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How Hope Strengthens Mental Emotionality as A Mediator of the Link Between Social Support and Psychosocial Adjustment in People Living With HIV

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Abstract

*Background - Psychological problems due to mental stress in the environment experienced by people living with HIV make them have difficulty in adjusting both psychologically and socially. Objective - This study aims to determine the role of hope as a mediator of the relationship between social support and psychosocial adjustment in PLWHA. Method - Based on a cross-sectional analysis, we recruited 154 HIV patients. Data were collected using convenience sampling techniques, and Andrew F. Hayes's PROCESS v3.4 macro in SPSS was used to analyze this study. Results - This study shows that Hope fully mediates the relationship between social support and psychosocial adjustment ability (βc = 0.3997; **p = <0.001). Implications - This suggests that social support will be meaningful if it is adjusted to the expectations set so that it can be used as a source of mental resilience to improve psychosocial adjustment ability.*

Keywords: *Social Support, Hope, Psychosocial Adjustment, HIV.*

Introduction

AIDS treatment in clinical pharmacology is now more sophisticated and modern (Abadiga et al., 2020; Oh & Han, 2021). This has increased the number of patients with AIDS associated with longevity (Basha et al., 2019) because a dangerous disease can become a mere chronic ailment (Mojola et al., 2022). It is estimated that 30.7 million (27.0 million -31.9 million) people received HIV treatment in 2023, and had reduced mortality of up to 250,000 people (UNAIDS, 2024). However, patients are particularly vulnerable to psychological problems (Olagunju et al., 2012; Tesfaye & Bune, 2014) because complex psychosocial issues tend to be neglected and more

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importance is given to clinical pharmacology (Breet et al., 2014)As such, PLH need to develop mental resilience to adapt to the places where they live because they often experience stigma and discrimination when interacting with society (Toppenberg et al., 2015), it is also vital to anticipate changes in the attitudes and behavior of PLH. Throughout their lives, PLH face difficulties in adjusting to their living environment, including challenges related to self-confidence, psychological adaptation, and social adaptation—even suicidal ideation (Wonde et al., 2019; Yu et al., 2023) because of the discriminatory behavior they often experience (Sombrea et al., 2024).

The realistic phase of improving self-adjustment to the living environment—which entails emotional regulation, impulse control, causal analysis, self-efficacy, realism and optimism, empathy, and affordability—needs to be the focus of attention because PLH have entered the psychological adaptation phase. PLH may lack the attributes of mental resilience needed to properly adjust to their living context (Reivich & Shatté, 2002). Moreover, PLH are overwhelmed by feelings of stress, anxiety, and depression (Saadat et al., 2015) and may lack self-confidence (Ke et al., 2020). This can make it difficult for them to make psychosocial adjustments to their living environment (Barata et al., 2013) because they are very pessimistic about their lives (Murphy et al., 2018), and their fighting spirit is at its lowest (Grassi et al., 1998).

Psychosocial adjustment is an adaptive pattern in which individuals maintain emotional balance in response to environmental demands to achieve desired goals (Harifi et al., 2020). Regarding HIV-AIDS, psychosocial adjustment is connected with the attitudes adopted to adapt to the living environment in maintaining personal and environmental growth (Barrios, 2022), exploring one's abilities and strategies for resolving psychological and emotional problems (Parcesepe et al., 2023)(Tavares et al., 2018), and being open about one's illness and/or confidence in continuing treatment to improve one's quality of life (Jia et al., 2022)(Tilahun et al., 2014).

In addition, PLH need to be able to adapt to view themselves more realistically, both in the present and in the future (Albright & Fair, 2018), this entails relearning and strengthening mental processes after mental decline as a result of stigma and discrimination. When suffering from HIV-AIDS (Kohli et al., 2023), PLH want to rediscover their identities as "normal" people (Nasir et al., 2023). However, PLH are less able to take on social roles because their physical condition is declining, so they easily experience mental stress (Harifi et al., 2021), give up hope (Kylma, 2001), develop apathy towards others and the environment (Hudson et al., 2001), and fail to maintain their self-concept (Ke et al., 2020).

As time goes by, the issue of psychosocial adjustment needs to be addressed as long as patients are infected with HIV-AIDS (Storey et al., 2014), and social capital is very valuable for psychological adaptation throughout one's life (Han et al., 2020; Soleimanvandiazar et al., 2021). For PLH, the ability to manage psychological problems used for adjusting to the living environment needs to be improved towards adaptive coping and a spiritual approach to achieve a better psychological state (Barrios, 2022).

PLH develop social skills to solve psychosocial issues when they explore their personal resources, both internally within themselves and in the environment; they flexibly use these resources to choose effective coping strategies (Dake et al., 2023; Rzeszutek et al., 2017). Health workers can prepare for psychosocial adjustment efforts when PLH are diagnosed and start new lives after leaving the hospital (Ford et al., 2022). When starting to socialize with the surrounding

environment, the role of health workers shifts and is replaced by family caregivers, peers, and significant others (Fasoulakis, 2017).

