) and Group 4 (3.04), which is in line with previous research highlighting academic challenges faced by multicultural adolescents (Oh, 2010). Nevertheless, the findings of this study also imply that, although differences in academic performance exist between multicultural and monocultural Korean adolescents, the explanatory power of academic achievement in distinguishing between the groups is low, suggesting a lack of direct association with suicidal ideation. Prior research, as reported by Joo and Chung (2023), has similarly revealed no statistically significant direct influence of academic performance on suicidal ideation.
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References

Over 90% of all adolescent suicides occur in low-and middle-income countries (LMIC), yet the majority of suicide research has focused on primarily high-income countries (HIC). Using nationally representative data on 82,494 adolescents from thirty-four LMIC, this research employed machine learning to compare the predictive effects of 20 determinants of suicidal behaviors previously identified in the literature. Results indicate that distinct predictors are present for suicidal ideation, suicidal planning, and suicide attempts in youth living in LMIC as well as shared predictors common to all three behaviors. These findings provide insights into the unique needs in global mental health policy and efforts within and across adolescents in LMIC.

전 세계 자살의 90%가 중/저소득 국가에서 발생하고 있지만, 자살 관련 연구는 여전히 주로 고소득 국가를 대상으로 이루어져 왔다. 본 연구는 34개 중/저소득 국가 82,494명의 청소년으로부터 수집된 자료를 기반으로 청소년 자살과 관련된 중요한 예측 요인들을 찾고자 하였다. 자살 생각, 계획, 시도에 대한 총 20개의 요인들의 예측효과를 마신러닝(랜덤 포레스트) 기법을 활용하여 검증하였다. 연구 결과, 자살 생각, 계획, 시도에 공통적으로 중요한 예측 변수와 각각의 특수한 예측 변수가 발견되었다. 이 연구는 중/저소득 국가의 청소년 자살과 관련된 요인들에 대한 정보를 제공함으로써, 국제적인 자살 연구와 예방 정책에 중요한 시사점을 제시한다.
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Understanding Dominant Predictors of Suicidal Behaviors among Youth from Low- and Middle-Income Countries

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Department of Psychiatry
University of Pennsylvania

Acknowledgment

Identifying important predictors of adolescent suicide ideation, planning, and attempt in low- and middle-income countries

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Danielle Richardson, Department of Counseling Psychology and Applied Human Development, Boston University. Boston, Massachusetts, USA

Abstract
Introduction: Over 90% of all adolescent suicides occur in low- and middle-income countries (LMIC), yet the majority of suicide research has focused on primarily high-income countries (HIC).
Method: Using nationally representative data on 82,494 adolescents from thirty-four LMIC, this research employed machine learning to compare the predictive effects of multiple determinants of suicidal behaviors mentioned in the literature.
Global Mental Health Equity and Suicide Research

Each year more than 700,000 people die by suicide worldwide, and 77% of suicide is from LMICs (WHO, 2021).

Suicide was the fourth leading cause of death among youth aged 15–29, and over 90% of youth suicide occurred in Low- and Middle-Income Countries (WHO, 2014; 2021).

Suicide among LMIC Adolescents

- Adolescents with high level of loneliness and more bullying experiences are more likely to experience suicidal ideation across 32 LMICs (McKinnon et al., 2016).

- Protective factors for suicide attempts included having close friends and parental support (Liu et al., 2018).

- All suicide ideation and behaviors were higher in females and older adolescents (15–17 years of age) than males and younger adolescents. (Uddin et al., 2019)
Research Questions

What factors are **most important** to predict suicide ideation, planning, and behaviors of adolescents in LMIC?

What factors are **commonly important to predict** suicide ideation, planning, and behaviors?

What factors are **uniquely important to predict** for each suicide ideation, planning, and behaviors?

Data and Variables

- **Data:** 82,494 adolescents in 34 LMICs (56.1% female, age 12-17, between 2013-2017) from Global School-based Student Health Surveys by WHO

- **Three target outcomes:** Suicide ideation, planning, attempts

- **20 Features:** Demographics (age, gender), psychological (loneliness, worry-induced sleep disturbance), physical (physically attacked, physical fight), behavioral (cigarette/alcohol/drug use, absence), relational (parent academic/emotional support, monitoring by parent, privacy from parent, number of friends), environmental (country, hunger, school atmosphere, indirect smoking) determinants.
Data: List of countries and prevalence rate of suicidality

Machine Learning Pipeline

Data Manipulation
- Merging data from 34 surveys conducted in LMICs
- Conducting feature engineering, which includes standardization and binary coding
- Performing feature selection based on model performance and previous literature

Model Building
- Training (80%) and Test (20%) data
- Utilizing 10-fold cross-validation with the training data
- Evaluating model performance using the test data
- Comparing the performance between the training and test datasets
- Performance criteria: AUC of ROC and PR curves

Prediction
- Utilizing partial dependence plots to explore the relationship between each feature and suicidality
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Random Forest Model Performance

<table>
<thead>
<tr>
<th></th>
<th>ROC curve</th>
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<th>PR curve</th>
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<td></td>
<td>Training</td>
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<td>Test</td>
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<tr>
<td>Suicide attempts</td>
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<td>0.80</td>
<td>0.81</td>
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</tbody>
</table>

Five Dominant Predictors of Suicidality

**Suicide ideation**
- Country
- Age
- Loneliness
- Worry-sleep disturbance
- School atmosphere

**Suicidal planning**
- Country
- Age
- School atmosphere
- Parent academic support
- Parent monitoring

**Suicide attempt**
- Country
- Age
- Parent academic support
- School atmosphere
- Parent monitoring
Common Predictor 1: Country

Common predictor 2: Age

Common predictor 3: School atmosphere
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Unique predictor for Suicidal ideation:
Loneliness and worry-induced sleep disturbance

![Graph showing the relationship between loneliness and possibility of suicide ideation.]

**FIGURE 4** Prediction of loneliness and worry-induced sleep disturbance in suicide ideation.

Unique predictors for Suicidal planning and attempts: parent academic support and monitoring

![Graph showing the relationship between parent academic support and possibility of suicide planning and attempt.]

**FIGURE 5** Prediction of parent academic support and monitoring in suicidal planning and attempt.
Discussion

This study comprehensively examined all three behaviors: suicidal ideation, planning, and attempts. This comprehensive approach identified that while there are similarities between suicidal planning and attempts, suicidal ideation exhibits distinctive patterns in terms of its predictive factors.

This study broadens our understanding on suicidality among LMIC adolescents by exploring six multi-dimensions (demographics, psychological, behavioral, physical, relational, and environmental dimensions).

Implication to Suicide prevention strategies

• Suicide risk-sensitive intervention plans and policies:
  • Low risk adolescents: Interventions focused on emotional and psychological factors (such as loneliness and worry-induced sleep disturbance).
  • High risk adolescents: Collaborative interventions involving parents and schools to create a safe environment for students.

• It is essential to design a suicide prevention policy with an understanding of the developmental characteristics of youth at different ages.

• It's crucial to highlight that the results don't imply that other factors (such as sex, bullying, and substance use), which haven't been identified as dominant predictors, are insignificantly related to youth suicide risk in LMICs.
Limitations

- Unique history, policies, and contexts of each country
- Considering the complexity of mental health
- Inclusive sampling, such as incorporating youth who are out of school

Reference

Risk Factors for Nonsuicidal Self-injury in Korean Adolescents: A Qualitative Study from the Perspective of School Counselors

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<Abstract>

Non-suicidal self-injury (NSSI) is a serious public health concern worldwide, especially in school settings. Research about the risk factors for NSSI has informed the field about interventions that should be delivered for adolescents who engage in NSSI. Missing is a comprehensive and in-depth understanding of the triggers of NSSI, including in the context of the pandemic. Therefore, this qualitative study engaged fifty-seven counselors with lived experiences of adolescents with NSSI in semi-structured interviews about the triggers of NSSI and what they need to emphasize to manage adolescents’ NSSI. Content analysis identified four major categories: biological factors, psychological factors, social factors, and COVID-19 factors. Within each major category, we also identified several themes and their subthemes. Highlighted were the negative self-image, affection seeking, lack of understanding and support in family, and changes in daily life and school due to the pandemic. These findings indicate that NSSI risk factors have been identified compressively and provide important insight into the prevention and intervention for NSSI among adolescents.

Keywords: risk factors, NSSI, adolescents, content analysis, COVID-19

비자살적 자해(NSSI)는 전 세계적으로, 특히 학교 환경에서 심각한 공중 보건 문제입니다. NSSI의 위험 요인에 대한 연구는 NSSI에 관여하는 청소년을 위해 제공해야 하는 개입에 대한 정보를 현장에 제공해 왔습니다. 팬데믹의 악화를 포함하여 NSSI의 유발 요인에 대한 포괄적이고 심층적인 이해가 부족합니다. 따라서 이 질적 연구에서는 NSSI를 경험한 청소년을 상담한 경험이 있는 상담사 57명을 대상으로 반구조화된 인터뷰를 통해 NSSI의 유발 요인과 청소년의 NSSI를 관리하기 위해 강조해야 할 사항에 대해 조사했습니다. 콘텐츠 분석 결과 생물학적 요인, 심리적 요인, 사회적 요인, 코로나19 요인 등 네 가지 주요 범주가 확인되었습니다. 또한 각 주요 범주 내에서 몇 가지 주제와 하위 주제를 확인했습니다. 부정적인 자아상, 예방 추구, 가족의 이해와 지원 부족, 팬데믹으로 인한 일상생활과 학교에서의 변화 등이 주요한 주제로 나타났습니다. 이러한 결과는 NSSI 위험 요인이 압축적으로 파악되었음을 나타내며 청소년의 NSSI 예방 및 개입에 대한 중요한 인사이트를 제공합니다.

키워드: 위험 요인, NSSI, 청소년, 콘텐츠 분석, 코로나19
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Risk Factors for Nonsuicidal Self-injury in Korean Adolescents: A Qualitative Study from the perspective of School Counselors

Jeonbuk National University
Jeong, Mijin

Contents

What is Nonsuicidal Self-Injury
Adolescents NSSI
Risk factors for NSSI
Content analysis
Method
Result
Discussion
Nonsuicidal self-injury

- “Direct and intentional acts of harming one’s own body without the intent to die” (Nock & Foreman, 2008)
- Include cutting with sharp objects, burning, hitting, and scratching oneself.
- NSSI differs from suicidal self-injury in various aspects. But,
  - It carries a high potential for causing death (Whitlock et al., 2015)
  - The impulsive nature of NSSI can increase the risk of suicide
- Considering the findings of previous research, NSSI is a distinct concept from suicidal self-injury and a significant risk factor for suicide attempts.
- Therefore, proactive efforts in preventing NSSI are essential.

Adolescents NSSI

- Lifetime rates of NSSI within high school students approximates 23% of the population (Lloyd & Richardson et al., 2007)
- An age of onset for NSSI around 14 years (Bebb et al., 2008).
- Majority of adolescents indicate they do not seek help for these problems (Benn et al., 2009; Pontano et al., 2005).
- There is a lack of research on effective therapeutic interventions for NSSI (Brown & Penaet, 2017; Penaet et al., 2018).
  - No specific therapeutic intervention has been reported to have superior therapeutic effects compared to other treatments (Bee J. W., 2019).
  - Almost no systematic research on the intervention of adolescent NSSI in Korea (Lee, Han, Jang, & Han, 2013).

The identification of individuals at risk for NSSI should be preceded for the early recognition and effective intervention in adolescent NSSI.
Risk factors for NSSI

- Previous clinical observations and cohort studies have reported various risk factors for NSSI
  - Involve biological, psychological, social, cultural and other factors (Harston, Saunders, & O'Connor, 2012)
- A meta-analysis conducted in 2015 analyzed the risk factors for NSSI in people aged 10 to 44
  - There is a lack of unified predictive factors (Fox et al., 2015)
- Media and contagion affect NSSI dramatically (Jacob et al., 2017)
  - Suggest that increased attention is needed regarding social and interpersonal influences.
- Concerns for the impact of COVID-19 on NSSI in young people have been raised (Hecking et al., 2021, Foner, 2021)
  - Researchers focused more on the impact of the pandemic in the elderly population (Yates et al., 2020)
  - Little attention to the psychological issues of COVID-19 on adolescents (Magres et al., 2021).

Content analysis

- National Institute for Clinical Excellence recommended using qualitative methods
- Findings from qualitative studies serve as an essential complement to empirical quantitative studies.
- However, qualitative research on self-injury is limited
  - There needs to be more attempts to include different functional ideas.
- Thus, a comprehensive qualitative approach is implicated in our study
  - Select content analysis as our methodological choice
- Content analysis
  - Originated as a quantitative method (Brodien, 1952) but endorsed a qualitative approach (Kroener, 1932)
  - Derive meanings and insights from data more holistically by counting responses.
Method

Participants

- Interviews were conducted with 57 counselors with experience in youth self-harm counseling.
- Working at the WEE (WE=Education+Emotion) center.
  - 32 counselors work in schools
  - 13 work in hospital-type WEE centers
  - 12 offices of education
- 7 are men, and 50 are women
- An average counseling experience of 10 years and five months (range: 1 to 27.50 years)
- An average age of 39.5 years (range: 25 to 60 years).

Method (continued)

Procedure

- Focus group interview
- Data collection spanned four months, from February 2022 to June 2022.
- Participants were divided into 16 groups, each group consisted of 2 to 5 people.
- Each interview lasted between two and a half to three hours.
- Interviewers included a counseling psychology professor, along with two doctoral and two master’s degree students.
- Semi-structured open questions were employed.
Method (continued)

- **Data analysis**
  - Content analysis method
    - a. Comprehending the complete text
    - b. Identifying significant statements
    - c. Categorization phase
    - d. Rearranging categories by dimension
  - Interviews were conducted and transcribed in Korean.
  - Frequency counts of change categories

Results

- **Category**
  - **Biological factors**
    - Within each major category- identified several themes and subthemes.
  - **Psychological factors**
    - Major factors: Negative self-image, Affection seeking,
      Lack of understanding and support in family,
      Changes in daily life and school due to the pandemic
  - **Social factors**
  - **COVID-19 factors**
## Results (continued)

### Biological factor

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>All Participants (N=57), n(%)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperament</td>
<td>20(33)</td>
<td></td>
</tr>
<tr>
<td>Impulsivity</td>
<td>9(15)</td>
<td></td>
</tr>
<tr>
<td>Intolerance</td>
<td>1(14)</td>
<td></td>
</tr>
<tr>
<td>Irritability</td>
<td>7(12)</td>
<td></td>
</tr>
<tr>
<td>Aggression</td>
<td>4(7)</td>
<td></td>
</tr>
<tr>
<td>With/without diagnosed disorder</td>
<td>13(22)</td>
<td></td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td>8(14)</td>
<td></td>
</tr>
<tr>
<td>Borderline personality disorder</td>
<td>5(8)</td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td>4(7)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>4(7)</td>
<td></td>
</tr>
</tbody>
</table>

- I think that self-harming students are displaying their violent tendencies, both towards themselves and other people as well. I have also noticed them being aggressive towards pets and in different situations.
- I have frequently found that this sleep pattern among the students with NISS has emerged repeatedly.
- It seems that girls have some hormonal issues. During counseling sessions, some students mentioned, “It is time to get my period,” and said they struggled more during that time. They definitely feel more intense and negative emotions then, and they report engaging in self-injury more frequently.

### Psychological factor

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>All Participants (N=57), n(%)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognition</td>
<td>29(50)</td>
<td></td>
</tr>
<tr>
<td>Negative self-image</td>
<td>24(42)</td>
<td></td>
</tr>
<tr>
<td>Low problem-solving ability</td>
<td>20(35)</td>
<td></td>
</tr>
<tr>
<td>Irrational self-attribution</td>
<td>6(10)</td>
<td></td>
</tr>
<tr>
<td>Lack of awareness on self-injury risk</td>
<td>4(7)</td>
<td></td>
</tr>
<tr>
<td>Affection</td>
<td>24(42)</td>
<td></td>
</tr>
<tr>
<td>Affection seeking</td>
<td>19(33)</td>
<td></td>
</tr>
<tr>
<td>Emotion inexpressivity</td>
<td>13(22)</td>
<td></td>
</tr>
<tr>
<td>Emotion dysregulation</td>
<td>5(9)</td>
<td></td>
</tr>
<tr>
<td>Behavior</td>
<td>13(22)</td>
<td></td>
</tr>
<tr>
<td>Emotional withdrawal</td>
<td>12(21)</td>
<td></td>
</tr>
<tr>
<td>Depression/withdrawal</td>
<td>6(10)</td>
<td></td>
</tr>
</tbody>
</table>

- He did not know his own worth, if he dared to define his value, he thought he was an existence that should disappear from the world and be damaged. That is why he put it into action.
- Even with friends with the same sex, if the friend hangs out with others, they are jealous of it. They tend to crave affection by constantly comparing and trying to monopolize the friend.
- Even though he is mad at his family members, he thinks he must endure as an older brother. He thinks she should not express them because of the responsibility and keep blaming himself.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Results (continued)

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>All Participants (N=57), n(%)</th>
<th>School</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social factor</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>31(54)</td>
<td>18(33)</td>
<td></td>
</tr>
<tr>
<td>Lack of understanding and support</td>
<td>25(43)</td>
<td>18(33)</td>
<td></td>
</tr>
<tr>
<td>Lack of communication with family</td>
<td>20(33)</td>
<td>11(19)</td>
<td></td>
</tr>
<tr>
<td>Parents divorce</td>
<td>13(22)</td>
<td>15(26)</td>
<td></td>
</tr>
<tr>
<td>Family conflict and discord</td>
<td>10(17)</td>
<td>14(24)</td>
<td></td>
</tr>
<tr>
<td>Peer relationship</td>
<td>22(38)</td>
<td>14(24)</td>
<td></td>
</tr>
<tr>
<td>Difficulties in peer relationship</td>
<td>22(38)</td>
<td>13(22)</td>
<td></td>
</tr>
<tr>
<td>Intimacy</td>
<td>11(19)</td>
<td>8(14)</td>
<td></td>
</tr>
<tr>
<td>NSSI peer</td>
<td>7(12)</td>
<td>8(14)</td>
<td></td>
</tr>
<tr>
<td>Stigma effect</td>
<td>3(5)</td>
<td>6(10)</td>
<td></td>
</tr>
</tbody>
</table>

"There were many cases where parents often belittled their child's difficulties, ignored the child's constant expressions of concerns, or were unable to pay attention to his hardship due to financial struggles. As a result, the family could have a communication breakdown, and the child's emotions would not be properly addressed."

Results (continued)

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>All Participants (N=57), n(%)</th>
<th>Changes in mental health</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COVID-19 factor</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in life event</td>
<td>26(46)</td>
<td>Anxiety and fear</td>
<td>9(16)</td>
</tr>
<tr>
<td>Increased time being alone</td>
<td>13(22)</td>
<td>Depression and helplessness</td>
<td>8(14)</td>
</tr>
<tr>
<td>Relied heavily on media</td>
<td>13(22)</td>
<td>Negative thoughts</td>
<td>5(8)</td>
</tr>
<tr>
<td>Increased tension within family members</td>
<td>13(22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irregular schedule</td>
<td>13(22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial difficulties</td>
<td>5(9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in school life</td>
<td>25(43)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased distance with peer</td>
<td>20(35)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School refusal</td>
<td>11(19)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulties in school adjustment</td>
<td>9(15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor academic performance</td>
<td>8(14)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

"In 2019, there were many online classes; in 2020, children attended school every other week. In 2022, they started attending school every day, and they did not know how their friends were or what to do with them, so they did not even have friendships. As a result, some children have experienced high levels of anxiety or depression and have sought counseling."
## Discussion

<table>
<thead>
<tr>
<th>LIMITATION</th>
<th>IMPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-language research</td>
<td>The most frequently reported risk factors were negative self-image, a lack of acceptance and support at home, difficulties in peer relationships.</td>
</tr>
<tr>
<td>Participants work either clinical or nonclinical setting.</td>
<td>Cultural aspects of NSSI have been identified as influencing the initiation and perpetuation of NSSI attempts among adolescents. For example, perfectionism, high levels of responsibility and academic stress.</td>
</tr>
<tr>
<td>Rely on a sample of Korean adolescents</td>
<td>Present comprehensive perspectives on NSSI risk factors related to the pandemic.</td>
</tr>
</tbody>
</table>
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Risk and Protective Factors for Non-Suicidal Self-Injury in Adolescents: A Delphi Expert Consensus Study

Lee, Hwa Jung
PostDoc. Fellow, Sungkyunkwan Univ., Korea

<Abstract>

Non-suicidal Self-injury (NSSI) a major issue in the research and clinical field—especially in adolescents—and is gradually gaining attention worldwide. The study aims to identify the risk and protective factors of NSSI in adolescents based on the biopsychosocial theory that can be practically applied in preventing and mitigating NSSI behaviors. Initially, 87 risk factors and 63 protective factors were extracted through a systematic literature review. A three-round Delphi study was conducted with 63 Wee Center counselors who had experience in counseling teenagers with NSSI problems. Consensus was defined as >80% of the panelists rating more than four points on the Likert scale. As a result, 65 risk factors were adopted, including 8 biological factors, 37 psychological factors, and 20 social and environmental factors. Forty-nine factors were adopted as protective factors, including 1 biological factor, 26 psychological factors, and 22 social factors. From a holistic view based on the biopsychosocial paradigm, this study offered a set of consensus-based risk and protective factors for practitioners working with NSSI engagers, and this set can be further employed in future prevention and interventions in the relevant field.

Keywords: Non-suicidal self-injury, Adolescents, Risk factors, Protective factors, South Korea

본 연구는 전문가 합의를 통해 한국 청소년의 비자살적 자해의 위험 및 보호요인을 생물심리사회적 접근에 따라 도출하는데 목적이 있다. 이를 위해 국내외의 비자살적 자해의 메타연구를 중심으로 체계적 문헌고찰을 실시하였으며, 확인한 87개의 위험요인과 63개의 보호요인들을 생물, 심리, 사회 요인으로 분류하는 과정을 거쳐 델파이 설문 초안을 작성하였다. 위험 및 보호요인에 대한 합의를 도출하기 위하여 비자살적 자해 청소년을 대상으로 5년 이상의 상담경력이 있는 학교 상담교사 및 Wee센터 치료진 63명에게 2개월 동안 총 3회에 걸쳐 델파이 조사를 실시하였다. 자료는 SPSS 21.0 통계 프로그램을 사용하여 인구학적 특성을 파악하였고, 빈도분석을 통해 전문가 합의 비율을 구하여 합의비율이 80% 이상의 경우 채택하였다. 최종적으로 생물학적 위험요인 8개, 심리적 위험요인 37개, 사회적 요인 20개 등 총 65개의 위험요인이 채택되었다. 보호요인의 경우 생물학적 보호요인 1개, 심리적 보호요인 26개, 사회적 요인 22개 등 총 49개의 요인이 채택되었다. 이러한 연구결과를 토대로 추후 연구에 대한 합의와 비자살적 자해를 하는 청소년 개입에서 반드시 고려하여야 할 핵심요인을 파악함으로써 상담 및 치료 장면에서의 활용도를 높일 수 있는 방안에 대해 논의하였다.

주제어: 비자살적 자해, 청소년, 델파이 연구, 위험요인, 보호요인, 대한민국
Risk and Protective Factors for Non-Suicidal Self-Injury in Adolescents: a Delphi Expert Consensus Study

Postdoctoral fellow, Traumatic Stress Center, Sungkyunkwan University
Hwa Jung Lee

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- the Delphi study -

I. Introduction

II. Theoretical Background

III. Method

IV. Results

V. Discussion & Conclusion
I. Introduction

Non-suicidal Self-injury (NSSI)

NSSI is defined as purposeful self-damaging behavior without the intention to commit suicide. The prevalent forms of NSSI include behaviors such as cutting, burning, craving, scratching, bumping, and beating.

NSSI in Adolescents

1 out of 10 adolescents with NSSI or suicidal thoughts.
- Younger starting age of NSSI behavior (5 years old)
- Nature of developmental phase of adolescence
- Sharing self-harm information, experiences, and method through SNS as a trend
- Recurrence rate of up to 60% (Kukmin Daily, 2018).

Although these NSSI behaviors occur in all ages, many studies on the prevalence of self-injury in adolescents and early adults have been undertaken based on the typical onset of NSSI behaviors during adolescence. It can be sustained until adulthood, cooccurring with mental health problems as well as suicidal thoughts and behaviors.

Risk and protective factors of NSSI in adolescents

In terms of the development phase, adolescents’ brains are still immature, leading to more difficulty in controlling emotions and impulsiveness than adults, which warrants deeper investigation. Adding to the biological changes, a survey conducted by the Korean Youth Counseling and Welfare Development Institute revealed that counseling for mental health conditions such as anxiety and sadness has increased since the outbreak of COVID-19.

Although measures to screen the risk and functions of NSSI are critical and useful, investigations on protective and risk factors are still lacking. Although some empirical studies have examined the factors affecting adolescent self-injury, there may be limitations in understanding them more holistically and interactively.
II. Theoretical Background

Biopsychosocial Model

The biopsychosocial model incorporates biological, psychological, and social factors affecting health.

Biology
- Physical Health
- Genetic Vulnerabilities
- Drug Effects

Psychological
- Physical Health
- Coping Skills
- Social Skills
- Family Relationships
- Self-Esteem
- Mental Health

Social
- Peers
- Family Circumstances
- Family Relationships

The biomedic

Stresses primarily biological elements, psychological aspects, and regards a state without

II. Theoretical Background

A Delphi Study

The Delphi Method
- Developed in the 1950s by the RAND Corporation in the United States (Dalkey, 1969).
- Expansively applied internationally to investigate a variety of issues in policy, administration, education, industry, and medical fields.
- Series of procedures used to derive and synthesize the opinions of experts on a specific issue leading to the arrangement of a collective judgment.
- “Two experts are more accurate than a judgment given by an individual expert”

The importance of risk and protective factors for adolescent self-injury can be confirmed by targeting counseling experts who have experience in counseling self-injury adolescents. At the same time, the opinions of the group of experts on examining issues will be extracted to derive a collective consensus at the end.
II. Background

Aim of the study

Through Delphi study, which allows field experts to rate the importance and suggest qualitative suggestions, the consensus on both risk and protective factors of NSSI in adolescents will be observed based on the biopsychosocial domain.

III. Method

1. Participants

- 73 participated in the surveys, equating to a total of 63 panelists
- Inclusion criteria: counselors with experience with self-injury-related issues and at least 3 years of occupational experience

<table>
<thead>
<tr>
<th>Variables</th>
<th>Total N = 63 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>39 (62.9%)</td>
</tr>
<tr>
<td>Men</td>
<td>4 (6.3%)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Setting of practice</td>
<td></td>
</tr>
<tr>
<td>WEE Class (Middle school)</td>
<td>19 (30.2%)</td>
</tr>
<tr>
<td>WEE Class (High school)</td>
<td>21 (33.3%)</td>
</tr>
<tr>
<td>Hospital-linked WEE center</td>
<td>5 (7.9%)</td>
</tr>
<tr>
<td>WEE Center</td>
<td>18 (28.6%)</td>
</tr>
<tr>
<td>Academic background</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>25 (39.7%)</td>
</tr>
<tr>
<td>Education</td>
<td>10 (15.9%)</td>
</tr>
<tr>
<td>Counseling</td>
<td>19 (30.2%)</td>
</tr>
<tr>
<td>Social Welfare</td>
<td>3 (4.7%)</td>
</tr>
<tr>
<td>Others</td>
<td>6 (9.5%)</td>
</tr>
</tbody>
</table>
III. Method

2. Procedures

- **Candidate item composition:** a total of 17 papers were chosen for the prospective study by excluding the literature that did not meet selection criteria through a review of abstracts and manuscripts in two rounds - one counseling professor, two doctoral students, and two master students participated in reviewing data of risk and protective factors of self-injury among adolescents based on the biopsychosocial model.

- **Pre-interviews and 3 Rounds of Delphi study for Risk and Protective factors**
  - The survey was conducted via e-mail during June - July 2022
  - Respond on a 5-point Likert scale ranging from 1 (lowly important) to 5 (extremely important)
  - Items with consensus rates over 80% were selected, rates between 70% and 80% were re-rated in the next round, and rates less than 70% were excluded.
  - Qualitative comments of panelists

IV. Results

**Risk Factors**

- **Round 1 Questionnaire (87 items)**
  - Items to be excluded (N=45)
  - Items to be re-rated (N=7)
  - New items to be added (N=21)
  - Items to be excluded (N=36)

- **Round 2 Questionnaire (72 items)**
  - Items to be included (N=40)
  - Items to be re-rated (N=4)
  - New items to be added (N=6)
  - Items to be excluded (N=8)

- **Round 3 Questionnaire (70 items)**
  - Items to be included (N=65)
  - Items to be excluded (N=5)

  **Total items included (65 items)**

**Protective Factors**

- **Round 1 Questionnaire (63 items)**
  - Items to be included (N=32)
  - Items to be re-rated (N=4)
  - New items to be added (N=10)
  - Items to be excluded (N=21)

- **Round 2 Questionnaire (51 items)**
  - Items to be included (N=20)
  - Items to be re-rated (N=4)
  - New items to be added (N=10)
  - Items to be excluded (N=11)

- **Round 3 Questionnaire (54 items)**
  - Items to be included (N=45)
  - Items to be excluded (N=9)

  **Total items included (40 items)**
IV. Results: Risk factors

Domain 1: Biological risk factors of NSSI

The consensus was reached on 8 of 22 items in this domain which focused on biological risk factors of adolescents who engage in self-injurious behaviors.

<table>
<thead>
<tr>
<th>Items (N=8)</th>
<th>Level of consensus%</th>
<th>Mean Rating (SD)</th>
<th>Median rating</th>
<th>Consensus round</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>98.4</td>
<td>4.67(0.51)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Temperamental vulnerability</td>
<td>98.4</td>
<td>4.43(0.53)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Depression</td>
<td>96.8</td>
<td>4.79(0.48)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Bipolar disorder</td>
<td>96.8</td>
<td>4.52(0.67)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Posttraumatic stress</td>
<td>93.7</td>
<td>4.27(0.63)</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Borderline</td>
<td>92.1</td>
<td>4.57(0.69)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sleep problem</td>
<td>88.9</td>
<td>4.00(0.48)</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Gender (female)</td>
<td>87.3</td>
<td>3.98(0.73)</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. SD = standard deviation.

IV. Results: Risk factors

Domain 2: Psychological risk factors of NSSI

In this domain, 37 of 51 items reached a consensus rate of over 80%.

<table>
<thead>
<tr>
<th>Items (N=37)</th>
<th>Level of consensus (%)</th>
<th>Mean Rating (SD)</th>
<th>Median rating</th>
<th>Consensus round</th>
</tr>
</thead>
<tbody>
<tr>
<td>High reinforcement sensitivity</td>
<td>100.0</td>
<td>4.83(0.38)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Catastrophe/ Negative exag1ruration</td>
<td>100.0</td>
<td>4.68(0.47)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Negative self-image</td>
<td>100.0</td>
<td>4.70(0.46)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Loneliness</td>
<td>100.0</td>
<td>4.48(0.50)</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Lack of Coping strategy for stress</td>
<td>100.0</td>
<td>4.78(0.42)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Stress Vulnerability</td>
<td>98.4</td>
<td>4.83(0.42)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Distort ed thinking</td>
<td>98.4</td>
<td>4.24(0.53)</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Guilt</td>
<td>98.4</td>
<td>4.78(0.46)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Severance and refusal schema</td>
<td>98.4</td>
<td>4.70(0.50)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Worthlessness</td>
<td>98.4</td>
<td>4.75(0.54)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Ruminat ion</td>
<td>98.4</td>
<td>4.55(0.53)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Difficulties regulating emotions</td>
<td>98.4</td>
<td>4.78(0.52)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>98.4</td>
<td>4.67(0.51)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Past/ Present self-injurious behaviors</td>
<td>98.4</td>
<td>4.76(0.47)</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>
IV. Results: Risk factors

Domain 3: Social and environmental risk factors of NSSI

In this domain, 20 of 39 items reached a consensus as presented in Table 4.

<table>
<thead>
<tr>
<th>Items (N=20)</th>
<th>Level of consensus (%)</th>
<th>Mean Rating (SD)</th>
<th>Median rating</th>
<th>Consensus round</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction problems at home</td>
<td>98.4</td>
<td>4.81(0.43)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Consistent exposure to family conflicts</td>
<td>98.4</td>
<td>4.71(0.55)</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Abuse experiences</td>
<td>98.4</td>
<td>4.73(0.63)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Difficulty in forming and maintaining interpersonal relationships</td>
<td>98.4</td>
<td>4.33(0.51)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Problems with parenting attitude</td>
<td>96.8</td>
<td>4.74(0.58)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Insecure attachment of parents</td>
<td>96.8</td>
<td>4.54(0.56)</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Bullying</td>
<td>96.8</td>
<td>4.67(0.54)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Alienation at home</td>
<td>96.8</td>
<td>4.56(0.56)</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Exposure to self-injury video through SNS or YouTube</td>
<td>95.2</td>
<td>4.32(0.69)</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Peer conflict</td>
<td>95.2</td>
<td>4.29(0.61)</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Lack or absence of someone to rely on</td>
<td>95.2</td>
<td>4.33(0.57)</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

IV. Results: Protective factors

Domain 1: Biological protective factors of NSSI

A total of 49 items reached a consensus rate of 80% regarding the protective factors for self-injury in adolescents. Among 4 biological protective factors, the consensus was reached on only a single item

<table>
<thead>
<tr>
<th>Domain (N=1)</th>
<th>Items</th>
<th>Level of Consensus (%)</th>
<th>Mean Rating (SD)</th>
<th>Median rating</th>
<th>Consensus round</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological</td>
<td>Good sleep quality</td>
<td>93.7</td>
<td>4.27(0.57)</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

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IV. Results: Protective factors

Domain 2: Psychological protective factors of NSSI

Out of 36 items, 26 reached a consensus including 6 newly added items.

<table>
<thead>
<tr>
<th>Psychological (N=26)</th>
<th>Life satisfaction</th>
<th>Ability to flexibly let go of goal setbacks and seek alternative goals</th>
<th>Self-resilience</th>
<th>Self-esteem</th>
<th>Ability to manage stress</th>
<th>Optimism</th>
<th>Reasons for living</th>
<th>Self-efficacy</th>
<th>Positive reappraisal</th>
<th>Ability to endure and overcome pain in life</th>
<th>Healthy Lifestyles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>98.4</td>
<td>98.4</td>
<td>98.4</td>
<td>98.4</td>
<td>98.4</td>
<td>98.4</td>
</tr>
<tr>
<td></td>
<td>4.76(0.43)</td>
<td>4.84(0.37)</td>
<td>4.84(0.37)</td>
<td>4.89(0.32)</td>
<td>4.65(0.48)</td>
<td>4.71(0.49)</td>
<td>4.73(0.48)</td>
<td>4.78(0.46)</td>
<td>4.68(0.50)</td>
<td>4.60(0.52)</td>
<td>4.60(0.52)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

IV. Results: Protective factors

Domain 3: Social protective factors of NSSI

The consensus was reached on 22 including 8 newly added items out of 42

<table>
<thead>
<tr>
<th>Items (N=22)</th>
<th>Level of consensus (%)</th>
<th>Mean Rating (SD)</th>
<th>Median rating</th>
<th>Consensus round</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence in ability to form and maintain good interpersonal relationships</td>
<td>100.0</td>
<td>4.54(0.50)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Positive parenting attitude of the primary caregiver</td>
<td>100.0</td>
<td>4.75(0.44)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Mutual trust with primary caregiver</td>
<td>100.0</td>
<td>4.84(0.37)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Communication satisfaction with primary caregiver</td>
<td>100.0</td>
<td>4.83(0.38)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Feeling a sense of closeness and receptiveness from family members</td>
<td>100.0</td>
<td>4.71(0.46)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Family cohesion</td>
<td>98.4</td>
<td>4.67(0.51)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Primary caregiver’s willingness to change</td>
<td>98.4</td>
<td>4.57(0.53)</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Positive counseling experience</td>
<td>96.8</td>
<td>4.32(0.53)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Parents’ understanding and acceptance of children’s growth and development</td>
<td>96.8</td>
<td>4.52(0.56)</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>
V. Discussion

Risk factors

**Biological domain**
- Psychopathological symptoms
- Gender

**Social domain**
- Home / Family
- School / Peers
- Community

**Psychological domain**
- Perceived sensitiveness
- Cognition
- Emotion
- Coping Style
- Behavioral experiences

---

V. Discussion

Protective factors

**Biological domain**
- Sleep Quality

**Social domain**
- Home / Family
- School / Peers
- Community

**Psychological domain**
- Perceived sensitiveness
- Cognition
- Emotion
- Coping Style
- Behavioral experiences
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

V. Discussion

- Risk and protective factors were identified starting from nearly covering all items supported by previous works.
- Previous studies lack holistic views relying on partial points of view
- Through the Delphi method, risk factors and protective factors were extracted based on the biological, psychological, and social domains while considering the interplaying roles of each domain. Since NSSI is a very multi-layered phenomenon, this study contributes to the understanding of NSSI in adolescents from all-encompassing perspectives.
- Practitioners would be able to assess and intervene to prevent NSSI by having a better grasp of NSSI adolescents’ biopsychosocial perspective of NSSI in mind, especially during the initial stage of therapy.

V. Discussion

Limitations

1. Disproportionate number of panelists from diverse counseling settings: limited to WEE centers.
2. Use of single medium of objective review
3. Opinions of minority of panelists may not have been reflected

Suggestion 1. Adding future in-depth qualitative data for mix-method studies may bring to further understanding of NSSI.

Suggestion 2. Employing factor analysis to examine the subdomains can more explicitly conceptualize the corresponding contents by confirming construct validity
V. Conclusion

- South Korea is the first- and second-highest suicide rates among the OECD member countries since 2003
- Self-injury predicts future suicide-related factors
- Self-harm can be perceived as an independent disorder as presented in DSM-5
- Deepening the understanding of the phenomenon of NSSI in South Korean adolescents will be adapted to the specifics of Korean culture and serve as a springboard

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V. Conclusion

- Dialectical behavior therapy (DBT): one of the NSSI interventions with the most support to date Effectiveness of DBT, cognitive–behavioral therapy (CBT), solution-orientated family therapy, and group therapy has not been proven
- Growing interest in the impact of body movement on cognition and affect: emergence of embodiment techniques, such as dance/movement therapy
- Effective therapy intervention to establish a greater sense of control and manage negative emotions may be achieved via the connection between a client’s body and mind.
Thank you.

E-mail: chopappy@naver.com
DAY 2 - 2024. 6. 8. Sat.
Session 1. Adaptation and Educational Practice
Psychosocial Adaptation from a Virtue Perspective

Kim, Jeong Han

Associate Prof., Dept. of Rehabilitation Services and Counseling, Univ. of Texas-Rio Grande Valley, US

The primary purpose of this presentation is to introduce the Virtue-Based Psychosocial Adaptation Model (V-PAM), which explains adaptation to life adversity in terms of five virtues, including courage, integrity, practical wisdom, committed action, and emotional transcendence. Three virtue-related perspectives that inspired the development of V-PAM are briefly addressed first. Then, the discussion covers the theoretical aspects and empirical findings of V-PAM studies conducted with various groups, including 92 LGBT+ individuals, 256 students with disabilities, 209 adults with disabilities, 595 adults, 106 adults with emotional regulation issues, and 146 individuals with PTSD. Overall findings confirm that virtues are important constructs for understanding adaptation to life adversity, such as disability and trauma.

이 프레젠테이션의 주요 목적은 용기, 진실성, 실천적 지혜, 헌신적 행동, 그리고 감정적 초월이라는 다섯 가지 미덕의 관점에서 삶의 역경에 대한 적응을 설명하는 덕성 기반 심리사회 적응 모델(V-PAM)을 소개하는 것입니다. V-PAM의 개발에 영감을 준 세 가지 덕성 관련 관점이 먼저 간략하게 언급됩니다. 그런 다음, 92명의 LGBT+ 개인, 256명의 장애 학생, 209명의 장애 성인, 595명의 성인, 감정 조절 문제를 가진 106명의 성인, 그리고 PTSD를 가진 146명의 개인을 대상으로 한 V-PAM 연구의 이론적 측면과 실증적 발견에 대해 논의합니다. 전체적인 연구 결과는 미덕이 장애와 트라우마와 같은 삶의 역경에 대한 적응을 이해하는 중요한 구성 요소임을 확인시켜줍니다.
Psychosocial Adaptation from a Virtue Perspective

Jeong Han Kim, PhD, CRC

Jeong Han Kim

- Education:
  - Bachelor of Science in Psychology
  - Master of Science and Doctor of Philosophy in Rehabilitation Psychology
- Affiliation:
  - Changing to California State University, Los Angeles
- Contact:
  - han.rehab@gmail.com

Agenda

- Four Virtue Perspectives
  - Character traits (Martin Seligman)
  - GRIT (Angela Duckworth)
  - Mindfulness and Meditation (David Richardson)
  - Virtue-Based Psychosocial Adaptation Model (V-PAM; Jeong Han Kim)
    - V-PAM Overview
    - Research Findings
  - Conclusion and Future Direction
Why is it that some people are more vulnerable to life’s slings and arrows and others more resilient?

Character Strengths

Character strengths are the positive parts of your personality that impact how you think, feel and behave.

- Six Virtues and 24 Character Strengths (Peterson & Seligman, 2004)
  - Wisdom: Creativity, Curiosity, Judgment, Love of learning, Perspective,
  - Courage: Bravery, Honesty, Perseverance, Zest
  - Humanity: Kindness, Love, Social Intelligence
  - Justice: Fairness, Leadership, Teamwork
  - Temperance: Forgiveness, Humility, Prudence, Self-Regulation
  - Transcendence: Appreciation of beauty and excellence, Excellence, Hope, Gratitude, Humor, Spirituality

Martin Seligman
Character Strengths

Character strengths are the positive parts of your personality that impact how you think, feel and behave.

- Research Findings:
  - The character strengths most associated with the meaning route to happiness are religiousness, gratitude, hope, zest, and curiosity (Peterson et al., 2007).
  - Bravery, kindness, humor, appreciation of beauty and excellence, and love of learning + Recovery from illness (Peterson, Park, & Seligman, 2006)

GRIT Perspective

Grit: Growth, Resilience, Integrity, and Tenacity

Grit is the tendency to sustain interest in and effort toward very long-term goals (Duckworth et al., 2007).

- Research Findings
  - Grit is positively correlated with happiness (Singh and Jha, 2008); satisfaction and a sense of belonging (Dowman et al., 2015); purpose commitment (Lill & Burrow, 2014); psychological well-being (Goodman et al., 2018); value and self-efficacy (Muenks et al., 2018); self-esteem (Weisskirch, 2016); a growth mindset (Hochanadel & Finamore, 2015); pursuing engagement and pleasure in life (Von Culin et al., 2014); emotional stability during stressful or negative life events (Bialock et al., 2015)
Mindfulness and Meditation

Four pillars of well-being:
- Awareness: Being able to pay attention, to be self-aware, and to be focused.
- Connection: Successful relationship with others (kind, empathy)
- Insight: healthy sense of self
- Purpose: Having clear direction in life and a sense that life has meaning

Research Findings:
- Four components of well-being can be nurtured via meditation practice.
- Neuroplasticity Study
- But, he also found no evidence of structural brain changes with short-term mindfulness training.

