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# Perceived Mental Health Service Priorities among Social Service Personnel in South Korea: An Importance–Performance Analysis by Depression Severity

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## Abstract

# Background

This study examined perceptions of the importance and performance of mental health services among young men serving as social service personnel (SSP) in South Korea and explored how service priorities differed according to depression severity.

# Method

Data were obtained from 201 SSPs who participated in the 2025 Mental Health Support Program survey conducted by a national public training institute in South Korea. Importance–Performance Analysis (IPA) was employed to assess perceived service importance and performance and to identify service priorities across depression severity groups.

# Results

Most services were concentrated within the high importance, high performance and low-priority quadrants. Core services, including counseling, psychiatric treatment, and suicide prevention, were generally rated highly in terms of both perceived importance and performance. However, IPA patterns varied according to depression severity. Participants with no or minimal depressive symptoms identified peer support respite services as requiring greater attention, whereas those with mild depressive symptoms highlighted youth counseling services as an area for improvement. Participants with moderate-to-severe depressive symptoms reported larger gaps between perceived importance and performance for public mental health services, suggesting potential unmet needs among individuals with higher levels of depressive symptoms.

# Conclusions

This study suggests that mental health support for SSP in South Korea should move beyond a uniform, internally focused model toward a coordinated and severity-responsive service framework. Strengthening referral pathways among the Military Manpower Administration, service assignment institutions, and community-based mental health providers may improve access to appropriate, less stigmatizing support and enhance continuity of care.

## Background

In South Korea, male citizens are subject to compulsory military service under the Constitution and the Military Service Act (1, 2). Within this system, social service personnel (SSP) are classified as supplementary service personnel and assigned to public-interest duties in civilian institutions, including social welfare, healthcare, and educational and cultural settings. Individuals assigned to SSP positions are typically classified during conscription medical examination as unfit for active-duty service due to physical or mental health conditions (1). SSPs are deployed across civilian institutions where they perform supportive administrative and public service roles (3). Consequently, many enter service with preexisting health-related vulnerabilities while performing duties in community-based welfare settings.

Recent administrative data indicate that mental health problems are particularly prevalent in this population. According to the Military Manpower Administration (4), depression accounted for 34.6% of SSP classified during conscription medical examinations as of 2023, highlighting a substantial mental health burden. These vulnerabilities may be further exacerbated by service-related stressors. Unlike active-duty soldiers, SSPs are assigned to civilian institutions such as welfare, healthcare, or administrative organizations (1), where they may experience role ambiguity, person–task mismatch, and frequent interpersonal demands (5).

In addition, SSP has often been socially stigmatized in South Korea as a less legitimate form of fulfilling compulsory service obligations, contributing to both external devaluation and internalized self-stigma (6, 7). Prior studies have documented elevated depressive symptoms, co-occurring mental health conditions, and associations between depression and lower service satisfaction (7, 8). Collectively, these findings suggest that SSP may have distinct mental health service needs shaped not only by individual mental health status but also by institutional and social contexts.

In response, the Military Manpower Administration announced plans to expand mental health support services for SSP (4). However, as this initiative is relatively recent, \ empirical evidence remains limited regarding whether existing services adequately reflect SSP needs and priorities. In particular, little is known about how SSPs evaluate the importance and performance of available mental health services, or how these evaluations differ according to depression severity.

Drawing on the Andersen Behavioral Model of Health Service Use (9, 10), this study conceptualizes depression severity as a key need factor shaping perceptions of mental health services. Prior research suggests that mental health service needs vary according to the severity of

depressive symptoms (11). However, empirical evidence examining the perceived importance and performance of mental health services across levels of depression severity remains limited. From a health service organization and management perspective, examining gaps between service importance and performance can inform improvements in referral pathways and coordination among the Military Manpower Administration, assignment institutions, and community-based mental health service providers. Accordingly, this study examines the importance and performance of mental health services among SSP in South Korea, with particular attention to differences by depression severity.

This study addresses the following research questions:

### RQ1: How do social service personnel perceive the importance and performance of mental health services?

*RQ2: How do patterns of perceived importance and performance of mental health services vary by depression severity?*

# Literature review

# Mental health vulnerability and service barriers among SSPs

In South Korea, SSPs fulfill compulsory national service in civilian institutions such as government agencies, healthcare settings, and social welfare organizations. Although assigned outside active-duty military units, SSPs remain embedded within the broader military service system because their assignment, evaluation, and service conditions are governed by the Military Service Act. SSPs are selected through a medical classification process that assesses both physical and psychological health conditions, resulting in a population with higher baseline health vulnerabilities compared with active-duty soldiers and the general young adult population (1, 8).

These vulnerabilities are influenced by developmental, cultural, and institutional factors. Early adulthood is associated with increased risk of depression, anxiety, and low engagement with formal help-seeking services (12, 13). In South Korea, young men often delay or avoid mental health care due to stigma, norms of emotional restraint and self-reliance, and anticipated social consequences (7, 8). For SSP, these barriers are intensified by their dual position within military and civilian systems and service-related stressors, including role ambiguity, person–task mismatch, and interpersonal demands within assignment institutions (5–7). Together, these factors produce layered vulnerability shaped by both individual and institutional conditions.