Throughout their lives, people with HIV spend time interacting with their families and discussing psychosocial problems (Casale et al., 2013). Individuals acquire social support when they obtain information, advice, emotional support, and interact with role models through social ties with others (Costa-cordella et al., 2021). For PLH, this support plays an important role in starting a new life as a person living with AIDS, including psychological adaptation patterns (Fife et al., 2008).

People with HIV experience psychological and social adaptation at home. At this stage of psychosocial adjustment, the family provides suggestions and support regarding how to improve mental health and socialize in the surrounding environment, including monitoring the impact of anxiety and depression (Shenderovich et al., 2021). Families also help individuals develop several aspects necessary for a comfortable home environment, such as establishing friendships between family members and positioning PLH according to their roles and functions (Evans & Thomas, 2009). Such skills should be developed so that PLH feel loved, normal, and not alone (McGray et al., 2023), making it easier for them to adjust to their living environment (Nebhinani et al., 2022). Thus, social support formed through emotional ties plays a role in reducing prolonged mental stress (Saleh et al., 2016) so that better psychological well-being can be achieved (Asante, 2012) and psychosocial adjustment can be improved.

Social support contributes to psychosocial adjustment in PLH (Barenbaum et al., 2016). Although social support can facilitate the development of psychological patterns and social adaptation, the influences of social support on psychosocial adjustment remain inconsistent (Barrios, 2022). This inconsistency is influenced by other variables that impact psychosocial adjustment and all forms of social support that individuals receive, depending on how high expectations are set (Smith et al., 2012). Social support will provide the maximum contribution to psychosocial adjustment if it always refers to expectations that have been set. Hence, psychosocial adjustment often depends on set expectations, even when social support is provided (R. Wang et al., 2023).

Hope can provide a sense of peace in the present and perhaps in the future; it requires openness to changes that occur in the individual, both negative and positive (Soundy et al., 2013). PLH have the potential to achieve social welfare (Duggleby et al., 2012) such that the support they receive is contextually meaningful (R. Wang et al., 2023). If the social support received is in line with the desired expectations, PLH will find it easier to make psychosocial adjustments. This indicates that individuals perceive social support as more meaningful because they follow predetermined expectations. PLH spend most of their time with their families and people they consider important (Xu et al., 2017), and these factors are thought to influence their expectations. Hope, as an attribute of mental health resilience, has been widely studied along with psychosocial adjustment among families impacted by HIV-AIDS (Wei et al., 2016). Furthermore, hope is associated with research oriented towards improving well-being, such as mental stress (Corrigan & Schutte, 2023), psychological well-being (Chi & Li, 2013), optimism (Gallagher et al., 2019), and resilience (Kelly et al., 2000). Thus, hope is a buffering factor in the formation of better psychosocial adjustment (Saleem et al., 2023).

Hope can be used for the self-management of psychological adaptation because of its contribution as a source of mental health resilience for better behavioral change (Chepkemoi et al., 2024). As such, we aimed to analyze the role of hope in mediating the influence of social

support on psychosocial adjustment. Hope has also been examined along with psychosocial adjustment so that one can adapt to stressful environments (Madan & Pakenham, 2015). This research raises strategic questions related to psychosocial adjustment due to the risk of stigmatizing and discriminatory behavior experienced by PLH. We expect the findings to motivate people to use hope as a mediator for other variables, especially as a variable oriented toward mental resilience in an environment with the same socio-cultural background and problems. It is interesting to note that in this study, the independent and mediator variables are mentioned simultaneously, while in other studies, the expectation variable is referred to as a separate variable.

Literature Review

Psychosocial Adjustment

As a defense for persuasion against social crises, psychosocial adjustment becomes a very important component of the life journey of people living with HIV/AIDS (PLHA) for problems of psychological disorder, psychological symptoms or negative mood in individuals (Harifi et al., 2021), because there is a demand to adjust to physical, psychological and social changes when living with their illness as HIV survivors (Farber et al., 2003) and this is done at a multidimensional level, starting from the use of space and time, family life, social life, and how to deal with the pattern of illness and treatment undergone (Bantjes & Kagee, 2018). In other words, psychosocial adjustment is an "adaptive skill" used to manage and control psychological demands as a form of responsibility for the psychological pressure experienced and how to negotiate with their environment (Dekker & de Groot, 2018), and thus that psychosocial adjustment becomes an effective instrument for PLHA to be able to adjust to their environment, especially during crises due to psychological pressure. Studies have identified that psychosocial adjustment difficulties expressed in terms of "loneliness," "shyness," or "social anxiety" negatively contribute to social skills (Riggio et al., 1993). Meanwhile, several studies have also reported that buffering factors such as optimism (Satici, 2019), self efficacy and Perceived Social Support (Yusoff, 2012), Religious coping (Burgess et al., 2020), Spiritual Wellbeing (Senmar et al., 2020) and social roles (Harifi et al., 2021), have a significant contribution to psychosocial adjustment. Thus, psychosocial adjustment can be used as an important element to support efforts to adapt to their illness, adjust to environmental conditions, and can be used to choose effective coping strategies to solve their problems through optimal social support (Bender et al., 2019)