Richard Davidson (Mindfulness Exercise, 2024)

Virtue-Based Psychosocial Adaptation (V-PAM)

- Courage (CO): One’s ability to execute will power to initiate an action despite the uncertainty of its outcome
- Integrity (IT): Ability to act genuinely and sincerely consistent with one’s moral and ethical standards. In turn, this integrity, which is a primary determinant of trust, promotes healthy interpersonal and intrapersonal relationships
- Practical Wisdom (PW): Ability to use knowledge and experience to make an informed decision relevant to their situation
- Committed Action (CA): One’s dedication to delivering a constant effort to accomplish a goal despite the presence of obstacles.
- Emotional Transcendence (ET): Ability to infuse new hope into life and to transform adversities into insights and renewal, even in the face of difficulties

Jeong Han Kim (2016)
Virtue-Based Psychosocial Adaptation (V-PAM)

- Research Findings
  - Adapted Inventory of Virtues and Strengths (AVIS; Kim et al., 2014, 2016): 46 items, semantic differential scale, 7-point rating scale, Cronbach’s alphas (.7-.89), convergent/divergent validity (life satisfaction, resilience, self-efficacy, perceived stress, values in action inventory of strengths).
  - LGBTQ+ (Miller & Kim, 2016): 92 individuals, grouped based on psychological well-being; elevated autonomy w/ low WB, balanced WB, average autonomy w/ high WB; Integrity virtue factors discriminate well-being groups.
  - V-PAM & Resilience (Kim et al., 2018): 296 college students with disabilities, high vs. low well-being, & contributory effect of V-PAM virtues in differentiating resilience levels. CA (.82) > ET (.76) > CO (.51) > PW (.39) > IT (.37)
  - V-PAM Replicability Study (Kim et al., 2021): 209 adults with disabilities, high/intermediate/low well-being groups classified in terms of adaptation level. contributory effect of V-PAM virtues in differentiating one’s adaptation to disability. CA (.77) > ET (.71) > CO (.60)

Jeong Han Kim

Virtue-Based Psychosocial Adaptation (V-PAM)

- Research Findings
  - AVIS Confirmatory Factor Analysis (Kim, 21 al., 2022): RMSEA values of .06 (90% confidence interval = .05–.70), SRMR value of .07, CFI = .94 and TLI = .91.
  - V-PAM Theoretical & Philosophical Basis (Kim et al., 2023): Strengthen theoretical and philosophical basis of V-PAM
  - V-PAM and Emotional Regulation (Kim et al., 2024a): 595 participants; lower vs. higher emotional functioning groups; practical wisdom (.84) followed by integrity (.84), emotional transcendence (.83), committed action (.68), and courage (.45); predictive discriminant analysis - 71% of cases were correctly classified.
  - V-PAM and Emotional Regulation (Kim et al., 2024b): 106 adults with disabilities, participants; lower vs. higher emotional functioning, measured in terms of Difficulties in Emotion Regulation Scale score. PW (.81) ? IT (.72) > ET (.68) > CA (.34) > CO (.17).

Jeong Han Kim
Virtue-Based Psychosocial Adaptation (V-PAM)

- Research Findings
  - V-PAM Posttraumatic Growth Study (in progress): 149 individuals who have PCL-5 scores over 38. Grouped based on their combination scores between posttraumatic growth, resilience, and life satisfaction. Found three groups (high, mid, low adaptation). Then, group memberships were discriminated by five V-PAM virtues. Two statistically significant discriminant functions. CO_1st function (.78), followed by IT (.90), ET (.66), PW (.60), & CA (.55).
  - V-PAM & Post Traumatic Growth (Pilot Study): People with significant life adversities. 12 psychoeducational sessions.

Jeong Han Kim

Virtue-Based Psychosocial Adaptation (V-PAM)

- Ongoing Research
  - Satisfaction with Labor Market Participation from V-PAM Perspective with cancer survivors (Fry, 2023)
  - 60 modular song psychotherapy programs were developed by combining 4 psychosocial adaptation characteristic factors of breast cancer survivors, 5 components of V-PAM, and 3 singing activity methods (Lim, 2023).
  - Developing V-PAM based counseling program for mothers with an adult that has childrens with developmental disabilities (Cho, 2022)
  - Emotional Regulation and V-PAM (Palomo, in-progress)
  - Community Reintegration and V-PAM (Hernandez, in-progress)

Jeong Han Kim
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Virtue-Based Psychosocial Adaptation (V-PAM)

• Conclusion
  ○ Virtue is an important construct to the understanding of psychosocial adaptation after life adversities.

• Future Directions
  ○ V-PAM Construct Refinement
  ○ V-PAM Model and AIVS Scale Validation
  ○ Intervention Development and Efficacy Study: counseling techniques, skill-building activities, group interventions aimed at fostering V-PAM virtues
  ○ IT and Biomarker Study
  ○ Cross-Cultural Validation Study

Jeong Han Kim

References

References

- Miller, D., & Kim, J. H. (2016). Character strengths and virtues in relation to well-being in gay and lesbian individuals. Mental Health In Family Medicine, 12, 156-164. https://doi.org/10.25149/1756-8358.1201001

han.rehab@gmail.com
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Educational Practices for Children Who Are Not Attending School - Case Study of “School of Diversified Learning”

Hiroki Tajima

Junior Associate Prof., Education Support & Research Center for All Children, Tokyo Gakugei Univ., Japan

<Abstract>

Through case studies, this study aims to clarify the characteristics and ingenuity of educational practices in Schools of Diversified learning.

School of Diversified learning is school that provide education based on special educational curricula in consideration of the actual situation of children who do not attend school, and their establishment is being promoted in Japan as a place of learning for children who do not attend school.

From the results of the case study, it became clear that the School of Diversified learning were characterized by (1) a transfer system as a matching function for learning places, (2) a multifaceted support system to support children learning at school, and (3) a devising of classes and learning assessments that elicit and empower class participation and motivation to learn.

<초 록>

본 연구는 사례 연구를 통해 배움의 다양화 학교(Schools of Diversified learning)에서 교육적 실천의 특성과 독창성을 명확히 하고자 한다. 배움의 다양화 학교에 출석하지 않는 아동들의 상황을 고려한 특수 교육 커리큘럼을 기반으로 교육을 제공하는 학교로써 일본에서는 학교에 출석하지 않는 아동들을 위한 학습 장소로서의 설립이 추진되고 있다. 사례 연구 결과, 배움의 다양화 학교는 (1) 학습 장소를 매칭하는 기능으로서의 전환 시스템, (2) 학교에서 학습하는 아이들을 지원하기 위한 다각적인 지원 시스템, (3) 수업 참여와 학습 동기를 유발하고 강화하는 수업과 학습 평가의 고안과 같은 특성을 가지고 있음을 밝혀냈다.
Educational practices for children who are not attending school
—Case study of “School of Diversified Learning”—

2024 SKKU Traumatic Stress Center International Conference
Day2 (June 8th, 2024)

Hiroki Tajima
Junior Associate Prof.,
Education Support & Research Center for All Children.,
Tokyo Gakugei Univ., Japan

Focusing on the difficulties in learning that tend to arise due to environmental factors such as poverty, abuse, and school refusal, our mission is to research and develop education and training of teachers and educational supporters to ensure learning for all children in cooperation with educational and welfare organizations and organizations nationwide.
Students who are absent from school for more than 30 consecutive or intermittent days per year, and who are unable to attend school due to psychological, emotional, physical, or social factors or circumstances (excluding those due to illness or economic reasons).

MEXT (2021) Survey on various issues in teaching students’ problematic behavior and truancy students in the second year of Reiwa

Number of students who do not attend school

- 134 -
Support for children who do not attend school should not only be aimed at the result of "going to school," but also should aim for students to take the initiative in their own career path and become socially independent. In addition, it should be noted that for some students, the period of School Non-attendance may have a positive meaning, such as rest and self-reflection, but there are risks to academic delays, disadvantages in career choices, and social independence.

MEXT (2019) "How to Support Children Who Do Not Go to School (Notice)"

What is “School of Diversified Learning”?

Considering the actual situation of children who do not go to school, Schools that provide education based on a specially organized curricula

2005
Nationwide due to revision of the Enforcement Regulations of the Basic Law of Schools

2016
"Act on Securing Educational Opportunities Equivalent to General Education at the Stage of Compulsory Education"

March 2023
"Measures against school Non-attendance to ensure that no one is left behind (COCOLO Plan)"

June 2023
Basic Plan for the Promotion of Education
Establishment of one or more schools in prefectures and ordinance-designated cities
Aiming to establish 300 schools nationwide
Recent Evidence and Future Directions for Crisis Prevention and Intervention:
From Youth to Elderly

What is a special curricula?

Special curricula is considered in light of various circumstances, such as the actual conditions and local characteristics of the students attending the school in question, in order to help them become socially independent, and although there is no single set formula, the following patterns are mainly possible.

- Establishment of new subjects
- Rearrangement of class schedules or number of class hours
- Instructional content transition to a different grade level
- Total class hours reduction
- Reduction of class time per hour

*From "Diversified Schools of Learning Explanatory Material" by MEXT

Study Overview

Research Themes
Research on how to grasp learning activities in "School of Diversified Learning" and how to reflect them in evaluation

Scope of the Survey
(1) Nationwide Survey: 20 out of 24 schools with diversified learning
(2) Field Survey: Public A School

Survey Method
Participant Observation Survey and Interview Survey

Survey period:
From July 2023 To March 2024
The earliest diversified school of learning, which opened in 2004

Integrated Elementary and Junior High School

The aim of this program is to stabilize the minds of each student in response to their refusal to go to school, improve their basic academic skills through appropriate learning support, and cultivate their ability to interact with each other through group activities, thereby helping them gain confidence in life and social independence (social skills).
### About Students

<table>
<thead>
<tr>
<th>grade</th>
<th>Number of Classes</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th and 5th grade elementary school students</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>6th grade</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>1 year of secondary school</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>2 years of secondary school</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>3 years of secondary school</td>
<td>3</td>
<td>46</td>
</tr>
<tr>
<td>sum</td>
<td>9</td>
<td>105</td>
</tr>
</tbody>
</table>

Experiences of school refusal
→ Inadjustment to group life and mass instruction
→ Interpersonal anxiety
→ Learning difficulties
→ Developmental characteristics, etc.

### Transfer Requirements

1. Must live in the city and be enrolled in Hachioji City Elementary and Junior High School.
2. Absent from school for more than 30 days a year due to illness or financial reasons, or attending a health room, counseling room, adaptive guidance class, etc., and still in such a state.

- The type of student who is likely to improve truancy at the school
- Types of students who find it difficult to improve their truancy at school in the brochure of the school guide
- Emphasis on motivation to go to school, learn, and interact with people
- If you have a tendency to delinquency, you will not fit in.
→ devised so that there is no gap between the desired and image before entering the school.
The process leading up to a transfer

1. Application for a tour or interview with the school attendance support team (secretariat) by telephone
2. Observation and Interview
3. Attendance at the Educational Support center in A School.
4. Three-stage school experience
   (1) Observation of classes only at the beginning of all subjects (accompanied by a staff in the educational support center)
   (2) Participation in classes only in some subjects (not accompanied by an instructor)
   (3) One-day class and school life experience
5. Determined by the Transfer Committee

Number of faculty and staff

<table>
<thead>
<tr>
<th>principal</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td>Junior High School</td>
</tr>
<tr>
<td>vice-principal 1</td>
<td>Vice Principal 1</td>
</tr>
<tr>
<td>Principal Teacher 1</td>
<td>Principal Teacher 3</td>
</tr>
<tr>
<td>Head Teacher 1</td>
<td>Head Teacher 4</td>
</tr>
<tr>
<td>teacher 1</td>
<td>Teacher 2</td>
</tr>
<tr>
<td>Conservation Teachings 1</td>
<td>Full-time teacher 4</td>
</tr>
<tr>
<td>School Counselor 1</td>
<td>School Nurse 1</td>
</tr>
<tr>
<td>School Support Staff 1</td>
<td>School Counselor 1</td>
</tr>
<tr>
<td></td>
<td>School Support Staff 1</td>
</tr>
</tbody>
</table>

Confusion and learning as a public teacher
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly
Flow of the day

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday &amp; Wednesday</th>
<th>Tuesday &amp; Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morning School Activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st period</td>
<td>9:30-10:00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd period</td>
<td>10:00-11:00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd period</td>
<td>11:00-12:00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lunch</td>
<td>12:00-13:00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>special time</td>
<td>13:00-13:30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>End-of-school activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th period</td>
<td>13:15-14:00</td>
<td>13:15-14:00</td>
<td></td>
</tr>
<tr>
<td>5th period</td>
<td>14:05-14:50</td>
<td>14:10-14:55</td>
<td></td>
</tr>
<tr>
<td>special time</td>
<td></td>
<td>cleaning</td>
<td></td>
</tr>
<tr>
<td>cleaning</td>
<td>14:20-14:35</td>
<td>14:55-15:15</td>
<td></td>
</tr>
<tr>
<td>colonel</td>
<td>16:00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Classroom Innovations

While respecting the will and choices of students, the first priority is to encourage students to attend and participate in classes.

Teaching materials and learning formats should be designed to make it easy for students to engage and want to engage.

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Science</th>
<th>Music</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Print learning that divides units and proficiency levels into small pieces + individual learning guidance by patrolling between desks</td>
<td>• In the Basic Course, there are many experiments, and in the Challenge Course, there are lecture-style classes.</td>
<td>• Lessons are designed in a modular manner, and multiple units such as ensemble, rhythm creation, and appreciation are incorporated in one class</td>
</tr>
</tbody>
</table>

Despite the small number of class hours and the instability of students' participation in classes,

While being close to students, we try to maximize and support their learning.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Learning Assessment

First of all, it is done so that each student receives the work positively and encourages the next initiative.

<table>
<thead>
<tr>
<th>society</th>
<th>English</th>
<th>Notification form</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Well done” stamp</td>
<td>Progress chart, sticker, certificate of commendation</td>
<td>Descriptive Evaluation</td>
</tr>
<tr>
<td></td>
<td>Partial points in the test</td>
<td>Grades are for junior high school students and above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thorough empowerment according to each student’s learning progress</td>
</tr>
</tbody>
</table>

Evaluation

On the other hand, teachers are constantly devising ways to design their learning activities in their daily educational activities from the perspective of guaranteeing students' academic ability with an eye on the future.

“Learning Tools”

- Use it to track your progress, reflect on your learning efforts, and plan for your next learning goal

“Accountability”

- Share your learning status and achievement with others or use it as a material for entrance exams

gap

When to use it properly

While empowering people to “come to school and learn”, Responding to diverse needs related to learning and career choices
• Mechanism of transfer as a matching function for learning
• A multifaceted support system to support children’s "learning at school"
• Devising classes and learning assessments that empower students to participate in classes and motivate them to learn

This research is funded by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). In addition, this research study is being conducted by a team. The team members are listed below.
Support for School Non-attendance at "Educational Support Centers" in Japan

Shuko Esumi

Junior Associate Prof., Faculty of Education, Tokyo Gakugei Univ., Japan

<Abstract>

In Japan, in recent years, the number of students with school non-attendance has been significantly increasing, so addressing this issue is considered urgent. To solve this problem, various learning opportunities are being developed. Among them, educational support centers are public facilities established in students’ residential areas, and they also serve as facilities with the function of expanding public education. Traditionally, educational support centers have been established outside of schools. However, out-of-school educational support centers face problems such as limitations in accessibility, capacity, and matching support goals with each student’s needs. To provide support to a greater number of students with school non-attendance, there has been a nationwide trend in recent years to establish educational support centers within schools. In this presentation, the support provided by both out-of-school and in-school educational support centers and the problems they face are introduced.

<초 록>

최근 일본에서는 학교에 출석하지 않는 학생들의 수가 급격히 증가하고 있어, 이 문제를 해결하는 것이 시급한 과제로 여겨지고 있다. 이를 해결하기 위해 다양한 학습 기회가 개발되고 있다. 그 중에서도 교육 지원 센터는 학생들이 거주하는 지역에 설립된 공공 시설로, 공교육을 확장하는 기능을 수행한다. 전통적으로 교육 지원 센터는 학교 외부에 설립되어 왔다. 그러나 학교 외부에 위치한 교육 지원 센터는 접근성, 수용 능력, 각 학생의 필요에 맞춘 지원 목표의 일치 등의 문제를 겪고 있다. 학교에 출석하지 않는 많은 학생들에게 지원을 제공하기 위해, 최근 몇 년간 학교 내부에 교육 지원 센터를 설립하는 것이 전국적인 추세이다. 본 발표에서는 학교 외부 및 내부 교육 지원 센터에서 제공하는 지원과 그들이 직면한 문제들을 소개한다.
Support for School Non-attendance at “Educational Support Centers” in Japan

Shuko ESUMI
Junior Associate Prof., Tokyo Gakugei Univ., Japan

*This work was supported by JSPS KAKENHI Grant Number JP21K13699.

Outline

1. Introduction
   • Definition and situation of “school non-attendance” in Japan

2. Educational Support Centers (Out-of-School)
   • Based on the paper written in 2022 (Esumi, 2022)

3. Educational Support Centers (In-School)
   • Based on a Study Conducted in B City, A Prefecture
1. Introduction

Definition and situation of "school non-attendance" in Japan

What is "School Non-attendance"?

Long-term absence ("Chouki-kesseki")
More than 30 days of absence per year

Illness-related absence
Economic reasons
To avoid COVID-19
School Non-attendance ("Futoukou")
Other reasons

*MEXT: the Ministry of Education, Culture, Sports, Science and Technology
Proportion of School Non-attendance

<table>
<thead>
<tr>
<th></th>
<th>Illness-related absence</th>
<th>Economic reasons</th>
<th>To avoid COVID-19</th>
<th>School non-attendance</th>
<th>Other reasons</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elementary school students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>31,955</td>
<td>16</td>
<td>16,155</td>
<td>105,112</td>
<td>43,438</td>
<td>196,676</td>
</tr>
<tr>
<td>%</td>
<td>0.5</td>
<td>0.0</td>
<td>0.3</td>
<td>1.7</td>
<td>0.7</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Junior high school students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>43,642</td>
<td>20</td>
<td>7,505</td>
<td>193,936</td>
<td>18,869</td>
<td>263,972</td>
</tr>
<tr>
<td>%</td>
<td>1.3</td>
<td>0.0</td>
<td>0.2</td>
<td>6.0</td>
<td>0.6</td>
<td>8.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>75,597</td>
<td>36</td>
<td>23,660</td>
<td>299,048</td>
<td>62,307</td>
<td>460,648</td>
</tr>
<tr>
<td>%</td>
<td>0.8</td>
<td>0.0</td>
<td>0.3</td>
<td>3.2</td>
<td>0.7</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Note: The percentage (%) indicates the proportion of the total number of students.


---

Trend of School Non-attendance

Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Various Opportunities to Ensure the Right of ALL Students to Receive Education

- School of Diversified Learning
- School in the Students’ Residential Area
- Free School (Alternative School)
- Learning Outside of School Using ICT
- Educational Support Center (In-School)
- Educational Support Center (Out-of-School)

2. Educational Support Center (Out-of-School)

Based on the paper written in 2022 (Esumi, 2022)
What are “Educational Support Centers”?

- Facilities established by the board of education of the local government to provide guidance and assistance for students with school non-attendance

The days when students attend there → Counted as attendance

- Three functions of educational support centers (Esumi, 2022)
  - Support for social independence
  - Support to re-attend school (for those wishing it)
  - Outreach (to those not receiving any support)

Achieving both psychological and economic independence in the future

Acquiring the skills necessary for a functional social life

- Three functions of educational support centers (Esumi, 2022)
  - Support for social independence
  - Support to re-attend school (for those wishing it)
  - Outreach (to those not receiving any support)
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

What kind of support can be received?

• Available time
  • 9:00 a.m. to 3:00 p.m. on weekdays

• Daily schedule
  • study hours \( \frac{2}{3} \) self-study hours

<table>
<thead>
<tr>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
</tr>
<tr>
<td>10:00</td>
</tr>
<tr>
<td>11:00</td>
</tr>
<tr>
<td>12:00</td>
</tr>
<tr>
<td>13:00</td>
</tr>
<tr>
<td>14:00</td>
</tr>
</tbody>
</table>

What kind of support can be received?

• Available time

For example:
  • Sports
  • Arts
  • Cooking
  • Board games
  • Psychological education programs (Social skills training, Stress management education)

Schedule

<table>
<thead>
<tr>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
</tr>
<tr>
<td>10:00</td>
</tr>
<tr>
<td>11:00</td>
</tr>
<tr>
<td>12:00</td>
</tr>
<tr>
<td>13:00</td>
</tr>
<tr>
<td>14:00</td>
</tr>
</tbody>
</table>
What kind of support can be received?

- Available time
  - 9:00 a.m. to 3:00 p.m. on weekdays

- Daily schedule
  - study hours ≈ self-study hours

- Individual counseling
  - for students and parents
  - regularly or as needed

Who Provides Support?
: Based on the Nationwide Survey Results

- Number of staff per facility (national average)
  - full-time: 0.85
  - part-time: 3.80

- Types of staff
  - holding teaching licenses
  - with teaching experience
  - few psychological staff

<table>
<thead>
<tr>
<th>Qualifications and experience of staff</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching license (for elementary, middle, and high school)</td>
<td>4,138</td>
<td>(81.52)</td>
</tr>
<tr>
<td>Among the above: experience as a teacher in elementary, middle, and high schools</td>
<td>3,439</td>
<td>(67.75)</td>
</tr>
<tr>
<td>Professional qualifications in psychology</td>
<td>653</td>
<td>(12.86)</td>
</tr>
<tr>
<td>Professional qualifications in welfare</td>
<td>120</td>
<td>(2.36)</td>
</tr>
<tr>
<td>Other</td>
<td>165</td>
<td>(3.25)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,076</strong></td>
<td><strong>(100.00)</strong></td>
</tr>
</tbody>
</table>

MEXT (2019). National Survey Results on the Actual Conditions of Educational Support Centers.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

What kind of support can be received?

- Avoidance
- 911 Helpline
- Daily help
- Support groups

≠ psychological counseling

≡ individual meetings conducted by teachers

Individual counseling
- for students and parents
- regularly or as needed

Three Problems
Facing Educational Support Centers

1. Gap in accessibility based on students’ residential areas
   • Inter-regional: Urban areas > Rural areas (Motoyama, 2011)
   • Intra-regional: Gap in residential areas due to municipal mergers
Usage status of Educational Support Centers
: Based on the Nationwide Survey Results

Participants: Students who have experienced school non-attendance

- Elementary School Students (n=754)
  - Used: 40.1%
  - Available, but not used: 28.8%
  - Not available in the environment: 20.7%
  - No Answer: 9.5%

- Junior High School Students (n=1,374)
  - Used: 36.4%
  - Available, but not used: 33.8%
  - Not available in the environment: 21.5%
  - No Answer: 8.4%


Three Problems Facing Educational Support Centers

1. Gap in accessibility based on students’ residential areas
   - Inter-regional: Urban areas > Rural areas (Motoyama, 2011)
   - Intra-regional: Gap in residential areas due to municipal mergers

2. Limit of the number of students who can be supported
   - About 9-12% of school non-attendance
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

![Graph showing number of students and educational support centers](image)

**Three Problems Facing Educational Support Centers**

3. Limit in the types of students who can be supported (Higuchi, 2008)
   - Four categories of centers based on support objectives
     A) Re-Attendance
     B) Achieving a sense of belonging
     C) Re-attendance after achieving a sense of belonging
     D) Going on to a higher school after achieving a sense of belonging

   - In ANY category, students with antisocial behavior are not accepted
   - Each of the four categories has different types of students who can be supported
3. Educational Support Center (In-School)

Based on the Study Conducted in B City, A Prefecture
Survey Overview

- Research Field: B City, A Prefecture
  - Number of Educational Support Centers
    - Out-of-school: 9
    - In-school: 30 (7 elementary schools, 23 Junior high schools)
- Research Period: From April 20XX to March 20XX+3
- Methodology
  - Interview survey with the B City board of education staff
  - Participant observation and interview survey at the out-school educational support centers
  - Participant observation and questionnaire survey at the in-school educational support centers

What are In-School Educational Support Centers?

- Environment
  - Dedicated classroom
  - Dedicated staff
- Who can use?
  - Students enrolled in the school
  - School non-attendance or facing difficulties in school life
- Aim of support
  - To support students to achieve social independence
    - Optional: Return to regular classes
Activities

- Dedicated schedules
  - Rough guideline
- Arrival and departure times are flexibly set

Example of a Schedule

<table>
<thead>
<tr>
<th></th>
<th>Mon</th>
<th>Tue</th>
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<th>Thu</th>
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<td>Sports</td>
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<tr>
<td>3</td>
<td>Group Activity</td>
<td>Sports</td>
<td>Study</td>
<td>Study</td>
<td>Sports</td>
</tr>
<tr>
<td>4</td>
<td>Study</td>
<td>Group Activity</td>
<td>Group Activity</td>
<td>Sports</td>
<td>Group Activity</td>
</tr>
<tr>
<td></td>
<td>Lunch break</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Study</td>
<td>Study</td>
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<td>Group Activity</td>
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</tr>
<tr>
<td>6</td>
<td>Study</td>
<td>Study</td>
<td>Study</td>
<td>Study</td>
<td>Study</td>
</tr>
</tbody>
</table>

Accommodation①
For making it more accessible

- For students with school non-attendance
  - Risk of being less accessible

> School \( \Rightarrow \) Aversive stimuli

- Examples of actual accommodation
  - Placing centers in less conspicuous locations
  - Making centers not visible from the outside (e.g., installing curtains)
  - Creating a space that is non-traditional
Recent Evidence and Future Directions for Crisis Prevention and Intervention:
From Youth to Elderly
Accommodation
For providing support tailored to each student’s needs

- Students with diverse needs utilize the in-school educational support centers

- Examples of actual accommodation
  - Adjusting the schedule and learning contents individually
  - Partitioned learning areas are set up
    - For students who prefer studying in less stimulating environments
  - Collaboration with school nurses and psychologists
Accommodation

For providing support tailored to each student’s needs

- Students with diverse needs utilize the in-school educational support centers

- Examples of actual accommodation
  - Adjusting the schedule and learning contents individually
  - Partitioned learning areas are set up
    - For students who prefer studying in less stimulating environments
  - Collaboration with school nurses and psychologists
Layout of the In-School Educational Support Center

Partitioned Learning Areas

Layout of an Another Center

Partitioned Learning Areas
Accommodation
For providing support tailored to each student's needs

- Students with diverse needs utilize the in-school educational support centers

- Examples of actual accommodation
  - Adjusting the schedule and learning contents individually
  - Partitioned learning areas are set up
    - For students who prefer studying in less stimulating environments
  - Collaboration with school nurses and psychologists

Problems Faced by In-school Educational Support centers

- Participants: 30 Teachers, 33 Support Staff (part-time)
- Engaged in support at In-school Educational Support Centers in City B
- Research Content: The difficulty experienced in providing support
- Research Method: Free-response questionnaire
- Analysis Method: KJ Method (Kawakita, 1986)

![Diagram showing the relationship between diversity of support needs among students, limit of support resources, difficulty of intra-school collaboration, difficulty of external collaboration, and problems faced by the in-school educational support center.]

Figure. Problems in providing support and related underlying factors and impact (Esumi, 2023)
Specific Details of the Problems with the In-school Educational Support Centers

1. Inability to provide support tailored to specific needs of each student
2. Lack of sufficient learning support
3. Difficulties in managing student groups
4. Difficulties in supporting re-attending the classroom

Conclusion

Simply establishing in-school educational support centers doesn’t guarantee successful support for students with school non-attendance.

Efforts and research are essential to enhance effectiveness.
References


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The Patterns of Life Satisfaction among Korean Young Carers

Kim, Seong Hee

Research Fellow, Yonsei Univ., Korea

<Abstract>

It is vital to highlight that when non-normative events occur within an individual’s or family’s life cycle, their stress level rises. From this perspective, young carers who are unable to accomplish developmental tasks experience long-term detrimental repercussions on their physical and mental health, as well as an excessive burden. This study aims to uncover latent classes of life satisfaction among Korean young carers and to examine whether latent classes of life satisfaction are related to depressive symptom among Korean young carers. The data from 137 young carers were analyzed. Two life satisfaction of latent class types (satisfied life and financial dissatisfaction) were identified in Korean young carers. In addition, young carers who are in financial dissatisfaction are more likely to have higher levels of depressive symptom. It implies the need to consider various types of young carers in policy and support for young carers and support for the economic needs.

<초 록>

개인의 삶이나 가족의 생활 주기에서 비규범적 사건의 발생은 스트레스 수준을 높인다. 이런 관점에서 발달 과업을 하지 못한 채 가족을 돌보는 가족돌봄청년은 과도한 업무 과중과 함께 신체적, 정신적 건강에도 장기적으로 부정적 영향을 받게 된다. 본 연구는 한국 가족돌봄청년의 삶의 만족도에 대한 잠재 계층 유형을 살펴보며, 이들의 삶의 만족도 관련 잠재 계층 유형이 우울감과 관련 있는지 알아보고자 했다. 한국 복지패널로부터 추출된 137명의 가족돌봄청년을 분석에 활용했다. 한국 가족돌봄청년의 삶에 만족도 관련 잠재 계층 유형은 두 가지(만족하는 삶과 경제적 불만족)로 나타났다. 경제적으로 불만족한 가족돌봄청년은 우울감을 느낄 가능성이 더 높았다. 이는 가족돌봄청년에 대한 다양한 유형이 있음을 인지하고, 정책과 지원, 경제적 필요에 대한 지원을 고려할 필요를 암시한다.
The patterns of life satisfaction among Korean young carers

Seong Hee Kim | Research Institution for Liberal Education, Yonsei University

Introduction

• Young carer
  • Young caregiver in U.S.
  • Children and adolescence under 18ys in U.K.
  • Young adult carer in U.K.: 18ys ~ 24ys

• Child & early adulthood, giving care to both adults and children in the family
• Because of the mobility of active outcomes and transitions to employment, the burden of care has an impact on many aspects of life, including schooling, college employment, etc.
Introduction

• **Young carer in Korea** (The Ministry of Health & Welfare, 2022)
  - The 6th ‘The Young Policy Coordination Committee’
  - Adolescents and young adults care for ailing family members
  - 19yrs ~ 34yrs

• **Parentified child** (Hendricks et al., 2021)
  - Instead of receiving parental care, young children care for their parents and assume adult roles
  - Higher susceptibility than peers owing to workload and social hazards
    - Age, internal circumstances, policy situation

Introduction

• **The risks of Young carer**
  - A lack of accessible abilities, expertise, and financial means, as well as the absence of other carers to seek assistance and support

• **Opportunity loss**
  - Time is spent on caregiving rather than developing the intellectual qualities and capacities required to enter society in the future
  - Leads to long-term employment or income (Stamatopoulos, 2018)

• **Vulnerability due to individual circumstances**
  - Single-parent households, divorced families, parents with disabilities
  - When care is provided within the family, duty and inevitability rise owing to the lack of additional members to share it
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Introduction

• The risks of Young carer
  • Household income
  • Vulnerability is defined by the health of the individual being cared for inside the family, as well as the position that requires care

• Hidden carer
  • They do not identify as young carers and are exempt from the policy because they believe the care they provide is normal for their family
  • Women in a gender imbalanced society
    • Belief that as the daughter, she must offer care

Introduction

• Young carer penalty
  • Potential squandering of opportunities and disadvantages associated with utilising time to give care that may otherwise be spent on education, training, job, and social activities (Stamatopoulos, 2018)
  • Declining mental and physical health (Jaerkestig-Berggren et al., 2019) → Shame by associations
  • Limited horizons (Robison et al., 2017)
  • Social isolation (Stamatopoulos, 2018)
  • Caretaker syndrome (Valleau et al., 1995)
Introduction

- Life cycle perspective & Family system theory
  - Possible exposure to social dangers in the short and long term
  - Children's perceptions of the (grand)parent-child connection
  - Your child's perspective on his or her life
  - Parent-child interaction as viewed by the child

Introduction

- The status of young carers in Korea
  - 2022년 Young Carers Survey (The Ministry of Health and Welfare, 2023)
    - Average weekly care hours: 21.6 hours
    - Average care period: 46.1 months
    - Life dissatisfaction is more than twice as high as in general youth, and depression is more than seven times greater
  - 2023 Seoul City's Young Carer Survey
    - Around 900 young carers were found
Purpose

- Investigating life satisfaction categories among young carers
  Verification of depressive symptom by kind of life satisfaction

- Exploring the various sorts of satisfaction among young carers to find particular strategies to intervene in their concerns
- Accumulate basic data related to young carers → Provide statistics on policy interventions and improvement strategies
- Preventive intervention in young carers' comprehension and development

Research Questions

- What is the sort of life satisfaction experienced by young carers?

- What influence do the different categories of life satisfaction have on depressive symptom among young carers?
Method

- **Usage data**
  - Data from rounds 1st-17th of the Korea Welfare Panel Study

- **Period**
  - Survey was done annually from 2006-2022

- **Participants**
  - A total of 137 young people aged 18-34 who are caring for one or more family members in Korea

Method

- **Dependent variable**
  - Depressive symptom (Center for Epidemiological Studies Depression Scale; CESD-11)

- **Independent variable**
  - Health satisfaction, family income satisfaction, living environment satisfaction, family relationship satisfaction, job satisfaction, social relationship satisfaction, leisure satisfaction

- **Analysis method**
  - After conducting latent class analysis, verification using BCH (using Mplus 7.4)
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

**Results**

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<td>253.664</td>
<td>158.138</td>
<td>159.709</td>
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<td>191.65</td>
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<td>247.257</td>
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<td>Entropy</td>
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\(N=137\)

**Latent Classes**

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<tr>
<td>Class1</td>
<td>18 (13%)</td>
<td></td>
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<tr>
<td>Class2</td>
<td>119 (87%)</td>
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Likelihood testing

- LMR: 111.526***
- BLRT: 108.328***

\(* * * p < .001, * p < .05\)

Life Satisfaction

- Health
- Family income
- Living environment
- Family relationships
- Job
- Social relationships
- Leisure

Satisfied life - Financial dissatisfaction
## Results

### Variables

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<th>Variables</th>
<th>Scale</th>
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<td>Gender</td>
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<td>42.4</td>
<td>44.4</td>
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<td>57.6</td>
<td>55.6</td>
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<td>Age</td>
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<td>29.44(3.0)</td>
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## Results

### Variables

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<td>Job satisfaction (1~5)</td>
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<td>1.66 (0.30)</td>
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Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Results

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<td>1.606</td>
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<td>2.015</td>
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<td>b &lt; a</td>
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$^a P < .1$

Discussion

- Young carers’ perspectives on family care and personal life difficulties

- Consider relationships between families, particularly the economic and residential circumstances of young carers

- Young carers demand attention to the pleasure of their family ties

- There is a need for sustained interest, policy support, and education about young carer


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Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Educational Practices for Children Educational Practices for Children Who Are Not Attending School - Nationwide Survey of “School of Diversified Learning”

Ha, Mee Sun

Ph. D. Researcher, Tokyo Gakugei Univ., Japan

<Abstract>

The survey we conducted is Research on methods of understanding learning activities and evaluation in “Schools of diversified learning”. The purpose of this survey was to understand how evaluation is conducted in schools of diversified learning and to find out if there are areas that can be appropriated in general schools.

For the nationwide survey, we visited 20 schools of diversified learning about school overview and establishment history, curriculum and learning support system, requirements to be considered in attendance and learning evaluation.

Among 25% of all Schools of diversified learning were not reducing total class time, and 75% were reducing class time. Many schools also established new subjects.

In the Schools of diversified learning, there was an emphasis on doing intra-individual assessments. There are challenges with this method of evaluation: it can be burdensome for teachers and creates a dilemma between the intra-individual evaluation and the 5-point scale. It is also necessary to consider enhancing the content of the Schools of Diversified Learning.

<초 록>

본 실험 조사는 “배움의 다양화 학교(Schools of diversified learning)”에서 학습 활동 및 평가가 어떻게 이루어지는지 이해하고, 일반 학교에서도 적용할 수 있는 영역이 있는지 파악하는 것을 목적으로 하였다.

전국 조사를 위해, 우리는 2개의 배움의 다양화 학교를 방문하여 학교 개요 및 설립 역사, 교육과정 및 학습 지원 시스템, 출석 및 학습 평가 시 고려해야 할 사항에 대해 조사하였다.

배움의 다양화 학교 중 25%는 총 수업 시간을 줄이지 않았고, 75%는 수업 시간을 줄였다. 많은 학교에서 새로운 과목을 개설하였다.

배움의 다양화 학교에서는 개인 내 평가를 중시하였다. 이러한 평가 방식은 교사에게 부담이 될 수 있으며, 개인 내 평가와 5점 척도 긴의 달레마를 초래할 수 있다. 또한, 배움의 다양화 학교의 내용에 대한 강화를 고려할 필요가 있다.
Educational Practices for Children Who Are Not Attending School
-Nationwide Survey of “School of Diversified Learning”-

This research is funded by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). In addition, this research is being conducted by a team. The team members are listed below.

<table>
<thead>
<tr>
<th>Team members</th>
<th>Position and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABANO Aiko (浅野 美恵子)</td>
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<td>Senior Researcher, Educational Support and Research for all children</td>
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<td>TANOKURA Kazuko (谷倉 常子)</td>
<td>Lecturer, Educational Support and Research for all children</td>
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<td>YAMAMOTO Hiroko (山本 明子)</td>
<td>Senior Researcher, Educational Support and Research for all children</td>
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</table>
1. What is “School of Diversified Learning”? 

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Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

CONTENTS

1. What is “School of Diversified Learning”?
2. Overview of the Entire Survey
3. Nationwide Survey
1. What is “School of Diversified Learning”?

What is “School of Diversified Learning”?

In cases where it is deemed necessary to organize and implement special curricula that take into consideration the actual conditions of non-attending students, the Minister of Education, Culture, Sports, Science and Technology may designate schools based on Article 58 of the Enforcement Regulations of the School Education Law (applicable mutatis mutandis to junior high schools, compulsory education schools, high schools and secondary education schools), and may designate specific schools to organize and implement special curricula without following curricular standards. The school may designate schools and provide education by organizing special curricula without following curriculum standards at a specific school. Schools that can provide this type of education are called “schools for diversified learning (so-called ‘special non-attendance schools’).”

*From "Toward the Establishment of Schools for Diversified Learning (Guidance) R8.2 Revision," by MEXT.

1. Who is “Non-attending Students” in Japan?

Who is “Non-attending Students” in Japan?

The number of long-term absentees by reason is based on the total number of days in the “Number of days of absence” and “Number of days of suspension, bereavement, etc.” columns of the “Child and Student Guidance Record”, and is calculated by surveying students who have not attended school for 30 days or more during the school year.

The “non-attendance” includes students who do not or cannot attend school due to psychological, emotional, physical, or social factors or backgrounds (excluding those due to “illness,” “economic reasons,” or “avoidance of COVID-19”).

*From "Survey on Student Guidance Issues such as Problematic Behavior and Truancy of Students - Explanation of Terms" by MEXT.
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1. Who is “Non-attending Students” in Japan?

Number of “Non-attending Students”

Among long-term absentee students from elementary and junior high schools, the number of non-attending students was 299,048 (244,940 in the previous year), and the number of non-attending students per 1,000 students was 31.7 (25.7 in the previous year). The number of truant children has increased for 10 consecutive years, reaching a record high.

*From “Summary of the Results of the 2022 Survey on Student Guidance Issues, Including Problematic Behavior and Truancy of Children” by MEXT.
### Laws Related to School of Diversified Learning

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Cabinet Decision on Special District “Curriculum Flexibility Project for Establishment of Schools for Truant Students, etc.</td>
</tr>
<tr>
<td>2005</td>
<td>Revision of the Enforcement Regulations of the School Basic Law to make it nationwide</td>
</tr>
<tr>
<td>2016</td>
<td>Act on Securing Educational Opportunities Equivalent to Regular Education at the Stage of Compulsory Education</td>
</tr>
<tr>
<td></td>
<td>Compulsory Education Level</td>
</tr>
<tr>
<td></td>
<td>Measures against truancy to ensure that no one is left behind in learning (COCOLO Plan)</td>
</tr>
</tbody>
</table>

*From "Toward the Establishment of Schools for Diversified Learning (Guidance) R8.2 Revision," by MEXT.

### Act on Securing of Educational Opportunities Equivalent to Regular Education at the Stage of Compulsory Education (Excerpt)

(Development of Schools Providing Education Based on Special Curricula, etc.)

Article 10 The national and local governments shall endeavor to take necessary measures for the development of schools that provide education based on curricula specially designed for non-attending children, taking into consideration their actual conditions, and for the enhancement of education in schools that provide such education.

--- Effort obligations of the national and local governments

- Establishing new schools of diversified learning
- To enhance the education of schools of diversified learning, if already established.

*From "Toward the Establishment of Schools for Diversified Learning (Guidance) R8.2 Revision," by MEXT.*
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

1. What is “School of Diversified Learning”?

What is a special curricula?

Special curricula is considered in light of various circumstances, such as the actual conditions and local characteristics of the students attending the school in question, in order to help them become socially independent, and although there is no single set formula, the following patterns are mainly possible.

- Establishment of new subjects
- Rearrangement of class schedules or number of class hours
- Instructional content transition to a different grade level
- Total class hours education
- Reduction of class time per hour

*From “Diversified Schools of Learning Explanatory Material” by MEXT

2. What is “School of Diversified Learning”?

Establishment of school of diversified learning

<table>
<thead>
<tr>
<th>24 schools (2023)</th>
<th>35 schools (2024)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public schools: 14 schools</td>
<td>Public schools: 21 schools (+7 schools)</td>
</tr>
<tr>
<td>Private schools: 10 schools</td>
<td>Private schools: 14 schools (+4 schools)</td>
</tr>
<tr>
<td>Elementary schools: 5 schools</td>
<td>Elementary schools: 8 schools (+3 schools)</td>
</tr>
<tr>
<td>Junior high schools: 18 schools</td>
<td>Junior high schools: 25 schools (+7 schools)</td>
</tr>
<tr>
<td>High schools: 3 schools</td>
<td>High schools: 6 schools (+3 schools)</td>
</tr>
</tbody>
</table>

*The total number of schools does not equal the total number of schools because integrated junior high and high schools are recorded in elementary and junior high schools, respectively.
1. What is "School of Diversified Learning"?