From a service utilization perspective, elevated mental health needs do not necessarily result in service use. Prior research indicates that depressive symptoms may increase perceived need for care; however, structural barriers and stigma can limit actual engagement with mental health services (14). This disconnect suggests that service availability alone is insufficient to ensure access or uptake. Accordingly, it is necessary to examine how SSPs evaluate both the importance and performance of mental health services, particularly across levels of depression severity.

## Perceived importance and performance of mental health services by depression severity

Depression is characterized by persistent negative mood along with cognitive and functional impairments that interfere with daily functioning (15). Timely access to appropriate mental health services is associated with improved clinical outcomes and functional recovery among individuals experiencing depressive symptoms (5, 15). Accordingly, mental health services should be aligned with symptom severity, as perceived need for care varies according to the intensity and complexity of depressive symptoms (11, 16). These findings suggest that mental health services must be both accessible and appropriately matched to clinical need.

However, service availability does not guarantee effective utilization, particularly in compulsory service contexts where stigma, institutional expectations, and administrative structures shape help-seeking behavior. Among SSPs, who experience elevated baseline vulnerability and operate within a structured compulsory system, mismatches may emerge between service need and perceived adequacy of available support (8, 14). Evidence from military and compulsory service populations similarly shows persistent gaps between mental health needs and service utilization, with systematic reviews indicating that fewer than half of individuals with depression receive adequate care in some settings (17, 18). These are often linked to organizational cultures that discourage help-seeking, stigma, and structural barriers embedded within service systems (19). Therefore, examining variation in perceived importance and performance across depression severity may clarify whether mental health services are aligned with SSP needs.

## The Andersen Behavioral Model and service gaps

The present study is guided by the Andersen Behavioral Model of Health Service Use, which posits that health service utilization and perceived service needs are influenced by predisposing characteristics, enabling resources, and need factors (9). Among these domains, need factors,

particularly perceived and evaluated need, are among the strongest predictors of mental health service utilization (9, 10). In the SSP context, depression severity can be conceptualized as a key need factor that shapes how individuals perceive the importance and performance of mental health services. However, service-related stigma, institutional constraints, and structural barriers within compulsory service systems may limit the extent to which these needs are addressed. This creates a potential mismatch between mental health need and service responsiveness. From this perspective, examining differences in perceived importance and performance across depression severity levels may help identify gaps in mental health service systems for SSPs.

## Methods

# Participants and procedures

This study utilized data from a cross-sectional survey examining mental health status and perceptions of mental health services among young adults serving as SSP in South Korea. The survey was conducted by the Korea Human Resource Development Institute for Health and Welfare, a national public training institute that provides education and learning support for SSP and promotes policy-related cooperation in the health and welfare sector. The survey was conducted between July and October 2025 and included individuals aged 20 years or older who voluntarily participated via an online platform. Participants were recruited nationwide through notices distributed to social welfare facilities and related public agencies, and accessed the survey using a web link or a quick response (QR) code. A total of 212 individuals completed the survey. After excluding 11 responses due to incomplete data or withdrawal, the final analytical sample comprised 201 participants.

Before participation, individuals provided electronic informed consent and were told that participation was voluntary and that they could withdraw at any time without penalty. The study protocol was reviewed and approved by the Institutional Review Board. All responses were collected anonymously, and data were stored on password-protected systems accessible only to the research team.

## Measures and instruments

# Importance and performance of mental health services

Perceived importance and performance of mental health services available to SSP in South Korea were assessed using the service items listed in Table 1. The services were categorized into three domains: military-related services (items 1–2), youth services (item 3), and public mental health services (items 4–11). Military-related services included mental health and counseling services provided by the Military Manpower Administration and the institutions to which SSP were assigned. Youth services included counseling and psychosocial support services available to individuals aged 24 years or younger. Public mental health services included community-based services available to the general population, such as mental health welfare centers, addiction and suicide prevention services, peer support programs, psychiatric care, and supportive housing. Participants rated the perceived importance and performance of each service on a four-point scale ranging from 0–3, with higher scores indicating greater perceived importance and performance.

Table 1
Categories and types of mental health services available to social service personnel (SSP) in South Korea

| Category | Code | Service type | Explanation |
|---|---|---|---|
| Military-related services | 1 | Mental Health Support Service provided by the Military Manpower Administration | Psychological support and mental health counseling are provided directly by the national agency responsible for conscription and SSPs. |
| | 2 | Counseling Services provided at Service Assignment Institutions | On-site counseling services are provided at institutions where SSPs are assigned. |
| Youth services | 3 | Youth Counseling and Support Center Services | Community-based counseling and psychosocial support services available to young people aged 24 years or younger. |
| Public mental health services | 4 | Mental Health Welfare Center Services | Public community mental health services provide counseling, case management, and referral services. |
| | 5 | Integrated Addiction Support Center Services | Services addressing substance use and behavioral addictions. |
| | 6 | Suicide Prevention Center Services | Crisis intervention and suicide prevention services. |
| | 7 | Mental Health Counseling Voucher Program Services | Government-funded counseling services are accessed through a voucher system. |
| | 8 | Psychiatric Medical Services | Clinical psychiatric services provided by hospitals or clinics. |
| | 9 | Peer Support Center Services | Peer-led, recovery-oriented mental health support services. |
| | 10 | Peer Support Respite Services | Short-term, nonclinical, peer-led respite services. |
| | 11 | Supportive Housing | Housing services combined with ongoing psychosocial support. |

[Table 1 here]

## Depression severity

Depression severity was assessed using the Korean version of the Patient Health Questionnaire-9 (PHQ-9). The PHQ-9 was originally developed by Kroenke et al. (20), and the Korean version has been validated in prior studies (21). The scale consists of nine items assessing the frequency of depressive symptoms over the past two weeks, with each item rated on a four-point Likert scale ranging from 0–3. Total scores range from 0–27. Standard PHQ-9 severity categories include 0–4 (minimal), 5–9 (mild), 10–14 (moderate), 15–19 (moderate-to-severe), and 20–27 (severe). In this study, scores were categorized into three groups to identify clinically meaningful symptom levels rather than fine-grained severity distinctions: no or minimal symptoms (0–4), mild symptoms (5–9), and moderate-to-severe depressive symptoms (≥ 10).