Type of schools for diversified learning

**Independent School type**
School facilities, including abandoned schools, are utilized as is.

**Partial classroom type**
This is a designation of only some classes as a School for Diversified Learning.

**Branch school type**
An establishment type that is established separately from the main school. Some schools have been approved since the R6 school year.

**Course-specified type**
The designation of some courses in high schools and other institutions as schools for diversification of learning.

*Reference to "Toward the Establishment of Schools for Diversified Learning (Guidance) R6.2 Revision" by MEXT*
2. Overview of the Entire Survey

Overview of the Entire Survey

Research on Methods of Understanding Learning Activities and Evaluation in “Schools of Diversified Learning”

**Nationwide Survey**
Survey of 20 of 24 schools in 2023

**Case study**
Hachioji City
Takaosan Gakuen

**additional research**
Board of Education
In-school placement
Free Schools
What is learning evaluation?

Learning assessment is an evaluation of the learning status of students in relation to educational activities at school.

The way of learning evaluation is important in order for teachers to improve their teaching and for students to be able to look back on their own learning and move on to the next stage of learning by accurately grasping the results of their learning and what skills they have acquired. It is necessary to promote efforts that are consistent with the improvement of curricula and learning and teaching methods.
### 3. Nationwide Survey

#### Surveyed Schools of Diversified Learning

<table>
<thead>
<tr>
<th>Prefecture</th>
<th>Name of School (name of school)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hokkaido</td>
<td>道立札幌市立北中学校 (Hokkaido, Sapporo City, North Middle School)</td>
</tr>
<tr>
<td>Miyagi</td>
<td>仙台市立東北高等学校 (Miyagi, Sendai City, East North High School)</td>
</tr>
<tr>
<td>Tokyo</td>
<td>东京都立中央高等学校 (Tokyo, Central Middle School)</td>
</tr>
<tr>
<td></td>
<td>东京都立新宿高等学校 (New宿 Middle School)</td>
</tr>
<tr>
<td></td>
<td>东京都立豊島高等学校 (丰島 Middle School)</td>
</tr>
<tr>
<td></td>
<td>东京都立渋谷高等学校 (渋谷 Middle School)</td>
</tr>
<tr>
<td></td>
<td>东京都立目白高等学校 (目白 Middle School)</td>
</tr>
<tr>
<td></td>
<td>东京都立中央高等学校 (东京中 Middle School)</td>
</tr>
<tr>
<td>Kanagawa</td>
<td>神奈川県立藤沢高等学校 (Kanagawa, Kamakura City, Fujisawa High School)</td>
</tr>
<tr>
<td>Gunma</td>
<td>岐阜県立恵那高等学校 (Gifu, Aka City, Aka High School)</td>
</tr>
<tr>
<td>Aichi</td>
<td>名古屋市立名古屋高等学校 (Aichi, Nagoya City, Nagoya High School)</td>
</tr>
<tr>
<td>Hiroshima</td>
<td>広島市立広島高等学校 (Hiroshima, Hiroshima City, Hiroshima High School)</td>
</tr>
<tr>
<td>Nagasaki</td>
<td>長崎市立長崎高等学校 (Nagasaki, Nagasaki City, Nagasaki High School)</td>
</tr>
<tr>
<td>Okayama</td>
<td>岡山県立倉敷高等学校 (Okayama, Kurashiki City, Okayama High School)</td>
</tr>
<tr>
<td>Kagawa</td>
<td>香川県立高松高等学校 (Kagawa, Takamatsu City, Kagawa High School)</td>
</tr>
<tr>
<td>Fukuoka</td>
<td>福岡市立福岡高等学校 (Fukuoka, Fukuoka City, Fukuoka High School)</td>
</tr>
<tr>
<td>Osaka</td>
<td>大阪市立大阪高等学校 (Osaka, Osaka City, Osaka High School)</td>
</tr>
<tr>
<td>Miyazaki</td>
<td>宮崎県立宮崎高等学校 (Miyazaki, Miyazaki City, Miyazaki High School)</td>
</tr>
<tr>
<td>Kagoshima</td>
<td>鹿児島県立鹿児島高等学校 (Kagoshima, Kagoshima City, Kagoshima High School)</td>
</tr>
</tbody>
</table>

20 of 24 schools in 2023
Details of Survey

- School overview and establishment history
- Curriculum and learning support system
- Attendance and learning evaluation
- Philosophy
- Faculty assignments
- About the target students
- School evaluation
- Sharing of policies and goals
- Class format
- Regular examination
- Use of ICT teaching materials
- Attendance requirements
- About evaluation/grading
- Problems of evaluation/grading

Form of Establishment

Public

12 of 20 schools

Private

8 of 20 schools

All in the form of independent schools
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

3. Nationwide Survey

<table>
<thead>
<tr>
<th>Independent school type</th>
<th>Partial classroom type</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 of 12 schools</td>
<td>7 of 12 schools</td>
</tr>
</tbody>
</table>

Non-attendance Support Center
Night Junior High School
Educational Support Center

3. Nationwide Survey

What is a special education program?

Special curricula are considered in light of various circumstances, such as the actual conditions and local characteristics of the students attending the school in question, in order to help them become socially independent, and although there is no single set formula, the following patterns are mainly possible.

- Establishment of new subjects in elementary schools
- Number of class hours rearrangement of class schedules
- Instructional Content Transition to a different grade level
- Total class hours Reduction
- Reduction of class time per hour

Devices that do not reduce the total number of class hours
Devices to reduce the total number of class hours

From "Diversified Schools of Learning Explanatory Material" by MEXT
Devising total class time

<table>
<thead>
<tr>
<th>Schools that do not reduce the total number of class hours</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools that reduce the total number of class hours</td>
<td>75%</td>
</tr>
</tbody>
</table>

Establishment of new subjects

<table>
<thead>
<tr>
<th>Contents</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relearning and individualized learning</td>
<td>・'Time for Stickness', 'Basic', 'Recovery',</td>
</tr>
<tr>
<td>Inquiry/Project Learning (Enrichment of integrated learning, etc.)</td>
<td>・'Various times', 'Project', 'Experiential course learning', 'Project Learning',</td>
</tr>
<tr>
<td>Interaction with different grades and mixed grades</td>
<td>・'Cross Time',</td>
</tr>
<tr>
<td>Collaborative learning with the community</td>
<td>・'Collaborate',</td>
</tr>
<tr>
<td>subject that combines subjects in school</td>
<td>・'Time for Science', 'Creative Atelier', 'Time for Human', 'Career Education',</td>
</tr>
<tr>
<td>Social Skills Training</td>
<td>・Communication Skills Training (CST), Social Skills Program (SSP), Social Skills Training (SST)</td>
</tr>
</tbody>
</table>
Class Format

- Many schools are based on simultaneous classes, but also incorporate individualized instruction to support learning.
- While some schools actively use online school attendance and class participation, others emphasize face-to-face school attendance and participation.
- ICT materials are used as tools for subject study, communication tools, and individualized instruction plan operation systems.

About Evaluation

Emphasis on intra-individual evaluation

- **Emphasis on written evaluations**
  Convey good points and encouragement for the future as evaluations
- **Devise a method for communicating evaluations and grades by means of notification sheets, etc.**
  Introduction of the desired nature of the results of the evaluation from each point of view and the 5-point grading system.
  Setting up self-evaluation columns, etc.
About Evaluation

Evaluation of home study, etc.
Utilization of home study assignments, research results, private practice tests, certification test results, etc.

Problems of evaluation
- Burden on teachers due to diversification of evaluation materials
- Dilemma over individual evaluation and 5-point grading

Toward the Enhancement of “Schools of Diversified Learning”
- Substantiation of the “Student Understanding and Support Sheet” and assignment of additional “Learning Support Coordinators (tentative name)”. Dilemma over individual evaluation and 5-point grading
- Creation of a training system for teachers and support staff to improve their expertise in “special support education” etc.
- Understanding and approving evaluation and grading methods and building a system for “matching learning places”.
- Identification of subject characteristics and learning activities, as well as evaluation and grading issues
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly
DAY 2 – 2024. 6. 8. Sat.
Session 2. Application of IT to Mental Health Practice
Developing a Single Session Synchronous Mental Health Intervention using Chat in Thailand

Nattasuda Taephant
Dean, Faculty of Psychology, Chulalongkorn Univ., Thailand

<Abstract>

The "Here to Heal" project offers real-time chat interventions, prioritizing individuals facing barriers to in-person mental health services, such as students and working adults, especially amid the COVID-19 pandemic. Comprehensive guidelines were developed for service providers, addressing key topics including online communication, single-session counseling, and crisis management. The operational process is divided into four main phases: preparation, service request, counseling, and post-service. In its initial phase, the "Here to Heal" project provided mental health counseling through a web-based chat system, the Line application, and a website. It conducted 4,281 sessions for 3,401 individuals, with 96 volunteers providing crucial mental health support and producing valuable resources. This pioneering effort demonstrates that chat-based counseling effectively widens access to mental health services across diverse age groups and geographical locations in Thailand.

<초 록>

"Here to Heal" 프로젝트는 COVID-19 팬데믹 상황에서 대면 정신 건강 서비스에 접근하기 어려운 학생 및 직장인 등 개인들을 대상으로 실시간 채팅 개입을 제공한다. 본 프로젝트는 온라인 소통, 단일 세션 상담, 위기 대응 등의 주요 주제를 다루는 종합적인 지침을 개발하였다. 운영 과정은 준비, 서비스 요청, 상담, 상담 후 서비스의 네 가지 주요 단계로 나누어졌다. 초기 단계에서 "Here to Heal" 프로젝트는 웹 기반 채팅 시스템, 라인(Line) 애플리케이션, 웹사이트를 통해 정신 건강 상담을 제공하였다. 프로젝트 결과, 총 4,281회의 상담이 3,401명의 개인을 대상으로 이루어졌으며, 96명의 자원봉사자가 중요한 정신 건강 지원을 제공하고 유용한 자원을 생산하였다. 이 선구적인 노력은 채팅 기반 상담이 태국 내 다양한 연령대와 지리적 위치에 걸쳐 정신 건강 서비스 접근을 효과적으로 확대할 수 있음을 보여준다.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly
• Single-session
• Chat based
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly
2024 SKKU Traumatic Stress Center International Conference
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<table>
<thead>
<tr>
<th>Service provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Students/graduates in counseling psychology or related fields</td>
</tr>
<tr>
<td>• Enrolled in counseling theory and skills courses</td>
</tr>
<tr>
<td>• Experience in individual psychological counseling under accredited supervision</td>
</tr>
<tr>
<td>• Participates in preparatory training for online psychological counseling</td>
</tr>
<tr>
<td>• Monthly supervision participation</td>
</tr>
<tr>
<td>• Proficient in computer and online programs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students/graduates in psychology or related fields at bachelor’s level or higher</td>
</tr>
<tr>
<td>Participates in preparatory training for online services</td>
</tr>
<tr>
<td>Monthly supervision participation</td>
</tr>
<tr>
<td>Proficient in computer and online programs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>• At least 5 years of continuous experience in counseling</td>
</tr>
<tr>
<td>• Available for scheduled supervision sessions</td>
</tr>
</tbody>
</table>
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- 200 -
During the 2020-2023, a total of 3,401 individuals received mental health counseling through various online formats, totaling 4,281 sessions.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly
Here to Heal #2

1. Expanding the Network at the National Level
2. Enhancing the Online Mental Health Counseling Service
3. Advocating for National Mental Health Policy
4. Standardizing the Mental Health Service System
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly
The Effects of Gaming on Reducing Anxiety and Depression

Cho, Moon-Heum

Associate Prof., Dept. of Instructional Design, Development & Evaluation, Syracuse Univ., US

Abstract

This study aimed to examine the effects of playing an action video game, Boson X, on anxiety and depression compared to journaling. From South Korea, 42 undergraduate students were randomly assigned to gaming (n=21) and journaling (n=21) groups. The intervention continued for six weeks. Changes in anxiety and depression levels were checked at three-week intervals for nine weeks, including pre-, mid- (week 3), post- (week 6), and follow-up points (week 9). The results revealed that university students’ anxiety and depression in both the gaming and journaling groups were significantly reduced over time. Additionally, reduced anxiety and depression were retained for another three weeks after the intervention ended in both the gaming and journaling groups. This study proves that playing an action game can be an alternative approach to reducing anxiety and depression in the Korean context and includes in-depth discussions.

Abstract

본 연구는 액션 비디오 게임인 '보손 엑스(Boson X)'를 플레이하는 것이 일기를 쓰는 것과 비교하여 불안과 우울증에 미치는 영향을 조사하기 위해 수행되었다. 한국에서 42명의 대학생을 무작위로 게임 그룹(n=21)과 일기 쓰기 그룹(n=21)에 배정하였으며, 개입은 6주 동안 진행하였다. 사전, 중간(3주차), 사후(6주차), 추적(9주차) 시점 등 9주 동안 3주 간격으로 불안과 우울 수준의 변화를 확인하였다. 그 결과, 게임 그룹과 일기 쓰기 그룹 모두 시간이 지남에 따라 대학생의 불안과 우울이 유의미하게 감소한 것으로 나타났다. 또한 게임 그룹과 일기 쓰기 그룹 모두 개입이 끝난 후에도 3주 동안 불안과 우울감 감소 효과가 유지되었다. 이 연구는 액션 게임이 한국적 맥락에서 불안과 우울을 감소시키는 대안이 될 수 있음을 나타내며, 심도 있는 논의를 다루고 있다.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

The Effects of Playing an Action Video Game on Reducing Anxiety and Depression

Moon-Heum Cho, Ph.D.
Syracuse University, USA

Background

- Anxiety and depression are related to physical maladaptation symptoms (e.g., sleep deprivation, stomachache, tiredness, breathing, appetite, headache, fever, and nausea) (Donnelly et al., 2021).

- In a nationwide Korean study (An et al., 2022), anxiety and depression predict the risk of lifetime suicide attempts.

- According to the Health Insurance Review and Assessment Service (HIRAS, 2022), the numbers of Koreans with anxiety and depression symptoms in South Korea in 2021 were 933,481 and 865,108, respectively.

- Among the age groups, a steep increase in anxiety and depression symptoms was noticeable in those in their 20s (HIRAS, 2022). In particular, the number of patients with anxiety in their 20s was 59,080 and 110,351 in 2017 and 2021, respectively.

- Additionally, the number of patients in their 20s with depression increased from 78,016 in 2017 to 177,166 in 2021
Gaming

- Recently, playing action video games has emerged as an alternative approach to reducing anxiety and depression, as many individuals in South Korea have high access to video games regardless of gender, region, and age (Nam & Kim, 2020).
- Accessibility allows video games to be used in various mental health-related areas, such as trauma, anxiety, and depression (Zayeni et al., 2020).
- Some researchers have used video games to relieve attention-deficit hyperactivity disorder, anxiety, stress, and depression (Falconer et al., 2016; Kühn et al., 2018; Merry et al., 2012; Morimoto et al., 2014; Rupp et al., 2017; Schoneveld et al., 2015).
- Very little empirical research has been conducted in South Korea because the bias toward gaming is still strong.
- This study aimed to examine whether playing video games contributes to reducing individuals’ anxiety and depression.

Research Questions

This study’s purpose was to examine the effectiveness of gaming in reducing anxiety and depression.

1. Is gaming effective in reducing anxiety?
2. Is gaming effective in reducing depression?
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Participants

- Inclusion criteria were set: the participants should (a) be over 20 years old, (b) have a personal smartphone, and (c) have depression symptoms defined as either mild (scores ranged 11–19) or moderate (20–29) according to the Beck Depression Inventory (BDI-II).

<table>
<thead>
<tr>
<th>Sociodemographic variables</th>
<th>Gaming group (N=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>25.2 (4.6)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>11 (52.4)</td>
</tr>
<tr>
<td>Male</td>
<td>10 (47.6)</td>
</tr>
<tr>
<td>Household type</td>
<td></td>
</tr>
<tr>
<td>One-person household</td>
<td>7 (33.3)</td>
</tr>
<tr>
<td>Group household</td>
<td>14 (66.7)</td>
</tr>
<tr>
<td>Gaming frequency</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>2 (9.5)</td>
</tr>
<tr>
<td>Everyday</td>
<td>7 (33.3)</td>
</tr>
<tr>
<td>4–5 days per week</td>
<td>1 (4.8)</td>
</tr>
<tr>
<td>2–3 days per week</td>
<td>6 (28.6)</td>
</tr>
<tr>
<td>1–4 days per month</td>
<td>4 (19)</td>
</tr>
<tr>
<td>1–11 times per year</td>
<td>1 (4.8)</td>
</tr>
</tbody>
</table>

Gaming

- Participants in the gaming group daily played Boson X for half an hour for six weeks.
- They had to report their daily gaming time, such as the starting and ending times, on Google Docs.
- Boson X is a fast-paced action game in which the player controls a character from a third-person perspective with a camera fixed behind it through a tunnel.
- The character moves automatically through a tunnel, and the player must overcome obstacles by pressing one of three keys (up, left, and right on the keyboard).
Research Instrument

• We used self-reported questionnaires.

| The General Anxiety Disorder-7 (GAD-7) | • 7 items validated by Ahn et al. (2019)  
| | • A 4-point Likert scale (0=not at all, 3=nearly every day) to measure the frequency of anxiety symptoms (i.e., nervous and anxious) over the previous 2 weeks.  
| | • The total score ranges from 0 to 21  
| | • Cronbach’s alpha .88 to .90  
| BDI-II | • 21 items validated by Beck et al. (1996)  
| | • A 4-point scale from 0 to 3 (0=not at all; 3=nearly every day) to measure depression symptoms (i.e., sadness, pessimism, and past failure) over 2 weeks.  
| | • The total score ranges from 0 to 63  
| | • Cronbach’s alpha 0.78 to 0.88 |

Research Procedures

• Campus Institutional Review Board (IRB)

• 9 weeks from July to September 2020 during the COVID-19

• The GAD-7 and BDI-II were administered four times to measure changes of anxiety and depression over time
  • At baseline,  
  • in the middle of the intervention (week 3),  
  • at the end of the intervention (week 6), and  
  • three weeks after the intervention (week 9).
Anxiety

(continued)

• Pre to Post Comparison
  • Paired-sample t-tests to examine whether anxiety was significantly reduced by the intervention. A significant difference was found between the pre- and post-point scores on the GAD-7, $t(20)=3.201$, $p<0.05$.

• Pre, Mid, and Post
  • One-way repeated measures ANOVA showed a significant difference in the GAD-7 at the pre-, mid-, and post-points, $F(2, 40)=3.98$, $p<0.05$, $\eta^2=0.17$, indicating significant changes at different time points.
  • Pairwise comparisons with the Bonferroni post hoc test revealed significant differences in GAD-7 between the pre-point and the post-point in GAD-7 ($p=0.013$).

<table>
<thead>
<tr>
<th>Measures</th>
<th>n</th>
<th>Pre M</th>
<th>Pre SD</th>
<th>Mid M</th>
<th>Mid SD</th>
<th>Post M</th>
<th>Post SD</th>
<th>Follow M</th>
<th>Follow SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD-7</td>
<td>21</td>
<td>4.33</td>
<td>2.60</td>
<td>3.67</td>
<td>3.79</td>
<td>2.33</td>
<td>2.18</td>
<td>3.24</td>
<td>3.55</td>
</tr>
</tbody>
</table>

Anxiety

• Post and Follow-up
  • Paired-sample t-tests were conducted with the GAD-7 to check the continuity of reduced anxiety at the follow-up point.
  • Insignificant differences in the GAD-7, $t(20)=-1.694$, $p=0.106$ was found, demonstrating that reduced anxiety continued for another three weeks.
Depression
(continued)

- **Pre to Post Comparison**
  - Paired-sample t-tests to examine whether depression was significantly reduced by the intervention. A significant difference was found between the pre- and post-point scores on the BDI-II, $t(20)=5.825$, $p<0.001$.

- **Pre, Mid, and Post**
  - One-way repeated measures ANOVA showed a significant difference in the BDI-II at the pre-, mid-, and post-points, $F(2, 40)=27.03$, $p<0.001$, $\eta^2=0.58$, indicating significant changes at different time points.
  - Pairwise comparisons with the Bonferroni post hoc test revealed significant differences in BDI-II was significantly different between the pre- and mid-point as well as between the pre- and post-point.

<table>
<thead>
<tr>
<th>Measures</th>
<th>n</th>
<th>Pre M</th>
<th>Pre SD</th>
<th>Mid M</th>
<th>Mid SD</th>
<th>Post M</th>
<th>Post SD</th>
<th>Follow M</th>
<th>Follow SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI-II</td>
<td>21</td>
<td>19.34</td>
<td>11.36</td>
<td>9.43</td>
<td>5.60</td>
<td>9.76</td>
<td>6.27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Depression

- **Post and Follow-up**
  - Paired-sample t-tests were conducted with the GAD-7 to check the continuity of reduced depression at the follow-up point.
  - Insignificant differences in the GAD-7, $t(20)=-1.694$, $p>0.5$ was found, demonstrating that reduced depression continued for another three weeks.
Discussion (continued)

- This study aimed to examine the effects of playing an action video game, *Boson X* on individuals’ anxiety and depression.
- The results showed that playing a video game was effective in reducing the participants’ anxiety and depression, and their effectiveness was retained three weeks after discharge.
- Our study proves that playing a well-selected game can be a valuable approach to reducing anxiety and depression among people in their 20s in South Korea.

Discussion (continued)

- Our study also demonstrates that gaming can be an alternative approach for the public in urgent situations such as the COVID-19 pandemic.
- Owing to the pandemic, participants experienced unwanted social isolation and quarantine to mitigate the spread of the coronavirus infection (Ganesan et al., 2021).
- Many people with anxiety and depression symptoms were unable to receive timely and appropriate treatment (Byrne et al., 2021), which is related to an increased number of mental disorders and suicide attempts and higher suicide rates (Ganesan et al., 2021).
Discussion

- Playing an action game provided an opportunity for them to feel a sense of achievement when they complete each stage or challenging task (Kühn et al., 2018).

- “I felt like I achieved something by regularly playing video games for half an hour. It gave me a sense of achievement, which also helped me to relieve and revitalize myself to a certain degree.”

- Playing Boson X distracted the participants’ thoughts about anxiety and depression by having them spend their cognitive resources on game activities.

- “I felt less anxious and depressive while playing the video game. It helped me stop ruminating about my negative thoughts.”

Limitations and Future Study

- Having a control group will demonstrate more accurate results regarding the effectiveness of video gaming.

- To generalize the results to Koreans in their 20s, recruiting more prominent participants with diverse backgrounds, such as non-higher education, is essential.

- Future researchers should consider exploring the efficacy of diverse types of video games (e.g., emotion regulation, relaxation, mindfulness, or serious games for mental health) on anxiety and depression.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Thank you

Questions or comments?

micho@syr.edu
Usability of a Suicide Risk Awareness Mobile App in South Korea

Hwang, Seokwon

Visiting Research Scholar, Dept. of Instructional Design, Development & Evaluation, Syracuse Univ., US

Abstract

Researchers have been concerned about the lack of consideration for user experience in developing mental health apps; thus, this study aimed to conduct a usability evaluation on a mobile suicide risk awareness app by using a mixed method. A total of 38 students from a large university in South Korea participated. Nineteen of them were in the group at high risk for suicide, and 19 were in the group not at risk for suicide. Results showed that regardless of group membership users positively evaluated the mobile app for suicide risk awareness for ease of use, accessibility, design, perceived learning, and satisfaction. In addition, one-way repeated measures ANOVA revealed that participants rated ease of use, accessibility, and design higher than perceived learning. Qualitative analysis with 19 individual interviews revealed six usability themes. Overall, the study showed that the participants saw the promise of a mobile app for suicide risk awareness among young adults in South Korea.

Introduction

대부분의 정신건강진단앱이 사용성 검사를 하지 않고 개발되어, 실용성과 연속성이 하나의 문제로 대두되고 있는 상황이다. 이에 본 연구는 모바일 자살예방앱의 사용성 조사를 시행하였다. 자살위험군에 속하는 19명의 한국인 대학생과 일반인 대학생 19명을 대상으로 자살예방앱의 사용성을 희합연구방법으로 조사하였다. 연구결과에 따르면, 두 집단에서 사용 용이성, 접근성, 화면설계, 정보습득, 그리고 사용 만족도에 상응적으로 대답하였다. 특히, 사용 용이성, 접근성, 화면설계가 정보습득보다 유의미한 수준에서 높은 결과를 보였다. 또한, 19명을 인터뷰한 질적자료는 사용성에 대한 6가지 주제가 도출되었다. 전반적으로, 연구참여자들은 한국에서 자살예방앱의 사용에 대하여 긍정적인 응답을 보였다.
Usability of a Suicide Risk Awareness Mobile App in South Korea

2024 SKKU Traumatic Stress Center International Conference

Contents

1 Background of the Study
2 Research Purpose
3 Methods
4 Results
5 Discussion
6 Limitations & Future Research
Background of the Study

The high rate of 20s’ suicide is one of the social issues in South Korea.

An app for suicide risk awareness is considered one of the solutions for addressing the issue.

Because most mental health apps were released without usability evaluation, these apps usually had high attrition rates and were short-lived.

An app needs usability evaluation in South Korea when it is developing.

Research Purpose

The purpose of this research is a usability evaluation of a mobile app for suicide risk awareness in South Korea.

- Target users
  - 20s in South Korea

- The main functions of the suicide risk assessment app
  a) Diagnosis and feedback (e.g., a suicide risk awareness tool)
  b) Help information (e.g., information about available human services and resources)

- Mixed method:
  - Quantitative research method – usability survey (e.g., t-test, ANOVA, multiple regression analysis)
  - Qualitative research method – semi-structured interview (e.g., content analysis)
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Method: Participants

1. Approval from the Institutional Review Board (IRB)

2. 38 Korean students were recruited from a South Korean university.

3. Based on a scale for suicidal ideation (Beck et al., 1979; Choi et al., 2020), they were evenly assigned to a high-risk group or a nonrisk for suicide group.

4. A significant difference in suicidal ideation emerged between the two groups ($t(25.05) = 6.36, p < 0.001$).

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>High-risk group (n=19)</th>
<th>Nonrisk group (n=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;20</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>20–29 years</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Single</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>Graduate</td>
<td>2</td>
<td>11</td>
</tr>
</tbody>
</table>

Method: Suicide Risk Assessment App

- **App Functions**
  a) Suicide Screening Questionnaire–Self-Rating (SSQ–SR), developed and validated by a Korean research team (Lee et al., 2022).

  b) Information for the help centers (e.g., phone number, location, and email contact).

- **App Use**
  - The participants installed the app on their smartphones with a randomized ID number to protect their privacy and ensure confidentiality.

  - They self-assessed their risk of suicidal ideation when they wanted.
Method: Measures

- **Usability Survey**
  - A usability survey (M.-H. Cho, 2012; Zhou et al., 2019) was slightly modified after consultations involving the researchers and counselors.
    - Five dimensions with 16 items – (a) ease of use, (b) accessibility, (c) design, (d) perceived learning, and (e) satisfaction.
    - A 5-point Likert scale – from 1 (strongly disagree) to 5 (strongly agree).

- **Semi-Structured Interview**
  - Questions were used to uncover further information about user experience with the mobile app in detail.

<table>
<thead>
<tr>
<th>Five Dimensions of User Experience (Usability Survey)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of use</td>
</tr>
<tr>
<td>1. The app was easy to use.</td>
</tr>
<tr>
<td>2. Figuring out how to use the app did not take long.</td>
</tr>
<tr>
<td>3. The layout made using the app easy.</td>
</tr>
<tr>
<td>Accessibility</td>
</tr>
<tr>
<td>4. No technical problems arose in accessing the app.</td>
</tr>
<tr>
<td>5. Installing the app on my phone was easy.</td>
</tr>
<tr>
<td>6. No time delay occurred when using the app.</td>
</tr>
<tr>
<td>Design</td>
</tr>
<tr>
<td>7. The menu was appropriate in helping me understand the overall use of the app.</td>
</tr>
<tr>
<td>8. The text was readable.</td>
</tr>
<tr>
<td>9. The icon matched well with the content.</td>
</tr>
<tr>
<td>10. The colors used made reading the text comfortable.</td>
</tr>
<tr>
<td>Perceived Learning</td>
</tr>
<tr>
<td>11. Using the app, I learned information about help centers, where I can receive immediate help.</td>
</tr>
<tr>
<td>12. Using the app, I understood the status of my mind better.</td>
</tr>
<tr>
<td>Satisfaction</td>
</tr>
<tr>
<td>13. I would recommend this app to others who might need it.</td>
</tr>
<tr>
<td>14. Overall, I am satisfied with the app.</td>
</tr>
<tr>
<td>15. The app was helpful in evaluating status for self-harm.</td>
</tr>
<tr>
<td>16. The app is useful.</td>
</tr>
</tbody>
</table>

Method: Procedures

1. **Group Assignment**
   - A high-risk for suicide group (n=19)
   - A non-risk for suicide group (n=19)

2. **Orientation**
   - App use (i.e., how to download and use the mobile app for suicide risk awareness)

3. **Use**
   - Use of the mobile app for suicide risk awareness for 2 weeks

4. **Data Collection**
   - Online survey (e.g., usability survey)
   - Individual interviews (e.g., examining user experience in detail)

5. **Data Analysis**
   - Quantitative analysis (e.g., t-test, ANOVA, multiple regression analysis)
   - Qualitative analysis (e.g., Content analysis)
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Results: Groups

There was no significant difference between high risk and nonrisk groups in usability.

- Two sample t-test

<table>
<thead>
<tr>
<th>Dimension of evaluation</th>
<th>High risk (n=19)</th>
<th>Nonrisk (n=19)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Ease of use</td>
<td>4.36</td>
<td>0.77</td>
<td>4.29</td>
<td>0.89</td>
</tr>
<tr>
<td>Accessibility</td>
<td>4.42</td>
<td>0.61</td>
<td>4.56</td>
<td>0.80</td>
</tr>
<tr>
<td>Design</td>
<td>4.39</td>
<td>0.63</td>
<td>4.65</td>
<td>0.53</td>
</tr>
<tr>
<td>Perceived Learning</td>
<td>3.97</td>
<td>0.77</td>
<td>3.55</td>
<td>0.97</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>4.09</td>
<td>0.67</td>
<td>4.03</td>
<td>0.98</td>
</tr>
</tbody>
</table>

Results: Dimensions

There were significant differences in the average ratings of the five usability dimensions.

- A Repeated Measure ANOVA (The Greenhouse–Geisser correction)

<table>
<thead>
<tr>
<th>Ease of Use</th>
<th>Accessibility</th>
<th>Design</th>
<th>Usefulness</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.33</td>
<td>4.49</td>
<td>4.53</td>
<td>3.76</td>
<td>4.06</td>
</tr>
<tr>
<td>0.13</td>
<td>0.12</td>
<td>0.10</td>
<td>0.15</td>
<td>0.14</td>
</tr>
</tbody>
</table>

- $F(3.06, 113.23) = 11.50, p < 0.001$, $R^2 = 0.24$, and $n_p^2 = .24$.

- The Bonferroni post-hoc test (Pairwise comparisons)
  - Ease of use ($p < 0.05$), Accessibility ($p < 0.001$), and Design ($p < 0.001$) $> \text{Perceived learning}$
  - Accessibility, and Design $> \text{Satisfaction} (p < .01)$
Results: Prediction

The two dimensions of usability – perceived learning, and ease of use – significantly contributed to the prediction of satisfaction with the mobile app.

- Multiple Regression Analysis
  - The usability dimensions—ease of use, accessibility, design, and perceived learning—to predict participant satisfaction with the suicide risk awareness app.
  - $F(4, 33) = 14.52, p < .001$
  - Perceived learning ($\beta = 0.38, p < 0.001$), Ease of use ($\beta = 0.32, p < .05$)
  - The model explained 59.4% ($R^2_{adj} = 0.594$) of the variance in user satisfaction with the app.

Results: User Experience in Detail

The six themes and 14 subthemes that emerged appear in Table.

- Content Analysis

<table>
<thead>
<tr>
<th>No.</th>
<th>Themes</th>
<th>Subthemes</th>
<th>Definitions</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overall experiences</td>
<td>Self-awareness</td>
<td>Users’ consciousness of their own suicide risk</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accessibility</td>
<td>Opportunity to enter the mobile app for suicide risk awareness</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trustworthiness</td>
<td>Users’ certainty about the self-diagnostic questionnaire as valid and reliable source</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wording</td>
<td>Statements on each page and in the diagnostic tool</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legibility</td>
<td>The quality of being clear enough to read the information on the mobile app</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Readability</td>
<td>Color scheme</td>
<td>Overall perceived level of comfort with the mobile app due to color choice</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Navigation</td>
<td>The level of ease in exploring and finding menu and functions</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Easy-to-answer questions</td>
<td>Straightforward answering of the questions in the self-diagnostic questionnaire presented on the mobile app</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>App interface</td>
<td>Technical glitch</td>
<td>Short-lived fault or malfunction issue in using the mobile app</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Confidentiality</td>
<td>Concerns about privacy in using the mobile app</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>App operations</td>
<td>Clear direction</td>
<td>User guidance and explanation for mobile app function, menu, or self-diagnostic questionnaire</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feedback interventions</td>
<td>Interpretations of the results and suggested further actions and information for further help.</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Functional requirements</td>
<td>Questionnaire length</td>
<td>Proper number of self-diagnostic questions</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Need for comprehensive questionnaire</td>
<td>Need for self-diagnostic questionnaire that includes both suicide risk and other emotions</td>
<td>2</td>
</tr>
</tbody>
</table>
Discussion: Merits and Demerits

This research unveiled the merits and demerits of a suicide risk awareness app.

- **The app enhanced self-awareness of mental health status and provided useful information**
  - Both high-risk and non-risk mental health groups rated each dimension of usability highly, which may lead to user engagement. Qualitative data analyses revealed that the app could enhance users' awareness of mental health status and would be helpful when seeking reliable services and resources.

- **The perceived learning dimension of the usability in the mobile app needs to be improved**
  - Users’ perceived learning is important for their satisfaction with the app, which is related to user engagement with mental health apps [H. Cho et al., 2020; Hentati et al., 2021; Naranjo-Rojas et al., 2022]. Perceived learning was rated significantly lower than the other dimensions of usability, and satisfaction. It means the need to improve the perceived learning dimension of the usability of our app.

Discussion: Expectations of Users

It clarified the expectations of users to the suicide risk awareness mobile app.

- **The app may need to consider the first, or high-risk users.**
  - The users, who did not know about mental health diagnoses before, were difficult to understand during their first read and were uncomfortable with the font size of the text. Some high-risk users said that the current color scheme, navigation, questionnaire length, and stated items need to be improved.

- **Customized feedback interventions may need to be offered from the app after diagnosing suicide risk.**
  - Some users needed more information about explanations and possible actions and resources they could choose to obtain appropriate help at the right time. Several users suggested even more proactive help offerings from relevant and reliable authorities by calling or texting them directly to check their mental health status.
Discussion: Significance of the Study

The usability test proved the efficacy of the suicide risk awareness mobile app in South Korea.

- The mobile app has the potential to significantly enhance the awareness of mental health status among members of the Korean public, and the mobile app can serve as a resource for users at high risk for suicide and those not at risk.

- The study demonstrates the role of a usability study in the development of mental health apps. The study results reveal the specific dimensions of usability that require improvement.

Limitations & Future Research

- The interpretation of the study needs to be limited to Korean adults in their 20s enrolled in higher education.
  
  ▶ Future researchers may recruit users from diverse backgrounds, including those not enrolled in higher education.

- The mobile app for suicide risk awareness was designed primarily to promote awareness of mental health status and support help-seeking efforts.
  
  ▶ To explore its potential contributions further, additional interactive functions for guided feedback should be integrated (Hung et al., 2016; O’Grady et al., 2020).
Thank you
Session 1. Understanding Self-harm and Death
A Two-Panel Delphi Study on Risk Factors of Adolescent Suicide in South Korea

Lee, Sangin Lee & Young Soon
Ph. D. Candidate, Jeonbuk Nat’l Univ., Korea, Prof., Dept. of Psychology, Jeonbuk Nat’l Univ., Korea

This study aimed to identify and reach a consensus on factors that contribute to adolescent suicidal tendencies. The research was conducted in three stages: 1) literature review and expert interview on self-harm and suicidal risks factors in the adolescent population; 2) Development of a list of risk factors by a panel of experts using the Delphi consensus method; and 3) Validation of the factors by a panel of adolescents using the same method. Three rounds of the Delphi questionnaire were conducted for each panel, and consents of over 80% are reported. The finalized adolescent suicide risk factors in the biopsychosocial model could help improve suicide prevention in South Korea, as they were validated by a rigorous research process that included a consensus among the key stakeholders, counselors, and adolescents.

본 연구는 자살 및 자해 경험이 있는 국내 청소년과 그들의 상담자가 지각하는 청소년 자살 위험요인을 규명하고자 델파이 연구를 실시하였다. 1) 선행된 국내외 메타연구들을 기반으로 문항을 도출한 후 전문가 의견을 받 아 자살 및 자해 위험 문항을 최종 도출하였다. 2) 델파이 연구 방법론에 따라 전문가 집단에게 각 위험요인의 중요도를 평정하고 추가 위험요인을 제안하도록 하였다. 3) 마지막으로 자해 및 자살 경험 청소년을 대상으로 델 파이 설문을 진행하였다. 세 번의 델파이 조사가 각 집단에 이루어졌으며 80%이상의 합의가 이루어진 요인을 결과로 도출 하였다. 그 결과 생물심리사회적 모델을 기반으로 도출된 두 패널의 합의를 비교분석 하였으며 이를 바탕으로 청소년 자살 예방 방략 등을 제언한다.
A two-panel Delphi study on risk factors of adolescent suicide in South Korea

Sangin Lee¹, Mo Hyun Yang², Young Soon¹, Dong Hun Lee²

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¹Jeonbuk National University
²Sungkyunkwan University

Suicide Risk in South Korea

- Since 2003, ranked #1 TOP among OECD countries: 2.2 x avg
- 2022 Korean Suicide Death: total 12,906
  - Suicide rate 25.2 per 100,000 people
  - About 36 per a day, one per 40 min
- Adolescent suicide 7.2 per 100,000 people in 2022
  - 3.2% adolescent attempted in 2023
- Suicide is global leading causes of adolescent deaths
  - 4.1% of USA adolescents (Nock et al., 2013)
  - 4.2% of European adolescents (Cari et al., 2014)

ref: Korean Statistical Information Service, 2022
Can we prevent adolescent suicide?

- Statistical reports recent worsened rates of suicide in Korea
- No meaningful reduction in suicide death rates past 60 years
- Research: Knowledge of factors associated with adolescent suicide
- Government, Schools, Family, Counseling sessions, Peers

Objectives

- Identify suicide risk factors in the adolescent context
  - biological, psychological, and societal factors according to the biopsychosocial model (Askew, 2007)
- Hear directly from adolescents who have attempted suicide, and experienced counselors who treated them
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

**Design**

- Literature search and questionnaire development
  - Literature review and expert interviews
  - Extract factors and classified into categories
  - Develop questionnaires with open suggestions
- Delphi process and data analysis
  - Expert Delphi Study
  - Adolescent Delphi Study

**Methodology**

- Literature search and questionnaire development
  Literature review on published meta-analysis to find verified factors for questionnaire items.
  - Domestic databases: National Assembly Electronic Library, Korean Studies Information Service System (KISS), and Research Information Sharing Service (RISS)
  - Overseas databases: Academic Search Complete (EBSCO), BIOMED1, PsycARTICLES, PsycINFO, ResearchGate, SCOPUS, Springer, and Wikipedia
  - During mid-Dec 2021 to Jan 2022, target studies published from 2007 - 2021.
  - Total 15 papers identified: 5 domestic and 7 international on suicide, and 2 domestic and 1 international papers on self-injury.
  Factors were revised and supplemented through interviewing experts.
  Identified factors were listed for a questionnaire foundation.
  - Additional explanations were provided for academic or clinical terms in the questionnaire that were difficult for adolescents to understand (i.e., high reward sensitivity; tendency to pursue a rather extreme way to improve your mood quickly).
  - The review process was conducted by a professor in counseling, a Ph.D. candidate, a doctoral student, and two master’s students.
Methodology

**Developed questionnaire**

Categories and subcategories to systematically present the identified factors

- Biological factors: socio-demographics, physical, and psychiatric problems
- Psychological factors: thought, cognition, emotion, and behavior
- Societal factors: family, peers, school, and community derived
- Environment and infectious diseases related factors were reviewed

Participants responded to the importance of each factor on a 5-point Likert scale. The higher the score, the higher the importance of the factors.

- A column for opinions on our primary categories
- Open questions to identify other important factors that were not included in this questionnaire.

---

**Methodology**

- **Delphi process- Experts Panel**
  
  Panel identification:
  
  - The Office of Education recommended 77 experts with experience in counseling self-harm or suicidal adolescents at a school or youth counseling center across the nation, including Seoul, Gyeonggi, Daegu, Busan, Gwangju, Jeonnam, Gangwon, and Gyeongnam.
  
  - Experts: counselors and psychologists working at the Wee Center
    
  Wee counselors provide counseling and psychological treatment for teenagers at elementary, middle, and high schools, hospitals, and Wee centers installed in local communities.
  
  - Out of 77 experts, 63 counselors who met our criteria over five years of experience were introduced to this expert Delphi study.
    
  - 19 (30.2 %) middle school WEe counselors
    
  - 21 (33.3 %) high school WEe counselors
    
  - 5 (7.9 %) hospital WEe and 18 (28.6 %) community WEe counselors
  
  - Mean age 40.7 (SD =8.82) years, with 93.7 % (n = 59) females

  Process: Questionnaire to the recruited panel via e-mail
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Methodology

- Delphi process- ①Experts Panel
  Process: Questionnaire to the recruited panel via e-mail
  - Study conducted: June 28 to July 31, 2022.
  - Round 1 Delphi questionnaire: 87 risk factors from the literature review and expert interviews.
  - Experts were asked to report the degree of increasing the risk of suicide in adolescents on a 5-point scale from "low" to "high", with suggestions for additional risk factors.
  2nd and 3rd Delphi questionnaires presented the factors selected from the previous round, along with the suggested factors from the open questions.

- Delphi process- ②Adolescent Panel
  Criteria for the adolescent panel:
  1) adolescents who wished to participate
  2) experience of self-harm or suicidal behavior
  3) parental consent.
  Snowball sampling: From 20 self-injury and 19 suicide interviewees to additional 34 adolescents
  - Of 73 contacted adolescents, 57 criteria met adolescents received the 1st survey, but 16 did not reply.
  - 2nd round sent to 38 who submitted the round 1 survey, of whom one person wanted to stop participating, while 37 adolescents completed the Delphi survey by the final round.
    - 2 (5.4 %) participants experienced only self-harm, 8 (21.6 %) experienced self-harm and suicidal thoughts, 2 (5.4 %) experienced self-harm and had a plan for self-harm and suicide, 19 (51.4 %) conducted self-harm and suicidal attempt, 1 (2.7 %) experienced only suicidal thought, 1 (2.7 %) only planned for suicide, and 4 (10.8 %) experienced only suicidal attempt.
    - Mean age of the adolescent respondents was 18.5 (SD -2.65), while 75.7 % (n - 28) were females.
Methodology

- **Delphi process - Adolescent Panel**
  - Process: Questionnaire to the recruited panel via e-mail
  - Round 1 Delphi questionnaire items: composed based on 112 factors from the counselors Delphi study.
    - Of 112, 1 deleted, 6 combined into 1, and 1 added considering the appropriate terminology for adolescents.
  - 106 items for 1st round of Adolescent Delphi questionnaire
  - Participants were asked to respond using a 5-point Likert scale ranging from ‘low’ to ‘high’ on applicable factors
  - The adolescent panel also suggested additional factors through open questions.
  - The factors classified as deleted were excluded from the next round, and the remainder were re-rated (Ross, Kelly, & Jorm, 2014).

Methodology

- **Data Analysis**

  Content Validity Ratio (CVR) were analyzed to represent the degree of importance (Ayre & Scally, 2014)
  - CVR : percentage of panels for which raters responded ‘high, 4, or very high, 5’ in risk to a specific item, and ranges max +1.0 to min −1.0 (Kwon & Cho, 2015).
  - Expert Delphi: followed CVR .300 (agreement rate 65.0 %) or higher
  - Adolescent Delphi: reported 1st CVR .316 (65.8 %) and CVR .297 (64.9 %) or higher in the second and third rounds
  - Frequency analysis was also conducted.
  - All statistical analysis was performed using the IBM SPSS 21.0 program.
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Results of all rounds for biological, psychological, and societal and environmental factors, and a list of final factors are reported with consensus of expert and adolescent panels. +Items accepted and rejected as a risk factor, and the corresponding round consensus.

Panel details as follows

<table>
<thead>
<tr>
<th>Expert (School Counselor and Psychologist) N=63</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>4</td>
<td>6.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>59</td>
<td>93.7</td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>0-13</td>
<td>28</td>
<td>45.1</td>
<td>(3.8)</td>
</tr>
<tr>
<td></td>
<td>14-18</td>
<td>32.2</td>
<td>9.56</td>
<td>(3.82)</td>
</tr>
<tr>
<td></td>
<td>19-25</td>
<td>31.9</td>
<td>11.48</td>
<td>(3.87)</td>
</tr>
<tr>
<td></td>
<td>26-30</td>
<td>13.8</td>
<td>10.07</td>
<td>(3.75)</td>
</tr>
<tr>
<td></td>
<td>31-50</td>
<td>20.6</td>
<td>12.09</td>
<td>(4.65)</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
<td>11.01</td>
<td>(4.79)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adolescent N=97</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>9</td>
<td>24.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>88</td>
<td>75.7</td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>0-13</td>
<td>18.46</td>
<td>(2.65)</td>
<td>15</td>
</tr>
</tbody>
</table>

Experience of self harm or suicide

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self harm only</td>
<td>2</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self harm &amp; Suicidal thoughts</td>
<td>8</td>
<td>21.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self harm &amp; Suicide plan</td>
<td>2</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self harm &amp; suicide attempt</td>
<td>13</td>
<td>35.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suicidal ideation only</td>
<td>1</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suicidal plan only</td>
<td>1</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suicide attempt only</td>
<td>4</td>
<td>10.8</td>
<td></td>
</tr>
</tbody>
</table>

Delphi Rounds and distinguished factors

The number of items adopted to be re-rated, deleted, and newly added in the consensus rounds of our two Delphi studies
The CVR of endorsed risk factors from experts and adolescents in each round for the biological factors.

<table>
<thead>
<tr>
<th>Category</th>
<th>Factor</th>
<th>Expert CVR</th>
<th>Adolescent CVR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1st</td>
<td>2nd</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td></td>
<td>0.302</td>
<td>0.429</td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td>0.968</td>
<td>0.968</td>
</tr>
<tr>
<td>Anxiety</td>
<td></td>
<td>0.429</td>
<td>0.587</td>
</tr>
<tr>
<td>Bipolar disorder</td>
<td></td>
<td>0.683</td>
<td>0.873</td>
</tr>
<tr>
<td>Post traumatic stress disorder</td>
<td></td>
<td>0.429</td>
<td>0.460</td>
</tr>
<tr>
<td>Borderline personality disorder</td>
<td></td>
<td>0.333</td>
<td>0.460</td>
</tr>
<tr>
<td>Psychiatric problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Psychiatric difficulties requiring a psychiatric visit (depression, anxiety, bipolar disorder, PTSD, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperament</td>
<td>Dispositional vulnerability *</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Items that have been integrated or deleted considering the level of understanding of adolescents on technical terminology.
* Factors as added recommended by the experts.
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### Table: CVR of Endorsed Risk Factors from Experts and Adolescents

<table>
<thead>
<tr>
<th>Rank</th>
<th>Experts</th>
<th>rank</th>
<th>Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Past and current suicide attempts (100 %, 4.89)</td>
<td>1</td>
<td>Past and current suicide attempts (86.5 %, 4.35)</td>
</tr>
<tr>
<td>2</td>
<td>Hopelessness (100 %, 4.86)</td>
<td>2</td>
<td>Impulsivity (83.8 %, 4.24)</td>
</tr>
<tr>
<td>3</td>
<td>Negative self-image (100 %, 4.67)</td>
<td>3</td>
<td>Feeling frustrated and hopeless because ‘I don’t know why I’m depressed and I can’t get out of depression’ (81.8 %, 4.32)</td>
</tr>
<tr>
<td>4</td>
<td>Feeling worthless (98.4 %, 4.84)</td>
<td>4</td>
<td>Victims of school violence (81.8 %, 4.27)</td>
</tr>
<tr>
<td>5</td>
<td>Depression (98.4 %, 4.79)</td>
<td>5</td>
<td>The idea that I’m a loser who can’t do anything (81.8 %, 4.27)</td>
</tr>
<tr>
<td>6</td>
<td>Impulsivity (98.4 %, 4.76)</td>
<td>6</td>
<td>Suicidal thinking (81.8 %, 4.19)</td>
</tr>
<tr>
<td>7</td>
<td>Family interaction problem (lack of support and connection, dysfunctional communication) (98.4 %, 4.75)</td>
<td>7</td>
<td>Helplessness that tomorrow will continue the same as today (81.8 %, 4.19)</td>
</tr>
<tr>
<td>8</td>
<td>Suicidal thinking (98.4 %, 4.71)</td>
<td>8</td>
<td>Acquired capability for suicide (81.8 %, 4.19)</td>
</tr>
<tr>
<td>9</td>
<td>Catastrophe (98.4 %, 4.70)</td>
<td>9</td>
<td>Domestic abuse experience (physical, emotional, sexual abuse and neglect) (78.4 %, 4.24)</td>
</tr>
<tr>
<td>10</td>
<td>Vulnerable to stress (98.4 %, 4.68)</td>
<td>10</td>
<td>Helplessness (78.4 %, 4.19)</td>
</tr>
<tr>
<td>11</td>
<td>Guilt (98.4 %, 4.68)</td>
<td>11</td>
<td>Environmental limitations that I can’t manage on my own (or cannot maintain my self-esteem) (78.4 %, 4.16)</td>
</tr>
<tr>
<td>12</td>
<td>Absence of meaning or purpose in life (98.4 %, 4.68)</td>
<td>12</td>
<td>Guilt (78.4 %, 4.14)</td>
</tr>
<tr>
<td>13</td>
<td>Hopelessness that talking to others won’t help (98.4 %, 4.64)</td>
<td>13</td>
<td>Felt unsupported or unprotected when there was a difficult problem (78.4 %, 4.05)</td>
</tr>
<tr>
<td>14</td>
<td>Powerlessness (98.4 %, 4.62)</td>
<td>14</td>
<td>Absence of meaning or purpose in life (78.4 %, 3.97)</td>
</tr>
<tr>
<td>15</td>
<td>Disconnection and rejection schema (98.4 %, 4.60)</td>
<td>15</td>
<td>Consistent exposure to family conflicts (marital fights, domestic violence, etc.) (78.4 %, 3.95)</td>
</tr>
</tbody>
</table>

Note: +Added factor recommended by adolescents.  
× Factors added as recommended by the experts.  
% Factors adopted by both experts and adolescents.
Conclusion

- The present study contributed to understanding of the risk factors of adolescent suicide by investigating the risk factors of Korean adolescents and counseling experts experienced in adolescent suicide.
- Biological, psychological, and sociological risk factors contributing to adolescent suicide were identified from the literature review and supported by the expert and adolescent Delphi studies.
- This study has significance in laying the foundation for a direct and comprehensive understanding of adolescent suicidal behavior by comprehensively considering adolescent suicide risk factors,
  - included the personal and environmental domain
- Systemically implemented school and societal psychology interventions considering the identified biological, psychological, and sociological factors may reduce suicide risks and promote adolescent survival rates.
- Although this study was conducted in South Korea, the findings are likely relevant to suicidal adolescents and their school psychologists in further understanding suicide risk in adolescents.
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Thank you
Counselors’ Perspective on Preventing Suicide in Korean Adolescents

Kim, Young Ae & Lee, Dong Hun

Doc. Student, Sungkyunkwan Univ., Korea
Director, Traumatic Stress Center/ Chairman, Counseling Council for University Student, Prof., Sungkyunkwan Univ., Korea

<Abstract>

This study explored the protective factors against adolescent suicide from the perspective of 57 Korean counselors with more than 10 years’ experience in counseling adolescent suicides. Based on content analysis, protective factors for Korean adolescents were divided into four categories: personal, family, social, and COVID-19. We also identified specific treatments and ways to prevent adolescent suicide based on counselors’ experiences with suicidal Korean adolescents, which we classified as attitudes and interventions judged to be effective based on counselors’ experiences. The factors in this study were divided into three categories: personal, family, and social. Finally, based on the findings, the possible ramifications for characterizing the suicide experiences of adolescents are examined from a counseling viewpoint.

Counselors’ Perspectives on Preventing Suicide in Korean Adolescents

Young Ae Kim, Dong Hun Lee*

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*Professor, Director, Traumatic Stress Center, Sungkyunkwan University, Korea

Contents

1. Introduction
2. Methods
3. Results
4. Discussion
5. References
1. Introduction

- **Worldwide, suicide is a growing public health concern**, with the World Health Organization (WHO) recording it as the number one killer of adolescents in 2022.

- Suicide involves suicidal ideation, intentions, and attempts, which are deliberate acts aimed at taking one’s life (Berman et al., 1991).

- **South Korea’s suicide rate is the highest among OECD nations**, reaching a notable 26.0 cases per 100,000 individuals, which marked a 0.3 increase compared to 2020 (OECD, 2021).

- While suicide rates across various age groups have demonstrated a consistent downward trend, during the years of 2019-2021 **the rate of suicide for Koreans aged 10 to 19 steadily increased from 2.1 to 2.5 and arriving at 2.7 respectively** (Statistics Korea, 2021).

1. Introduction

- Thus, adolescents who make an initial suicide attempt are reported to have a 30% chance of attempting suicide within the first year and 5% mortality after nine years, and 44% of survivors report repeated suicide attempts (Cooper et al., 2005).

- **Adolescents may choose suicide impulsively to escape psychological difficulties, social conflicts, and distressing realities**, even without showing any prior signs of suicidal intentions, unlike adults with a genuine intent to die (Cooper, 1998).

- Various reasons contributing to adolescent suicide include **life stressors, family discord, substance abuse (such as alcohol consumption), low social support, and conflicts with friends** (Weller et al., 2021).

- Quarantine, fear of illness, economic struggles, stress of health workers, social isolation, future uncertainty, and the loss of normal routines were all introduced by Gummell et al. (2020) as components from the pandemic which may increase suicidal tendencies.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

1. Introduction

- Accordingly, it is imperative to research and understand the protective factors that shield against suicide related to ideation, intent, attempt, and behavior to prevent and predict adolescent suicide.

- However, most previous studies on protective factors against adolescent suicide have focused on Western and European populations, leaving a significant research gap with respect to Asian countries and, more specifically, South Korean adolescents.

- Therefore, further research is necessary to clarify strategies to mitigate the adverse impacts of suicidal ideation and behaviors in Korean adolescents by shedding light on and strengthening protective factors.

- Protective factors reduce the possibility of adolescents engaging in suicidal behaviors and are deemed essential as a defense against suicidal impulses (Wasserman et al., 2021).

1. Introduction

- Lew et al. (2020) indicated that even when they encounter high-risk contexts, many young people exhibit resilience and manage to avoid suicidal crises through protective factors such as reframing a meaningful life, adequate nutrition, and parent-child interaction.

- Kessler et al. (2005) also reported the significance of counselors in examining practical, effective intervention methods that can help adolescents at risk of suicide in practice.

- School counselors assume a pivotal role in fostering the mental health and growth of students while serving as gatekeepers for suicide prevention among their students (Mo et al., 2018).

- Effective interventions approaches for adolescent suicide include cognitive-behavioral therapy, dialectical behavior therapy, family therapy, and parental education (Mcwton & Andrews, 2016).
1. Introduction

Purpose of the Study

- This study examined protective factors and effective interventions for adolescents against suicide using Krippendorff’s (2004) content analysis.

- This study explored how protective factors and effective counselor interventions can prevent adolescent suicide, based on the perspectives of experienced counselors with over 10 years of expertise in adolescent suicide.

- This study can provide foundational information that may assist in the prevention of adolescent suicide behavior within the counseling field by offering basic insights and comprehensively exploring techniques and effective skills that genuinely minimize the negative impact of counselors’ perspectives on adolescent suicide.

2. Methods

Study Participants

- We recruited participants who had counseled high-risk adolescents in relation to suicide for an average of more than 10 years, could deeply understand the characteristics of suicidal adolescents, and were capable of leading their treatment.

- We interviewed 57 participants (7 male and 50 female) who worked at Wee Centers in 2022.

- We selected participants from different Wee Centers, including the School Wee Center (32), Hospital Wee Center (13), and Special Counseling Wee Center (12), where high-risk adolescents with suicidal thoughts due to maladjustment in school life visit to seek help.

- Participants ranged in age from 25 to 60 years and the mean age was 39.5.

- By location, 40 participants worked in a capital area, and 17 worked in a rural area.
2. Methods

Procedure

- This study collected data through **focus group interviews** to gather and understand information on the specific experiences and perspectives of counselors who counsel adolescents on protecting against suicide at counseling sites.

- The interviews were conducted **from February to June 2022 and took place over approximately four months**. The total number of participants involved in this study was 57, and they were divided into 16 groups, with each group comprising 2–5 individuals.

- **The interviews explored participants’ clinical counseling experiences with suicidal adolescents.**

- A professor of counseling psychology and education in addition to four students (two doctoral and two master’s level) interviewed the participants. All interviews were conducted in a group section over a period of **2.5–3 hours** in a serene atmosphere in the conference room.

---

2. Methods

Procedure

- To thoroughly investigate the clinical practice of counselors who counseled teenagers at risk of suicide, the researchers employed an open, **semi-structured interview format**.

- Within each group, the interviews were conducted in a format in which each participant responded to the interview questions individually.

- **The interviews began with the question**, “What do you think about the characteristics of suicidal adolescents while counseling them? What are the possible suicide prevention measures that can be taken to reduce suicide deaths among Korean suicidal adolescents who might be at risk?”

- At the end of the interview, each participant was presented with a **$70 gift voucher** as compensation.

- Within two weeks, each of the recorded interviews were transcribed word-for-word.
2. Methods

Data Analysis

- The researchers analyzed every interview with Krippendorff’s (2004) content analysis method. As content analysis is a way to divide and group participants’ statements along dimensions, it is beneficial when attempting to understand the statements’ content meticulously (Krippendorff, 2004).

- Over the course of six months, the research team met twice a week to execute each analysis process on the interview data collectively, producing a high level of consensus among the teams.

- Each researcher read the transcripts four to five times during analysis.

2. Methods

Data Analysis

- Using these transcripts, the following five steps of the Krippendorff content analysis were performed.

1) The first step involved comprehensively reviewing the entire transcript to assess the relevance of participants’ statements from their counseling experiences with suicidal adolescents in exploring protective factors against adolescent suicide.

2) In the second step, researchers involved the researchers recognizing meaningful statements by the participants related to protective factors against adolescent suicide and constructing meaning from those statements.

3) During the categorization stage, the third step, we conceptualized the semantic materials from the second step and categorized the interconnected and corresponding content into prominent themes.

4) In the fourth step, we classified and analyzed the concepts and groupings of semantic statements from the participants based on various dimensions.

5) Finally, all researchers independently reread the transcripts to calculate the frequency of each theme.
2. Methods

Ethical Considerations
- The Institutional Review Board of University authorized the use of the interview questionnaires.
- Before the interviews, we notified participants that the interview content would not be used for any purpose other than research.
- Due to the focus of the interviews being potentially heavy emotional and psychological experiences, the participants were told prior to the interview that they could stop at any time.
- After these explanations, each participant gave permission to continue the interview.

3. Results

- We explored the insights shared by the participants concerning factors that could serve to protect against suicide among Korean adolescents. We derived 9 main themes and 20 subthemes along the four dimensions of personal, family, social, and COVID-19 (See Table 1).

Table 1. Protective factors for suicide in adolescents (N = 57)

<table>
<thead>
<tr>
<th>Protective factors for suicide in adolescents</th>
<th>n(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal</td>
<td>14(25%)</td>
</tr>
<tr>
<td>Meaning of Life</td>
<td>11(19%)</td>
</tr>
<tr>
<td>Determining One’s Direction</td>
<td>9(16%)</td>
</tr>
<tr>
<td>Discovering One’s Hobby</td>
<td>8(14%)</td>
</tr>
<tr>
<td>Experience of Success</td>
<td>7(12%)</td>
</tr>
<tr>
<td>Completing Small Tasks</td>
<td>5(9%)</td>
</tr>
<tr>
<td>Achieving Academic Goals</td>
<td>3(5%)</td>
</tr>
<tr>
<td>Physical Health Care</td>
<td>6(11%)</td>
</tr>
<tr>
<td>Establishing Regular Sleep</td>
<td>6(11%)</td>
</tr>
<tr>
<td>Eating at Fixed Time</td>
<td>3(5%)</td>
</tr>
<tr>
<td>Family</td>
<td>14(25%)</td>
</tr>
<tr>
<td>Positive Parental Attitudes</td>
<td>11(19%)</td>
</tr>
<tr>
<td>Positivity Related to Children’s Treatment</td>
<td>9(16%)</td>
</tr>
<tr>
<td>Empathy, Acceptance</td>
<td>8(14%)</td>
</tr>
<tr>
<td>Positive Home Atmosphere</td>
<td>4(7%)</td>
</tr>
<tr>
<td>A Harmonious and Supportive Family</td>
<td>4(7%)</td>
</tr>
<tr>
<td>A Communicating Family</td>
<td>3(5%)</td>
</tr>
</tbody>
</table>
3. Results

Table 1. Protective factors for suicide in adolescents (N = 57)

<table>
<thead>
<tr>
<th>Protective Factors</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td></td>
</tr>
<tr>
<td>Meaningful Connections</td>
<td>24(42)</td>
</tr>
<tr>
<td>Finding Friends, Significant Others Who Understand Me</td>
<td>22(39)</td>
</tr>
<tr>
<td>Meeting a Helpful Teacher or Counselor</td>
<td>12(21)</td>
</tr>
<tr>
<td>Developing a Bond with a Favorite Celebrity</td>
<td>6(11)</td>
</tr>
<tr>
<td>Transition to a New Environment</td>
<td>7(12)</td>
</tr>
<tr>
<td>Transferring to a Different School</td>
<td>5(9)</td>
</tr>
<tr>
<td>Experiencing a Part-time Job</td>
<td>2(4)</td>
</tr>
<tr>
<td>Support from the Government</td>
<td>5(9)</td>
</tr>
<tr>
<td>Receiving Financial Support for Counseling and Treatment</td>
<td>4(7)</td>
</tr>
<tr>
<td>Receiving Support for Education Expenses</td>
<td>4(7)</td>
</tr>
<tr>
<td>COVID-19</td>
<td></td>
</tr>
<tr>
<td>Benefits of Online Experience</td>
<td>19(33)</td>
</tr>
<tr>
<td>Reducing Stress from Friendships</td>
<td>14(25)</td>
</tr>
<tr>
<td>Ability to Obtain a Certificate Online</td>
<td>4(7)</td>
</tr>
<tr>
<td>Gaining a Sense of Camaraderie with Friends Online</td>
<td>4(7)</td>
</tr>
<tr>
<td>Locus of Control</td>
<td></td>
</tr>
<tr>
<td>Maintaining a Regular Routine in Life</td>
<td>12(21)</td>
</tr>
<tr>
<td>Thankfulness for One’s Life Pre-COVID</td>
<td>3(5)</td>
</tr>
</tbody>
</table>

3. Results

Protective factors for suicide in adolescents

<Personal Dimension>

Meaning of Life

Determining One’s Direction. Some participants reported that the determination of career decisions by adolescents had a positive impact on alleviating adolescent suicide (16%).

Discovering One’s Hobby. Some participants reported that helping adolescents discover their hobbies positively affected them by reigniting their interest in life, thus reducing their risk of suicide (14%).

Experience of Success

Completing Small Tasks. Participants stated that another significant shift occurred when these vulnerable teenagers began to experience moments of success sequentially (9%).

Achieving Academic Goals. Participants reported that suicidal adolescents were protected from suicide risk by achieving their academic goals, which are considered one of the most important tasks during their adolescent years (5%).
3. Results

Protective factors for suicide in adolescents

<Personal Dimension>

Physical Health Care

Establishing Regular Sleep Patterns. Consistent with the fact that adolescents struggling with persistent suicidal ideation often suffer from disrupted sleep patterns and symptoms of insomnia, some participants highlighted the significance of maintaining regular sleep schedules because these physical health habits play an integral role in shaping mental health (11%).

Eating at Fixed Times. Irregular eating habits can lead to digestive disorders, appetite loss, lethargy, and sleep disturbances, all of which can negatively impact adolescent health. Therefore, instilling fixed mealtime habits in adolescents can positively impact their overall physical and mental well-being (5%).

3. Results

Protective factors for suicide in adolescents

<Family Dimension>

Positive Parental Attitudes

Positivity Related to Children’s Treatment. The positive role attitude of parents in their children’s treatment was identified as a pivotal protective factor capable of mitigating suicidal desires in the long run (16%).

Empathy, Acceptance. Some participants reported that when parents showed attentive concern for their child’s suicidal thoughts and made efforts to understand and accommodate their child’s current emotional state, it helped reduce their child’s suicidal thoughts and behaviors (14%).

Positive Home Atmosphere

A Harmonious and Supportive Family. Participants reported that despite economic difficulties at home, students with supportive family relationships were extremely unlikely to make suicide reports (7%).

A Communicating Family. Participants confirmed the importance of parents engaging in conversations and sharing about their child’s daily life, such as talking about what happened that day (5%).
3. Results

Protective factors for suicide in adolescents
<Social Dimension>

Meaningful Connections
Finding Friends, Significant Others Who Understand Me. Teenagers struggling with suicidal thoughts experience a sense of relief when they have close friends and a partner who genuinely care for and understand them (39%).

Meeting a Helpful Teacher or Counselor. Some participants emphasized the profound impact of having aid and support from teachers or counselors who hold meaning in a child’s life, even if they are not parent (21%).

Developing a Bond with a Favorite Celebrity. Developing a bond with a favorite celebrity was reported by participants to have a positive impact as a protective factor against suicide by bringing vitality to the lives of suicidal adolescents (11%).

3. Results

Protective factors for suicide in adolescents
<Social Dimension>

Transition to a New Environment
Transferring to a Different School. Some participants reported that after the transfer of suicidal adolescents who were experiencing difficulties with school relationships to different schools, they showed a gradual decrease in the risk of suicide (9%).

Experiencing a Part-Time Job. Some participants reported that gaining work experience through part-time jobs to engage in social life helps alleviate youth suicide (4%).

Developing a Bond with a Favorite Celebrity. Developing a bond with a favorite celebrity was reported by participants to have a positive impact as a protective factor against suicide by bringing vitality to the lives of suicidal adolescents (11%).
3. Results

Protective factors for suicide in adolescents
<Social Dimension>

Support from the Government
Receiving Financial Support for Counseling and Treatment. Some participants reported that financial support from the government can encourage suicidal adolescents to participate in counseling or make treatment more accessible for adolescents contemplating suicide, which can significantly help in regularly monitoring the psychological and emotional difficulties of adolescents and contribute to preventing suicide among them (7%).

Receiving Support for Education Expenses. Some participants revealed that receiving support, such as education expenses offered within certain government-supported organizations, was beneficial for suicidal adolescents (7%).

3. Results

Protective factors for suicide in adolescents
<COVID-19 Dimension>

Benefits of Online Experience
Reducing Stress from Friendships. The participants stated that in the early days under COVID-19, when all school classes were conducted remotely, suicidal adolescents experienced reduced stress as tension in their relationships decreased, and they no longer encountered conflicts in friendships (25%).

Ability to Obtain a Certificate Online. The participants reported that, in the post-COVID non-face-to-face environment, tasks that had previously been limited to offline activities were now being undertaken online, making certification more accessible in less time, regardless of location (7%).

Gaining a Sense of Camaraderie with Friends Online. Participants reported that suicidal adolescents who had originally experienced difficulties in forming friendships offline found solace in establishing a sense of camaraderie with others through online chats when transitioning online (7%).
3. Results

Protective factors for suicide in adolescents

<COVID-19 Dimension>

Locus of Control

*Maintaining a Regular Routine in Life.* As the period of not attending school extended under COVID-19, adolescent routines were disrupted, causing them to develop irregular habits such as excessive sleep or gaming, leading to a lack of structure in their lives. When COVID-19 restrictions began to ease, the return to school with irregular schedules caused confusion. However, reestablishing a regular routine after this adjustment period was crucial in preventing adolescent suicide (21%).

*Thankfulness for One’s Life Pre-COVID.* The participants mentioned that while some adolescents were comfortable staying home after COVID-19, most experienced negative emotions such as depression and isolation during the initial pandemic situation and the unpredictable, prolonged quarantine period (5%).

- We also explored additional factors related to the counselor’s effective attitude and intervention that help support the prevention of adolescent suicide based on the counselor’s perspective, which was referred to as the “Counselor’s perspective on preventing suicide in adolescents.” (See Table 2)

<table>
<thead>
<tr>
<th>Counselors’ perspectives on preventing suicide in adolescents</th>
<th>n(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal:</td>
<td></td>
</tr>
<tr>
<td>Cognitive and Emotional Interventions:</td>
<td>16(28)</td>
</tr>
<tr>
<td>Broadening One’s Thought Perspectives:</td>
<td>13(23)</td>
</tr>
<tr>
<td>Sensing One’s Emotions:</td>
<td>9(16)</td>
</tr>
<tr>
<td>Coping Skills Education:</td>
<td>12(21)</td>
</tr>
<tr>
<td>Developing Practical Alternatives:</td>
<td>11(19)</td>
</tr>
<tr>
<td>Explaining Symptoms of Somatization:</td>
<td>3(4)</td>
</tr>
</tbody>
</table>
3. Results

Counselor’s perspective on preventing suicide in adolescents

Personal Dimension

Cognitive and Emotional Interventions

Broadening One’s Perspectives. A critical element highlighted by participants was the significance of instilling and broadening in students struggling with mistakes they have made (23%) the idea that “I may have imperfections, but they contribute to my personal growth process” (P25).

Sensing One’s Emotions. A focal point for some participants was the observation that suicidal adolescents gradually reduced their suicidal behaviors as they delved into and reflected upon their emotions (16%).

Coping Skills Education

Developing Practical Alternatives for Suicide Prevention. Some participants stressed that safeguarding suicidal adolescents might include creating an emergency contact network or establishing immediate connections to school or crisis management officers via a button (19%).

Counselor’s perspective on preventing suicide in adolescents

Personal Dimension

Coping Skills Education

Explaining Symptoms of Somatization. Some participants emphasized the importance of counselors educating suicidal adolescents about somatic symptoms and warning signs (4%).

Career Counseling

Identifying Strengths and Career Guidance. Participants emphasized the importance of encouraging suicidal adolescents to identify their strengths and providing guidance on career paths (7%).

Writing College Applications. Participants reported that helping adolescents who had obtained the qualifications to attend college apply for and submit university applications during the admission period of hopeful specialized colleges led to positive changes in suicidal adolescents (4%).
3. Results

Counselor’s perspective on preventing suicide in adolescents

*<Family Dimension>*

**Counseling and Education for Parents**

*Promoting Parental Participation in Counseling.* Some participants reported that involving parents and other family members in the treatment process significantly enhanced therapeutic outcomes (16%).

*Educating Parents to Understand and Accept Children’s Behaviors.* Some participants underscored the critical role of providing counseling and education for parents to understand their children’s behaviors within the context of suicide intervention (12%).

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3. Results

Counselor’s perspective on preventing suicide in adolescents

*<Social Dimension>*

**Factors Related to the Supportive Counselor**

*Empathetic Understanding.* Participants highlighted that when suicidal students declined counseling, counselors helped them gradually engage in counseling by empathizing with and understanding the negative emotions they initially felt about counseling (39%).

*Authenticity.* Some participants highlighted that notable transformations in adolescents could occur when counselors embrace a nurturing and amicable approach and become steadfast companions (19%).
4. Discussion

1) Protective Factors

- This study explored the protective factors and associated individual components of Korean teenagers at risk of suicide, derived from the counselors’ experiences.

- Among the personal factors, the one with the highest frequency in this study, “determining one’s direction” or “discovery of one’s hobby” through the meaning of life, can contribute to alleviating the issue of suicide among adolescents.

- A previous study showed that adolescents who lack significance in their lives and have no future or job ambitions are more likely to consider and attempt suicide as their levels of sadness and anxiety increase (Marcenko et al., 1999).

- Therefore, adolescents planning their career paths, gaining a clear sense of life’s purpose, and moving forward can help mitigate the risk of suicide.

4. Discussion

1) Protective Factors

- In this study, participants reported that discovering areas of interest (such as attending a lecture of interest or learning how to apply make-up) made a positive difference to Korean suicidal adolescents, providing them with a sense of hope and fulfillment.

- Our findings indicate that positive parental attitudes, which have the highest frequency of occurrence among family factors related to protective factors among Korean suicidal adolescents, can mitigate the risk of suicide among Korean adolescents.

- Therefore, parents must first recognize their children’s psychological distress and crisis status related to suicidal behavior and provide ongoing attention to guide them in obtaining appropriate help and support, such as counseling, medication, and other necessary assistance.
4. Discussion

1) Protective Factors
   - The results of this study indicate that “meaningful connections with others,” which had the highest frequency among all protective factors for Korean suicidal adolescents, played an essential role in mitigating suicidal thoughts.
   - The findings of this study showed that the highest frequency among COVID-19-related factors associated with protective factors for Korean suicidal adolescents was the transition to online schooling due to the COVID-19 pandemic situation, which significantly prevented suicides among Korean adolescents.
   - This phenomenon has emerged because of the increased use of remote activities for COVID-19 prevention, which naturally leads to physical distancing in friendships. Such changes have provided an opportunity to avoid unnecessary conflict among friends, which, in turn, could have a positive impact on preventing adolescent suicide.

2) Effective counselor attitudes and intervention strategies for preventing adolescent suicide
   - Some participants reported that activities aimed at structuring their thoughts and feelings during counseling resulted in a decrease in suicidal thoughts among Korean adolescents.
   - The high-frequency suicide-preventive coping strategies reported by participants included providing an immediate connection, such as a crisis coordinator through the push of a button to implement safety measures for suicidal youths or installing a stopper on a porch door to prevent it from opening, which could also be considered a suicide prevention measure.
   - Effective counselor interventions related to family factors to prevent adolescent suicide in Korea, as parents play an important role as protective factors for suicidal adolescents, indicate that the counseling and education of parents about their children’s suicides is an effective suicide intervention.
4. Discussion

2) Effective counselor attitudes and intervention strategies for preventing adolescent suicide

- Finally, effective counselor attitudes related to social factors that can prevent suicide among Korean youths were found to have a considerably high frequency of social support for suicidal adolescents, as if they were parents.

- Counselors, instead of parents, can provide suicidal adolescents with the opportunity to listen and provide them with trust, highlighting counselors as an effective strategy to minimize the negative effects of adolescent suicide.

4. Discussion

Implication

- The significance of this study was in establishing a foundational understanding of the characteristics related to adolescent suicide by examining protective factors along the Personal, Family, Social, and COVID-19 dimensions in the context of South Korea based on the experiences of counselors who have been communicating with and observing adolescents displaying suicidal behaviors for an average of more than 10 years in school settings.

- This study could confirm the attitudes and therapeutic interventions of counselors toward adolescent suicide prevention from the perspective of expert counselors who have effectively used practical approaches and methods while counseling suicidal adolescents directly.

- According to the results of this study, another effective counselor intervention is suggested to be “broadening one’s thought perspectives,” which is crucial in mitigating adolescent suicide.

- Therefore, integrating these two counselor interventions and approaches could be highly useful in developing therapeutic plans and interventions for suicidal adolescents in counseling settings.
4. Discussion

Limitation

- In future research, it is essential to explore the particular experiences of individuals close to suicidal adolescents, as this is crucial.
- Future research investigating the impact of COVID-19 on teenage suicide are required to determine the scope of the pandemic’s impact on suicidal behavior, suicide attempts, and its other negative developments.
- Suicide involves complex mechanisms in which various factors interact; ultimately, protective factors can emerge from the interplay with risk factors. Therefore, in follow-up studies, it is essential to explore the risk and protective factors related to adolescent suicide.
- Finally, to assess the practical effectiveness of the results of this study, future research should explore the protective factors for suicidal adolescents from a longitudinal perspective.

5. Reference


Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly
Cluster Types by the Level of Death Anxiety and Meaning in Life: Group Differences in Death Acceptance and Psychological Well-being

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Prof., Dept. of Psychology, Jeonbuk Nat’l Univ., Korea

<Abstract>

The aim of this study was to cluster death anxiety and meaning in life and to identify differences in death acceptance and psychological well-being between the clusters. The results of cluster analysis, one-way ANOVA and post-hoc analysis of 339 older people aged 65 years and over are as follows. First, four clusters were derived according to levels of death anxiety and meaning in life. Cluster 1 was 'high death anxiety, low meaning in life', Cluster 2 was 'low death anxiety, high meaning in life', Cluster 3 was 'high death anxiety, high meaning in life', Cluster 4 was 'low death anxiety, low meaning in life'. Secondly, when examining the differences in death acceptance according to cluster, it was found that neutral acceptance was significantly higher in cluster 2, and approach acceptance was significantly higher in clusters 2 and 4. In addition, escape acceptance was found to be significantly higher in clusters 1 and 4. Thirdly, the differences in psychological well-being levels by cluster showed that clusters 2 and 3 had the highest levels. Lastly, the study discussed limitations and proposed directions for future research.

<초 록>

본 연구는 노인의 죽음 불안과 삶의 의미 조합에 따라 형성되는 군집을 확인하고 군집별 죽음 수용, 심리적 안녕감 차이가 있는지 확인하였다. 노인 339명을 대상으로 군집분석과 일반변량분석 및 사후검증을 실시한 결과는 다음과 같다. 첫째, 죽음 불안과 삶의 의미 수준에 따라 4개의 군집이 도출되었다. 군집 1은 '높은 죽음 불안, 낮은 삶의 의미 집단', 군집 2는 '낮은 죽음 불안, 높은 삶의 의미 집단', 군집 3은 '높은 죽음 불안, 높은 삶의 의미 집단', 군집 4는 '낮은 죽음 불안, 낮은 삶의 의미 집단'으로 명명하였다. 둘째, 군집에 따른 죽음 수용 하위 차원의 차이를 살펴본 결과, 중립적 수용은 군집 2에서 유의하게 높은 것으로 나타났고, 접근적 수용은 군집 2와 군집 4에서 유의하게 높은 것으로 나타났다. 또한 도피 수용은 군집 1과 군집 4에서 유의하게 높게 나타났다. 셋째, 군집에 따른 심리적 안녕감은 군집 2와 군집 3에서 유의하게 높게 나타났다. 이러한 연구결과를 바탕으로 시사점 및 제한점 그리고 후속 연구를 위한 제언을 제시하였다.
Cluster Types by the Level of Death Anxiety and Meaning in Life: Group Differences In Death Acceptance and Psychological well-being

2024 SKKU Traumatic Stress Center international Conference

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Prof., Dept. of Psychology,
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1. Introduction
2. Research Questions
3. Methods
4. Results
5. Discussion
6. References
1. Introduction

- Death allows us to gain freedom and meaning in our finite lives (Heidegger, 1927)
  ⇒ When we face death, we are better able to deal with death anxiety (May, 1961)

- Death is seen as a threat to humans (Wong & Tomer, 2011)

- Denial and avoidance (Heidegger, 1927)
  ⇒ Denial and avoidance of death, experiencing death anxiety (Hwang & Shim, 2022)

1. Introduction

1) Death Anxiety

- Emotional and physiological responses triggered by thoughts of death (Templer, 1970)

- Individuals are finite beings and cannot be completely free from death anxiety (Wong et al., 2015)

- Rather than trying to eliminate the death anxiety, it is important to manage it well
  - Death anxiety stems from the awareness that they have not lived a meaningful life (Powell, 2010)

  ⇒ To explore the relationship between death anxiety and the meaning in life.
1. Introduction

2) Meaning in Life

- The goals in life that an individual considers important and meaningful (Park & Kwon, 2012).

- The positive effect of meaning in life on old age
  - When faced with adversity, cope with the pain by giving meaning to the situation (Park & Kwon, 2012).
  - Bringing stability to an unstable life (Baumeister & Vohs, 2002).

- The positive influence of meaning in life is much greater in old age than in young (Kim et al., 2011)
  - Helping older people cope with crisis and loss in a time of rapid change (Jeong et al., 2022).

⇒ It is important to maintain meaning in life during old age

1. Introduction

3) Death Anxiety and Meaning in Life

- Previous research has tried to reduce death anxiety by giving meaning in life (Kil, 2023; Yüksel et al., 2017; Zhang et al., 2019).

- Death anxiety impact on the individual can vary depending on the meaning in life
  - The level of meaning in life acts as a variable that regulates the experience of death anxiety (Lee et al., 2022).

- For humans, the meaning given to an event has a greater impact than the content of the event experienced (Wong, 2013)
  ⇒ People with high meaning in life are able to focus on life goals and values despite death anxiety

⇒ It is necessary to confirm the interaction between death anxiety and meaning in life
1. Introduction

3) The need for cluster analysis of Death Anxiety and Meaning in Life

1. Dual-system model (Wong & Tomer, 2011)

⇒ ‘Fear of death’ and ‘desire for meaning’ coexist → It is important to manage both experiences well.

- Dealing with both experiences through avoidance and approach systems

<table>
<thead>
<tr>
<th></th>
<th>Definition</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>avoidance</td>
<td>Resistance to the fear of death and loss</td>
<td>Pursuit of self-preservation</td>
</tr>
<tr>
<td>system</td>
<td>Defensive function to protect itself</td>
<td>Triggers a variety of self-defence behaviours</td>
</tr>
<tr>
<td>approach</td>
<td>Provides a foundation for a meaningful life</td>
<td>Provides the energy you need to live a purposeful life</td>
</tr>
<tr>
<td>system</td>
<td></td>
<td>Creation of positive feelings about life</td>
</tr>
</tbody>
</table>

⇒ The avoidance system and the approach system are complementary, and the two systems must be balanced.

1. Introduction

3) The need for cluster analysis of Death Anxiety and Meaning in Life

1. Dual-system model (Wong & Tomer, 2011)

- The interaction between the avoidance system, which copes with death anxiety, and the approach system which pursues meaningful goals

⇒ Determining an individual's attitude to life and death

- We categorized clusters based on levels of death anxiety and meaning in life.

⇒ We anticipated that each cluster would exhibit variations in both death acceptance and psychological well-being
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

1. Introduction

4) Death Acceptance

- Acknowledgement of the finiteness of life and the inevitability of death (Kwon, 2019).
- Death acceptance is divided into three dimensions (Wong et al., 1994)
  - Neutral acceptance: facing death rationally as an inevitable end of every life
  - Approach acceptance: accepting death as a gateway to a better afterlife
  - Escape acceptance: choosing death as a better alternative to a painful existence
- In old age, it is important to accept death (Erikson, 1963)
  - Acceptance of death is the most mature and healthy attitude of a finite being (Hwang & Sim, 2022)

→ Analysing these sub-dimensions within each cluster can provide insights into individuals’ attitudes towards the end of life

1. Introduction

5) Death Acceptance, Death Anxiety and Meaning in Life

- Death Anxiety: Significant negative correlation with neutral acceptance,
  no significant correlation with escape acceptance and approach acceptance (Ch & An, 2023).
- Meaning in Life: Positive relationship between neutral and approach acceptance (Brudek & Sekowski, 2021; Dragan, 2021),
  Negative relationship with escape acceptance (Brudek & Sekowski, 2021; Youn, 2020)
  - The interaction between the search for meaning in life and death anxiety reduces the negative impact of death anxiety on neutral acceptance (Hwang & Shim, 2022).
  ⇒ It is necessary to confirm the differences between death anxiety and meaning of life clusters in the death acceptance subdimension.
1. Introduction

6) Psychological well-being

- A concept that describes the degree to which an individual functions well as a member of society, with an emphasis on self-actualization and a meaningful life (Ryff, 1989)
  - self acceptance, positive relations with other, autonomy, environmental mastery, purpose in life, personal growth

- Psychological well-being has been shown to accurately predict happiness in older people (Cho, 2020).
  - In old age, social isolation due to loss of social roles after retirement can affect individual adjustment (Song & Yoo, 2011).
  - Happiness in old age can be better understood in terms of psychological well-being, which indicates whether people can function effectively in society (Ryff & Keyes, 1995).

⇒ Identify differences in each group’s attitude to life through psychological well-being.

7) Psychological well-being, Death Anxiety and Meaning in Life

- Death anxiety is a major factor in lower psychological well-being
  (Kim & Song, 2013; Nam & Jung, 2011; Sharma & Jain, 2020; Sreelekha & Sia, 2022)

- Meaning in life positively predicts psychological well-being
  (Folkman et al., 1996; Kim & Kim 2020; Raei & Lee, 2015; Steger et al., 2006)

- People who experience high levels of death anxiety can still maintain well-being if they perceive a high level of meaning in their lives.
  - When meaning in life is high, the negative impact of death anxiety on subjective well-being is reduced
    (Lee et al., 2022)
  - If you have a clear sense of purpose and meaning in life, you are more likely to be able to cope with death anxiety and experience psychological well-being (Reckers, 2020; Steger & Frazier, 2005)

⇒ It is necessary to confirm the differences between death anxiety and meaning of life clusters in the Psychological well-being
2. Research Questions

Research Question 1
How can clusters be characterised based on different levels of death anxiety and meaning of life?