## Statistical analysis

Descriptive statistics and frequency analyses were conducted to examine participants' general characteristics. Importance–Performance Analysis (IPA) was employed to assess perceptions of mental health service importance and performance. IPA, originally proposed by Martilla and James (22) for marketing strategy development, has been widely applied in social sciences research to identify service improvement priorities. By simultaneously evaluating perceived importance and performance, IPA is well-suited for identifying gaps in service delivery within policy and organizational contexts. In mental health service research, IPA can identify services requiring priority attention by assessing discrepancies between perceived importance and observed performance of existing support systems.

In IPA, services are plotted into four quadrants based on mean values of perceived importance and performance, as illustrated in Fig. 1. For each IPA matrix, mean scores were calculated for either the total sample or each depression severity subgroup and used as crosshair points. Quadrant 1 ("Keep up the good work") includes services rated high in both importance and performance, indicating satisfactory provision. Quadrant 2 ("Concentrate here") includes services rated high in importance but low in performance, indicating priority areas for improvement. Quadrant 3 ("Low priority") includes services rated low in both perceived importance and performance, indicating limited urgency for intervention. Quadrant 4 ("Possible overkill") includes services rated high in performance but low in perceived importance, suggesting potential inefficiencies in resource allocation. All analyses were conducted using SPSS version 29.0.

# Results

## Sample characterization

As shown in Table 2, the mean age of the participants was 22.59 years (SD = 1.55). Most participants reported no religious affiliation (68.2%), while 31.8% reported a religious affiliation. Regarding educational attainment, most participants were college graduates (*n* = 128, 63.7%), followed by graduate-level education or higher (*n* = 37, 18.4%), high school graduates (*n* = 34, 16.9%), and those with less than high school

education (*n* = 2, 1.0%). Most participants lived with their families (*n* = 188, 93.5%), while a small proportion lived alone (*n* = 13, 6.5%). Monthly household income was highest in the category of 6 million Korean Won (KRW) or more (*n* = 74, 36.8%), followed by 3.0–3.99 million KRW (*n* = 36, 17.9%), 4.0–4.99 million KRW (*n* = 25, 12.4%), 2.0–2.99 million KRW (*n* = 21, 10.4%), 1.0–1.99 million KRW (*n* = 21, 10.4%), 5.0–5.99 million KRW (*n* = 20, 10.0%), and less than 1.0 million KRW (*n* = 4, 2.0%). Regarding service duration, most participants reported serving 3–6 months (*n* = 148, 73.6%), followed by less than 3 months (*n* = 29, 14.4%), 12 months or longer (*n* = 13, 6.5%), 6–9 months (*n* = 9, 4.5%), and 9–12 months (*n* = 2, 1.0%). Based on PHQ-9 scores, participants were categorized into three groups: no or minimal depressive symptoms (*n* = 142, 70.6%), mild symptoms (*n* = 33, 16.4%), and moderate-to-severe depressive symptoms (*n* = 26, 12.9%).

Table 2
Sociodemographic characteristics of the participants

| **Variable** | **Category** | **Mean** | **SD** |
|---|---|---|---|
| Age | | 22.59 | 1.55 |
| Variable | Category | *n* | % |
| Religious affiliation | None | 137 | 68.2 |
| | Yes | 64 | 31.8 |
| Educational attainment | Less than high school | 2 | 1.0 |
| | High school graduate | 34 | 16.9 |
| | College graduate | 128 | 63.7 |
| | Graduate school or higher | 37 | 18.4 |
| Living arrangement | Living alone | 13 | 6.5 |
| | Living with family | 188 | 93.5 |
| Household monthly income (KRW) | < 1,000,000 | 4 | 2.0 |
| | 1,000,000–1,999,999 | 21 | 10.4 |
| | 2,000,000–2,999,999 | 21 | 10.4 |
| | 3,000,000–3,999,999 | 36 | 17.9 |
| | 4,000,000–4,999,999 | 25 | 12.4 |
| | 5,000,000–5,999,999 | 20 | 10.0 |
| | ≥ 6,000,000 | 74 | 36.8 |
| Length of mandatory service as SSP (months) | ≤ 3 months | 29 | 14.4 |
| | 3–6 months | 148 | 73.6 |
| | 6–9 months | 9 | 4.5 |
| | 9–12 months | 2 | 1.0 |
| | ≥ 12 months | 13 | 6.5 |
| Depression severity (PHQ-9) | No or minimal depressive symptoms (0–4) | 142 | 70.6 |
| | Mild depressive symptoms (5–9) | 33 | 16.4 |
| | Moderate-to-severe depressive symptoms (≥ 10) | 26 | 12.9 |

**Note.** Household monthly income is reported in Korean Won (KRW). PHQ-9 = Patient Health Questionnaire-9.

[Table 2 here]

## Importance and performance of mental health services

Table 3 presents the importance and performance ratings of mental health services across depression severity groups. Across all groups, perceived importance ratings generally exceeded performance ratings for most services. Some variation was observed across depression severity groups, with the moderate-to-severe symptom group reporting relatively lower importance and higher performance ratings for certain services compared with the no or minimal and mild symptom groups.