Research Question 2
Are there differences within the sub-dimensions of death acceptance within these clusters?

Research Question 3
Does psychological well-being vary between the groups?

3. Methods

1) Participants

- Conducted an online survey of 350 seniors aged 65 and over
- After removing outliers, data from 339 people were used for analysis
- Out of a total of 339 people, 177 (50.4%) were male and 168 (49.6%) were female
- Age range: 220 people (64.9%) aged 65-69 years, 78 people (23.0%) aged 70-74 years, 34 people (10.0%) aged 75-79 years, 7 people (2.1%) aged 80 years or older.
### 3. Methods

#### 2) Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Developed/Validated</th>
<th>Cronbach's α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Death Anxiety</strong></td>
<td>(Fear of Death and Dying Scale: FOODS)</td>
<td></td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>• Developed by Colleter and Lester (1969)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Revised by Sim (2001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 20 questions, 4 sub-factors, 4-point Likert scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Meaning in Life</strong></td>
<td>(Meaning in Life Scale: MLS)</td>
<td></td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>• Developed by Lee and Hong (2017)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 12 questions, 3 sub-factors, 4-point Likert scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cronbach's α = 0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Death Acceptance</strong></td>
<td>(Death Attitude Profile Revised: DAP-R)</td>
<td></td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>• Developed by Wong, Recker and Gesser (1994)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Validated by Lee (2008)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 14 questions, 3 sub-factors, 7-point Likert scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cronbach's α = 0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Psychological well-being</strong></td>
<td>(psychological well-being scale: PWBS)</td>
<td></td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td>• Ryff (1989)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Revised by Kim, Kim and Cha (2001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 46 questions, 6 sub-factors, 4-point Likert scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cronbach's α = 0.93</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 3) Statistical Analysis

The data were analyzed using the IBM SPSS Statistics 21.0

1. Frequency analysis was used to compare the demographic characteristics of the subjects.
2. Calculation of internal consistency (Cronbach's alpha) of measurement tools.
3. Pearson correlation analysis and descriptive statistics were used to check normality.
4. Cluster analysis was used to explore individual differences in death anxiety and levels of meaning in life.
   - Level 1: Determine the number of clusters using Wards' method, a hierarchical cluster analysis.
   - Level 2: Final cluster confirmed by K-means analysis, a non-hierarchical cluster analysis.
5. ANOVA was used to test for differences in acceptance of death and psychological well-being according to clusters, and Scheffe post hoc test was used to test for significant differences between clusters.
4. Results

1) Correlation coefficient of major variables

Table 1. Correlation coefficient of major variables

<table>
<thead>
<tr>
<th>variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death Anxiety</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaning in Life</td>
<td>.070</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutal acceptance</td>
<td>-.335</td>
<td>-.189</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach acceptance</td>
<td>-.191</td>
<td>.013</td>
<td>-.293</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escape acceptance</td>
<td>-.121</td>
<td>-.279</td>
<td>-.344</td>
<td>.564</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Psychological well-being</td>
<td>-.187</td>
<td>.649</td>
<td>-.205</td>
<td>-.043</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

| M                  | 52.292 | 36.714 | 16.557 | 29.634 | 11.386 | 155.493 |
| Skewness           | -.012  | -.020  | -.848  | .234   | -.095  | .064   |

Kurtosis           | -.317  | -.187  | .783   | -.394  | -.714  | -.320  |

* P<.05, ** P<.01, *** P<.001

2) Centroid for each cluster and Cluster profile

Table 2. Centroid for each cluster

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death Anxiety</td>
<td>.552</td>
<td>-.796</td>
<td>1.185</td>
</tr>
<tr>
<td>Meaning in Life</td>
<td>-.715</td>
<td>.810</td>
<td>.942</td>
</tr>
<tr>
<td>N</td>
<td>101</td>
<td>86</td>
<td>68</td>
</tr>
</tbody>
</table>

Figure 1. Cluster profile
4. Results

3) Mean and standard deviation of cluster variables for each cluster

<table>
<thead>
<tr>
<th>Table 3. Mean and standard deviation of cluster variables for each cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>(n=101)</td>
</tr>
<tr>
<td>Death Anxiety</td>
</tr>
<tr>
<td>Meaning in Life</td>
</tr>
</tbody>
</table>

4. Results

4) Cluster-specific differences in death acceptance

<table>
<thead>
<tr>
<th>Table 4. Cluster-specific differences in death acceptance</th>
<th>n=339</th>
</tr>
</thead>
<tbody>
<tr>
<td>dependent variable</td>
<td>Cluster 1</td>
</tr>
<tr>
<td>Death Acceptance</td>
<td>(n=101)</td>
</tr>
<tr>
<td>neutral acceptance</td>
<td>15.64(2.97)</td>
</tr>
<tr>
<td>approach acceptance</td>
<td>29.56(12.82)</td>
</tr>
<tr>
<td>escape acceptance</td>
<td>12.45(3.57)</td>
</tr>
</tbody>
</table>

**p<.01, ***p<.001

Figure 2. Cluster-specific differences in death acceptance
4. Results

5) Cluster-specific differences in Psychological well-being

<table>
<thead>
<tr>
<th>Cluster-specific differences in Psychological well-being</th>
<th>N=339</th>
</tr>
</thead>
<tbody>
<tr>
<td>dependent variable</td>
<td></td>
</tr>
<tr>
<td>Cluster 1</td>
<td>Cluster 2</td>
</tr>
<tr>
<td>[n=101]</td>
<td>[n=86]</td>
</tr>
<tr>
<td>M(50)</td>
<td>M(50)</td>
</tr>
<tr>
<td>Psychological well-being</td>
<td></td>
</tr>
<tr>
<td>142.97</td>
<td>186.88</td>
</tr>
<tr>
<td>[16.07]</td>
<td>[17.18]</td>
</tr>
</tbody>
</table>

***P<.01

![Figure 3. Cluster-specific differences in Psychological well-being](image)

5. Discussion

1) A total of four clusters were identified.

**Cluster 1** 'High death anxiety, Low meaning in life' group
- When meaning in life is low and death anxiety is high, subjective well-being is low (Lee et al., 2022)

⇒ Cluster 1 is likely to have difficulty adapting

**Cluster 2** 'Low death anxiety, High meaning in life' group
- Low death anxiety and high meaning in life are positive functions for well-being (Oh, 2013; Tekce, 2022)

⇒ Cluster 2 is likely to be well adapted to life and death.

⇒ This is consistent with previous research that has attempted to alleviate death anxiety by giving meaning to life (Choi, 2014; Kil, 2023; Zhang et al., 2019)
5. Discussion

1) A total of four clusters were identified.

**Cluster 3** ‘High death anxiety, High meaning in life’ group
- The realisation that comes from fear of death can provide the energy to pursue a meaningful life (Wong, 2008).

⇒ Cluster 3 maintains meaning in life despite death anxiety

**Cluster 4** ‘Low death anxiety, Low meaning in life’ group
- No defensive efforts to protect oneself from death anxiety (Solomon et al., 1991).
- Not feeling that life is worth living (Wong, 2007).

⇒ Cluster 4 shows an avoidant attitude towards both death and life.

⇒ It was confirmed that there can be individuals who experience both high and low levels of death anxiety and meaning in life.

5. Discussion

2) Significant differences were observed in the subdimensions of death acceptance across the clusters

(1) Neutral acceptance
- Highest in Cluster 2 (Low death anxiety and High meaning in life)
  - Older people who find meaning or purpose in life have low levels of death anxiety and high levels of death acceptance (Yoon, 2020)
  - People with high meaning in life experience less death anxiety and higher death acceptance (Ozmon, 1983).

⇒ It seems that people find meaning in life and pain and accept death naturally.
5. Discussion

2) Significant differences were observed in the subdimensions of death acceptance across the clusters

(2) Approach acceptance

- Highest in cluster 2 (Low death anxiety and High meaning in life) and cluster 4 (Low death anxiety and High meaning in life)
- Approach acceptance was high in the two groups with low death anxiety.

- Approach acceptance scale: Measuring beliefs and attitudes about the afterlife
  - 'I look forward to the afterlife.'
  - 'The reason I am comfortable with death is because I believe in life after death.'
  - 'I think heaven is a much better place than this world.'

✓ Relatively low in cluster 3 (High death anxiety, High meaning in life)

⇒ Experiencing low death anxiety is more important to increase approach acceptance.

5. Discussion

2) Significant differences were observed in the subdimensions of death acceptance across the clusters

(3) Escape acceptance

- Highest in cluster 1 (High death anxiety and Low meaning in life) and cluster 4 (Low death anxiety and High meaning in life)
- Escape acceptance was high in the two groups with low meaning in life.
  - Escape Acceptance means escape from life
  - People high in escape acceptance are more afraid of life than of death and choose death as an alternative to reality (Yoon, 2020).

✓ Relatively low in cluster 3 (High death anxiety, High meaning in life)

⇒ Maintaining meaning in life is important to reduce escape acceptance.
5. Discussion

3) Significant differences were observed in the psychological well-being across the clusters

- Highest in cluster 2 (Low death anxiety and High meaning in life) and cluster 3 (High death anxiety and High meaning in life)

- Escape acceptance was high in the two groups with high meaning in life.
  - If life is seen as meaningful, then death anxiety cannot be a threat to the individual (Solomon et al., 1991)

✓ Relatively low in cluster 4 (Low death anxiety, Low meaning in life)

⇒ To increase psychological well-being, it is more important to experience high meaning in life.

5. Discussion

4) Implications

(1) Expanding consideration of the relationship between death anxiety and the meaning in life

- As the elderly’s death anxiety and the meaning in life may be high or low at the same time, it is necessary to approach death and life in an integrated way.

(2) Suggested the need to distinguish the patterns in which older people accept death.

- The Korean elderly have a remarkable attitude of trying to avoid the pain of life through death, so it is necessary to help them discover the meaning of life (Oh & An, 2023)

(3) It was confirmed that life and death need to be considered together when counselling older people to help them adapt.

- It is easy to experience death anxiety in old age, but it is expected that focusing on the present meaningful life through counselling will contribute to psychological well-being.
5. Discussion

5) Limitations and Directions for Future Study

(1) It is difficult to generalise the research findings to people over the age of 80.
   - In this study, the proportion of people aged over 80 was only 2.1% of the total study population.
   - Death anxiety and meaning in life are closely related to age (Chopik, 2017; Steger et al., 2006)
   - Follow-up studies are needed to confirm death anxiety and meaning in life clusters in elders aged 80 and over.

(2) Uses self-report scales
   - In future studies, phenomenological research could provide a deeper understanding of these experiences by capturing the subjective realities of individuals.

(3) Only the differences visible in the adaptive indicators of each cluster were confirmed.
   - Simultaneous low death anxiety and low meaning in life may be associated with death avoidance attitudes (Wong et al., 1994)
   - In follow-up research, it is necessary to confirm the differences between each group in death avoidance.

6. References

6. References

Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

6. References


Thank you
A Meta Study of Non Suicidal Self Injury of Adolescents and Protective Factors

Kim, Keun-Ki

Graduate Student, The Catholic Univ., Korea

<Abstract>

Adolescent non-suicidal self-injury (NSSI) is defined as the deliberate self-infliction of harm without suicidal intent, often used to alleviate psychological distress or manage intense emotional stress. Protective factors play a crucial role in preventing or mitigating NSSI and include strong social support systems, positive family relationships, high self-esteem, and effective problem-solving skills. This study conducted a meta-analysis of 78 studies to examine the correlation between adolescent NSSI and protective factors. The weighted average correlation coefficient between NSSI and protective factors indicated that protective factors significantly reduce the risk of NSSI in adolescents. Even after adjusting for publication bias, a significant negative correlation between protective factors and NSSI was maintained. Focusing on these factors can help in the prevention and intervention of NSSI among adolescents.

<초 록>

청소년 비자살적 자해(NSSI)는 자살 의도 없이 자신의 신체를 고의적으로 손상시키는 행위로 정의하며, 이는 심리적 고통을 완화하거나 강한 감정적 스트레스를 조절하기 위한 수단으로 사용된다. 보호 요인은 NSSI 발생을 예방하거나 완화하는 데 중요한 역할을 하며, 강력한 사회적 지원 시스템, 긍정적인 가족 관계, 높은 자아존중감, 효과적인 문제 해결 능력 등이 이에 해당한다. 이 연구는 청소년 NSSI와 보호 요인 간의 상관을 메타 분석하기 위해 78편의 논문을 메타 분석했다. NSSI와 보호 요인 간의 가중 평균 상관 계수를 도출한 결과, 보호 요인이 청소년의 NSSI 위험을 줄이는 데 중요한 역할을 하며, 출판 편향을 조정한 후에도 보호 요인과 NSSI 간의 유의미한 음의 상관 관계가 유지되었다. 이러한 요인을 염두에 두어 초점을 맞추는 것이 청소년 NSSI의 예방 및 중재에 도움이 될 수 있다.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

A Meta Study of Non-Suicidal Self-Injury of Adolescents and Protective Factors

Keun-Ki Kim, The Catholic University of Korea

Introduction

NSSI in Adolescence

A deliberate infliction of harm on one’s body without suicidal intent
The method often used to alleviate psychological distress or regulate emotions

- Including self-inflicted cuts, burns, or scratches, and in severe cases, the formation of scars
- Linked with depression, anxiety, and PTSD

While NSSI may offer short-term psychological stability, it can lead to more severe psychological issues and social isolation in the long run.
Introduction

NSSI in adolescence → strong predictor → Suicide attempts in adulthood

Increasing the importance of early intervention and effective prevention strategies

Introduction

Protective Factors Against NSSI

- Important role in preventing or mitigating the occurrence of NSSI in adolescents

Social support
Emotional stability
Cognitive coping strategies
Introduction

Protective Factors Against NSSI

- The emotional and instrumental assistance received from significant others, such as family, friends, and teachers
  ➔ Reliable social networks enable positive coping in stressful situations.

- The ability of adolescents to feel emotionally secure and manage their emotions effectively
  ➔ It helps to endure internal distress and manage it healthily.

- Including problem-solving skills, positive thinking, and stress management techniques
  ➔ It helps to respond more constructively, positively, and proactively to difficult situations.

Research Purpose

Previous studies on the correlation between adolescent NSSI and protective factors have primarily focused on analyzing the effects of individual protective factors.

To systematically analyze the interactions between NSSI and various protective factors, comprehensively evaluating the relative importance of each factor.
Research Purpose

The Goal of The Study

- This study aims to comprehensively addresses multiple protective factors such as social support, emotional stability, cognitive coping strategies, and environmental support.
- It aims to provide foundational data necessary for developing NSSI prevention and intervention programs.
- It aims to derive more consistent and reliable results, providing practical assistance for NSSI prevention and intervention strategies.

Methods

Literature Search

1. Employing the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) guidelines
   - The primary research question: "What is the correlation between protective factors and adolescent NSSI?"

2. Identifying relevant articles, comprehensive searches across several databases, including Web of Science, KISS, DBpedia, RISS, Google Scholar and directories of prominent psychology journals

Keywords: "Adolescent Non-Suicidal Self-Injury", "Protective Factors", "Social Support", "Emotional Stability", "Cognitive Coping Strategies" and "Environmental Factors"
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

**Methods**

**Inclusion Criteria**

1. Including articles written either in English or Korean

2. Including articles that reported correlation coefficients between adolescent non-suicidal self-injury (NSSI) and protective factors

3. Including studies that examined protective factors such as personal psychological factors, cognitive factors, emotional factors, and environmental factors

4. Excluding articles that only reported aggregated scores without providing specific correlation coefficients for NSSI and protective factors

**Flow Chart for The Meta-Analysis**
Methods
Meta-Analytic Procedure

Research Objective
• To investigate the relationship between adolescent non-suicidal self-injury (NSSI) and protective factors using meta-analysis.

Analytical Tools
• CMA Software: Used for calculating overall effect size, testing heterogeneity, and assessing publication bias.

Data Coding
• Variables coded from studies, including sample size, measurements, and outcome characteristics.
• Multiple R values within a single study were individually extracted, resulting in a total of 120 R values.

Effect Size Calculation
• Correlation coefficients (r) between NSSI and protective factors were coded.
• Weighted average correlation coefficients (weighted mean r) were calculated using each study’s sample size.

Heterogeneity Testing
• Q Statistics: Used to choose between fixed-effect or random-effect models.
• I² Index: Measured the degree of actual heterogeneity.
  I² values interpretation: 25% (low), 50% (moderate), 75% (high) Huedo-Medina et al. (2006)
Methods

Meta-Analytic Procedure

Detailed Analysis
- Analyzed the number of studies, total sample size, weighted average effect size (r), mean Fisher’s Z for significance testing, 95% confidence intervals, Q statistics, and I² (%).
- Tested for publication bias sensitivity using Classic fail-safe N.

Model Selection
- Random-Effect Model: Used for heterogeneous variables.
- Fixed-Effect Model: Used for homogeneous variables.

Moderator Effects
- Q statistics were used to test for moderator effects.

Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of Studies</th>
<th>Effect Size and 95% Interval</th>
<th>Test of Heterogeneity</th>
<th>Prediction Interval</th>
<th>Between-study</th>
<th>Other heterogeneity statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>120</td>
<td>-0.326 to -0.322</td>
<td>Z-value: -189.13, p = 0.000</td>
<td>Lower Limit: -0.323, Upper Limit: 0.323</td>
<td>Tau: 1.23, Tau²: 0.45</td>
<td>Q-value: 274.01, df: 3, p: 0.000, I²: 95.66%</td>
</tr>
<tr>
<td>Random</td>
<td>120</td>
<td>-0.283 to -0.242</td>
<td>Z-value: -24.110, p = 0.000</td>
<td>Lower Limit: -0.242, Upper Limit: 0.242</td>
<td>Tau: 0.19, Tau²: 0.012</td>
<td>Q-value: 119, df: 0, p: 0.000, I²: 95.66%</td>
</tr>
</tbody>
</table>
Results

Classic fail-safe N

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-value for observed studies</td>
<td>-83.70565</td>
</tr>
<tr>
<td>P-value for observed studies</td>
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</tr>
<tr>
<td>Alpha</td>
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<tr>
<td>Tails</td>
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<tr>
<td>Z for alpha</td>
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</tr>
<tr>
<td>Number of observed studies</td>
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</tr>
<tr>
<td>Number of missing studies that bring p-value to &gt; alpha</td>
<td>8755.00000</td>
</tr>
</tbody>
</table>

Results

Funnel Plot of Standard Error by Fisher’s Z
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Results

Duval and Tweedie’s trim and fill

<table>
<thead>
<tr>
<th>Studies Trimmed</th>
<th>Fixed Effects</th>
<th>Random Effects</th>
<th>Q Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Point estimate</td>
<td>Lower limit</td>
<td>Upper limit</td>
</tr>
<tr>
<td>Observed values</td>
<td>-0.32565</td>
<td>-0.32878</td>
<td>-0.32252</td>
</tr>
<tr>
<td>Adjusted values</td>
<td>-0.34824</td>
<td>-0.35117</td>
<td>-0.34531</td>
</tr>
</tbody>
</table>

Discussion

Investigate the relationship between adolescent non-suicidal self-injury (NSSI) and protective factors using meta-analysis.

Key Findings

- Relationship between NSSI and Protective Factors:
- Fixed Effects Model: $r = -0.326$ (95% CI: -0.329 to -0.323)
- Random Effects Model: $r = -0.263$ (95% CI: -0.283 to -0.242)
- Protective factors reduce the risk of NSSI.
Discussion

Heterogeneity and Publication Bias

Heterogeneity

- Q value: 2743.01347, I²: 95.662%
- Significant variability in effect sizes across studies.
- Potential need for moderator variables.

Publication Bias

- Funnel Plot: Relatively symmetrical
- Duval and Tweedie’s Trim and Fill: 37 studies potentially missing
- Classic fail-safe N: 8755 missing studies needed (results robust)

Discussion

Limitations

- High heterogeneity necessitates cautious interpretation of results.
- Potential for publication bias: inclusion of unpublished studies needed.

Conclusion

- Protective factors play a crucial role in reducing the risk of NSSI.
- Development of tailored prevention and intervention strategies is necessary.
Discussion

The findings of this study provide valuable insights for developing effective interventions to support adolescents at risk of NSSI. By focusing on strengthening protective factors, practitioners can better address the underlying issues contributing to NSSI and promote healthier coping mechanisms among adolescents.
Session 2. Trauma and Grief Counseling
Efficacy of Grief Interventions for Prolonged Grief in College Student Populations: A Scoping Review

Shin, Jiyoung
Doc. Student, Univ. of Iowa, US

<Abstract>

Background: Grief is a prevalent and impactful concern among college students, often leading to significant emotional and academic challenges if prolonged. Despite its importance, the range and efficacy of grief therapy interventions tailored for this population remain underexplored.

Objective: This scoping review aims to map the existing literature on grief therapy interventions specifically designed for college students, identify key therapeutic approaches, assess the outcomes, and highlight gaps in the current research.

Methods: A comprehensive search was conducted across multiple databases, including PubMed, PsycINFO, and Google Scholar, for relevant studies.

Results: The grief interventions identified ranged from individual counseling and group therapy to online intervention. Cognitive-behavioral therapy, narrative therapy, support groups, online interventions, university engagements, and campus-level institutional support were among the most frequently studied approaches.

Conclusions: The review highlights a diversity of grief therapy interventions available to college students, with some evidence of effectiveness. Future research should also explore culturally tailored approaches and the long-term impacts of grief therapy on college students.

Keywords: grief therapy, college students, grief interventions

<초 록>

대학생 시기에 경험하는 상실 이후 지속비애 증상은 다양한 심리적 어려움을 초래함에도 불구하고, 대학생 대상 애도 상담 및 심리치료와 개입의 효과성에 대한 탐색은 충분히 이루어지지 않은 실정이다. 본 문헌고찰은 대학생을 위한 애도 상담을 위한 기존 무한한 상담을 탐색하고, 주요 치료접근법 및 개입을 식별하고자 하였다. 문헌고찰 결과, 대학생 대상 애도 상담 및 집단상담부터 온라인 기반 프로그램 등이 탐색되었으며, 인지 행동 치료, 이야기 치료, 지지 기반 집단상담, 온라인 상담 프로그램, 학내 제도적 지원 및 교육 지원 등 다양한 유형의 근거기반 애도상담 및 심리치료와 관련 개입이 탐색되었다. 문헌고찰을 바탕으로 추후 연구방향에 대한 논의를 제시하였 다.

키워드: 지속비애, 대학생, 애도 상담 및 심리치료
Grief Interventions for Prolonged Grief in College Student Populations

Jiyoung Shin
University of Iowa
Counseling Psychology PhD Student

Prolonged grief

Grief

- “The anguish experienced after significant loss, usually the death of a beloved person.”

- Grief often includes physiological distress, separation anxiety, confusion, yearning, obsessive dwelling on the past, and apprehension about the future. Intense grief can become life-threatening through disruption of the immune system, self-neglect, and suicidal thoughts.

- Grief may also take the form of regret for something lost, remorse for something done, or sorrow for a mishap to oneself.

Quoted by APA’s dictionary
Prolonged grief

- Also termed as complicated grief disorder (Horowitz et al., 1997), prolonged grief disorder (PGD; e.g. Prigerson et al., 2009), complicated grief (e.g. Shear et al., 2011) persistent complex bereavement disorder (APA, 2013).

- Prolonged grief disorder is characterized by this intense and persistent grief that causes problems and interferes with daily life. For a diagnosis of prolonged grief disorder in DSM-5-TR, the loss of a loved one had to have occurred at least a year ago for adults, and at least 6 months ago for children and adolescents (APA, 2022).

- Grief specialists commonly concur that a notable portion of individuals undergoing bereavement encounter intense, enduring, and incapacitating sorrow, necessitating appropriate intervention (e.g., Boelen et al., 2020; Prigerson et al., 2021b; Simon et al., 2020).

Traumatic grief after unexpected death

- Those who have experienced a disaster or violent death are more likely to experience complex grief (Holland & Neimeyer, 2011; Shear et al., 2011)

- Meaning making tasks are often cited as more difficult for survivors of traumatic bereavement because the trauma or violence surrounding the death does not fit in with most people’s basic assumptions about the way in which the world operates (Armour, 2006; Neimeyer, 2001).
College student and Grief

- According to Cox et al. (2015), 59.9% of college students will experience the death of a loved one after their first year, and nearly 23% will endure multiple losses among family and friends during their four-year college experience. College students sometimes encounter traumatic deaths in campus, including peer’s suicide or violent death.

- When college students are going through big transitions, figuring out who they are as later adolescent, and focusing on themselves, dealing with death during this time brings its own set of challenges (Cupit et al., 2016)

- Grieving college students reported severe grief symptoms and these symptoms connected with their daily lives functioning (Taub & Servaty-Seib, 2008, including academic performances and lack of social engagement and belongingness (Balk, 2011; Cupit et al., 2016; Liew & Servaty-Seib, 2018; Plocha et al., 2023; Servaty-Seib & Fajgenbaum, 2015; Walker et al., 2012)

Grieving Processes

“The grief experience is not a state but a process (Mughal, 2022)”
Kubler-Ross (1969) - Five stage of grief

1) Denial - Avoidance, Confusion, Shock, Fear
2) Anger - Frustration, Irritation, Anxiety
3) Bargaining - Struggling to find meaning
4) Depression - Overwhelmed
5) Acceptance - Moving on

Worden (1969) - Four tasks of grief

- Task 1
  Accepting the reality of the loss

- Task 2
  Working through pain and grief

- Task 3
  Adjusting to the new environment

- Task 4
  Finding a connection with the deceased while moving forward with life
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Transition of grieving processes in treatment

**Stage/task models**
- Accomplishment or Completion of Grieving Stages and Tasks
- Separation from the Deceased

**Process-based model**
- Oscillation between restoration-oriented coping and loss-oriented coping
- Continuing bonds with the deceased may significantly influence the bereaved individual’s success in adapting to loss—either by contributing to or inhibiting the ability to cope with the loss (Root & Exline, 2014).


<table>
<thead>
<tr>
<th>Everyday Life Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Violent Dying Oriented</strong></td>
</tr>
<tr>
<td>Trauma distress (horror/helplessness)</td>
</tr>
<tr>
<td>Reenactment (intrusive)</td>
</tr>
<tr>
<td>Breaking Bonds (care-giving)</td>
</tr>
<tr>
<td>Nihilism about change</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Loss Oriented</strong></th>
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</thead>
<tbody>
<tr>
<td>Separation distress (pining/searching)</td>
</tr>
<tr>
<td>Resurrection (alluring)</td>
</tr>
<tr>
<td>Breaking Bonds (care-seeking)</td>
</tr>
<tr>
<td>Denial-avoidance of change</td>
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<table>
<thead>
<tr>
<th><strong>Restoration Oriented</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attending to life changes</td>
</tr>
<tr>
<td>Doing new things</td>
</tr>
<tr>
<td>New roles and relationships</td>
</tr>
<tr>
<td>Denial-avoidance of grief</td>
</tr>
</tbody>
</table>

Fig. 1. The integrative risk factor framework for the prediction of bereavement outcome.

Evidence-based Grief interventions
Evidence based-treatments for Prolonged grief

Cognitive-behavioral therapy (CBT)

- According to Boelen et al. (2006), a cognitive-behavioral conceptualization of complicated grief (CG) introduces three processes

Three Processes in the Development and Maintenance of Complicated Grief
(a) Insufficient integration of the loss into the autobiographical knowledge base
(b) Negative global beliefs and misinterpretations of grief reactions
(c) Anxious and depressive avoidance strategies.

Evidence based-treatments for Prolonged grief

Cognitive-behavioral therapy (CBT)

- Applying CBT in Prolonged Grief (Boelen et al., 2006)

(1) The loss needs to be conceptually processed and integrated with existing autobiographical knowledge
(2) Problematic beliefs and interpretations need to be identified and changed
(3) Anxious and depressive avoidance strategies need to be replaced by more helpful strategies that facilitate adjustment
Evidence based-treatments for Prolonged grief

Complicated Grief Treatment / Prolonged Grief Therapy (Shear et al., 2005)

- CGT incorporates components of attachment theory, cognitive-behavioral therapy (CBT), and other approaches to facilitate natural adaptive processes to loss (Szuhany et al., 2021)
- Seven core themes of complicated grief therapy (Shear et al., 2005)
  1) Understanding and accepting grief
  2) Managing emotional pain
  3) Thinking about the future
  4) Strengthening ongoing relationships
  5) Telling the story of the death
  6) Living with reminders
  7) Connecting to memories

Evidence based-treatments for Prolonged grief

Narrative strategies in grief therapy (Neimeyer, 1999; Neimeyer et al., 2010)

- Grieving as a process of reaffirming or reconstructing a world of meaning that has been challenged by loss (Neimeyer, 2001; Neimeyer & sands, 2011) Narrative strategies foster meaning making and help clients reestablish a coherent self-narrative that integrates the loss, while also permitting their life story to move forward along new lines.
- Narrative retelling, therapeutic writing, a focus on metaphorical language, and the use of visualization can all be viable strategies in helping individuals reconstruct meaning in the wake of bereavement.
Evidence based-treatments for Prolonged grief

Internet-based intervention for Prolonged Grief Disorder

- Internet-based psychological interventions have proven effective in the treatment of prolonged grief disorder (Kaiser et al., 2022; Kaiser et al., 2023)
- Structured writing tasks and individualized therapist feedback online
- The writing tasks are assigned to three modules (Hoffmann et al., 2018)
- The goal is to reduce avoidance behavior and to help participants form a coherent narrative of grief.
- Three modules include 1) self confrontation, 2) cognitive reappraisal, 3) social sharing

The module Self-Confrontation involves thoroughly describing the most distressing memory concerning the loss with an emphasis on emotional, bodily, and cognitive qualities of the experience.

Evidence based-treatments for Prolonged grief

Bereavement Support Group

- Group format therapy is effective to address complicated grief (Goodkin et al., 1999; Lieberman & Yalom, 1992; Murphey et al., 1998; O’Connor et al.; Piper et al., 2001)

- Various theoretical orientations could be utilized.
  - Combination of CBT and social support group interventions from stressor-support-coping model (Goodkin et al., 1999)
  - Consisted of information-giving and skill-building support followed by emotion-focused support (Murphey et al., 1998)
  - Focusing on interpersonal and existential issues (Lieberman & Yalom, 1992)
  - Writing workshop participation and developing narratives to explore feelings and thoughts (O’Connor et al., 2003)
Future Directions in Grief Interventions for College Students

Contextual Support

- University faculty and institutions play a crucial role in supporting students experiencing grief.

- Helping bereaved students connect with the University Counseling Center and support services on campus is crucial.

- Implementing training programs to equip students with the skills to respond compassionately to grieving peers can be highly beneficial.

Future Directions in Grief Interventions for College Students

Multicultural Consideration

- Grieving processes, grief reactions, and the meaning of grief vary in cultural contexts (Stroebe & Schut, 1998).

- The definition of ‘normal’ grief can differ across cultures, so the construction of treatment should be culturally sensitive.

- Expressing grief involves culturally stereotyped patterns and expectations (Hooyman & Kiyak, 2002).
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Future Directions in Grief Interventions for College Students

Consideration of bereavement-related variables

- Studies (Houwen et al., 2010; Stroebe et al., 2007; Stroebe et al., 2008) indicate that variables related to bereavement can influence grieving processes.
  - Relationship with deceased
  - Circumstances of death (Cause of death)
  - Previous traumatic histories in childhood
  - Lack of social support

Thank you!
Patterns and Predictors of PTSD during the COVID-19 Pandemic among Trauma-Exposed Individuals: A Latent Class Analysis

Kim, Ye Jin & Lee, Dong Hun

Doc. Student, Sungkyunkwan Univ., Korea
Director, Traumatic Stress Center/ Chairman, National College Counseling Center Association, Prof., Sungkyunkwan Univ., Korea

<Abstract>

The coronavirus disease (COVID-19) outbreak in South Korea and worldwide has posed a significant challenge to both physical and mental health, leading to an increased risk of developing disorders such as posttraumatic stress disorder (PTSD). This study assessed the construct validity and reliability of the South Korean version of the PTSD Checklist-5 (PCL-5-K) and identified PTSD patterns and predictors during the COVID-19 pandemic. About 384 Korean participants who had previously experienced traumatic events completed an online survey between July and August 2020. Latent class analysis (LCA) was used to identify the classes characterized by PTSD symptom patterns. The patterns of PTSD symptoms were predicted using socio-demographics, mental health outcomes, and traumatic events. The confirmatory factor analysis (CFA) demonstrated the best fit with a 7-factor model. The total and subscale scores showed good internal consistency. Additionally, the LCA identified four different classes of PTSD severity (Class 1 showed low PTSD symptoms, Class 2 displayed moderate PTSD, Class 3 exhibited a higher severity of PTSD, and Class 4 displayed pervasive PTSD). According to the findings, LCA can be used to categorize individuals with different forms of trauma exposure according to the severity of their PTSD symptoms during the COVID-19 pandemic. The main factors influencing the high and pervasive PTSD groups were lower socioeconomic status and higher levels of depressive and anxiety symptoms. It is suggested that administrative departments can conduct targeted psychological interventions according to different subgroups to mitigate PTSD symptoms among individuals.

<초 록>

코로나바이러스감염증-19(COVID-19) 발생은 한국과 전 세계적으로 신체적, 정신적 건강에 큰 도전을 제기했으며, 외상 후 스트레스 장애(PTSD)와 같은 장애의 발생 위험을 증가시켰다. 본 연구는 한국어판 PTSD 체크리스트-5(PCL-5-K)의 구성 타당성과 신뢰성을 평가하고, 코로나 팬데믹 기간 동안 PTSD 패턴과 예측 요인을 확인하였다. 이를 위해 본 연구에서는 과거 외상 경험이 384명의 성인을 대상으로 2020년 7월~8월까지 온라인 설문조사를 실시하였다. 확신적 요인분석 결과 7요인 모델이 가장 적합한 것으로 나타났고 전체 및 하위 척도 점수는 우수한 내적 일관성을 보였다. 또한, PTSD 증상 패턴에 따른 잠재계층분석(LCA)을 통해 집단 모형 적합도를 확인한 결과, 4개층(낮은 PTSD 증상(계층1), 중간 PTSD 증상(계층2), 높은 PTSD 증상(계층3), 광범위한 PTSD증상(계층4))이 가장 적합한 것으로 나타났다. 잠재계층 구분에 영향을 미치는 요인을 살펴본 결과, 높은 심각도와 광범위한 PTSD 계층에 영향을 미치는 요인은 낮은 사회경제적 지위와 높은 수준의 우울증 및 불안 증상을 나타냈다. 이를 토대로 논의 및 시사점이 제시되었다.
Latent class analysis of PTSD symptoms during the COVID-19 in trauma-exposed individuals

Ph.D. Candidate. Yejin Kim
Professor. Dong Hun Lee
Sungkyunkwan University

Introduction
Overview of the impact of Covid-19 in South Korea

- The global COVID-19 pandemic has had profound and enduring impacts.
- Globally, 680 million infected, 6+ million died, 615+ million recovered (WHO, 2023)

- South Korea ranks third in COVID-19 cases in the Asia-Pacific region (Statista, 2023)
- COVID-19 has severely disrupted all aspects of human life.

Psychological Impact of COVID-19 and PTSD

Social distancing interventions

- Increased social isolation
- Reduced access to community and religious support
- Barriers to mental health treatment

Experiencing or witnessing a COVID-19 attack

- Death of a close person or family member
- Experiencing severe after-effects of COVID-19
- Caring for patients infected with COVID-19

Increased likelihood of developing a set of trauma-related psychological symptoms known as post-traumatic stress disorder (PTSD)
Vulnerability of individuals with a history of trauma

- Previous trauma increases sensitivity.
- Past trauma can worsen mental health by making individuals more likely to encounter additional traumatic experiences, as they are more susceptible to similar stimuli.
- Individuals with a history of trauma are more likely to develop PTSD during the pandemic (Roger et al., 2020; Soest et al., 2020)

The Posttraumatic Stress Disorder Checklist (PCL-5)

Symptom clusters are as follows
1) Re-experiencing
2) Avoidance
3) Negative changes in cognition and mood
4) Increased arousal and reactivity

- Research on PTSD validation has been conducted in different countries, targeting traffic accident victims, civilians exposed to war, and bereaved survivors of various traumatic events (Bahari et al., 2019; Kim et al., 2017; Kichhoff, 2022).

  => Difficult to generalize due to the specificity of the study sample

- Recently, the PCL-5 tool was validated among the general public in Korea (Lee, Kim, & Lee, 2022).

  => Research on PTSD symptoms during the pandemic in individuals with prior trauma experiences is lacking.
Risk factors for increased PTSD during COVID-19

- Younger age
- Having no religion
- Lower level of education
- Female gender
- Lower-income
- Residing in a city

The risk factors of individuals with a history of previous traumatic events and their profiles of PTSD during COVID-19 have yet to be identified.

Purpose of research

<table>
<thead>
<tr>
<th>Variable-Centered Approach</th>
<th>Person-Centered Approach</th>
</tr>
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<tbody>
<tr>
<td>- Prior research primarily employed a variable-centered approach, treating each variable independently to study relationships among individuals.</td>
<td>- LCA categorizes individuals into diverse subgroups based on variations in different aspects of variables (Marsh et al., 2009).</td>
</tr>
<tr>
<td>- This may disregard the diversity among individuals in different types of PTSD.</td>
<td>- Understanding PTSD patterns during COVID-19 in individuals with prior trauma can aid in tailoring treatments and identifying predictive factors for PTSD.</td>
</tr>
</tbody>
</table>

We aimed to validate previous findings and explore the specific traits of PTSD profiles in individuals with prior trauma exposure.
Method & Results

Participants

- National sample based on the 2020 South Korean population census
- Inclusion criteria were: 1) age above 20 years at the time of enrolment and 2) individuals who have had a history of at least one traumatic event
- 384 participants included (214 male, 170 female)
- Mean age: 40.32 years (range from 20 to 60 years old)

Procedure

- Online survey conducted from July to August 2020, six months after the outbreak of COVID-19 in South Korea
- Ethical approval was obtained from the institutional review board (IRB) to which the research team belongs.
Measures

- Posttraumatic stress disorder checklist-5 (PCL-5)
- Life Events Checklist for DSM-5 (LEC-5)
- Brief Symptoms Inventory - 18 (BSI-18)
- Posttraumatic Growth Inventory (PTGI)
- Suicidal Ideation Attributes Scale (SIDAS)

Data Analysis

<table>
<thead>
<tr>
<th>Confirmatory Factor Analysis (CFA)</th>
<th>Latent Class Analysis (LCA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method</strong></td>
<td>Four structural models of the PCL-5 K (1, 4, 6, and 7 factors) were tested using CFA.</td>
</tr>
<tr>
<td><strong>Fit indices</strong></td>
<td>We used several criteria for the goodness of fit, including CFI, TLI ≥ .90 (Barrett, 2007), RMSEA ≤ .08, SRMR ≤ .08, and low values of the Akaike and Bayesian information criteria (Hu &amp; Bentler, 1999).</td>
</tr>
<tr>
<td></td>
<td>Patterns of PTSD classes were further investigated using LCA.</td>
</tr>
<tr>
<td></td>
<td>The Mplus three-step approach was used to examine whether psychological distress predicted patterns of PTSD symptoms.</td>
</tr>
<tr>
<td></td>
<td>Higher entropy values and lower AIC, BIC, and SABIC values indicate better model fit (Schwarz, 1978).</td>
</tr>
</tbody>
</table>

Results

- **Confirmatory Factor analysis on PCL-5-K items**

  - As a result of comparing the fit indices of several factor models, the single-factor model showed adequate fit only in SRMR, while the DSM-5 4-factor, 6-factor anhedonia, and 7-factor hybrid models showed adequate fit in all indices.
  - In particular, the 7-factor model was selected because it showed a superior fit compared to other models.

- **Internal Consistency of PCL-5-K**

  - The items in each model of the PCL-5-K exhibited high internal reliability.
  - Cronbach’s α coefficient of the total score was .97. Moreover, Cronbach’s α for each of the subscales was good (Cronbach’s α = 0.847~0.973).
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Results

• Profiles of Latent Classes of PTSD Symptoms

  - Based on indicators including AIC, BIC, SABIC, entropy, LMR, and BLRT, we identified a **four-class model as the most appropriate solution** for assessing PTSD symptom patterns in Korean adults with trauma experiences.

  - Class 1 (n=160, 41.7%): low PTSD class
  - Class 2 (n=104, 27.1%): moderate PTSD class
  - Class 3 (n=83, 21.6%): high PTSD class
  - Class 4 (n=37, 9.6%): Pervasive PTSD class

<table>
<thead>
<tr>
<th>Amount of Classes</th>
<th>AIC</th>
<th>BIC</th>
<th>SABIC</th>
<th>Entropy</th>
<th>LMR</th>
<th>BLRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-classes</td>
<td>6138.104</td>
<td>6225.108</td>
<td>6155.305</td>
<td>0.951</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>3-classes</td>
<td>5550.809</td>
<td>5669.329</td>
<td>5574.143</td>
<td>0.933</td>
<td>0.0165</td>
<td>0.0000</td>
</tr>
<tr>
<td>4-classes</td>
<td>5210.392</td>
<td>5360.516</td>
<td>5293.948</td>
<td>0.941</td>
<td>0.0005</td>
<td>0.0000</td>
</tr>
<tr>
<td>5-classes</td>
<td>5138.734</td>
<td>5320.463</td>
<td>5174.512</td>
<td>0.920</td>
<td>0.3052</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Results

• Profiles of Latent Classes of PTSD Symptoms

  - Class 4, characterized by pervasive PTSD symptoms, exhibited the highest levels of suicidal ideation and reported significantly greater new possibilities and spiritual change compared to Classes 1 and 2.
  - Additionally, Class 3, with high PTSD symptoms, also showed higher new possibilities and spiritual change compared to Classes 1 and 2.
Results

- **Predictors of class membership**

  - Lower socioeconomic status was linked to higher PTSD symptoms, while higher depression levels were associated with pervasive symptoms and lower levels with low symptoms.
  
  - Additionally, greater anxiety increased the likelihood of belonging to the high PTSD symptom group.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Low PTSD</th>
<th></th>
<th>High PTSD</th>
<th></th>
<th>Pervasive PTSD</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>S.E.</td>
<td></td>
<td>Estimate</td>
<td>S.E.</td>
<td></td>
</tr>
<tr>
<td>Socio-economic level</td>
<td>0.00</td>
<td>0.00</td>
<td>-0.00</td>
<td>0.00*</td>
<td>-0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Depression</td>
<td>-0.80</td>
<td>0.26**</td>
<td>0.27</td>
<td>0.35</td>
<td>1.97</td>
<td>0.70**</td>
</tr>
<tr>
<td>Anxiety</td>
<td>-0.13</td>
<td>0.40</td>
<td>1.19</td>
<td>0.52*</td>
<td>1.93</td>
<td>1.14</td>
</tr>
</tbody>
</table>

*Note. The reference group is the moderate PTSD group.*

Discussion
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Discussion

① As a result of evaluating the validity and reliability of the Korean version of PCL-5 during the COVID-19 period targeting people with a history of trauma, it showed a strong fit index and reliability for the 7-factor PTSD scale.

- Armor et al.’s (2015) initial proposal has been supported by various CFA studies on diverse populations, including undergraduate students, community population, and military personnel, showing a better fit of the seven-factor model than others.
- The present study includes a larger sample with a variety of traumatic experiences in South Korea and expands the evidence for the suitability of the 7-factor model.
- This study’s fit indices (CFI=0.95, RMSEA=0.07) were within the same range as the previous studies (CFI=0.92–0.99; RMSEA=0.02–0.08).

Discussion

② The study examined PTSD patterns during the COVID-19 pandemic in individuals with prior trauma, identifying four distinct subtypes: low (C1, 41.7%), moderate (C2, 27.1%), high (C3, 21.6%), and Pervasive PTSD groups (C4, 9.6%).

- Similar to the results of this study, previous studies targeting urban primary care patients and veterans exposed to combat also classified groups according to the severity of PTSD symptoms (Rahman et al., 2018; Steenkamp et al., 2012).
- This study is significant for assessing PTSD severity during the COVID-19 pandemic in individuals with prior trauma, categorizing them by symptom severity, and highlighting the necessity for targeted interventions given the varying levels of psychological vulnerability among groups.

=> These studies have limitations in that they do not take into account differences in the cultural backgrounds of participants or the pandemic situation.
Discussion

(3) Suicidal ideation scores were in the following order: C4>C3>C2>C1. New possibilities and spiritual change: C4>C1,2, C3>C1, New possibilities: C3,4>C1,2

- Participants in Classes 3 and 4 experienced high PTSD symptoms and suicidal ideation, while they felt hopeful and sought new possibilities for the future.

=> PTSD commonly leads to negative outcomes like suicidal ideation, but for some, it triggers cognitive processes that foster post-traumatic growth (PTG). This suggests the need to strengthen the intervention to promote cognitive rumination and positive feelings among members in Classes 3 and 4.

=> Conversely, individuals in Class 1, who experienced minimal trauma, showed little growth, possibly due to a lack of opportunities or low PTSD severity.

Discussion

(4) Socioeconomic status, depression, and anxiety were significant predictors of class membership

- Lower socioeconomic status increases the likelihood of being in Class 3 rather than Class 2.

=> This suggests that the lower the socioeconomic status, the higher the level of PTSD due to secondary trauma caused by COVID-19.

- Higher levels of depression were associated with Class 4 rather than Class 2, and higher levels of anxiety were more likely to be classified as Class 3 than Class 2.

=> These findings support a recent meta-analysis linking increased depression and anxiety levels during the COVID-19 pandemic to heightened psychological distress and higher rates of PTSD symptoms (Cooke et al., 2020).
Strengths and limitations

Limitations

- Cross-sectional design limits causal inference; recommend further longitudinal research to understand COVID-19's impact on preexisting PTSD symptoms.
- Sample limited to young, lower-income South Koreans with internet access; recommend conducting a study with a more representative sample.

Strengths and significance

- Our findings highlight the importance of monitoring and providing support and clinical assistance to previously traumatized individuals during the COVID-19 pandemic.
- Researchers and clinicians should consider these influencing factors and indicators of previous trauma when evaluating or treating PTSD symptoms during a pandemic (anxiety, depression, and lower socioeconomic status).

Thank you!
Time Perspective and Trauma: Exploring the Impact of Time Perspective on Healing and Resilience

Jung, Hayoung

Doc. Student, Univ. of Iowa, US

Background: Grief is a prevalent and impactful concern among college students, often leading to significant emotional and academic challenges if prolonged. Despite its importance, the range and efficacy of grief therapy interventions tailored for this population remain underexplored.

Objective: This scoping review aims to map the existing literature on grief therapy interventions specifically designed for college students, identify key therapeutic approaches, assess the outcomes, and highlight gaps in the current research.

Methods: A comprehensive search was conducted across multiple databases, including PubMed, PsycINFO, and Google Scholar, for relevant studies.

Results: The grief interventions identified ranged from individual counseling and group therapy to online intervention. Cognitive-behavioral therapy, narrative therapy, support groups, online interventions, university engagements, and campus-level institutional support were among the most frequently studied approaches.

Conclusions: The review highlights a diversity of grief therapy interventions available to college students, with some evidence of effectiveness. Future research should also explore culturally tailored approaches and the long-term impacts of grief therapy on college students.

Keywords: grief therapy, college students, grief interventions

<초 록>

대학생 시기에 경험하는 상실 이후 지속비에 증상은 다양한 심리적 어려움을 초래함에도 불구하고, 대학생 대상 애도 상담 및 심리치료와 개입의 효과성에 대한 탐색은 충분히 이루어지지 않은 실정이다. 본 문헌고찰은 대학생을 위한 둘다 대형 문헌을 탐색하고, 주요 치료 접근법 및 개입을 식별하고자 하였다. 문헌고찰 결과, 대학생 대상 개인 상담 및 집단상담부터 온라인 기반 프로그램 등이 탐색되었으며, 인지 행동 치료, 이야기 치료, 지지 기반 집단상담, 포레상담 프로그램, 학내 제도적 지원 및 교육 지원 등 다양한 유형의 근거기반 예 도상담 및 심리치료와 관련 개입이 탐색되었다. 문헌고찰을 바탕으로 추후 연구방향에 대한 논의를 제시하였 다.

키워드: 지속비에, 대학생, 애도 상담 및 심리치료
Time Perspective and Trauma

Exploring the Impact of Time Perspective on Healing and Resilience

Hayoung Jung

BIO

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Doctoral Student, University of Iowa
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M.A. in Education, SungKyonKwan Univ., South Korea
B.A. in French, Hankuk Univ., South Korea

Research Experience
Traumatic Stress Center, South Korea
- trauma, psychological distress, PTSD symptoms
AGENDA

01 Time perspective & Trauma
02 Research Summary
03 Research Findings
04 Conclusion

Time perspective & Trauma

What is Time Perspective?
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

What is **Time Perspective (TP)?**

01. Personal attitudes toward time
02. Individuals’ perceptions of the past, present, and future
03. **The time perspective theory**
   - the association between TP and traumatic experiences
04. **Five dimensions of TP**
   - past-positive, past-negative, present-fatalistic, present-hedonistic, and future

What is **Time Perspective (TP)?**

**Traumatic Experience** → **Current & Future distress** → **Time Perspective**
TP Profile of Traumatized People

- Unbalanced profile
- High Past-Negative
- Low Past-Positive
- Low Future

Research Purpose

- Zimbardo's time perspective theory (TPT) explores how individuals perceive and relate to time, influencing their behaviors, attitudes, and decisions.

- In the context of traumatized individuals, Zimbardo’s TPT suggests that their experiences shape how they perceive and interact with time.

- TP may influence psychological symptoms in people with traumatic experiences, and it is necessary to verify how each TP influences these symptoms.
Method

Participants
- 482 Korean adults (Male: 263; Female: 219) who have had at least one traumatic experience according to the DSM-5 criteria in their lifetime.
- Community sample (Non-clinical)

Variables
- Indicators: PTSD symptoms, Psychological distress
- Predictors: Sex, Age, Time since trauma, TPs

Analysis: Latent Transition Analysis

Research Findings

Class identification at each time point

<table>
<thead>
<tr>
<th>Model</th>
<th>AIC</th>
<th>BIC</th>
<th>SABIC</th>
<th>Entropy</th>
<th>LMR-LRT</th>
<th>BLRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1 (2018)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-class</td>
<td>7556.741</td>
<td>7648.656</td>
<td>7578.830</td>
<td>0.961</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>3-class</td>
<td>7208.835</td>
<td>7334.173</td>
<td>7238.955</td>
<td>0.926</td>
<td>0.0292</td>
<td>0.0000</td>
</tr>
<tr>
<td>4-class</td>
<td>6881.547</td>
<td>7040.309</td>
<td>6919.700</td>
<td>0.898</td>
<td>0.0498</td>
<td>0.0000</td>
</tr>
<tr>
<td>5-class</td>
<td>6587.539</td>
<td>6779.725</td>
<td>6633.725</td>
<td>0.916</td>
<td>0.0035</td>
<td>0.0000</td>
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<tr>
<td>6-class</td>
<td>6480.563</td>
<td>6706.172</td>
<td>6534.781</td>
<td>0.910</td>
<td>0.2076</td>
<td>0.0000</td>
</tr>
<tr>
<td>T2 (2019)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-class</td>
<td>4024.743</td>
<td>4102.726</td>
<td>4032.991</td>
<td>0.945</td>
<td>0.0000</td>
<td>0.0000</td>
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<tr>
<td>3-class</td>
<td>3745.545</td>
<td>3851.700</td>
<td>3756.592</td>
<td>0.924</td>
<td>0.1768</td>
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<tr>
<td>4-class</td>
<td>3572.680</td>
<td>3706.797</td>
<td>3586.327</td>
<td>0.914</td>
<td>0.0457</td>
<td>0.0000</td>
</tr>
<tr>
<td>5-class</td>
<td>3427.046</td>
<td>3590.119</td>
<td>3444.286</td>
<td>0.920</td>
<td>0.2160</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Abbreviations: AIC, Akaike Information criteria; BIC, Bayesian Information criteria; BLRT, bootstrap likelihood ratio test; LMR-LRT, Lo-Mendell-Rubin likelihood ratio test; SABIC, sample-size adjusted BIC. Bolded: values of the final model at T1 and T2, respectively.
Research Findings

The effect of predictors in class membership

<table>
<thead>
<tr>
<th>Predictor</th>
<th>PTSD symptom</th>
<th>Moderate symptom</th>
<th>High symptom</th>
<th>PTSD symptom</th>
<th>Moderate symptom</th>
<th>High symptom</th>
<th>PTSD symptom</th>
<th>Moderate symptom</th>
<th>High symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EST (SE)</td>
<td>EST (SE)</td>
<td>EST (SE)</td>
<td>EST (SE)</td>
<td>EST (SE)</td>
<td>EST (SE)</td>
<td>EST (SE)</td>
<td>EST (SE)</td>
<td>EST (SE)</td>
</tr>
<tr>
<td>Sex</td>
<td>0.196</td>
<td>-0.042</td>
<td>0.789</td>
<td>-0.238</td>
<td>0.593</td>
<td>0.831</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(0.206)</td>
<td>(0.316)</td>
<td>(0.443)</td>
<td>(0.367)</td>
<td>(0.423)</td>
<td>(0.431)</td>
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<td></td>
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<tr>
<td>Age</td>
<td>0.032</td>
<td>-0.014</td>
<td>0.022</td>
<td>-0.013</td>
<td>0.016</td>
<td>0.044</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.054)</td>
<td>(0.095)</td>
<td>(0.093)</td>
<td>(0.067)**</td>
<td>(0.053)</td>
<td>(0.052)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time since trauma</td>
<td>0.010</td>
<td>0.006</td>
<td>0.027</td>
<td>-0.003</td>
<td>0.003</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.033)</td>
<td>(0.029)</td>
<td>(0.026)</td>
<td>(0.027)</td>
<td>(0.034)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past negative</td>
<td>0.532**</td>
<td>0.478</td>
<td>1.140**</td>
<td>-0.051</td>
<td>0.436</td>
<td>0.677</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>(0.194)**</td>
<td>(0.237)**</td>
<td>(0.341)****</td>
<td>(0.226)</td>
<td>(0.357)</td>
<td>(0.364)</td>
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<td></td>
</tr>
<tr>
<td>Past positive</td>
<td>-0.012</td>
<td>-0.010</td>
<td>0.001</td>
<td>-0.135</td>
<td>0.014</td>
<td>0.209</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.201)</td>
<td>(0.201)</td>
<td>(0.289)</td>
<td>(0.225)</td>
<td>(0.289)</td>
<td>(0.292)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present fatalistic</td>
<td>0.204</td>
<td>1.097</td>
<td>0.922</td>
<td>0.894</td>
<td>0.718</td>
<td>0.175**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.208)**</td>
<td>(0.290)**</td>
<td>(0.338)**</td>
<td>(0.228)**</td>
<td>(0.337)**</td>
<td>(0.337)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future</td>
<td>-0.064</td>
<td>-0.029</td>
<td>-0.239**</td>
<td>-0.463</td>
<td>-0.173</td>
<td>0.190</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.200)</td>
<td>(0.234)**</td>
<td>(0.377)</td>
<td>(0.229)**</td>
<td>(0.365)</td>
<td>(0.395)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Abbreviations: EST*, estimation; SE, standard error.
Bolded: significant values.
*p < 0.05, **p < 0.01, ***p < 0.001.

Research Findings

The effect of predictors in class transitions

<table>
<thead>
<tr>
<th>Variable</th>
<th>T2 Ref = High symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low symptom</td>
</tr>
<tr>
<td>T1 Low symptom</td>
<td>Sex 0.305 1.128 0.421</td>
</tr>
<tr>
<td></td>
<td>Age -0.041 -0.90 -0.090</td>
</tr>
<tr>
<td></td>
<td>Time since trauma 0.404 0.452 0.388</td>
</tr>
<tr>
<td></td>
<td>Past-negative -1.195 -0.72 -0.816</td>
</tr>
<tr>
<td></td>
<td>Past-positive 1.037 0.259 0.226</td>
</tr>
<tr>
<td></td>
<td>Present-fatalistic -0.053 -0.601 -0.374</td>
</tr>
<tr>
<td></td>
<td>Future -1.002 -0.091 -0.055</td>
</tr>
<tr>
<td>PTSD symptom</td>
<td>Sex <strong>-22.379</strong>* -22.498*** -21.907</td>
</tr>
<tr>
<td></td>
<td>Age -0.096 -0.118 -0.045</td>
</tr>
<tr>
<td></td>
<td>Time since trauma 0.012 -0.022 -0.020</td>
</tr>
<tr>
<td></td>
<td>Past-negative -2.250 -2.192 -1.129</td>
</tr>
<tr>
<td></td>
<td>Past-positive 2.628 3.133 3.191</td>
</tr>
<tr>
<td></td>
<td>Present-fatalistic -3.673 -3.082 -4.077</td>
</tr>
<tr>
<td></td>
<td>Future -2.531 -3.205 -3.500</td>
</tr>
</tbody>
</table>
Research Findings

The effect of predictors in class transitions

<table>
<thead>
<tr>
<th></th>
<th>Future</th>
<th>New</th>
<th>Old</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Moderate symptom</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>-2.531</td>
<td>-3.205</td>
<td>-3.500</td>
</tr>
<tr>
<td>Age</td>
<td>-1.401</td>
<td>-1.185</td>
<td>-0.742</td>
</tr>
<tr>
<td>Time since trauma</td>
<td>-2.167</td>
<td>0.024</td>
<td>0.024</td>
</tr>
<tr>
<td>Post-negative</td>
<td>-2.690***</td>
<td>-1.640</td>
<td>-1.460</td>
</tr>
<tr>
<td>Post-positive</td>
<td>0.483</td>
<td>-0.063</td>
<td>-0.307</td>
</tr>
<tr>
<td>Present-fatalistic</td>
<td>-0.685</td>
<td>0.037</td>
<td>0.504</td>
</tr>
<tr>
<td>Future</td>
<td>0.774</td>
<td>0.110</td>
<td>-0.587</td>
</tr>
<tr>
<td><strong>High symptom</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>184.841</td>
<td>219.680</td>
<td>0.248</td>
</tr>
<tr>
<td>Age</td>
<td>-13.327</td>
<td>-21.972</td>
<td>0.016</td>
</tr>
<tr>
<td>Time since trauma</td>
<td>18.433</td>
<td>16.248</td>
<td>0.032</td>
</tr>
<tr>
<td>Post-negative</td>
<td>-228.307</td>
<td>11.704</td>
<td>-3.662</td>
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<tr>
<td>Post-positive</td>
<td>44.767</td>
<td>57.419</td>
<td>-1.094</td>
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<tr>
<td>Present-fatalistic</td>
<td>158.397</td>
<td>24.809</td>
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<tr>
<td>Future</td>
<td>-203.569</td>
<td>13.447</td>
<td>1.319*</td>
</tr>
</tbody>
</table>

Bolded: significant values.

*p < 0.05, **p < 0.01, ***p < 0.001.

Implications

The role of sex, age, time since trauma, and TPs
- Profile membership prediction
- Profile transition prediction

There are more predictors that should be addressed, such as anger, loneliness, and others.

Then, why is understanding this important?
Implications

- Highlight the need to go beyond understanding symptoms
- Highlight the need for a more detailed approach to understanding trauma
- Highlight the importance of TP in understanding traumatic symptoms

Conclusions

- Understanding coping mechanisms
- Tailoring interventions
- Promoting self-awareness and empowerment
Thank you

Questions: hayoung-jung@uiowa.edu

References

<Full Research>

<Reference>
References


References

Assessing the Psychometric Properties of the Korean Version of the Revised Prolonged Grief Disorder Scale (PG-13-R-K)

Jo, Ahran & Lee, Dong Hun
Doc. Student, Sungkyunkwan Univ., Korea
Director, Traumatic Stress Center/ Chairman, National College Counseling Center Association, Prof., Sungkyunkwan Univ., Korea

<Abstract>
This study aims to validate the Korean version of the Revised Prolonged Grief Disorder scale (PG-13-R-K) by exploring the psychometric properties of the revised Prolonged Grief Disorder scale in bereaved South Korean adults. A total of 694 bereaved individuals who had experienced the loss of a close person for a duration ranging from 12 to 24 months were included in this study and randomly divided into two separate datasets to conduct factor analyses. The results of both EFA and CFA revealed a single-factor structure for the PG-13-R-K. Moreover, the results of reliability and validity tests showed adequate internal consistency and concurrent validity. These findings suggest that the PG-13-R-K is a reliable and valid tool for assessing PGD symptoms among bereaved Korean adults. The limitations and implications of this study are thoroughly examined and discussed.

Keywords: Bereavement, Prolonged grief disorder, PG-13-R, South Korea, Validation

Assessing the Psychometric Properties of the Korean version of the Revised Prolonged Grief Disorder Scale (PG-13-R-K)

Department of Education
Sungkyunkwan University
South Korea

Ahran Jo, Dong Hun Lee

Contents

1. Introduction
2. Method
3. Results
4. Discussion
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

1. Intro Bereavement & Grief

1. Intro Normal Grief vs. Prolonged Grief

- Grief symptoms tend to diminish gradually over time, and individuals may find success in integrating the bereavement experience into their personal lives (Maciejewski, Zhang, Block, & Prigerson, 2007; Zhang, El-Jawahri, & Prigerson, 2006).

- While grief is a normal and expected reaction to loss, a small subset of individuals may continue to experience overwhelming and intense grief that goes beyond the socially and culturally accepted norms of mourning.
1. Intro Normal Grief vs. Prolonged Grief

• Approximately 10-20% of individuals who have experienced the death of a closed one undergo significant changes in their lifestyle and interpersonal relationships, including a loss of meaning in life (Prigerson, 2004).

• These extended and chronic grieving where individuals remain stuck in a state of shock or daze following bereavement is referred to as Prolonged Grief Disorder (PGD).

1. Intro PGD in DSM-5-TR

• "Persistent Complex Bereavement Disorder (PCBD)" was introduced in DSM-5, but yet under Section III as Explicit Criteria in Conditions for Further Study (APA, 2013).

• “Prolonged Grief Disorder (PGD)” as a formal DSM diagnosis in the recently released DSM-5-TR under Section II-Diagnostic Criteria and Codes (APA, 2022).
1. Intro  

PCBD to PGD

- Similar to PCBD, PGD is characterized by intense and persistent grief that causes significant impairment in daily functioning.
- However, the criteria for PGD require the presence of a minimum of three out of eight symptoms, instead of five as it was in PCBD.
- PGD diagnosis focuses more on yearning for and preoccupation with the deceased individual, contrasting with the emphasis on the circumstances of death.

1. Intro  

Revised version of PG-13

- The Prolonged Grief Disorder-13 (PG-13) Scale was developed by Prigerson et al. (2009)
- It has been used to diagnose and evaluate the frequency and severity of PGD symptoms.
- Widely used instrument that has been validated in multiple countries.
- In the revised version, three items related to feeling stunned, shocked, or dazed by the loss, feeling bitterness, and difficulty in trusting others from the original PG-13 were removed.
- Items related to symptoms such as preoccupation regarding the deceased and intense loneliness and one gatekeeping item asking whether the participant have lost someone significant were added.
1. Intro  Revised version of PG-13

- Rather than adhering to a fixed 6-month timeframe in PG-13, this gatekeeping item underwent a format change, prompting respondents to fill out the number of months that have passed since the loss occurred (Prigerson et al., 2021).
- Whereas PG-13 evaluates the frequency of symptoms in some items and the intensity in others, PG-13-R solely focuses on assessing the intensity of symptoms.
- Following the revision to PG-13-R, the items were refined and made more explicit, emphasizing more on distinct symptoms that characterize PGD uniquely, thereby establishing a clear distinction from other diagnoses.

1. Intro  Korean version of the PG-13-R (PG-13-R-K)

- A lack of studies in South Korea that have examined PGD using the newly introduced diagnostic criteria in DSM-5-TR.
- The COVID-19 pandemic which has resulted in a significant increase in fatalities
- Recent catastrophic incidents in South Korea have resulted countless individuals to confront the abrupt loss of their loved ones
- The suicide deaths are another traumatic event for many South Koreans. Survivors of suicide face profound psychological pain due to the unexpected loss of a family member
- **Purpose of the study:** To validate the Korean version of the PG-13-R (PG-13-R-K), aligning it with the recently updated DSM-5-TR criteria for diagnosing PGD
2. Method  Participants

- South Korean adults who had experienced the death of someone close to them.
- The data were collected through an online-based survey agency for about 7 weeks from October 12th, 2022 to November 28th, 2022.
- A total of 694 individuals who had experienced the loss of a closed one for more than 12 months, but less than 24 months were included for a final data set.
- Among the total participants, 501(72.19%) were men and 193(27.81%) were women. The mean age of the final dataset was 51.37 years (SD=12.48).

2. Method  Bereavement characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Participants N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relationship to the deceased</strong></td>
<td></td>
</tr>
<tr>
<td>Spouse</td>
<td>6(0.9)</td>
</tr>
<tr>
<td>Child</td>
<td>1(0.1)</td>
</tr>
<tr>
<td>Father</td>
<td>75(10.8)</td>
</tr>
<tr>
<td>Mother</td>
<td>71(10.2)</td>
</tr>
<tr>
<td>Sibling</td>
<td>28(4.0)</td>
</tr>
<tr>
<td>Grandparent</td>
<td>51(7.3)</td>
</tr>
<tr>
<td>Friends</td>
<td>111(16.0)</td>
</tr>
<tr>
<td>Others (e.g., acquaintance, colleagues, relatives)</td>
<td>351(50.6)</td>
</tr>
<tr>
<td><strong>Cause of death (Multiple responses collected)</strong></td>
<td></td>
</tr>
<tr>
<td>Unexpected death due to violent cause (e.g., suicide or homicide)</td>
<td>93(13.4)</td>
</tr>
<tr>
<td>Unexpected death due to accidental cause (e.g., car accident)</td>
<td>109(15.7)</td>
</tr>
<tr>
<td>Unexpected death due to acute illness, excluding COVID-19</td>
<td>333(48.0)</td>
</tr>
<tr>
<td>Unexpected death due to COVID-19</td>
<td>219(31.0)</td>
</tr>
<tr>
<td>Expected death (e.g., due to chronic illness)</td>
<td>418(60.2)</td>
</tr>
</tbody>
</table>
2. Method

Bereavement characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Participants N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most painful bereavement experience</td>
<td></td>
</tr>
<tr>
<td>Unexpected death due to violent cause (e.g., suicide or homicide)</td>
<td>43 (6.2)</td>
</tr>
<tr>
<td>Unexpected death due to accidental cause (e.g., car accident)</td>
<td>52 (7.5)</td>
</tr>
<tr>
<td>Unexpected death due to acute illness, excluding COVID-19</td>
<td>216 (31.1)</td>
</tr>
<tr>
<td>Unexpected death due to COVID-19</td>
<td>145 (20.9)</td>
</tr>
<tr>
<td>Expected death (e.g., due to chronic illness)</td>
<td>238 (34.3)</td>
</tr>
</tbody>
</table>

Reasons for prolonged distress regarding the death of the deceased

<table>
<thead>
<tr>
<th>Reason</th>
<th>Participants N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unexpected death</td>
<td>318 (45.8)</td>
</tr>
<tr>
<td>The deceased's young age</td>
<td>57 (8.2)</td>
</tr>
<tr>
<td>Pain that the deceased may have experienced at the time of death</td>
<td>67 (9.7)</td>
</tr>
<tr>
<td>Regrets about not doing enough for the deceased in their lifetime</td>
<td>148 (21.3)</td>
</tr>
<tr>
<td>Subsequent loss of another close one</td>
<td>2 (0.3)</td>
</tr>
<tr>
<td>Lack of respect for feelings or thoughts about the deceased</td>
<td>28 (4.0)</td>
</tr>
<tr>
<td>Sense of loneliness &amp; not knowing what to do following the death of deceased</td>
<td>32 (4.6)</td>
</tr>
<tr>
<td>Unsure of the deceased's cause of death</td>
<td>13 (1.9)</td>
</tr>
<tr>
<td>Others (e.g., inability to be present at the time of death or have proper funeral due to COVID-19 infection, expected death but sooner than anticipated, the permanent separation, the feeling responsible for the deceased's death)</td>
<td>29 (4.2)</td>
</tr>
</tbody>
</table>

2. Method

Measures

1) **Prolonged Grief Disorder**: The Revised version of Prolonged Grief Disorder-13 scale (PG-13-R)

- Developed by Prigerson et al. (2021) to classify individuals with PGD according to DSM-5-TR criteria.
- Consist of 13 items
- The PG-13-R was translated from English to Korean using back-translation technique.
- According to the original version of PG-13-R validation study using three different samples, the Cronbach's alpha coefficient was 0.83~0.93 (Prigerson et al., 2021).
- In this study, Cronbach's alpha coefficient was .95.
2. Method Measures

2) Depression: The Patient Health Questionnaire (PHQ-9)
- Originally developed by Spitzer et al. (1999) and later validated in the South Korean context by Park et al. (2010)
- Used to assess the depression severity.
- Consists of 9 items, with 4-point Likert scale ranging from 0 (not at all) to 3 (almost every day).
- Higher scores indicate higher levels of depression.
- In the validation study of the Korean version of PHQ-9, Cronbach’s alpha coefficient was .81 (Park et al., 2010).
- In this study, Cronbach’s alpha coefficient was .92.

3) Anxiety: The Generalized Anxiety Disorder Scale (GAD-7)
- Originally developed by Spitzer et al. (2006) and validated in Korean by Seo and Park (2015)
- Used to evaluate the severity of anxiety symptoms.
- Consists of 7 items, with 4-point Likert scale ranging from 0 (not at all) to 3 (almost every day).
- The higher scores reflect more severe symptoms of generalized anxiety disorder.
- In the validation study of the Korean version of the GAD-7, Cronbach’s alpha coefficient was .92 (Seo and Park, 2015).
- In this study, Cronbach’s alpha coefficient was .94.
2. Method Measures

   - Originally developed by Weathers et al. (2013) and later translated and validated in Korea by Lee et al. (2020)
   - Used to measure the level of PTSD symptoms.
   - Consists of 20 items, with 5-point Likert scale ranging from 0 (Not at all) to 4 (Extremely).
   - Higher scores indicate an increased likelihood of experiencing PTSD symptoms.
   - The Cronbach’s alpha coefficient was .90 in the study of Korean version of the PCL-5 (Lee et al., 2020). Cronbach’s alpha in the current study was .98.

2. Method Data analysis

   - A normality test and an item-total correlation
   - Kaiser-Meyer-Olkin (KMO) and Bartlett’s test of sphericity
   - A scree plot and a parallel analysis
   - Exploratory factor analysis (EFA) and Confirmatory factor analysis (CFA) using weighted least square mean and variance adjusted (WLSMV) and the goemin rotation method
   - Internal consistency
   - Concurrent validity
   - A t-test between PGD and non-PGD groups differentiated by PG-13-R cut-off score
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

3. Results Normality test & item-total correlation

Descriptive Statistics of PG-13-R-K (N=694)

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Item-total correlation</th>
<th>Deleted alpha</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3</td>
<td>2.638</td>
<td>1.101</td>
<td>.619</td>
<td>.952</td>
<td>0.492</td>
<td>-0.443</td>
</tr>
<tr>
<td>Q4</td>
<td>1.692</td>
<td>0.977</td>
<td>.862</td>
<td>.941</td>
<td>1.449</td>
<td>1.557</td>
</tr>
<tr>
<td>Q5</td>
<td>1.813</td>
<td>1.036</td>
<td>.827</td>
<td>.942</td>
<td>1.201</td>
<td>0.711</td>
</tr>
<tr>
<td>Q6</td>
<td>2.101</td>
<td>1.119</td>
<td>.721</td>
<td>.947</td>
<td>0.911</td>
<td>0.065</td>
</tr>
<tr>
<td>Q7</td>
<td>1.883</td>
<td>1.057</td>
<td>.727</td>
<td>.947</td>
<td>1.155</td>
<td>0.654</td>
</tr>
<tr>
<td>Q8</td>
<td>2.241</td>
<td>1.100</td>
<td>.778</td>
<td>.945</td>
<td>0.837</td>
<td>0.039</td>
</tr>
<tr>
<td>Q9</td>
<td>1.752</td>
<td>0.993</td>
<td>.882</td>
<td>.940</td>
<td>1.266</td>
<td>0.922</td>
</tr>
<tr>
<td>Q10</td>
<td>1.751</td>
<td>1.033</td>
<td>.785</td>
<td>.944</td>
<td>1.371</td>
<td>1.153</td>
</tr>
<tr>
<td>Q11</td>
<td>1.614</td>
<td>0.976</td>
<td>.860</td>
<td>.941</td>
<td>1.591</td>
<td>1.791</td>
</tr>
<tr>
<td>Q12</td>
<td>1.669</td>
<td>1.014</td>
<td>.833</td>
<td>.942</td>
<td>1.500</td>
<td>1.409</td>
</tr>
</tbody>
</table>

Note. Three non-Likert gatekeeping items (Q1, Q2, Q13) were excluded from the analysis.

Considered normality to be satisfied if the values of skewness were not over 2 and the values of kurtosis were not over 7 (Curran et al., 1996).

3. Results KMO & Bartlett’s test of sphericity

- The KMO fitness index was .953
- The result of Bartlett’s test of sphericity was $x^2(df=45, p<.001) = 3,187.5$, indicating that the sample was suitable for factor analysis (Kaiser, 1974).

- The 694 participants were randomly divided into two data sets, for two separate factor analysis.
- The data of 349 participants ($M_{age} = 51.54, SD = 13.14$) were used for EFA
- The remaining data of 345 participants ($M_{age} = 51.18, SD = 11.80$) were used for CFA
3. Results Scree plot and parallel analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>Eigenvalue</th>
<th>Difference</th>
<th>Variance</th>
<th>Cumulative Variance</th>
<th>Eigenvalue Variance of Actual Data: %</th>
<th>Eigenvalue Variance of Random Data: %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.089</td>
<td>6.591</td>
<td>0.875</td>
<td>0.875</td>
<td>74.4</td>
<td>20.4</td>
</tr>
<tr>
<td>2</td>
<td>0.498</td>
<td>0.325</td>
<td>0.061</td>
<td>0.936</td>
<td>7.4</td>
<td>17.8</td>
</tr>
<tr>
<td>3</td>
<td>0.173</td>
<td>0.055</td>
<td>0.021</td>
<td>0.958</td>
<td>4.5</td>
<td>15.4</td>
</tr>
</tbody>
</table>

→ Supporting a single-factor structure

3. Results Fit indices and factor loading for EFA

<table>
<thead>
<tr>
<th>Factor Model</th>
<th>x²(df)</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA (90% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Factor</td>
<td>125.449(35)**</td>
<td>.996</td>
<td>.994</td>
<td>.090(.073-.107)</td>
</tr>
</tbody>
</table>

** p<.001

A CFI and TLI value of 0.90 or greater is considered indicative of a satisfactory fit (Kline, 2015)

RMSEA values below 0.08 are deemed acceptable fit (MacCallum et al., 1996).

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor loadings (N=347)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3. Yearning</td>
<td>.711</td>
</tr>
<tr>
<td>Q4. Preoccupation</td>
<td>.937</td>
</tr>
<tr>
<td>Q5. Identity disruption</td>
<td>.916</td>
</tr>
<tr>
<td>Q6. Disbelief</td>
<td>.827</td>
</tr>
<tr>
<td>Q7. Avoidance</td>
<td>.873</td>
</tr>
<tr>
<td>Q8. Intense emotional pain</td>
<td>.862</td>
</tr>
<tr>
<td>Q9. Difficulty with reintegration</td>
<td>.957</td>
</tr>
<tr>
<td>Q10. Emotional numbness</td>
<td>.882</td>
</tr>
<tr>
<td>Q11. Life is meaningless</td>
<td>.966</td>
</tr>
<tr>
<td>Q12. Intense loneliness</td>
<td>.952</td>
</tr>
</tbody>
</table>
3. Results

Fit indices and factor loading for CFA

<table>
<thead>
<tr>
<th>Factor Model</th>
<th>$x^2$(df)</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA (90% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Factor</td>
<td>207.884(35)***</td>
<td>.989</td>
<td>.966</td>
<td>.115(.100-.131)</td>
</tr>
</tbody>
</table>

*** $p<.001$

A CFI and TLI value of 0.90 or greater is considered indicative of a satisfactory fit (Kline, 2015). RMSEA values below 0.08 are deemed acceptable fit (MacCallum et al., 1996).

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor loadings (N=347)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3. Yearning</td>
<td>.667</td>
</tr>
<tr>
<td>Q4. Preoccupation</td>
<td>.923</td>
</tr>
<tr>
<td>Q5. Identity disruption</td>
<td>.876</td>
</tr>
<tr>
<td>Q6. Disbelief</td>
<td>.754</td>
</tr>
<tr>
<td>Q7. Avoidance</td>
<td>.746</td>
</tr>
<tr>
<td>Q8. Intense emotional pain</td>
<td>.823</td>
</tr>
<tr>
<td>Q9. Difficulty with reintegration</td>
<td>.942</td>
</tr>
<tr>
<td>Q10. Emotional numbness</td>
<td>.867</td>
</tr>
<tr>
<td>Q11. Life is meaningless</td>
<td>.965</td>
</tr>
<tr>
<td>Q12. Intense loneliness</td>
<td>.944</td>
</tr>
</tbody>
</table>

3. Results

Reliability & Concurrent validity

- Cronbach’s alpha coefficient was .949 for the total scale of the PG-13-R-K.

- The PG-13-R-K was positively correlated with the depression score measured by PHQ-9 ($r = .46$, $p<.001$), anxiety score measured by GAD-7 ($r = .46$, $p<.001$), and PTSD symptom score measured by PCL-5 ($r = .60$, $p<.001$).
3. Results  A result of group t-test

<table>
<thead>
<tr>
<th></th>
<th>PGD group (n = 95)</th>
<th>Non-PGD group (n = 599)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.14 (0.83)</td>
<td>0.482 (0.48)</td>
<td>7.58</td>
<td>.000</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1.12 (0.85)</td>
<td>0.440 (0.54)</td>
<td>7.56</td>
<td>.000</td>
</tr>
<tr>
<td>PTSD</td>
<td>1.78 (1.00)</td>
<td>0.553 (0.68)</td>
<td>11.48</td>
<td>.000</td>
</tr>
</tbody>
</table>

4. Discussion  A single-factor model

- The EFA and CFA results showed that the PG-13-R-K has a single factor structure model, consistent with the factor structure revealed in the original PG-13-R study using three independent samples (Prigerson et al., 2021).

- The EFA and CFA results indicated that the RMSEA values were slightly higher than the standard
  - RMSEA often surpasses cutoff values in models with low degrees of freedom, even when the model is accurately specified (Kenny, Kaniskan, & McCoach, 2015).
  - RMSEA estimation formula can result in a large estimation if the degrees of freedom are low (Browne et al., 1993), and particularly if the value of CFI is greater than .90 indicating a good fit (Hong, 2000).
  - Since the CFI value of this study was .989, it could be interpreted that the RMSEA value was higher than the standard due to the influence of low degrees of freedom.

- All item factor loadings exceeded .40, which is considered appropriate.
4. Discussion Significant losses

• About half of participants in this study considered the loss of close relatives, acquaintances, and colleagues as significant losses.

• This result suggests that PGD could manifest even when the bereaved individual is not an immediate family member, highlighting the potential influence of collectivistic cultural values prevalent in East Asian societies.

• This cultural perspective may contribute to individuals viewing not only family members but also close acquaintances and colleagues as intimate connections, possibly leading to a higher likelihood of developing PGD.

• Further research exploring the factor structure in diverse bereavement contexts is needed.

4. Discussion PGD and maladaptive symptoms

• The concurrent validity was supported via positive correlations between the scores of PG-13-R-K and related variables such as depression, anxiety, and PTSD symptoms.

• Our results align with the original study, where PGD symptom scores performed well in predicting current maladaptive symptoms of depression, anxiety, and PTSD (Prigerson et al., 2021).

• The results from the group t-test showed that the PGD group, distinguished by the PG-13-R cutoff score of 30, had significantly higher scores in depression, anxiety, and PTSD symptoms compared to the non-PGD group.

• Hence, to prevent not only pathological grief but also other maladaptive symptoms, it is crucial to employ proactive and immediate therapeutic interventions to assist bereaved individuals in successfully integrating their bereavement experiences into their lives.
4. Discussion Q7. avoidance item

- Q7 item (asking to what extent one avoids reminders that the deceased has passed away) showed relevantly weak correlation with the total item scores across the original study and was suggested for future studies for the consideration of its inclusion (Prigerson et al., 2021).

- Our study showed strong item-total correlation and there was not much improvement in Cronbach’s alpha if the avoidance item was removed.

- The bereaved individuals with a higher likelihood of PGD tend to avoid reminders or thoughts of the deceased, triggering painful memories (Eisma & Stroebe, 2021).

- Those with a higher likelihood of PGD engage in approach behaviors, such as visiting the grave and looking at old pictures (Boelen et al., 2006).

- The investigation for the mechanisms considering the role of both avoidance behavior and approaching behavior in bereaved individuals is suggested for future studies.

4. Discussion Q7. avoidance item

- These findings seem to be influenced by the participants’ bereavement experiences associated with COVID-19.

- Avoidance of reminders related to the deceased’s passing might be more closely associated with traumatic responses, which might lead to strong correlation between Q7 score and total item scores.

- The result implies that symptoms of prolonged grief disorder may manifest differently depending on whether the death was natural or COVID-19 related.

- Further research is warranted to delve into the intricacies of bereavement related to COVID-19.
4. Discussion  Limitation

1. Relied on a self-report measure
   → addition assessment methods such as observational measures or structured interviews are recommended.

2. The cross-sectional design
   → Employing a longitudinal study could enhance comprehension of the causal links between PGD and other maladaptive symptoms.

3. Regarding the relationship with the deceased, the study samples were predominantly experienced the loss of closed one classified as “others”
   → inclusion of a wider range of samples that have experienced bereavement across various types of relationships is recommended.

4. Discussion  Strengths

• Introducing and validating the PG-13-R scale in the South Korean context in accordance with the new DSM-5-TR criteria for PGD.

• Considering the COVID-19 related deaths, recent occurrence of several tragedies, and suicide rates in South Korea, it is imperative to validate an instrument for assessing PGD among bereaved South Korean adults.

• It is expected that effective interventions and accurate therapeutic approaches will become available for individuals experiencing prolonged grief symptoms after the loss of someone loved.

• Inclusion of individuals who experienced bereavement due to COVID-19, which not only adds significance to our research but also distinguishes it from previous studies on bereavement that did not consider COVID-19 aspects.
References


References


Thank You 😊

Contact: ahranjo1115@gmail.com
The Relationship between Discrimination Victimization Experience and Quality of Life among Older Adults: The Double Mediating Effect of Emotional Dysregulation and Self-compassion

Kim, Min Ki & Lee, Young Soon

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Prof., Dept. of Psychology, Jeonbuk Nat’l Univ., Korea

<Abstract>

This study aimed to investigate the dual mediating effects of emotional dysregulation and self-compassion on the relationship between discrimination victimization experience and quality of life among 289 seniors aged 65 or older. The results showed that the experience of discrimination directly affected quality of life and that emotional dysregulation and self-compassion had a significant partial mediating effect.

<초 록>

본 연구는 65세 이상 노인 289명을 대상으로 차별피해경험과 삶의 질의 관계에서 정서조절곤란과 자기자비의 이중매개효과를 알아보고자 하였다. 연구 결과는 차별피해경험이 삶의 질에 직접적으로 영향을 미쳤고 정서조절곤란과 자기자비가 부분 매개하여 유의미한 영향을 미친 것으로 나타났다.
The Relationship between Discrimination Victimization Experience and Quality of Life among Older Adults: The Double Mediating Effect of Difficulties in emotion regulation and Self-compassion

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Lee, Young Soon
Prof., Dept. of Psychology, Jeonbuk Nat’l Univ., Korea

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1. Introduction and Theoretical Background
2. Research Model and Research Questions
3. Research Methods
4. Research Results
5. Discussion
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Introduction and Theoretical Background

- Discrimination against older adults exists in various contexts such as family, workplace, interpersonal relationships, and social institutions (Ministry of Health and Welfare, 2020; ASEM, 2019).
- Recently, the COVID-19 pandemic has exacerbated existing age discrimination, sparking societal discourse about older adults being sick and needing help (Drury et al., 2022; Lytle & Levy, 2022).
- This has increased intergenerational tensions and hatred towards older adults (Sipocz et al., 2021; Skipper & Rose, 2021).
- Older adults experiencing age discrimination feel negative emotions (Kim Juhyun, 2015; Hwang Minyoung et al., 2018) and reduce their social activities (Dattilo et al., 2015).

➢ It is important to analyze the impact of discrimination experienced by older adults on their quality of life and determine the necessary interventions.

Introduction and Theoretical Background

Quality of life

- Unlike other age groups, older adults face physical, mental, and social changes due to aging, making it important to examine their quality of life (Lee Kyungwook, 2008).
- Quality of life can be seen as a subjective perception and evaluation to fulfill personal internal needs (Choi Myungjin & Kim Giyeon, 2022).
- Maintaining active and social interactions can increase quality of life by impacting self-realization and autonomy (Ward et al., 2019).