Table 3
Importance–performance ratings of mental health services by depression severity (PHQ-9)

| Service category | Overall | | No or minimal depressive symptoms (0–4) | | Mild depressive symptoms (5–9) | | Moderate-to-severe depressive symptoms (≥ 10) | |
|---|---|---|---|---|---|---|---|---|
| | Importance (*M*) | Performance (*M*) | Importance (*M*) | Performance (*M*) | Importance (*M*) | Performance (*M*) | Importance (*M*) | Performance (*M*) |
| Mental Health Support Services provided by the Military Manpower Administration | 2.01 | 1.91 | 2.02 | 1.96 | 2.03 | 1.96 | 1.96 | 1.73 |
| Counseling Services provided at Service Assignment Institutions | 1.77 | 1.81 | 1.86 | 1.83 | 1.67 | 1.83 | 1.38 | 1.85 |
| Youth counseling and support center services | 1.95 | 1.87 | 2.00 | 1.90 | 1.97 | 1.90 | 1.62 | 1.65 |
| Mental health welfare center services | 2.12 | 1.94 | 2.13 | 1.99 | 2.15 | 1.99 | 2.00 | 1.69 |
| Integrated addiction support center services | 2.01 | 1.96 | 2.08 | 1.98 | 2.09 | 1.98 | 1.54 | 1.85 |
| Suicide prevention center services | 2.03 | 1.98 | 2.07 | 2.04 | 2.09 | 2.04 | 1.77 | 1.73 |
| Mental health counseling voucher program services | 2.08 | 1.99 | 2.12 | 2.04 | 2.12 | 2.04 | 1.85 | 1.69 |
| Psychiatric medical services | 2.07 | 1.99 | 2.10 | 2.03 | 2.06 | 2.03 | 1.96 | 1.85 |
| Peer support center services | 1.89 | 1.85 | 1.96 | 1.92 | 1.76 | 1.92 | 1.69 | 1.65 |
| Peer support respite services | 1.95 | 1.83 | 2.05 | 1.89 | 1.88 | 1.89 | 1.50 | 1.58 |
| Supportive housing | 1.81 | 1.83 | 1.83 | 1.86 | 1.82 | 1.86 | 1.46 | 1.73 |
| Overall mean | 1.97 | 1.91 | 2.02 | 1.95 | 1.97 | 1.95 | 1.70 | 1.73 |

**Note.** *M* = mean; PHQ-9 = Patient Health Questionnaire-9. Higher scores indicate greater perceived importance or performance of mental health services.

[Table 3 here]

## Importance and performance of mental health services for the total sample

Figure 2 presents the IPA results of mental health services among SSPs. The overall mean scores for perceived importance and perceived performance were 1.97 and 1.91, respectively, and these values were used as crosshair points for the IPA matrix. Most services were located in Quadrant 1 (“Keep up the good work”) and Quadrant 3 (“Low priority”). Services positioned in Quadrant 1 included mental health welfare center

services, mental health counseling voucher program services, psychiatric medical services, suicide prevention center services, integrated addiction support center services, and mental health support services provided by the Military Manpower Administration. Overall, SSP perceived core mental health services as relatively well aligned with their needs. However, IPA patterns varied across depression severity groups.

## Importance–performance patterns by depression severity

## No or minimal depressive symptoms (PHQ-9: 0–4)

For participants with no or minimal depressive symptoms (PHQ-9: 0–4), the mean scores for perceived importance and performance were 2.02 and 1.95, respectively, and these values were used as crosshair points for the IPA matrix. Services located in Quadrant 1 (“Keep up the good work”) included mental health welfare center services, mental health counseling voucher program services, psychiatric medical services, suicide prevention center services, and integrated addiction support center services (Fig. 3).

Peer support respite services were located in Quadrant 2 (“Concentrate here”), while mental health support services provided by the Military Manpower Administration were located in Quadrant 4 (“Possible overkill”). These results indicate variation in perceived service adequacy within this subgroup, particularly for peer support and administrative mental health services.

## Mild depressive symptoms (PHQ-9: 5–9)

For participants with mild depressive symptoms (PHQ-9: 5–9), the mean scores for perceived importance and perceived performance were 1.97 and 1.95, respectively, and these values were used as crosshair points for the IPA matrix. Services in Quadrant 1 (“Keep up the good work”) included mental health welfare center services, mental health counseling voucher program services, psychiatric medical services, suicide prevention center services, and integrated addiction support center services. Services in Quadrant 3 (“Low priority”) included youth counseling and peer support respite services, peer support center services, supportive housing, and counseling services provided at service assignment institutions (Fig. 4).

Mental health support services provided by the Military Manpower Administration were located in Quadrant 1, while youth counseling and support center services were located in Quadrant 2 (“Concentrate here”). These findings indicate that participants with mild depressive symptoms viewed youth counseling and support services as important yet insufficient.