➢ State of Quality of Life of Older Adults in Korea
- The quality of life of older adults in Korea was ranked 67th in 2013 and 60th in 2015 out of 96 countries (HelpAge, 2015).
- In a 2020 national survey, satisfaction with life among those in their 60s was the lowest, at 5.9 out of 11 (Statistics Korea, 2021).
Introduction and Theoretical Background

Discrimination Victimization Experience

- According to Richman and Levy (2009), experiences of discrimination lead to feelings of being socially devalued and rejected.
- Chronic experiences of discrimination cause older adults to adopt avoidance coping strategies and withdraw from social participation.
- Domestic qualitative studies show that after experiencing age discrimination, older adults use emotional avoidance coping strategies such as setting boundaries and isolation (Kim Juhyun et al., 2020).
- Older adults who internalize negative stereotypes about age are six times more likely to have suicidal thoughts and about ten times more likely to experience anxiety compared to those who do not (Levy et al., 2014).
- Negative self-perceptions resulting from discrimination experiences accelerate cognitive decline and decrease positive self-perceptions among older adults (Seldler & Wolff, 2017).

Introduction and Theoretical Background

Discrimination Victimization Experience—Quality of life

- Research on experiences of discrimination victimization experience and quality of life
  - Negative perceptions of older adults decrease their quality of life (Levy et al., 2000), increase disregard for their decision-making (Vitman et al., 2014), and hinder positive intergenerational interactions (Ishii & Tadooka, 2015).
  - Discrimination experiences significantly affect depression and suicidal thoughts (Jeon Sangnam & Shin Hakjin, 2011; Cho Seonghee & Kim Kyungmi, 2016).
- This study focuses on exploring the pathways through which discrimination experiences impact the quality of life in older adults, to develop targeted interventions.
Introduction and Theoretical Background

Discrimination Victimization Experience—Quality of life

• Domestic qualitative studies show that discrimination experiences lead to avoidance-focused coping strategies such as stopping activities, setting boundaries, enduring, retreating, and isolation (Kim Juhyun et al., 2020).

• Discrimination victimization experiences are associated with feeling negative emotions such as anger, anxiety, isolation, and rejection (Curtis et al., 2021; Truong et al., 2016; Tynes et al., 2019).

• Negative emotions like hostility, sadness, and fear experienced during discrimination victimization tend to link and reinforce the negative impacts of discrimination (Deckard et al., 2023).

• Increased and repetitive emotional distress requires individuals to use more energy for emotional regulation (Brondolo et al., 2009).

➢ There is a possibility that emotional regulation variables are involved in the relationship between discrimination victimization experiences and quality of life.

Introduction and Theoretical Background

Difficulties in Emotion Regulation

• Some international studies discuss the theoretical importance of emotional regulation in the well-being of older adults (Livingstone & Isaacowitz, 2021; John & Gross, 2004).

• According to the Socioemotional Selectivity Theory, emotional regulation becomes increasingly important in old age (Carstensen, 1992).

• Stress experiences from discrimination trigger negative emotional responses and regulate individual emotional responses (Folkman, 1984; Krieger, 1990; Noh et al., 2003).

• Difficulties in emotional regulation manifest when emotional regulation failures are chronic and recurrent (Cole et al., 1994)

• Inability to recognize and articulate one's emotions damages relationships (Karukivi et al., 2011) and increases stress burdens (McEwen, 2007).

• Difficulties in emotional regulation are predictors of decreased quality of life (Panayiotou et al., 2021).

➢ Thus, difficulties in emotional regulation can be considered mediators in the relationship between discrimination experiences and quality of life.
Introduction and Theoretical Background

Self-compassion

- Self-compassion is the acceptance of painful emotions rather than avoiding or ruminating on them (Neff, 2023).
- It promotes adaptive emotional regulation and mental health by enabling the processing of potentially negative emotions (Diedrich et al., 2017).
- However, a low self-compassionate attitude can lead to excessive self-judgment and a tendency to identify excessively with negative experiences and suffering.
- Self-critical individuals struggle to feel satisfaction or safety in relationships and find it difficult to properly accept discrimination experiences (Gilbert, 2009).
- They tend to magnify suffering and lack objective perspectives (Leeming & Boyle, 2004).

➢ Low self-compassionate attitudes can negatively impact quality of life.

Introduction and Theoretical Background

Difficulties in Emotion Regulation-Self-compassion

- Research shows that older adults with high difficulties in emotion regulation have lower quality of life, while those who use problem-focused coping have higher quality of life (Yoon Eun Kyung, 2011).
- Difficulties in emotion regulation affects quality of life indirectly through emotion-focused coping (Yoon Eun Kyung, 2011).
- Generally, individuals with high levels of difficulties in emotion regulation have low levels of self-compassion, which is related to various mental health issues later in life (Barlow et al., 2017; Scoglio et al., 2018; Vettese et al., 2011).

➢ Therefore, there is a close relationship between difficulties in emotion regulation and self-compassion.
Introduction and Theoretical Background

Discrimination Victimization Experience–Difficulties in Emotion Regulation–Self-compassion–Quality of Life

- Considering previous studies, difficulties in emotion regulation and self-compassion can mediate the relationship between discrimination experiences and quality of life.
- However, there are few comprehensive studies on the impact of discrimination experiences on quality of life that consider both difficulties in emotion regulation (Horhota et al., 2018) and self-compassion (Zhang et al., 2019).

Identifying the pathways through which discrimination experiences impact quality of life can help develop comprehensive interventions for older adults facing discrimination.

Research Model and Research Questions

Research Questions 1. What is the relationship between discrimination victimization experiences and quality of life?

Research Questions 2. Through which pathways do discrimination victimization experiences, difficulties in emotion regulation, and self-compassion affect the quality of life of older adults?
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

Research Methods

1-1. Participants

- An online survey was conducted targeting older adults aged 65 and above nationwide.
- Data from 300 respondents were collected, excluding 11 insincere responses and outliers, resulting in 289 valid responses (145 males and 144 females).

- Measurement Tools

<table>
<thead>
<tr>
<th>Discrimination Victimization Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Developed by Won Younghye et al. (2006).</td>
</tr>
<tr>
<td>- Consists of one sub-factor.</td>
</tr>
<tr>
<td>- Consisting of 13 items on a 4-point Likert scale.</td>
</tr>
<tr>
<td>- In this research Cronbach’s α = .90</td>
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<table>
<thead>
<tr>
<th>Self-Compassion</th>
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<td>- Developed by Nieh (2003).</td>
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<tr>
<td>- Translated and validated by Kim Kyungyi et al. (2008)</td>
</tr>
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<td>- Consisting of 26 items with six sub-factors on a 5-point Likert scale.</td>
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<table>
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<table>
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<tbody>
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<td>- Developed by Hyde et al. (2003)</td>
</tr>
<tr>
<td>- Translated and validated by Choi Myungjin and Kim Gyeon (2022)</td>
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<tr>
<td>- Consisting of 16 items with four sub-factors on a 6-point Likert scale.</td>
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<td>- In this research Cronbach’s α = .90</td>
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</tbody>
</table>

Research Methods

1-2. Data Analysis

- The collected data were analyzed using SPSS 27.0 and SPSS PROCESS macro 4.0.

1. Frequency analysis was performed to examine demographic characteristics and internal consistency (Cronbach’s α) was calculated.

2. Descriptive statistics and Pearson correlation coefficients were calculated to confirm data normality.

3. Mediation effects of emotional regulation difficulties and self-compassion were verified using PROCESS macro Model 6.

4. Bootstrapping was conducted to confirm the statistical significance of the final model, calculating the 95% confidence intervals for indirect effects (Shrout & Bolger, 2002).
Research Results

- Correlation Analysis of Key Variables

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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
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<td>-.472***</td>
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M 1.49    2.82    3.41    2.31
SD .46    .49    .46    .52
Skew 1.39  -.25    .33    -.35
Kur 1.39  .00    .04    .15

*p<.05, **p<.01, ***p<.001

---

Research Results

- Double Mediation Effect of Self-Compassion and Difficulties in Emotion Regulation (N=299)

<table>
<thead>
<tr>
<th>Pathways</th>
<th>B</th>
<th>se</th>
<th>t</th>
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<th>F</th>
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<tbody>
<tr>
<td>Discrimination Victimization → Quality of Life</td>
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<td>.06</td>
<td>-4.37***</td>
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<td>20.07***</td>
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<td>.07</td>
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<tr>
<td>Difficulties in Emotion Regulation → Self-Compassion</td>
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<td>.05</td>
<td>-13.53***</td>
<td>.47</td>
<td>27.13***</td>
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<td>.06</td>
<td>-1.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Compassion → Quality of Life</td>
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<td>.06</td>
<td>-2.52*</td>
<td>.55</td>
<td>33.29***</td>
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<tr>
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<td>.06</td>
<td>-6.34***</td>
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</table>

*p<.05, ***p<.001
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Research Results

• Double Mediation Effect of Self-Compassion and Difficulties in Emotion Regulation \(N=298\)

![Diagram showing the double mediation effect]

Research Results

• Verification of significance of double mediation effect through bootstrapping \(N=298\)

<table>
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<tr>
<th>Pathways</th>
<th>Bootstrap estimates</th>
<th>95% confidence interval</th>
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<tr>
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<td>se</td>
</tr>
<tr>
<td>Total Effect</td>
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<td>.06</td>
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<tr>
<td>Direct Effect</td>
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<tr>
<td>Total Indirect Effect</td>
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<td>-.09</td>
<td>.03</td>
</tr>
<tr>
<td>Discrimination Victimization (\rightarrow) Self-Compassion (\rightarrow) Quality of Life</td>
<td>.04</td>
<td>.02</td>
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<tr>
<td>Discrimination Victimization (\rightarrow) Difficulties in Emotion Regulation (\rightarrow) Self-Compassion (\rightarrow) Quality of Life</td>
<td>-.13</td>
<td>.03</td>
</tr>
</tbody>
</table>

*** \(p<.001\)

LLCI=Lower bound within the 95% confidence interval for the boot indirect effect
ULCI=Upper bound within the 95% confidence interval for the boot indirect effect
Discussion

1. Correlation Analysis of Key Variables

- Discrimination Victimization Experience and Difficulties in Emotion Regulation are negatively correlated with Quality of Life.
  - Research shows that as discrimination victimization experiences increase, individuals perceive negative emotions as more threatening and tend to avoid them (Doyle & Mollé, 2014; Miller & Kaiser, 2001; Matheson et al., 2019).
  - Ineffective management of negative emotions can increase the likelihood of psychopathology (Green et al., 2007; Mennin et al., 2005; Parker et al., 2000)

- Self-compassion shows a positive correlation with quality of life.
  - High levels of self-compassion enable individuals to endure and integrate negative emotions, which can positively impact quality of life (Berking & Whitley, 2014; Neff & Germer, 2013).

2. Difficulties in emotion regulation has a mediating effect between discrimination victimization experiences and quality of life.

- Emotional dysregulation mediates the relationship between discrimination victimization experiences and quality of life.
  - Older adults experiencing chronic discrimination tend to use negative emotion-focused coping strategies (Kim Juhyun, 2015; Kim Minhee & Min Kyungwhan, 2004; Yoon Eun Kyung, 2011).
  - Inadequate resolution of negative emotions through suppressive emotion regulation strategies affects quality of life (Sahin et al., 2019; Mohd et al., 2019; Kasar & Karaman, 2021).

- Avoidant and suppressive emotion regulation strategies exacerbate the negative impacts of discrimination victimization experiences.
  - There are emotion regulation strategies that exacerbate and accumulate unpleasant emotions (Lee Ji-young & Kwon Seok-man, 2006; Aldao et al., 2010; Silk et al., 2003).
  - Counseling techniques that help older adults learn effective strategies to manage negative emotions resulting from discrimination can improve their quality of life.
3. Self-compassion does not mediate the relationship between discrimination victimization experiences and quality of life.

- Discrimination victimization experiences have a direct impact on quality of life, but the indirect effect of self-compassion is not significant.
  - Discrimination experiences convey a devalued social identity in specific contexts, causing psychological distress (Crocker et al., 1998; Major & O'Brien, 2005).
  - Individuals with devalued identities may activate emotion regulation processes to alleviate psychological distress.
  - Thus, self-compassion may be related to the emotional processing of discrimination victimization experiences, but if not, the association between discrimination victimization experiences and self-compassion may be weak.

- Self-compassion is likely a personal characteristic rather than something altered by discrimination victimization experiences.
  - Self-compassion is formed through early attachment relationships and experiences with caregivers (Bowby, 1988).
  - Neff and McGehee (2010) suggest that self-compassion may reflect internalized parent-child relationships, indicating that individuals often treat themselves and others as they were treated by their attachment figures (Bowby, 1969).


- Chronic discrimination victimization leads to negative emotional experiences, self-blame, and isolation (Chang et al., 2020; Kelly et al., 2020).
  - Older adults who perceive their aging negatively tend to become more socially isolated as their physical health declines (Yoo Hye Kyung & Lee Min Sun, 2019; Kim Jihyun, 2020).
  - Chronic discrimination victimization experiences negatively affect emotional, cognitive, and behavioral responses in older adults, suppressing emotional expression and manifesting as physical symptoms.

- Counseling can address the decrease in quality of life due to chronic discrimination victimization experiences among older adults.
  - Counselors should help older adults safely express their negative emotions, especially in a supportive and accepting relationship (Greenberg & Paivio, 2008).
  - Promoting empathetic and accepting relationship experiences can help older adults realize that discrimination experiences do not make them worthless or defective (Greenberg & Paivio, 2008).
Discussion

 commencements

1. This study explores the pathways through which discrimination victimization experiences affect quality of life, clarifying counseling goals and strategies for improving older adults’ quality of life.
   - Older adults with long-term discrimination experiences may show resistance and defensiveness towards counseling and respond passively and avoidantly.
   - Increasing self-compassion and using emotion-focused interventions in counseling may reduce resistance to change.

2. Effective strategies to address older adults’ self-perceptions and negative emotions resulting from discrimination in counseling are necessary.
   - The Mindfulness and Positive Psychology Program (MPP) is reported to be effective in reducing depression (Martinez et al., 2022).
   - Acceptance and Commitment Therapy (ACT) has shown positive results in improving quality of life for older adults with low emotion regulation skills by reducing experiential avoidance and enhancing psychological acceptance (Mahmoudpour et al., 2023; Golestanifar & Dashbozorg, 2020).

Discussion

 commencements

3. Kim Soobin et al. (2017) point out the need for self-compassion research targeting older adults rather than just college students.
   - Self-compassion, defined as the attitude one has towards oneself when experiencing vulnerability or deficiency, makes older adults, who experience various losses and discrimination, a suitable research group for self-compassion studies.
   - This study, conducted on older adults aged 65 and above, provides foundational data for self-compassion research in the elderly population.
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Discussion

- Limitations and Suggestions

1. Subjectivity in Self-Report: The self-report questionnaires used in this study may involve social desirability bias and defensive attitudes, impacting objectivity.
   - Future studies should use physiological measures or behavioral observations and interviews to collect more objective data.

2. Data Distribution Bias: The data distribution of discrimination victimization experiences may be skewed.
   - The study may not have captured experiences from older adults who have faced high levels of discrimination, focusing more on those with fewer experiences.
   - Future research should include both individual and institutional discrimination experiences and cover a broader range of discrimination severity.

References

References


Thank you for your attention
Session 3. Navigating the Interactions between Psychological Phenomena
Latent Class Analysis of Depression, Anxiety, and Somatization among Korean During Covid-19 Pandemic

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Doc. Student, Sungkyunkwan Univ., Korea

<Abstract>

The purpose of this research study was to identify the latent profiles of depression, anxiety, and somatization among South Korean adults during pandemic and to further investigate the association between the latent profiles and other psychological as well as socio-demographic variables. The participants consisted of 1434 South Korean adults. Four latent profiles were identified using latent profile analysis: group 1 (57%; low depression, low anxiety, and low somatization), group 2 (22%; mid depression, mid anxiety, and mid somatization), group 3 (11%; high depression, mid anxiety, and mid somatization), and group 4 (10%; high depression, high anxiety, and high somatization). Gender and socio-economic status had significant association with the profile memberships. Females and individuals in low socio-economic status were more likely to belong to group 2 and 4. Significant group differences were found in terms of various psychological variables scores (post-traumatic stress, suicidal ideation, life-satisfaction, perceived social support). Implications and future research directions were discussed.

<초 록>

본 연구는 코로나 시기의 한국성인의 우울, 불안, 신체화 증상을 토대로 잠재 프로파일을 도출하고, 각 집단의 구분에 영향을 미치는 인구사회학적 변인을 탐색하여, 집단에 따른 다양한 사회심리학적 변인 (외상 후 스트레스, 자살 사고, 삶의 만족도, 사회적 지지)'의 차이를 탐색하고자 하였다. 참가자는 1434명의 한국 성인으로, 설문은 코로나 세계보건기구(WHO)가 팬데믹을 선언한 1년여정도 지난 후에 실시되었다. 잠재 프로파일 분석 (Latent Profile Analysis)을 통해 네 개의 잠재 프로파일 (그룹 1 [57%: 낮은 우울, 낮은 불안, 낮은 신체화], 그룹 2 [22%: 중간 우울, 중간 불안, 중간 신체화], 그룹 3 [11%: 높은 우울, 중간 불안, 중간 신체화], 그룹 4 [10%: 높은 우울, 높은 불안, 높은 신체화])이 도출되었다. 성별과 사회경제적 지위가 집단 예측 변인으로 영향을 미치는 것으로 확인되었으며, 외상 후 스트레스, 자살 사고, 삶의 만족도, 사회적 지지 변인 모두에서 유의한 그룹 차이가 발견되었다. 마지막으로 본 연구 결과를 토대로 논의와 향후 연구 방향에 대해 제시하였다.
Latent profile analysis of depression, anxiety, and somatization among Korean during Covid-19 pandemic

Gahyun Park, M. A.
Yejin Kim, M. A.

Who we are...

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Introduction

The study of mental health during Covid-19 Pandemic remain crucial

- The pandemic has had long-lasting psychological effects (Bourmistrova et al., 2022)
- Identify Psychologically Vulnerable Groups During the Pandemic – Evaluate how well mental health professionals have done for them, prepare for future crises
- Identify Psychologically Resilient Groups – protective factors

Depression, Anxiety, and Somatization

- Depression and anxiety are two of the most widespread mental health issues, significantly affecting both individuals and society (World Health Organization, 2017). The COVID-19 pandemic increased these symptoms, which led to a rise in suicidal behavior and suicide rates (Sher, 2020)
- Covid-19 also affected somatization symptom in general population (Ran, 2020)
- Individuals in collectivistic culture, such as South Korea, tend to experience and express psychological discomfort through physical symptoms more often than people in individualistic cultures (Unger et al., 2002)
Latent profile analysis (LPA)

- Person-centered analysis
- LPA aims "to determine if subgroups of similar subjects exist within a given population"
- However, the purpose of a variable-centered approach is "to explain the relationship between specific variables in a given population" (Howard & Hoffman, 2018, p. 849).

Several studies have identified the latent profiles of mental health during the COVID-19 pandemic. For example, Li et al. (2022) investigated the latent profiles of mental health among healthcare staff, Liu et al. (2021) examined those of medical students, and Lu et al. (2024) studied the mental health profiles of teachers.

However, few attempts have been made to understand the profiles of the general adult population over the pandemic.

Research Questions

Question 1
What is the nature of latent profiles based on depression, anxiety, and somatization symptoms?

Question 2
What are socio-demographic factors in predicting the latent profiles?

Question 3
What is the association between the latent profiles and other psychological variables?
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

02
Method

Participants and procedure

- Online survey
- 1434 South Korean adults
- February–March, 2021

- One year after the World Health Organization declared a pandemic
- Vaccinations begun in China, Japan, the United States, Europe, and other countries
- In south Korea, vaccinations started for high-risk groups including patients and medical staff
Participants
N=1434 South Korean Adults

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</tr>
<tr>
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</tr>
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</table>

Measures

- **Depression**: The Center for Epidemiological Studies Depression Scale, 10 items
- **Anxiety**: The Generalized Anxiety Scale, 7 items
- **Somatization**: The revised Patient Health Questionnaire, 15 items
- **PTSD**: PTSD Checklist (PCL-5), 20 items
- **Suicidal ideation**: Depressive symptom inventory-suicidality subscale, 4 items
- **Life satisfaction**: The Satisfaction with Life Scale, 5 items
- **Social support**: Multidimensional Scale Perceived Social Support, 12 items
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Statistical procedure

1. LPA was conducted to identify latent profiles using depression, anxiety, and somatization symptoms. A series of LPA were run from 2 to 5 profiles using Mplus 7.0
   • information criteria (Akaikeln formation Criterion \( \text{AIC} \), Bayesian Information Criterion \( \text{BIC} \), and Sample size-adjusted BIC (\( \text{sBIC} \))
   • entropy
   • model comparisons (La–Mendell–Rubin likelihood-ratio test \( \text{LMR–LRT} \) and bootstrapped LRT \( \text{BLRT} \))
   • # of participants in each profile membership

2. Regression analysis using the robust three-step approach was done to explore which socio-demographic variables can predict the profile membership

3. BCH method was used to evaluate the association of each subgroup with other psychological variables (PTSD symptoms, suicidal ideation, life satisfaction, and perceived social support)

Result
Research question 1. Latent profile
Model fit indices of latent profile analysis

<table>
<thead>
<tr>
<th></th>
<th>AIC</th>
<th>BIC</th>
<th>SaBIC</th>
<th>Entropy</th>
<th>LMR-LRT</th>
<th>BLRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-class</td>
<td>2959.407</td>
<td>3012.089</td>
<td>2980.322</td>
<td>0.885</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>3-class</td>
<td>2654.334</td>
<td>2728.089</td>
<td>2683.616</td>
<td>0.870</td>
<td>0.066</td>
<td>0.000</td>
</tr>
<tr>
<td>4-class</td>
<td>2451.558</td>
<td>2546.386</td>
<td>2489.206</td>
<td>0.854</td>
<td>0.003</td>
<td>0.000</td>
</tr>
<tr>
<td>5-class</td>
<td>2353.073</td>
<td>2468.974</td>
<td>2399.088</td>
<td>0.853</td>
<td>0.184</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table abbreviations: AIC, Akaike information criteria; BIC, Bayesian information criteria; BLRT, bootstrapped likelihood ratio test; LMR-LRT, Lo-Mendell-Rubin likelihood ratio test; SaBIC, sample size adjusted BIC

Research question 1. Latent profile
The four-profile results

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low DEP</td>
<td>Mid DEP</td>
<td>High DEP</td>
<td>High ANX</td>
</tr>
<tr>
<td>Low ANX</td>
<td>Mid ANX</td>
<td>High ANX</td>
<td>High SOM</td>
</tr>
<tr>
<td>Low SOM (N= 818, 57%)</td>
<td>Mid SOM (N= 317, 22%)</td>
<td>High SOM (N= 156, 11%)</td>
<td>High SOM (N= 143, 10%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEP</td>
<td>.068</td>
<td>.005</td>
<td>.352</td>
<td>.017</td>
<td>.668</td>
<td>.022</td>
<td>.746</td>
<td>.027</td>
</tr>
<tr>
<td>ANX</td>
<td>.312</td>
<td>.017</td>
<td>1.003</td>
<td>.056</td>
<td>.894</td>
<td>.112</td>
<td>1.936</td>
<td>.121</td>
</tr>
<tr>
<td>SOM</td>
<td>.307</td>
<td>.010</td>
<td>0.601</td>
<td>.027</td>
<td>.526</td>
<td>.059</td>
<td>.982</td>
<td>.056</td>
</tr>
</tbody>
</table>

Note: All values are unstandardized. The possible ranges of depression, anxiety, and somatization scores are 0-1, 0-3, and 0-2, respectively.
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Research question 2. Predictors of class membership

<table>
<thead>
<tr>
<th></th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.718(0.173)***</td>
<td>0.333(0.203)</td>
<td>0.467(0.230)*</td>
</tr>
<tr>
<td>Age</td>
<td>-0.007(0.006)</td>
<td>-0.007(0.007)</td>
<td>-0.011(0.007)</td>
</tr>
<tr>
<td>SES</td>
<td>-0.747(0.168)***</td>
<td>-0.347(0.185)</td>
<td>-1.388(0.298)***</td>
</tr>
</tbody>
</table>

Note: *p<0.05; **p<0.01; ***p<0.001

- Female is more likely to be in group 2 or 4 than group 1
- Age is not significant predictor of class membership
- The higher SES, the more likely to be in group 1 than group 2 and 4

Research question 3. Association with other psychological variables

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
<th>χ2</th>
<th>Post hoc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td>0.508(0.021)</td>
<td>1.455(0.055)</td>
<td>1.361(0.070)</td>
<td>2.388(0.067)</td>
<td>1047.066***</td>
<td>1&lt;2,3,4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2&lt;3&lt;4</td>
</tr>
<tr>
<td>Suicidal ideation</td>
<td>0.038(0.009)</td>
<td>0.330(0.040)</td>
<td>0.314(0.053)</td>
<td>0.796(0.075)</td>
<td>197.536***</td>
<td>1&lt;2,3,4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2&lt;3&lt;4</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>3.780(0.048)</td>
<td>3.138(0.087)</td>
<td>3.012(0.112)</td>
<td>2.514(0.135)</td>
<td>139.514***</td>
<td>1&lt;2,3,4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2&lt;3&lt;4</td>
</tr>
<tr>
<td>Perceived social support</td>
<td>5.152(0.046)</td>
<td>4.756(0.085)</td>
<td>4.345(0.119)</td>
<td>4.398(0.127)</td>
<td>81.261***</td>
<td>1&lt;2,3,4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2&lt;3,4</td>
</tr>
</tbody>
</table>

Note: ***p<0.001
Discussion

Research question 1. Latent profile

- Understanding the heterogeneous patterns of depression, anxiety, and somatization is crucial for making proper intervention during pandemic.

- By employing a person-centered and model-based LPA, instead of a variable-centered approach, four groups were found.
  Group 1 (N= 818, 57%; Low DEP – Low ANX – Low SOM)
  Group 2 (N= 317, 22%; Mid DEP – Mid ANX – Mid SOM)
  Group 3 (N= 156, 11%; High DEP – Mid ANX – Mid SOM)
  Group 4 (N= 143, 10%; High DEP – High ANX – High SOM)

- In the study of the latent profile analysis of depression, anxiety, and stress (Lu et al., 2024), both Mid DEP–High ANX and High DEP – Mid ANX groups were found. In the study of COVID-19 fear, depression, anxiety, stress, mindfulness, and resilience (Yalçın et al., 2021), Mid DEP–Mid ANX were found.
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**Research question 2. Predictors of class membership**

- Women were more likely to exhibit moderate and high levels of depression, anxiety, and somatization symptoms compared to men, aligning with the findings of previous research (Lu et al., 2024).

- Age did not predict class membership.

- People in higher SES are more likely to have low depression, anxiety symptoms. This might be related to social determinants of mental health during the pandemic (McQuaid et al., 2021).

- What is surprising is that no single socio-demographic factor predicts group 3 (High DEP – Mid ANX – Mid SOM), which might imply that people in this group have unique characteristics compared to those of groups 1, 2, and 4.

**Research question 3. Association with other psychological variables**

- People with higher depression and anxiety symptoms have higher PTSD scores, supporting a shared vulnerability model for comorbidity of anxiety and depressive disorders with PTSD (Spinhoven et al., 2014).

- People with higher depression and anxiety symptoms have higher suicidal ideation scores, which is inline with the previous literature that suicidal intentions are most pronounced in patients who have both anxiety and depression (Wiebenga et al., 2021).

- People with higher depression and anxiety symptoms have lower life satisfaction scores, which is consistent with previous literature (Steina & Heimberg, 2004).

- People with lower depression and anxiety symptoms have higher perceived social support scores, supporting the buffering effect of social support (Zimet et al., 1988).

- There is no statistical difference in PTSD, suicidal ideation, and life satisfaction scores between group 2 (Mid DEP – Mid ANX – Mid SOM) group and 3 (High DEP – Mid ANX – Mid SOM). However, the perceived social support scores are significantly different among two groups. This might be a clue to understanding the difference between two groups.
Implication

- Identify psychologically vulnerable groups and resilient group – help make appropriate intervention as mental health professionals
- Factors predicting class memberships – preventative approach can be made, social determinant of mental health
- This study is, to our knowledge, one of the first efforts to explore profile of Korean adults during Covid-19 pandemic, associations between profile membership and other psychological variables as well as sociodemographic variables

Limitation

- Across-sectional study
- Using self-rating scales
- Unable to figure out what made a significant difference between group 2 (Mid DEP – Mid ANX – Mid SOM) and group 3 (High DEP – Mid ANX – Mid SOM) – adding other variables such as covid-related ones might be beneficial

Reference


Thanks!

Do you have any questions? Feel free to reach out to us 😊

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Effect of College Students’ Perfectionistic Self-Presentation on SNS Addiction Tendency: Moderated Mediating Effect of Social Support through Loneliness

Ha, Jeong Eun
Doc. Student, Pukyung Nat’l Univ., Korea

<Abstract>
This study verified the mediating effect of loneliness and the controlled mediating effect of social support in the relationship between college students’ perfectionist self-presentation and SNS addiction tendency. 343 university students in Gyeongsang Province were measured for perfectionist self-presentation, SNS addiction tendency, loneliness, and social support, and analyzed. As a result, first, perfectionist self-presentation had a positive effect on SNS addiction tendency. Second, loneliness partially mediated in the relationship between perfectionist self-presentation and SNS addiction tendency. Third, social support significantly moderated the relationship between loneliness and SNS addiction tendency. Fourth, in the relationship between perfectionist self-presentation and SNS addiction tendency, loneliness had a controlled mediating effect through social support. This suggest that loneliness caused by perfectionist self-presentation can predict SNS addiction tendency, and the role of social support is important in mitigating SNS addiction. This study is significant in that it identifies factors that influence SNS addictive tendencies among college students and provides evidence for interventions.

Key words: Perfectionistic self-presentation, SNS addiction tendency, Loneliness, and Social support

<고 록>
본 연구는 대학생의 완벽주의적 자기제시와 SNS중독경향성 간의 관계에서 외로움의 매개효과와 사회적 지지의 조절된 매개효과를 검증하였다. 이를 위해 부산, 경상권의 대학생 343명을 대상으로 완벽주의적 자기제시, SNS중독경향성, 외로움, 사회적 지지를 측정하였으며, SPSS 25.0과 PROCESS MACRO를 사용하여 분석하였 다. 연구결과 첫째, 완벽주의적 자기제시는 SNS중독경향성에 정적 영향을 미쳤다. 둘째, 완벽주의적 자기제시와 SNS중독경향성 간의 관계에서 외로움은 부분매개하였다. 셋째, 사회적 지지는 외로움과 SNS중독경향성의 관계를 유의하게 조절하였다. 넷째, 완벽주의적 자기제시와 SNS중독경향성의 관계에서 사회적 지지를 통한 외로움의 조절된 매개효과가 있었다. 이 결과는 완벽주의적 자기제시로 인한 외로움은 SNS중독경향성을 예측할 수 있으며, SNS중독경향성을 완화시키는데 사회적 지자의 역할이 중요함을 의미한다. 본 연구는 대학생의 SNS 중독경향성에 영향을 미치는 요인을 확인하고, SNS중독경향성의 예방 및 완화를 돕기 위한 개입 방안을 마련하는 데 근거자료를 제시하였다는 점에서 의의가 있다.

주요어 : 완벽주의적 자기제시, SNS중독경향성, 외로움, 사회적 지지
Effect of College Students' Perfectionistic Self-Presentation on Social Media Addiction Tendency: Moderated Mediating Effect of Social Support through Loneliness

Authors and presenters: JeongEun, Hai (Pukyong National University)

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I. Introduction

II. Methods

III. Results

IV. Discussion
I. Introduction

1. The Need for Research

2. Research Question

---

I Introduction

The need for research (1/3)

- Korea's Social Media usage rate is 87%, ranking third in the world (DMC Media, 2020), with the highest usage rate among college students at 94.6% and the average Social Media usage time of people in their 20s is 30.4 hours per week, increasing every year (Ministry of Gender Equality and Family, Korea Youth Policy Research Institute, 2022).

- People who spend a lot of time on and obsess over social media have higher levels of pathological narcissism and stress (Lee, 2016), and those who spend more than two hours a day on social media are not only vulnerable to mental health problems but also have higher rates of suicidal ideation (Sampasa-Kanyinga & Lewis, 2015).

- Social Media addiction tendency influences academic procrastination behavior, which leads to academic failure tolerance (Ham & Song, 2021), and the more frequent Social Media use is associated with lower learning engagement (Shin & Chol, 2020). In addition, Social Media addiction tendency has been shown to impair college students' subjective well-being (Chol & Seo, 2017), career preparation (Kim & Lee, 2018), and adaptation to college life (Saeed & Jo, 2016).
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I Introduction

The need for research[2/3]

- People who are high in perfectionistic self-presentation are overly concerned with their mistakes or the needs of others and have a strong need for approval, whereas people who are low in perfectionistic self-presentation are comfortable with being themselves and value their own internal efforts over what others think of them (Lee & Seo, 2010).

- A number of previous studies have shown that people who strive to present a perfect image to others are more likely to be addicted to Social Media (Kang & Han, 2020; Lee & Jin, 2022; Lim & Lim, 2017). Therefore, it is believed that individuals with high perfectionistic self-presentation may be more likely to become overly engaged in Social Media to realize their idealized self by selectively disclosing the information they want to show through Social Media.

- People with high levels of loneliness have been shown to experience a variety of psychological and relational difficulties, including adjustment to college life (Park, 2021), relationship addiction (Jeon & Yoo, 2021), suicide (Jeong, 2021), and depression (Park et al., 2016).

- The lonelier college students were, the greater their fear of abandonment and perceived stress, which led to higher problematic internet use (Ahn et al., 2022). Furthermore, individuals with higher levels of loneliness were more likely to use social media to enhance interpersonal relationships and, moreover, to engage in social media as a coping behavior to alleviate loneliness (Lee et al., 2017).

- Social support has been consistently found to be an effective variable in helping individuals adopt psychologically and enhance their problem-solving abilities (Sarason et al., 1983), as well as in curbing maladaptive behaviors and reducing psychological symptoms, including life satisfaction (Kim & Lee, 2015), career adjustment (Yoo & Kim, 2017), optimism (Shin, 2006), and self-esteem (Lee et al., 2007).

- In particular, social support was found to have a buffering effect on Social Media addiction tendencies. In this regard, previous studies have shown that social support has a moderating effect on the effect of introverted narcissism on Social Media addiction among college students (Kim & Lee, 2018), and family and friend support has been shown to be a protective factor in the relationship between Social Media addiction and interpersonal problems (Hong & Jeon, 2017).

Therefore, the purpose of this study is to examine the mediating effect of loneliness and the moderating effect of social support on the relationship between perfectionistic self-presentation and Social Media addiction tendency in college students. In addition, this study aims to explore therapeutic intervention strategies utilizing social support resources to prevent Social and alleviate symptoms in college students with Social Media addiction tendencies.
I. Introduction

Research questions

Research Question 1. How does perfectionistic self-presentation influence social media addiction tendencies?
Research Question 2. Is loneliness mediating the relationship between perfectionistic self-presentation and social media addiction tendencies?
Research Question 3. Does social support moderate the relationship between loneliness and social media addiction tendencies?
Research Question 4. Does social support moderate the mediating effect of loneliness on the relationship between perfectionistic self-presentation and social media addiction tendencies?

Figure. Research Model

II. Methods

1. Research subjects
2. Measurement tools
3. Analyze data
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II Methods

Research Subjects

- The study was conducted online for two weeks from January 26, 2021, with male and female college students in grades 1-4 enrolled in universities in Busan and Gyeongsang-do.

- Of the 347 questionnaires collected, including the consent form, 342 were used in the analysis, excluding 5 that were returned dishonestly or indicated that they do not use social media.

II Methods

Measurement Tools (1/2)

- Perfectionist self-presentation
  The scale developed by Hewitt et al. (2003) and adapted and validated by Ha, Jung-Hee (2011) was used. The scale consists of 19 items, with three subscales: Perfectionistic self-effort, Effort to conceal imperfections-behavioral, and Effort to conceal imperfections-verbal, and each item is rated on a 7-point Likert scale (1: Not at all true to 7: Very true). In Ha, Jung-Hee (2011) study, Cronbach's α was .85, and in this study, it was .90.

- Tendency to social media addiction
  We used the Social Media Addiction Tendency Scale for College Students developed and validated by Jung, So-Young and Kim, Jong-Nam (2014). The scale consists of 24 items and four sub-factors: dysregulation and impairment of daily life, immersion and tolerance, avoidance of negative emotions, virtual world orientation, and withdrawal, and each item is rated on a 4-point Likert scale (1: not at all true to 4: very true). In a study by Jung, So-Young and Kim, Jong-Nam (2014), Cronbach's α was found to be .92, and in this study it was .97.
II Methods

Measurement Tools[2/2]

- **Loneliness**
  The UCLA Loneliness Scale, developed by Russell et al. (1978) and later revised by Russell et al. (1980), was adapted and validated by Kim, Kye-Heon, and Kim, Ji-Hwan (1989). The scale consists of 20 items and is rated on a 4-point Likert scale (1: not at all to 4: very much). The Cronbach’s α of the scale was .86 in the study by Kim, Kye-Heon, and Kim, Ji-Hwan (1989) and .96 in this study.

- **Social support**
  The social support scale developed by Zimet, Dahlem, Zimet, and Farley (1988) and used by Lee, Ok-Sun (2001) was modified by Park, So-Hyun (2008) to a 5-point Likert scale. The scale consists of 12 items and is organized into three subscales: family support, friend support, and significant others support. Each item is rated on a 5-point Likert scale (1: Not at all true to 5: Very true), with higher scores indicating higher levels of subjective social support perceived by the individual. In Park, So-Hyun (2008) study, the Cronbach’s α was .91, and in this study, it was .97.

II Methods

Analyzing data[1/1]

The collected data were analyzed using SPSS 25.0 and Hayes’ (2013) PROCESS MACRO.

- **First**, internal consistency was measured to determine the reliability of each instrument, and descriptive statistics were analyzed to determine the demographic characteristics of the participants, the mean and standard deviation of the variables, and the skewness and kurtosis values.

- **Second**, to verify the reliability of each measurement tool, we calculated internal consistency and conducted Pearson’s correlation analysis to examine the relationship between variables.

- **Third**, a hierarchical regression analysis was conducted to test the mediating effect of loneliness on perfectionistic self-presentation and Social Media addiction tendency, and the significance of the mediating effect was tested using bootstrap.

- **Fourth**, to test the moderating effect of social support on loneliness and Social Media addiction tendency, we conducted a hierarchical regression analysis to examine the interaction effect.

- **Fifth**, the PROCESS MACRO model 14 was utilized to test the role of social support as a moderating variable in the relationship between perfectionistic self-presentation and Social Media addiction tendency.
### III. Results

1. Descriptive Statistics and Correlation Analysis
2. Validate the Mediating Effect
3. Verify the Effectiveness of the Adjustment
4. Validate the Moderated Mediation Effect

### III. Findings

#### Descriptive Statistics and Correlation

<table>
<thead>
<tr>
<th></th>
<th>Perfectionist self-presentation</th>
<th>Social Media Addiction Tendency</th>
<th>Loneliness</th>
<th>Social Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfectionist self-presentation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Media Addiction Tendency</td>
<td>0.47***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loneliness</td>
<td>0.54**</td>
<td>0.71***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Social Support</td>
<td>-0.50**</td>
<td>-0.68**</td>
<td>-0.86**</td>
<td>1</td>
</tr>
</tbody>
</table>

**M**: 4.68, **SD**: 1.39, **Skewness**: 1.10, **Kurtosis**: -0.49

**Note**: **p < .001**
## Findings

### Validating Mediation Effects [1/2]

**Mediating Effect of Loneliness**

<table>
<thead>
<tr>
<th>Independent</th>
<th>Dependent</th>
<th>$B$</th>
<th>SE</th>
<th>$\beta$</th>
<th>t</th>
<th>$R^2$</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>C</td>
<td>.51</td>
<td>.05</td>
<td>.47</td>
<td>9.83**</td>
<td>.22</td>
<td>98.37***</td>
</tr>
</tbody>
</table>

| A           | B         | .62  | .04 | .34     | 11.88**| .29   | 159.09*** |

| A           | C         | .13  | .05 | .12     | 2.13*  | .51   | 178.74*** |

| B           | C         | .09  | .06 | .04     | 1.43** |       |       |

Note: A: Perfectionist self-presentation, B: Loneliness, C: Social Media Addiction Tendency

"**" $p < .01$, "***" $p < .001$.

### Validating Mediation Effects [2/2]

**The Bootstrap Result of the Mediating Effect of Loneliness**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Effect</th>
<th>S.E.</th>
<th>95% Bias-corrected CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total effect (A→C)</td>
<td>.51</td>
<td>.05</td>
<td>[.41, .61]</td>
</tr>
<tr>
<td>Direct effect (A→C)</td>
<td>.13</td>
<td>.05</td>
<td>[.04, .23]</td>
</tr>
<tr>
<td>Indirect effect (A→B→C)</td>
<td>.36</td>
<td>.05</td>
<td>[.28, .48]</td>
</tr>
</tbody>
</table>

Note: A: Perfectionist self-presentation, B: Loneliness, C: Social Media Addiction Tendency

**Figure**: Mediation Model
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### Findings

#### Validate Moderation Effectiveness

<table>
<thead>
<tr>
<th>Independent</th>
<th>B</th>
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<th>R²</th>
<th>ΔR²</th>
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<td>2 A</td>
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*Note: A: Loneliness, B: Social Support

#### Validation of the Significance of Interaction According to the Value of Social support

<table>
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*p < .05, **p < .01.

---

### Findings

#### Validating Controlled Mediation Effects

**Results of Moderated Mediating Effect**

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<tr>
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*p < .001.
### III. Findings

#### Validating Moderated Mediation Effects

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<tr>
<td>Mean +1SD</td>
<td>.11</td>
<td>.09</td>
<td>.01 - .37</td>
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</table>

The Controlled Mediating effect of social support in the relationship between loneliness and social media addiction tendency.

### IV. Discussion

1. Conclusion
2. Significance
3. Limitations and suggestions
Discussion

Conclusion

- First, college students’ perceived perfectionistic self-presentation had a static effect on social media addiction tendencies.

- Second, we examined the mediating effect of loneliness on the relationship between perfectionistic self-presentation and Social Media addiction tendency, and found that loneliness partially mediated the relationship.

- Third, we tested the moderating effect of social support on the relationship between loneliness and Social Media addiction tendency, and found that social support significantly moderated the relationship between loneliness and Social Media addiction tendency.

- Finally, we tested the moderated mediation of loneliness through social support on the relationship between perfectionistic self-presentation and Social Media addiction tendencies and found that the moderated mediation was partially significant. Specifically, the mediating effect of loneliness was significant only when social support was below average, and not when social support was high.

This suggests the need to improve levels of social support through healthy relationship experiences by practicing expressing oneself appropriately in interpersonal relationships as a way to reduce loneliness and social media addiction tendencies. Therefore, it is necessary to examine the level of social support in the pathway of perfectionistic self-presentation through loneliness to Social Media addiction tendency, and to take an integrated and multifaceted approach by considering the patterns of college students with related complaints in education and counseling.

Significance (1/2)

- First, by exploring the pathway of perfectionistic self-presentation through loneliness to Social Media addiction tendency, we identified variables and psychological mechanisms that influence Social Media addiction. In counseling practice, in order to help clients who complain of symptoms related to Social Media addiction, it is necessary to accurately identify the client’s condition so that appropriate interventions can be made. Therefore, by examining the relationship between perfectionistic self-presentation and Social Media addiction among college students and the effect of loneliness on this relationship, this study provided basic data to help treat and prevent Social Media addiction.

- Second, we examined the relationship between the variables by testing the partial mediation of loneliness in the relationship between perfectionistic self-presentation and Social Media addiction among college students. This suggests that while perfectionistic self-presentation, a trait that seeks to present a perfect image to others, may directly influence Social Media addiction tendencies, this dysfunctional trait may lead to social isolation, which in turn may increase Social Media addiction tendencies by increasing loneliness. Therefore, this study suggests that it is necessary to understand the influence of individual personality traits on Social Media addiction tendencies and to examine the personality and interpersonal characteristics of college students in educational and counseling settings before intervening.

- Third, by testing the moderating effect of social support on the relationship between loneliness and Social Media addiction tendency, we confirmed that social support has a key buffering effect in the pathway from loneliness to Social Media addiction tendency. This suggests that when counselors encounter clients with high levels of loneliness, it is necessary to consider personality traits and interpersonal relationships, as well as whether they use Social Media and whether they use Social Media to relieve loneliness. Furthermore, sequential interventions should be designed to explore the client’s support resources and social support networks to increase positive emotional experiences.
IV Discussion

Significance(2/2)

- Fourth, a new model of the moderated full mediation effect of social support through loneliness on the relationship between perfectionistic self-presentation and Social Media addiction tendencies in college students was identified. We found that in the pathway of perfectionistic self-presentation through loneliness to Social Media addiction, lower levels of social support increased Social Media addiction, while higher levels of social support had no effect on Social Media addiction. These results suggest that future educational and counseling interventions for Social Media addiction should recognize the importance of social support levels, and that Social Media addiction can be mitigated by establishing a social support system.

- Finally, the need for social support is further emphasized by the finding that social support fully mediated the effect of perfectionistic self-presentation on Social Media addiction tendency through loneliness. This suggests the need for expanded psychological support, such as counseling and education, for college students with high Social Media addiction tendencies due to loneliness caused by perfectionist self-presentation. Counseling approaches to help alleviate Social Media addiction tendencies include existential counseling and human-centered counseling, which are relationship-oriented approaches. Experiential and relationship-oriented counseling is expected to have a positive impact on alleviating loneliness and Social Media addiction tendencies by empowering clients to form social support systems in their daily lives based on the social support experiences they receive from counselors.

IV Discussion

Limitations and suggestions

- First, the study was limited to university students in Busan and Gyeonggido, so it is difficult to generalize the results to all university students.

- Second, we used a self-report questionnaire to measure the study variables, which may introduce bias due to respondents' social desirability.

- Third, by testing the moderating effect of social support on the relationship between loneliness and Social Media addiction, we found that social support is a key buffer in the pathway from loneliness to Social Media addiction.

- Finally, the present study found a moderated and full mediation effect of loneliness through social support on the pathway of perfectionistic self-presentation to Social Media addiction. However, the specific results were statistically significant for the group with below-average social support, but not for the group with high social support. Therefore, future research should take into account individual and environmental characteristics that may affect the relationship between perfectionistic self-presentation and Social Media addiction tendencies, which will allow for a more precise analysis of the moderated mediation in the relationship between the variables.
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

References


Thank you
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

The Relationship Between Adult ADHD Tendencies and Academic Procrastination in College Students: The Mediating Effect of Self-Control

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President, Korea Educational Therapy Association, Prof., Dept. of Applied Psychology, Pukyung Nat’l Univ., Korea

<Abstract>

The purpose of this study was to determine the effect of ADHD tendencies on academic procrastination and to test the mediating effect of self-control in college students. For this purpose, adult ADHD tendencies, academic procrastination, and self-control were measured in 515 college students from four-year universities and analyzed. The results of the study showed that, first, ADHD tendencies had a significant positive effect on academic procrastination in college students. Second, self-control partially mediated the relationship between ADHD tendencies and procrastination in college students. Third, the effect of self-control on the relationship between ADHD tendencies and academic procrastination in adults was significant regardless of gender. These results suggest that college students with high ADHD tendencies, regardless of gender, are more likely to have low self-control and engage in procrastinatory behaviors. Therefore, it is necessary to develop interventions to improve self-control among college students with high ADHD tendencies. The significance, limitations, and suggestions for future research are discussed.

Keywords: college students, adult ADHD tendencies, academic procrastination, self-control

본 연구의 목적은 대학생의 ADHD 성향이 학업지연에 미치는 영향을 확인하고, ADHD 성향과 학업지연의 관계에서 자기통제력의 매개효과를 검증하는 데 있다. 이를 위해 전국의 4년제 대학생 남녀 515명을 대상으로 성인 ADHD 성향, 학업지연, 자기통제력을 측정하였으며, SPSS 25.0과 PROCESS MACRO 4.2(Model 4)를 사용하여 분석하였다. 연구 결과, 첫째, 대학생의 ADHD 성향은 학업지연에 유의한 정적 영향을 미쳤다. 둘째, 대학생의 ADHD 성향과 학업지연의 관계에서 자기통제력이 부분 매개 하였다. 셋째, 성인 ADHD 성향과 학업지연의 관계에서 자기통제력의 영향은 성별과 관계없이 모두 유의미하게 나타났다. 이러한 결과는 성별과 관계없이 ADHD 성향이 높은 대학생들은 자기통제력이 낮고, 학업지연 행동을 보일 가능성이 크다는 것을 의미한다. 따라서 ADHD 성향이 높은 대학생의 학업지연 문제를 해결하기 위해서는 자기통제력 향상을 위한 개입방안을 마련할 필요가 있다. 위의 결과를 토대로 본 연구의 의의와 제한점 및 추후 연구에 대해 제언하였다.

주요어: 대학생, 성인 ADHD 성향, 학업지연, 자기통제력
THE RELATIONSHIP BETWEEN ADULT ADHD TENDENCIES AND ACADEMIC PROCRASTINATION IN COLLEGE STUDENTS:
THE MEDIATING EFFECT OF SELF-CONTROL

SeungA Son
SeongMoon Cheon
Pukyong National University

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II. RESEARCH METHODS
III. RESULTS
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1. INTRODUCTION

NEED FOR RESEARCH

RESEARCH QUESTIONS

NEED FOR RESEARCH

• The behavior in which learners put off tasks related to their studies is called **academic procrastination** (Rothblum, Solomon, & Murakami, 1986), and academic procrastination is known to have a variety of negative effects on college students in their 20s.

Therefore, there is a need to pay attention to academic procrastination and find ways to prevent it.
NEED FOR RESEARCH

- A number of studies conducted abroad have examined the role of Adult ADHD as a procrastination factor.
- Both adult ADHD and academic procrastination are major contributors to lower college graduation rates (Miller, 2007).
- In-depth research on related variables is essential to establish the exact causal relationship between the two variables and to prevent and control the decline in college graduation rates.

Thus, in the present study, adult ADHD tendencies were selected as a variable of influence on academic procrastination.

NEED FOR RESEARCH

- Self-control and ADHD tendencies were found to be highly correlated, as ADHD behavioral characteristics are perceived to be due to a lack of self-control (Barkley, 1995; Kendall & Braswell, 1993).
- Self-control has also been described as one of the factors that predict academic procrastination (Jaejung Park, 2023; Steel, 2007; Wolters, 2003), and many studies have shown that self-control is associated with procrastination (Jungmi Shim, Jungseob Kim, 2020).

- Based on this, it is reasonable to hypothesize that self-control is associated with ADHD and academic procrastination.

Therefore, in this study, self-control was selected as the variable that may have a mediating effect in the relationship between ADHD and academic procrastination in college students.
NEED FOR RESEARCH

- Prior research on the gender-related aspects of ADHD has shown that adult females have higher tendencies for ADHD than adult males (Jang, 2008).

- Studies examining gender differences in academic procrastination have yielded mixed results.

- Studies examining gender differences in self-control also had mixed results.

- Thus, the results of previous studies on ADHD tendencies, academic procrastination, and self-control by gender are inconsistent.

Therefore, the present study aimed to revalidate and identify gender differences among the variables.

NEED FOR RESEARCH

The objective of this study was to comprehensively examine the relationship between adult ADHD, academic procrastination, and self-control in college students, and to determine the effects of self-control and academic procrastination on college students with ADHD tendencies by testing a path model of the relationship and identifying gender differences.
RESEARCH QUESTIONS

First
Do ADHD tendencies influence academic procrastination in college students?

Second
Do ADHD tendencies in college students influence academic procrastination through the mediation of self-control?

Third
Does the mediating effect of self-control on the relationship between adult ADHD tendencies and procrastination differ by gender?

II. RESEARCH METHODS

RESEARCH SUBJECTS
MEASUREMENT TOOLS
DATA ANALYSIS PROCESS
RESEARCH SUBJECTS

- To conduct this study, an online survey was conducted to collect data from 515 male and female college students enrolled in four-year universities across the country.

- We excluded 7 people who filled out the questionnaire incorrectly or answered incoherently and 11 people who were not eligible for the survey and used the data of 497 people for the analysis.

MEASUREMENT TOOLS

- **Adult ADHD Tendencies** - *Conners’ Adult ADHD Rating Scale–Korean Short Version*
  - In Jang’s (2008) study, Cronbach’s $\alpha$ was .92, and in this study, it was .94.

- **Academic Procrastination** - *Academic Initiation-Completion Procrastination Scale*
  - Developed and validated by Hyo-Sun Heo (2012).
  - In Heo’s (2012) validation study, Cronbach’s $\alpha$ was .92, and in this study, it was .96.

- **Self-Control** - *The Brief Self-Control Scale*
  - Developed by Tangney, Baumeister, and Boone (2004), which was adapted and validated in Korean by Hyun-Ki Hong et al. (2012).
  - In Hong et al’s (2012) study, Cronbach’s $\alpha$ was .78, and in this study, it was .85.
DATA ANALYSIS PROCESS

First
Pearson’s correlation analysis was conducted to measure the correlation between adult ADHD tendencies, academic procrastination, and self-control in college students.

Second
SPSS 25.0 was used to analyze the mediating effect of self-control on the relationship between adult ADHD tendencies and academic procrastination by conducting multiple linear regression analysis according to the procedure suggested by Baron and Kenny (1986).

Third
Macro PROCESS for SPSS 4.2 (Model 4) was used to test for gender differences in the mediating effect.

III. RESULTS
CORRELATIONS BETWEEN KEY VARIABLES
THE MEDIATING EFFECT OF SELF-CONTROL
GENDER-SPECIFIC MEDIATION TEST
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

### CORRELATIONS BETWEEN KEY VARIABLES

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<th>1a</th>
<th>1b</th>
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***p < .001

1. ADHD tendencies, 1-a inattention and memory issues, 1-b Impulsiveness and emotional instability, 1-c Hyperactivity and agitation, 1-d Self-control, 1-e ADHD Index, 2. Academic Procrastination, 2-a Delayed academic initiation, 2-b Delayed academic completion, 3. Self-Control, 3-a Self-Control, 3-b Concentration

### THE MEDIATING EFFECT OF SELF-CONTROL

The Mediating Effect of Self-Control on The Relationship between Adult ADHD Tendencies and Academic Procrastination (n=497)

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***p < .001
**Gender-Specific Mediation Test**

Results of the gender-specific mediation test  
(n=497)

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<td>-.37</td>
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<td>.12</td>
<td>.08</td>
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***p < .001  *p < .05
CONCLUSION

• First, we examined the relationship between adult ADHD tendencies and academic procrastination in college students and found that adult ADHD tendencies had a significant positive effect on academic procrastination.

• Second, we examined the mediating effect of self-control on the relationship between ADHD tendencies and academic procrastination in college students and found that self-control partially mediated the relationship between adult ADHD tendencies and academic procrastination.

• Third, we analyzed the mediating effect of self-control on the relationship between adult ADHD tendencies and academic procrastination by gender and found that the effect of self-control on the relationship between adult ADHD tendencies and academic procrastination was significant for both men and women. This means that self-control has a significant effect on the relationship between adult ADHD tendencies and academic procrastination regardless of gender.

SIGNIFICANCE

• First, we found adult ADHD tendencies as a new predictor of academic procrastination among Korean college students.

• Second, we found that self-control partially mediated the relationship between adult ADHD tendencies and academic procrastination.

• Third, we examined the mediating effect of self-control on the relationship between adult ADHD tendencies and academic procrastination by gender.
LIMITATIONS AND RECOMMENDATIONS

• First, the present study used self-report measures of ADHD tendencies, which may be less accurate than objectively or behaviorally identifying ADHD tendencies.

• Second, this study selected the behavioral variable of self-control as a variable that influences the relationship between adult ADHD tendencies and academic procrastination.

• Third, the mediating effect of self-control on the effect of adult ADHD tendencies on academic procrastination in this study was found to be partially mediated, meaning that adult ADHD tendencies have a direct effect on academic procrastination and an indirect effect through self-control.

V. REFERENCES
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

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Parental, individual, and peer factors associated with smartphone addiction in South Korean adolescents based on Self-determination Theory

Kim, Mi Na

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Abstract

Smartphone addiction is on the rise worldwide, especially in Korea, and it is important to study the predictive factors of smartphone addiction based on Self-determination theory (SDT). This study aimed to investigate the relationships among parental autonomy support, collective efficacy, peer relationship, and smartphone addiction, and to examine potential mediating roles of collective efficacy and peer relationship. This model was examined with 2590 Korean middle school students collected from the Korea Children and Youth Panel Survey. A serial multiple mediation model was analyzed using multiple regression and PROCESS Macro. The results revealed that parental autonomy support was sequentially positively associated with collective efficacy at first and then peer relationships, negatively predicting smartphone addiction. Moreover, collective efficacy and peer relationship mediated the relationship between parental autonomy support and smartphone addiction. The present study highlights the underlying mechanisms between parental autonomy support and smartphone addiction, which has implications for the prevention of adolescent smartphone addiction.

Keywords: smartphone addiction, self-determination theory, Korea Children and Youth Panel Survey, adolescents
Parental, individual, and peer factors associated with smartphone addiction in South Korean adolescents based on Self-determination theory

Mina Kim, The Catholic University of Korea

Introduction
Recent Evidence and Future Directions for Crisis Prevention and Intervention: From Youth to Elderly

**Prevalence and Consequences**

**Growing Concern**
The increasing prevalence of smartphone addiction in South Korea has sparked concerns due to its association with various psychological, physiological, and behavioral issues.

**Adverse Effects**
Excessive smartphone use has been linked to depression, sleep disturbances, poor academic performance, and difficulties in developing social skills and mood regulation.

**Statistics on Usage**
A national survey reveals that 90% of Korean adolescents own smartphones, with 35.8% at risk of addiction—a significant rise from previous years.

**Individual and Environmental Predictors**

**Pathological Behavior**
Smartphone addiction is characterized by withdrawal, resistance, and an over-reliance on virtual interactions, which negatively impact daily life.

**Environmental Predictors**
Recent research has highlighted the role of environmental factors, such as parental and peer relationships, in predicting smartphone addiction.

**Friendship Conflicts and Academic Stress**
Conflicts with friends and academic stress are significant predictors of increased smartphone obsession and addiction.
Self-determination Theory and Smartphone Addiction

Fundamental Motivation
Self-determination theory posits that humans have basic psychological needs for autonomy, competence, and relatedness, the frustration of which can lead to maladaptive behaviors.

Addiction and Maladaptive Behaviors
The inability to satisfy these basic needs may predict the likelihood of developing addictive behaviors, including smartphone addiction.

National Data and SDT
Utilizing national data from Korea, this study applies the Self-determination theory to understand the motivational aspects of smartphone addiction and inform parental interventions.

Theoretical Background
Overview of Self-determination theory

Motivational Continuum
Self-determination theory posits a spectrum of motivation, ranging from intrinsic motivation, driven by personal interest and enjoyment, to extrinsic motivation influenced by external rewards or pressures.

Intrinsic vs. Controlled Motivation
Intrinsic motivation is characterized by engaging in activities for their inherent satisfaction, while controlled motivation involves actions taken to achieve external recognition or meet specific goals.

Deci & Ryan’s Theory
This motivational theory posits that autonomy, competence, and relatedness are essential for psychological growth and well-being. It underscores the importance of these basic psychological needs in fostering intrinsic motivation.

The Basic Psychological Needs and Well-being

* SDT proposes that psychological well-being is related to a person’s basic psychological needs.

* Satisfying these needs for autonomy, relatedness, and competence is essential for promoting intrinsic motivation.
Autonomy

01 Definition of Autonomy
Autonomy is the need to feel in control of one's actions and decisions, free from external pressure or influence.

02 Autonomy Support
Supporting autonomy involves acknowledging one's perspective, offering choices, and minimizing restrictions, which can help individuals autonomously manage behaviors such as addiction.

03 Parental Influence
Research indicates that parental autonomy support is crucial in preventing smartphone addiction, highlighting the role of parenting style in fostering healthy technology use.

Competence

Understanding Competence
Competence is the need to feel effective and capable of achieving desired outcomes, closely related to the concept of self-efficacy.

Self-Efficacy and Collective Efficacy
Self-efficacy is the belief in one's ability to accomplish tasks, while collective efficacy refers to a group's shared belief in its capabilities to achieve goals.

Competence and Addiction
Studies suggest that both individual self-efficacy and collective efficacy can act as protective factors against smartphone addiction by promoting a sense of competence.
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**Relatedness**

01 The Need for Relatedness
Relatedness involves feeling connected, loved, and supported within social relationships.

02 Smartphone Use and Social Satisfaction
While smartphones can compensate for a lack of physical interaction, excessive use can lead to loneliness and hinder genuine social connections.

03 Peer Relationships
Positive peer relationships and friendship satisfaction have been found to mitigate the risk of smartphone addiction, emphasizing the importance of fulfilling the need for relatedness.

---

**The Present Study**
The Context of Adolescent Smartphone Addiction

Research Gap
Prior research on the relationship between basic needs and addiction in adolescents, particularly in the context of smartphone usage, is limited and has yielded inconsistent results. This study aims to delve into how basic needs correlate with smartphone addiction among adolescents in South Korea.

Influence of Basic Needs
While previous studies suggest that competence and relatedness may not directly affect internet addiction, there is a need to explore beyond the measurement of basic needs to understand the factors and mechanisms contributing to addiction.

Theoretical Framework

Environmental Factors and Basic Psychological Needs

Parental Autonomy Support  The study postulates that parental autonomy support is crucial for adolescents to develop autonomy, which in turn may predict their vulnerability to smartphone addiction. Low levels of autonomy support could lead to increased reliance on smartphones as a means of avoiding real-life communication.

Collective Efficacy and Peer Relationships: Collective efficacy, understood as group-level self-efficacy, and peer relationships are considered environmental factors that satisfy basic psychological needs. The lack of these factors may predicts increased addictive smartphone usage due to failures in establishing satisfactory peer relationships.
Theoretical Framework

Self-determination theory (SDT) and Smartphone Addiction

Relatedness and Intrinsic Motivation: While relatedness is not directly linked to intrinsic motivation, it is necessary for maintaining it. The study proposes a serial mediation model to explore the relationships between parental autonomy support, collective efficacy, peer relationships, and smartphone addiction.

Research Objectives and Hypotheses
Purpose and Hypotheses of the Study

**Study Purpose:** The primary aim of this study is to investigate how parental autonomy support can predict smartphone addiction in adolescents, with a focus on the mediating roles of collective efficacy and peer relationships.

**Proposed Hypotheses:** Two hypotheses are generated. (a) Parental autonomy support, collective efficacy, and peer relationships are related to smartphone addiction. (b) Collective efficacy and peer relationships potentially mediate the relationship between parental autonomy support and smartphone addiction.

Research Model

```
  Collective efficacy
   ↓
  Parental autonomy support
  ↓
  Peer relationship
  ↓
  Smartphone addiction
```
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Research Method

National Data Set and Subjects

01 National Data Set
The study utilized a cross-sectional national data set obtained from the Korean Children and Youth Panel Survey (KCYPS) conducted by the National Youth Policy Institute (NYPI) in South Korea. The KCYPS aimed to investigate the development and growth of Korean children and youth in 2018.

02 Ethical Standards
All procedures involving human participants adhered to the ethical standards of the institutional research committee and were in accordance with the 1964 Helsinki Declaration and its later amendments. Informed consent was obtained from all participants prior to their involvement in the study.

03 Sample Description
The sample comprised 2590 middle-school students, with 1495 male and 1885 female eighth-grade students (average age, M = 15). The participants were nested within 17 cities, with the sample size per city ranging from 38 to 619, determined through random sampling methods by the institution of the Korean government.
Measurements

The Korean version of the Parents as Social Context Questionnaire for Adolescents (PSCQ-KA) by Kim and Lee (2017) is used.

A self-reported instrument consisting of 24 items with 6 factors: Warmth, Rejection, Autonomy support, Coercion, Structure, and Chaos. The present study used four items measuring autonomy support.

The 4 items were answered using a 4-point Likert-type scale format ranging from 1 to 4. In this study, Cronbach’s alpha was .88.

The Collective Efficacy Scale originated from A Study on Measurement of Korean Youth Competency and international Comparative Study II (ICCS 2016) by Kim, Oh, Lee, and Choi (2015) is used.

This scale consists of 14 items. Each item is rated on a 4-point Likert scale, with a higher total score suggesting better collective efficacy.

In this study, Cronbach’s alpha was .94.

Measurements

The Korean Peer Relationship Quality Scale for Adolescents by Bae, Hong, and Hyun (2015) was used.

The Scale consists of 13 items, which are divided into two subscales: 8 items relevant to positive peer relationship, and 5 items relevant to negative peer relationship.

Each item is rated on a four-point Likert scale with higher score suggesting more satisfaction with their peer relationship. In this study, Cronbach’s alpha was .90.

The Smartphone Addiction Proneness Scale by Kim et al. (2012) was used.

The scale consists of 15 items, which are divided into four dimensions: disturbance of adaptive functions (9 items), virtual life orientation (7 items), withdrawal (7 items), and tolerance (6 items).

Items are rated on a 4-point Likert scale with a higher score indicating higher addictive use of smartphones. In this study, Cronbach’s alpha was .76.
Data Analyses

**Descriptive Analyses:** The descriptive analyses were conducted using SPSS 26.0. Descriptive statistics for all research variables and Pearson correlations between them were calculated.

**The Model Analyses:** The proposed multiple mediation model was tested to examine the relationship between parental autonomy support and smartphone addiction as well as the mediating effects of collective efficacy and peer relationship. The model analyses were performed using SPSS macro PROCESS (Hayes, 2013) with the bootstrapping procedure of 5,000 samples.

Results
Correlation and Descriptive Statistics

Table 1

Correlations between study variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parental autonomy support</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Collective efficacy</td>
<td>.35***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Peer relationship</td>
<td>.38***</td>
<td>.51***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4. Smartphone addiction</td>
<td>-.21***</td>
<td>-.25***</td>
<td>-.24***</td>
<td>1</td>
</tr>
</tbody>
</table>

M   | 3.35  | 2.99  | 3.13  | 2.04  |
SD  | .58   | .52   | .43   | .49   |
Skewness | -.54  | -.15  | -.09  | .24   |
Kurtosis | -.14  | .65   | .29   | -.02  |

Note. *** p < .001

Serial Multiple Mediational Analyses

Figure 2

The relationship between parental autonomy support and smartphone addiction before inputting mediators

\[ c = -.21^{***} \]

Note. \( c \) – standardized regression coefficient

*** p < .001
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Serial Multiple Mediational Analyses

Figure 3

Multiple mediation model predicting smartphone addiction by parental autonomy support, collective efficacy and peer relationship

Note. Presented are standardized regression coefficients

\[ **p < .001 \]

Table 2

Statistical Significance of the indirect effects

<table>
<thead>
<tr>
<th>Path</th>
<th>Point Estimate</th>
<th>SE</th>
<th>Bootstrapping 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>CI</td>
</tr>
<tr>
<td>Total Indirect Effects</td>
<td>-0.0897</td>
<td>0.012</td>
<td>-1.107</td>
</tr>
<tr>
<td>PAS-CE-SA</td>
<td>-0.0506</td>
<td>0.0088</td>
<td>-0.0677</td>
</tr>
<tr>
<td>PAS-PR-SA</td>
<td>-0.0235</td>
<td>0.0059</td>
<td>-0.0358</td>
</tr>
<tr>
<td>PAS-CE-PR-SA</td>
<td>-0.0157</td>
<td>0.0039</td>
<td>-0.0238</td>
</tr>
</tbody>
</table>

Note. PAS (Parental autonomy support), CE (collective efficacy), PR (Peer relationships), SA (Smartphone addiction). CI = confidence interval; LL = lower limit; UL = upper limit.
Discussion

A significant relationship between parental autonomy support, collective efficacy, peer relationship, and smartphone addiction among adolescents
Adolescents who perceived higher levels of autonomy support from their parents were more likely to exhibit greater collective efficacy.

- The importance of parental involvement and support in shaping adolescents' beliefs about their capabilities within social contexts.

The parental autonomy support extended beyond individual perfection of competence to impact peer relationships.

- Adolescents who experienced greater autonomy support from their parents tended to have stronger and more positive relationship with their peers.

Parental autonomy support not only fosters adolescents' sense of competence but also contributes to the development of healthier peer interactions, which in turn may serve as a protective factor against smartphone addiction.
Collective efficacy refers to an individual's shared belief in their ability to work together effectively to achieve common goals.

Adolescents who have higher levels of collective efficacy are less likely to develop problematic smartphone usage patterns.

Collective efficacy as a protective factor against smartphone addiction

Adolescents who perceive themselves as capable contributors to group efforts are likely to feel a sense of belonging and purpose within their social circles.

-> This sense of belonging can serve as a buffer against the isolation and loneliness that may drive excessive smartphone use as a coping mechanism.

Individuals with higher collective efficacy may be more inclined to engage in collaborative activities offline, reducing their reliance on smartphone for social interaction and entertainment.
Collective efficacy and peer relationship partially mediate the relationship between parental autonomy support and smartphone addiction, both individually and in combination.

→ Parental autonomy support increases, adolescents perceive greater collective efficacy and experience improved peer relationships, resulting in reduced smartphone usage.
The study sets the variables that represent basic psychological needs

**Autonomy:** Parental Autonomy Support
**Competence:** Collective Efficacy
**Relatedness:** Peer Relationship

Parental autonomy support was negatively related to adolescents' smartphone addiction.

Collective efficacy and peer relationship mediated the association between parental autonomy support and smartphone addiction.
Parental autonomy support was positively associated with collective efficacy first and then peer relationship sequentially, which in turn alleviated the level of smartphone addiction.

Parental autonomy support, collective efficacy, and peer relationships could be protective factors in adolescents' smartphone addiction.
Thank you
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Eustress-Distress Academic Scale

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Abstract

Academic stress is a significant issue in higher education, impacting students’ mental health and academic performance. Excessive academic stress can lead to poor performance, decreased motivation, burnout, anxiety, depression, and even suicide. Studies reveal that changes in educational systems and environments have heightened stress levels, with 20% of students at Universitas Surabaya experiencing high stress. Addressing this requires early detection and intervention. The methodology used a development of digital academic stress measuring tool tailored to Indonesian students. The result drawn from 211 participants (Indonesian university students from varying institutions, study programs, and semesters into their studies) was the domains of stressors, personal factors, and symptoms that had passed the validity and reliability qualifications as a prototype. Therefore, this study shows that reducing academic stress in university students is essential and the introduction of an education system that is both effective and productive on academic results and mental health is necessary.

Abstract

학업 스트레스는 고등 교육에서 중요한 문제로, 학생들의 정신 건강과 학업 성과에 영향을 미친다. 과도한 학업 스트레스는 성적 저하, 동기 감소, 번아웃, 불안, 우울, 심지어 자살로 이어질 수 있다. 연구에 따르면 교육 시스템과 환경의 변화가 스트레스 수준을 높이며, Surabaya 대학교 학생 중 20%가 높은 스트레스를 경험하고 있다. 이를 해결하기 위해서는 조기 선별과 개입이 필요하다. 본 연구에서는 인도네시아 학생들에게 맞춘 디지털 학업 스트레스 측정 도구를 개발하였다. 다양한 학교, 학과, 학기의 인도네시아 대학생 211명을 대상으로 한 연구 결과, 스트레스 요인, 개인적 요인, 증상 영역이 유효성과 신뢰성 검증을 통과하여 프로토타입으로 확인되었다. 따라서 본 연구는 대학생의 학업 스트레스를 줄이는 것이 필수적이며, 학업 성과와 정신 건강 모두에 효과적이고 생산적인 교육 시스템의 도입이 필요함을 보여준다.
Eustress-Distress Academic Scale Prototype

Presenter: Thoriq Muhammad Syamil
Supervised by: Mr. Jae Hyeok Choi

Researched with Trisna Alvicena Putra
and Adib Muhammad Daffa

in collaboration with Faxtor Indonesia

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- Conclusion
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Introduction

Academic Stress as a Prevalent Problem

Academic stress is a problem prevalent for those in higher education. According to Saqib and Rehman (2018), academic stress is a fundamental problem in obtaining an education because it affects educational institutions. Excessive academic stress slows the progress of academic work and hinders academic development in college (Adom et al., 2020). Indonesia is no exception; many students whose academic lives are disrupted due to academic stress, which even impacts their mental health.

Effects of academic stress includes symptoms such as lack of performance, decreased motivation to study, burnout, anxiety, depression, and even suicide. This problem is an urgent matter to handle. One way to deal with it is to prevent and deal with it as early as possible. This can be achieved if there is a measuring instrument that can detect the academic stress conditions of Indonesian students. Therefore, the study aims to develop a prototype of digitalized academic stress measuring tool that suits the characteristics of the Indonesian student population.
Introduction

Academic Stress to be measured

The prototype of this study has significant novelty. Most academic stress measurement tools only measure symptoms of stress, which makes the interventions can only be aimed at students. Meanwhile, this study’s measuring tool measures sources of stress, personal factors, and symptoms of stress. This allows educational practitioners and psychologists to detect sources of stress that burden students so that they can intervene to reduce the burden of student academic stress.

This novelty allows certain personal factors to be intervened in order to improve students’ ability to deal with sources of academic stress. The uniqueness of this measuring tool is that it measures and determine the condition of eustress or distress that students are experiencing. This is useful so that universities and students can monitor students’ mental health and academic stress conditions so that they can live their academic lives well. This novelty and uniqueness can be implemented with the theoretical framework that academic stress is a condition as a result of academic stressors and individual personal factors that give rise to psychological, physiological, and behavioral symptoms. Both positive (academic eustress) and negative (academic distress).

Literature Review and Hypothesis Development

Definition of Stress

Selye (1956; 1983) states that stress is a non-specific response to a stressor with positive or negative impacts (Pluut et al., 2022). Stress that has a positive impact is called Eustress, while stress that has a negative impact is called Distress.

From this definition, Lazarus and Folkman (1984) determine that psychological stress is a relationship between a person and the environment, which the person assesses as burdening or exceeding their resources and endangering their well-being.

In line with this statement, Sarafino and Smith (2010) argue that stress is a condition where transactions cause individuals to experience discrepancies (gaps) between the physical or psychological demands and the biological, psychological, or social resources of the individual’s system.

Additionally, Selye (1956) and Pluut et al. (2022) further explain that Eustress is constructive stress that reflects positive emotional arousal associated with activation and engagement. Meanwhile, Distress is destructive stress and reflects a condition of negative emotional arousal associated with dissatisfaction and disengagement.
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Literature Review and Hypothesis Development

Definition of Academic Stress

Khan et al. (2013) state that academic stress can be seen as stress that occurs due to an individual’s excess of academic work that is beyond their personal capacity (Adom et al., 2020; Kiani et al., 2017). Also, Gulzaina et al. (2018) assert that there is positive stress (eustress) and negative stress (distress). Positive stress is generally felt when faced with a challenging situation that the individual can handle, while negative stress usually has negative consequences. Moreover, Adom et al. (2020) argue that academic stress is relational or transactional and depends on the individual’s assessment of the environment (stressor) that they face.

Thus, it can be concluded that academic stress is a result of academic stressors and individual’s personal factors that give rise to psychological, physiological, and behavioral symptoms, both positive (academic eustress) and negative (academic distress). This definition is in line with the stress theory that we use from Selye (1956), Lazarus and Folkman (1984), Sarafino and Smith (2010), and Pluut (2022).

Literature Review and Hypothesis Development

Hypothesis Model

This is the hypothesized model developed from older stress models. This model explains that there are interactions between stressor and personal factors before any showing of stress symptoms.

For example, someone with high resilience could be given a task and no stress symptoms would be shown by the person. On the contrary, someone with low resilience could be given the same task and stress symptoms would show due to their personal factors.

This model is mainly influenced by Lazarus and Folkman’s theory explaining that stress is a process in which there are interactions and adjustments between a person and its environment.
Research Methodology

This study included phases of the measurement instrument creation.

First phase included the generation of items for the three domains. Which are stressors, personal factors, and stress symptoms.

Second phase included assessing the generated item through participant testing to see content validity and test reliability.

Third phase was drawing conclusions from the pilot testing to establish the hypothesis’s validity, reliability, and accuracy, which was assisted by the research and development team of Faxtor Indonesia.

Research Methodology

Academic Stressor Domain

Stressor domains are measured to determine the level of burden that each academic stressor poses to students. Items in this domain are in the form of statements about the perception of how heavy the burden of academic stressors. This domain interprets the degree of academic stress perceived by students, so that intervention can be carried out against academic stressors that are burdensome or less challenging for students. The facets of the academic stressor domain are as follows:

1. Unavailability of learning facilities on campus
2. Exam frequency
3. Expectations from family and friends
4. Learning satisfaction
5. Social support
6. Competition between students
Research Methodology

Personal Factors Domain

The personal factor domain is measured to determine the personal factors that influence students to face stressors. Items in this domain are in the form of statements about how they interact with burdensome academic stressors that result in academic stress. The aim of this domain measurement is to discern the traits of students when faced with academic stressors. This facilitates the deployment of interventions aimed at personal factors that might be less than optimal in managing these stressors. The facets of the personal factors domain are as follows:

1. Resilience
2. Self Efficacy
3. Fear of Failure
4. Time management

Research Methodology

Stress Symptoms Domain

The symptom domain is measured to determine the symptoms that appear when students receive academic stressors to determine the consequences of academic stress. The interpretation of this domain measurement is a description of students’ academic stress conditions, namely academic eustress or academic distress. The facets of the symptoms are as follows:

1. Psychological Symptoms
2. Physiological Symptoms
3. Behavioral Symptoms
Research Methodology

Pilot Testing

Through a few processes of item discussion and revisions by peer review and the research and development team in Faxtor Indonesia, we had our facets ready with each at least four items. The next step was to run a pilot test on 211 subjects of university students with varying institutions, study programs, and semesters into their studies.

Results

Reliability Analysis -

<table>
<thead>
<tr>
<th>Facet</th>
<th>Jamovi</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Factor - Internal Source of Stress</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resiliency</td>
<td>8</td>
<td>0.704</td>
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<td>Self-efficacy</td>
<td>5</td>
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<tr>
<td>Time Management</td>
<td>5</td>
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</tr>
<tr>
<td><strong>Academic Stressor - External Source of Stress</strong></td>
<td></td>
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</tr>
<tr>
<td>Competition between students</td>
<td>5</td>
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<tr>
<td>Exam Frequency</td>
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<tr>
<td>Expectations from family</td>
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Recent Evidence and Future Directions for Crisis Prevention and Intervention:
From Youth to Elderly

Results

<table>
<thead>
<tr>
<th>Facet</th>
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<tr>
<td>Stress Symptoms</td>
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<tr>
<td>Psychological symptoms</td>
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<td>Physiological symptoms</td>
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Results

Validity Analysis - Jamovi

<table>
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<tr>
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<th>df</th>
<th>p</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
<th>RMSEA</th>
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<tr>
<td>Personal Factor - Internal Source of Stress</td>
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<td>Resilience</td>
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<td>Self-efficacy</td>
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<tr>
<td>Domain Internal</td>
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<td>0.959</td>
<td>0.953</td>
<td>0.079</td>
<td>0.089</td>
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</tbody>
</table>
## Results

### Validity Analysis - Jamovi

#### Academic Stressor - External Source of Stress

<table>
<thead>
<tr>
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<th>$X^2$</th>
<th>df</th>
<th>p</th>
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<th>TLI</th>
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<tbody>
<tr>
<td>Competitions between students</td>
<td>17.9</td>
<td>2</td>
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<td>Exam Frequency</td>
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<td>Expectations from family</td>
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<tr>
<td>Domain Stresor</td>
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<td>62</td>
<td>&lt; 0.001</td>
<td>0.986</td>
<td>0.982</td>
<td>0.062</td>
<td>0.056</td>
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</table>

#### Stress Symptoms

<table>
<thead>
<tr>
<th>Facet</th>
<th>$X^2$</th>
<th>df</th>
<th>p</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological symptoms</td>
<td>23.6</td>
<td>5</td>
<td>&lt; 0.001</td>
<td>0.952</td>
<td>0.905</td>
<td>0.0423</td>
<td>0.0133</td>
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<tr>
<td>Physiological symptoms</td>
<td>6.62</td>
<td>5</td>
<td>0.251</td>
<td>0.994</td>
<td>0.988</td>
<td>0.0234</td>
<td>0.0392</td>
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</table>
Based on the conducted research and testing, this study already managed to make a measurement instrument prototype in which the domains of personal factors, stressors, and symptoms have items that pass qualifications to be valid and reliable.

Improvements in item generation is needed so that the items of this measuring instrument can measure the academic stress of Indonesian students in accordance with the theory that the study has proposed.

The limitation of this study would be its focus on Indonesian education culture, thus might not be applicable in other countries. Therefore, future studies need to be conducted in different educational environments.

<table>
<thead>
<tr>
<th>Model</th>
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<tr>
<td>Model 1</td>
<td>30.4</td>
<td>16</td>
<td>0.016</td>
<td>0.972</td>
<td>0.951</td>
<td>0.039</td>
<td>0.065</td>
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</table>
1. Mission

The SKKU Traumatic Stress Center is to investigate the impact of diverse societal factors on mental health and aims to develop counseling and psychological interventions as potential treatments for these issues. The subjects of trauma, suicide, bereavement, self-harm, and multiculturalism are explored within the context of counseling theory, particularly existentialism and case conceptualization.

2. About Social Sciences Korea

Research Project: Prevention and Intervention of Non-suicidal Self Injury and Suicide in Adolescents: Establish the Korean Version of the Biopsychosocial–Pathway Model to Develop an AI-Based Ecological Momentary Assessment and Intervention Application
Sponsoring Organization : National Research Foundation of Korea
Research Period: 2021.9.1 ~ 2024.5.31

The COVID-19 pandemic has brought about reduced social interactions, such as the closure of schools, the widespread adoption of remote work arrangements, and the halt of in-person meetings and events, leading to unforeseen changes in our society. These restrictions on external activities have triggered a range of issues, including excessive exposure to media, increase of depression and economic challenges, leading to conflicts within families, and subsequently, deterioration in the mental well-being of adolescents. Particularly, the escalating concern is that as time goes on, the youth suicide rate could reach unprecedented levels, accompanied by rapid increase in serious self-injury and suicide cases within schools. However,
Recent Evidence and Future Directions for Crisis Prevention and Intervention:
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self-injury and suicide are psychological and health-related concerns, characterized by a strong sense of stigma and concealment. As a result, adolescents are often hesitant to provide honest responses during screening tests. Moreover, there is a distinct tendency among adolescents to resist seeking counseling and psychological interventions, resulting in a significantly low rate of successful treatment. Given that adolescents’ mental health challenges extend beyond the immediate phase and continue to have lasting impacts into adulthood across various aspects of life including family, professional experiences, and social adaptation, it is important to prevent, early identify, intervene, and continuously manage and support self-injury and suicide adolescents.

Our center strives to establish a comprehensive theoretical framework for understanding self-harm and suicide among Korean adolescents. Through a rigorous longitudinal study spanning three years, we aim to construct a Korean biopsychosocial pathway model with the ultimate goal of intervening in and preventing self-harm and suicide in this population. Building upon this theoretical foundation, we are endeavoring to develop an innovative Ecological Momentary Assessment Online Application. This application will enable the identification of crises experienced by adolescents struggling with self-harm and suicidal ideations, facilitating their seamless connection to appropriate treatment interventions. In line with our objectives, we aspire to create an Ecological Momentary Intervention that incorporates cutting-edge features such as social networking, virtual reality, and personalized AI services. This intervention is designed to provide therapeutic support to adolescents who have encountered self-harm or suicidal ideations, as well as clients who face challenges in accessing counseling and treatment. By leveraging the ubiquity of smartphones, we aim to deliver therapeutic interventions that transcend traditional counseling sessions, unrestricted by temporal and geographical limitations.

### Evidence-Based Nonsuicidal Self-injury • Suicide Prevention and Intervention

<table>
<thead>
<tr>
<th>STEP 1</th>
<th>(3 years)</th>
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</thead>
<tbody>
<tr>
<td>A Basic Study on the Establishment of a Korean Biopsychosocial Path Model</td>
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<table>
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<td>An Evidence-Based In-depth Study on the Establishment of a Korean Biopsychosocial Path Model</td>
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<tr>
<td>Design of EMA &amp; EMI App Producing Educational Materials for Youth Nonsuicidal Self-injury • Suicide Prevention Education &amp; Strengthening Counselors and School Counselors’ Capacity</td>
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<table>
<thead>
<tr>
<th>STEP 3</th>
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<tr>
<td>Establishment of EMA &amp; EMI App Functions</td>
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<tr>
<td>(AI-Personalized Services, Virtual Reality, etc.)</td>
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<tr>
<td>Position</td>
<td>Name</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>President</td>
<td>Lee, Dong Hun</td>
</tr>
<tr>
<td>Organizing Committee Chairperson</td>
<td>Lee, Hwa Jung</td>
</tr>
<tr>
<td>Secretary General</td>
<td>Kim, Ye Jin</td>
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<td>Kim, Da Sol</td>
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<td>Jung, Da Song</td>
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<td>Kim, Seong Yeon</td>
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<tr>
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<td>Jo, Ahran</td>
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<td>Kim, Young Ae</td>
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<td></td>
<td>Shin, Jae Wook</td>
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</table>
2024 SKKU Traumatic Stress Center
International Conference

Publication: SKKU Traumatic Stress Center
Publication Date: 7, June, 2024
Address: 25-2 SUNGKYUNKWAN-RO, JONGNO-GU, SEOUL (03063)
E-mail: skku_trauma@naver.com
Telephone: +8227401984

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7 June (Fri) – 9 June (Sun), 2024

SKKU Traumatic Stress Center
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