## Moderate-to-severe depressive symptoms (PHQ-9: ≥10)

For participants with moderate-to-severe depressive symptoms (PHQ-9: ≥10), the mean scores for perceived importance and performance were 1.70 and 1.73, respectively, and these values were used as crosshair points for the IPA matrix. Services located in Quadrant 1 (“Keep up the good work”) included psychiatric medical services, mental health support services provided by the Military Manpower Administration, and suicide prevention center services. Services positioned in Quadrant 3 (“Low priority”) included peer support respite services, youth counseling and support center services, and peer support center services.

In contrast to other groups, Quadrant 2 (“Concentrate here”) included general public mental health services such as mental health welfare center services and mental health counseling voucher program services. Quadrant 4 (“Possible overkill”) included integrated addiction support center services, supportive housing, and counseling services provided at service assignment institutions (Fig. 5). This pattern indicates variation in perceived adequacy of general public mental health services among participants with higher depressive symptom severity.

### Discussion

Although the Military Manpower Administration in South Korea has announced plans to expand mental health services (4), the findings of this study indicate that gaps persist between perceived importance and service performance. Several mental health services were rated as highly important despite relatively low performance scores, and both importance and performance patterns varied by depressive symptom severity.

These findings are consistent with previous research indicating that mental health service needs vary by depressive symptom severity (11), as well as studies emphasizing appropriate mental health service linkage during military service (17, 18). Taken together, these findings highlight the need to strengthen attention to the mental health needs of SSPs and to develop service linkage strategies that consider clinical characteristics such as symptom severity. The findings may also be interpreted through the Andersen Behavioral Model, which emphasizes the role of need factors in shaping perceptions of health service use and adequacy. In this study, depressive symptom severity appeared to function as a key need factor influencing perceptions of mental health service importance and performance. However, institutional barriers and stigma related to psychiatric service utilization may limit the extent to which mental health needs are addressed within compulsory service settings.

The overall IPA results indicate that specialized services such as psychiatric treatment and psychological counseling showed relatively high perceived importance and performance, while peer support services, supportive housing, youth counseling services, and counseling provided

within service assignment institutions were rated low in both dimensions. These findings suggest that SSP perceived professionally delivered mental health services as relatively well-performing and important.

The Military Manpower Administration in South Korea has emphasized youth counseling services and counseling within service assignment institutions (4), which are closer to general counseling services than to specialized mental health services delivered by mental health professionals. In light of these findings, mental health service expansion for SSP should prioritize stronger linkages to public mental health services staffed by trained mental health professionals. The findings also suggest the need to tailor specific components of service provision according to depressive symptom severity.

For participants with no or minimal depressive symptoms, IPA patterns were largely consistent with the total sample, except that peer support respite services were located in Quadrant 2 and Military Manpower Administration mental health support services were located in Quadrant 4. This pattern suggests that formal mental health services remain central, while peer-based respite services may be particularly relevant for individuals without clinically significant depressive symptoms. Peer respite services, when delivered by trained peer supporters, provide nonclinical, relationship-based support that facilitates temporary relief from stress and assists individuals during short-term psychological crises (23, 24). Because this study used cross-sectional self-reported perceptions, findings should not be interpreted as evidence of preventive effects. Rather, peer respite may function as a low-threshold early support option for SSPs experiencing temporary distress. Where integration into existing systems is limited, alternative community-based respite spaces may be considered while maintaining core peer-support principles.

For participants with mild depressive symptoms, youth counseling services appeared to represent an important but underperforming support source. This pattern may be interpreted in two complementary ways. First, youth counseling services may be familiar due to prior exposure among young men serving as SSP in South Korea (25). However, although these services are available up to age 24, they may be perceived as more relevant to adolescents than to young adults in compulsory service contexts.

Second, stigma associated with psychiatric service utilization may discourage engagement, particularly among individuals with mild depressive symptoms. These findings highlight the importance of considering both institutional familiarity and stigma-related perceptions when designing support strategies for this group. Strengthening linkages with youth counseling systems already familiar to this population may improve accessibility. To facilitate such linkages, the Military Manpower Administration may support youth counseling centers in understanding the contextual circumstances of SSP.

A different approach may be required for participants with moderate-to-severe depressive symptoms. In mental health service linkage for SSP, support is often limited to institutional guidance and information provision. However, for individuals at higher risk of depression, referrals should account not only for structural characteristics of service systems but also for limitations in emotional accessibility (26). For example, community mental health centers in South Korea often require a diagnostic certificate issued by a psychiatric institution, which necessitates a prior hospital visit that may delay entry into care (27). Similarly, voucher-based counseling programs require administrative registration and may involve waiting periods before service initiation. Budget constraints and waiting lists may further delay access in some regions (28). These structural and procedural requirements may pose additional barriers for individuals with more severe depressive symptoms, particularly when active service navigation is limited (27, 28). Continuous service navigation and proactive case management may therefore be particularly important. The findings may reflect a service system that emphasizes referral over sustained engagement. From the Andersen Behavioral Model perspective, substantial need alone may not ensure service utilization when structural and psychological barriers persist.

From a health service organization and management perspective, these findings suggest that mental health support for SSP should extend beyond information provision and individual help-seeking. Because SSPs are distributed across diverse social welfare, healthcare, educational, and community-based institutions, effective support requires clear referral pathways and inter-organizational coordination among the Military Manpower Administration, service assignment institutions, and community-based mental health service providers. In particular, systems should implement proactive service navigation mechanisms to identify SSPs with higher depressive symptom severity and connect them to appropriate counseling, psychiatric care, suicide prevention services, and community mental health supports. Such an approach would allow health service systems to respond more systematically to vulnerable groups within compulsory service contexts rather than relying on fragmented or delayed access.

# Limitations

This study has several limitations. First, the sample consisted exclusively of young men serving as SSPs within South Korea's mandatory service system and was recruited on a voluntary basis, which may limit the generalizability of the findings and introduce selection bias. In addition, because participants were recruited through institutional notices, individuals with a greater interest in mental health may have been more likely to participate. Second, importance–performance analysis identifies perceived gaps in service provision but does not directly assess service effectiveness, utilization outcomes, or implementation-related constraints. Furthermore, the cross-sectional and self-reported nature of the data precludes causal inferences regarding the relationship between depressive symptom severity and perceived service gaps. Accordingly, the findings should be interpreted as reflecting subjective evaluations rather than objective assessments of service adequacy. Finally, although this

study identified variations in perceived importance and performance across levels of depressive symptom severity, it does not fully explain the factors underlying these perceptions.

## Conclusions

This study suggests that mental health support for SSP in South Korea may benefit from moving beyond a uniform, internally focused support model. The findings identified important gaps between perceived importance and performance and demonstrated that service priorities varied according to depressive symptom severity, highlighting the need for a tiered and severity-responsive mental health support strategy. While specialized services were rated relatively high in both perceived importance and performance, individuals experiencing early-stage distress appeared to prefer low-threshold and accessible forms of support, whereas those with more severe symptoms faced barriers that may impede effective service utilization.

These findings underscore the importance of strengthening connections with external mental health resources and enhancing coordination with community-based providers to improve access to specialized and less stigmatized services. From a health service organization and management perspective, support for SSP should be structured through clearer referral pathways linking the Military Manpower Administration, service assignment institutions, and community-based mental health service organizations. Mental health support should be differentiated according to clinical need, with preventive and low-threshold interventions supporting individuals with milder symptoms and proactive case management for those at higher risk who may encounter structural and administrative barriers. A coordinated, severity-responsive service framework may enhance continuity of care for SSP.

## Abbreviations

IRB Institutional Review Board

KRW Korean Won

QR Quick response

SSP Social service personnel

IPA Importance–Performance Analysis

PHQ-9 Patient Health Questionnaire-9

## Declarations

**• Ethics approval and consent to participate**

This study was conducted in accordance with the Declaration of Helsinki and the ethical standards of the American Psychological Association for research involving human participants. The study was approved by the Kangnam University Institutional Review Board (KNU-HR2025011). All participants provided informed consent prior to participation.

**• Consent for publication**

Not applicable.

**• Availability of data and materials**

The data that support the findings of this study are not publicly available due to privacy and ethical restrictions.

**• Competing interests**

The authors declare no competing interests.

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**• Authors' contributions**

JEP and YES planned and conceptualized the study. JEP, YK, and YES contributed to the investigation. JEP performed the formal analysis, methodology, validation, and visualization. JEP drafted the manuscript, and YK and YES contributed to writing and revising the draft. All authors

read and approved the final manuscript.

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## References

1. Military Service Act of the Republic of Korea. Act No. 16356, articles 2, 12, 14 and 26. 2019. https://www.law.go.kr/LSW/lsInfoP.do?lsiSeq=208449&chrClsCd=010203&urlMode=engLsInfoR&viewCls=engLsInfoR#0000. Accessed 20 Mar 2026.
2. Woo MT. Dual citizenship and mandatory military service in the Republic of Korea. Iowa Law Rev. 2023;108:2049–74.
3. Military Manpower Administration. Alternative service personnel duties. 2024. https://www.mma.go.kr/contents.do?mc=mma0000909&mc1=usr0000179#=7. Accessed 20 Mar 2026.
4. Military Manpower Administration. Expansion of mental health support services for alternative service members. 2024 Jan 12. https://www.mma.go.kr/board/boardView.do?mc=mma0000392&gesipan_id=15&gsgeul_no=1516093. Accessed 20 Mar 2026.
5. Kim S, Kim T, Lee K. Effect of social service personnel's discrimination experience on job satisfaction: focusing on the mediating effect of smartphone addiction. Acad Mil Soc Welf. 2015;8:5–36.
6. Lee S, Kim S. The effect of discrimination experience on mental health among social service agents: the mediating role of social isolation. Acad Mil Soc Welf. 2025;18:5–28.
7. Kim E, Park H. The effects of depression on military service satisfaction of social service personnel. Res Case Manag. 2021;12:93–112.
8. Lee MS, Lee EJ. Depressive symptoms and mental health of military social service personnel. J Korean Acad Psychiatr Ment Health Nurs. 2024;33:1–8.
9. Andersen RM. Revisiting the behavioral model and access to medical care: does it matter? J Health Soc Behav. 1995;36:1–10.
10. Babitsch B, Gohl D, Von Lengerke T. Re-revisiting Andersen's Behavioral Model of Health Services Use: a systematic review of studies from 1998–2011. GMS Psycho-Soc Med. 2012;9:Doc11.
11. Cadigan JM, Lee CM, Larimer ME. Young adult mental health: a prospective examination of service utilization, perceived unmet service needs, attitudes, and barriers to service use. Prev Sci. 2019;20:366–76.
12. Currier D, Patton G, Sanci L, Sahabandu S, Spittal M, English D, et al. Socioeconomic disadvantage, mental health and substance use in young men in emerging adulthood. Behav Med. 2021;47:31–9.
13. Rice SM, Purcell R, McGorry PD. Adolescent and young adult male mental health: transforming system failures into proactive models of engagement. J Adolesc Health. 2018;62:S9–17.
14. Park H, Kim E. A study on level of depression and factors affecting on the preference of social service personnel's mental health counseling utilization. Korean Acad Mil Soc Welf. 2018;11:37–60.
15. Ormel J, Kessler RC, Schoevers R. Depression: more treatment but no drop in prevalence: how effective is treatment? And can we do better? Curr Opin Psychiatry. 2019;32:348–54.
16. Birnbaum HG, Kessler RC, Kelley D, Ben-Hamadi R, Joish VN, Greenberg PE. Employer burden of mild, moderate, and severe major depressive disorder: mental health services utilization and costs, and work performance. Depress Anxiety. 2010;27:78–89.
17. Thériault FL, Garber BG, Momoli F, Gardner W, Zamorski MA, Colman I. Mental health service utilization in depressed Canadian Armed Forces personnel. Can J Psychiatry. 2019;64:59–67.
18. Thériault FL, Gardner W, Momoli F, Garber BG, Kingsbury M, Clayborne Z, et al. Mental health service use in depressed military personnel: a systematic review. Mil Med. 2020;185:e1255–62.
19. Sharifian N, LeardMann CA, Kolaja CA, Baccetti A, Carey FR, Castañeda SF, et al. Factors associated with mental healthcare utilization among United States military personnel with posttraumatic stress disorder or depression symptoms. Am J Prev Med. 2025;68:289–99.
20. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001;16:606–13.
21. Park SJ, Choi HR, Choi JH, Kim KW, Hong JP. Reliability and validity of the Korean version of the Patient Health Questionnaire-9 (PHQ-9). Anxiety Mood. 2010;6:119–24.
22. Martilla JA, James JC. Importance-performance analysis. J Mark. 1977;41:77–9.
23. Siantz E, Henwood B, McGovern N, Greene J, Gilmer T. Peer respites: a qualitative assessment of consumer experience. Adm Policy Ment Health Ment Health Serv Res. 2019;46:10–7.
24. Spiro L, Swarbrick M. Peer-run respite approaches to supporting people experiencing an emotional crisis. Psychiatr Serv. 2024;75:1163–66.

25. Jo H, Kim N, Yoon E. Introducing Korean adolescent counselling systems: implications for future directions. Couns Psychother Res. 2022;22:74–82.
26. Doblyte S, Jiménez-Mejías E. Understanding help-seeking behavior in depression: a qualitative synthesis of patients' experiences. Qual Health Res. 2017;27:100–13.
27. Ministry of Health and Welfare. 2025 mental health program guidelines. Seoul: Government of the Republic of Korea; 2025.
28. Daedeok-gu Office. Announcement on the termination of mental health counseling voucher services due to budget exhaustion. 2025. https://www.daedeok.go.kr/chc/chc04/CHC0401_cmmBoardView.do?ntatcSeq=1095009025. Accessed 20 Mar 2026.

## Figures

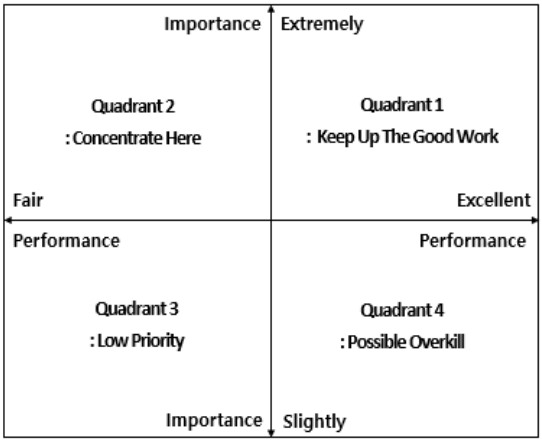



**Figure 1**

Conceptual framework of the Importance–Performance Analysis (IPA) matrix

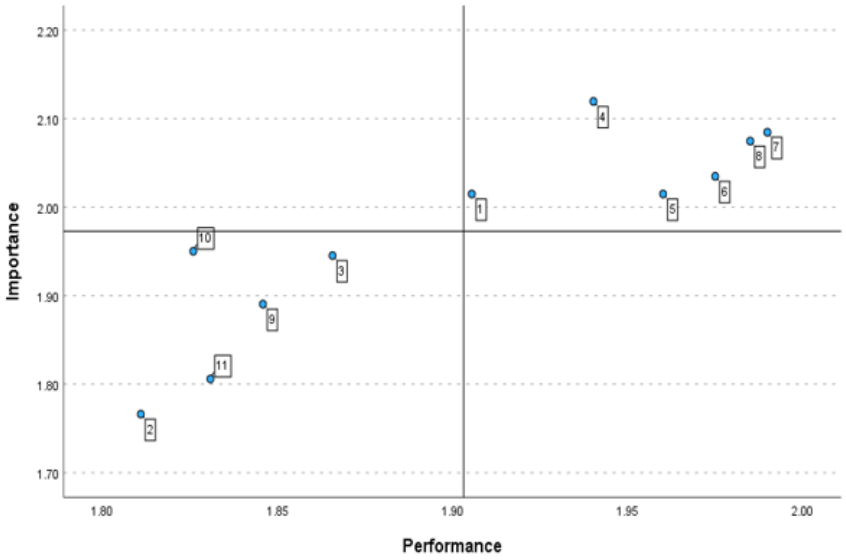



**Figure 2**

IPA analysis of mental health services for the total sample

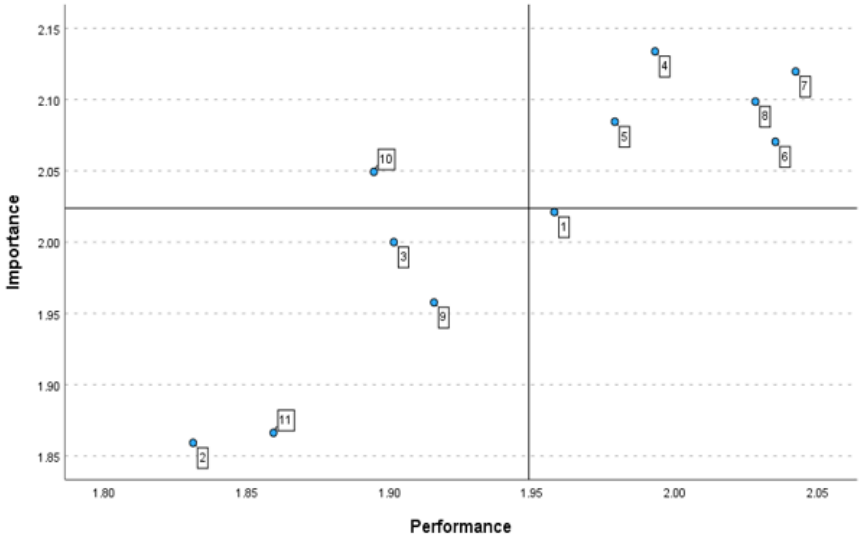



**Figure 3**

IPA analysis of mental health services among participants with no or minimal depressive symptoms

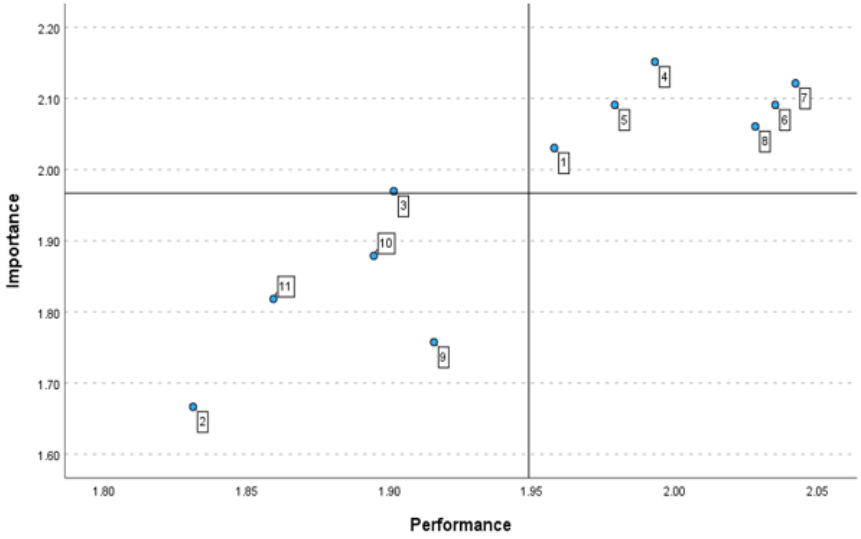



**Figure 4**

IPA analysis of mental health services among participants with mild depressive symptoms

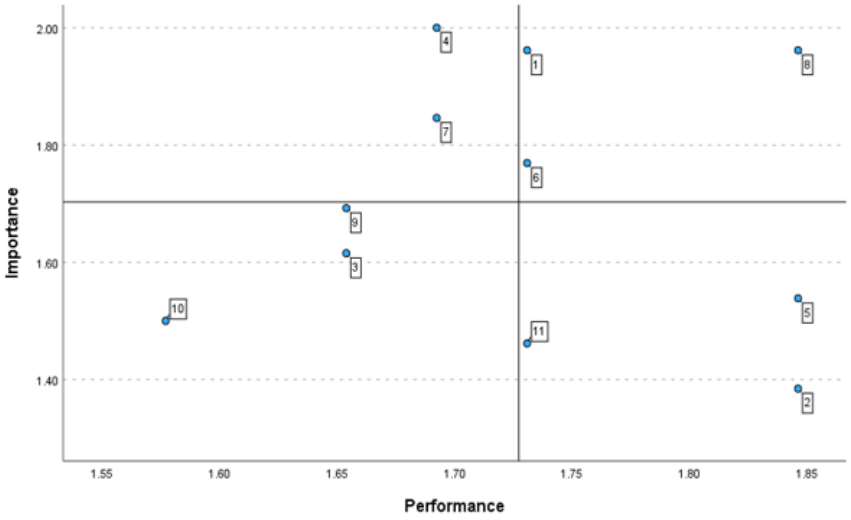



**Figure 5**

IPA analysis of mental health services among participants with moderate-to-severe depressive symptoms