Social Support

Previous studies have reported that social support is used as a guarantor for psychosocial adjustment because the effects of social networks can provide new positive experiences and a relatively stable space for self-adjustment (Xiang et al., 2020). So that social support is defined as any form of assistance given to someone through social relationships, and social support from a health perspective is interpreted as assistance that can alleviate suffering due to the impacts caused by various diseases through friendship ties (Cohen et al., 2016; Ginting et al., 2016; Valtorta et al., 2016). Individuals who feel social support always involve subjective responses about experiences and emotions, that they are very comfortable, respectful, respectful, satisfied and appreciative of the understanding and understanding of the help given by others (Hodges & Winstanley, 2012), and this is always connected to self-efficacy, self-esteem, and optimism (Boyle et al., 2018; Xie et al., 2018). Therefore, the perception of social support is felt to be very meaningful and gives a sense of happiness for those who are entering the healing period of the

disease (Holland & Holahan, 2003), but it is felt to be insignificant for those with very serious illnesses (Shelby et al., 2008). Furthermore, for chronic diseases, social support can facilitate one's health recovery, adjustment to medical treatment and care, facilitate improvement in quality of life and ultimately prolong their life (Rizalar et al., 2014), and in particular, high-quality social support can protect individuals from the "damaging" effects of stress (McQuaid et al., 2016), and is very effective as a buffer for adaptive coping (Hodges & Winstanley, 2012). For people who have a sense that the social support they receive is highly valuable, they may also have higher expectations over time for a happy prognosis due to feelings of threat or danger from the problems they face (Nie et al., 2019)

Hope

Hope as a psychological strength is always associated with an individual's ability to see positive aspects in the future, and this is always related to the goals to be achieved and the desired direction of the goals (Soundy et al., 2013, 2014). As an important aspect of positive psychological function, hope is also related to various aspects of physical and mental health, and plays an important role in protective functions to protect individuals from negative influences (Pallini et al., 2018), so that hope is described as a very important psychological resource for developing new behavioral modes as protection against predetermined goals (Duggleby et al., 2012), but becomes weak when hostile situations continue (Rustøen et al., 2010). Some important attributes related to hope are self-evaluation and self-confidence (Forbes 1999, Buckley & Herth 2004), high self-control (Eliott & Olver, 2007), satisfying relationships with others (Mattioli et al., 2008), and better quality of life (Milne et al., 2009). This means that hope can provide a sense of peace in the current situation and perhaps in the future (Soundy et al., 2013). However, hope always requires openness to changes that occur in the individual, both negative and positive (Duggleby et al., 2012; Soundy et al., 2013), and if necessary abandoning goals that have been set or replacing them as a strategy to meet better expectations (Park, 2010). Seeing hope in possibilities, provides opportunities for PLWHA to overcome uncertainty, or is considered unrealistic to continue, so it can be used as a buffer for despair (Kylma, 2001). Consequently, hope can be seen as a protective factor in mental well-being in relation to the difficult conditions created by HIV.

Research Method

Study Design

We used non-probability convenience sampling where respondents were recruited based on their willingness to participate (Kaplan & Saccuzzo, 2001). This non-experimental, cross-sectional, and correlational quantitative study aimed to determine the effect of social support on psychosocial adjustment mediated by hope.

People living with HIV who were treated at the Ibnu Sina General Hospital Polyclinic in Gresik were selected as a convenience sample. Respondents from Ibnu Sina Hospital in Gresik were chosen as one of the criteria because the hospital has been designated as a referral hospital for the treatment of people living with HIV; thus, they are assumed to represent the population of people living with HIV in the country. The law of large numbers is enforced so that the larger the number of samples taken, the more accurate the data produced and the more representative the study population (Khatun, 2021). G*Power 3.1 power analysis was used to measure the appropriate sample with a medium effect size of 0.15, a significance level of 0.05, and a power of 0.09. A minimum sample size of 136 respondents is required (Neuha et al., 2023). Therefore,

the respondents in this study were 154, and 10% were added to anticipate respondents who dropped out; Thus, the total number of respondents was 169 people. Of the participants who visited Ibnu Sina Hospital Gresik from November 2022 to June 2023 and met the inclusion criteria, 165 people gave their consent to participate, but 4 people refused to participate. After discarding 11 questionnaires with inadequate answers, we analyzed 154 questionnaires. The criteria for inadequate answers are if more than 50% of the answers are not filled in.

The inclusion criteria for respondents were as follows: (a) respondents registered in the Outpatient Clinic register for people living with HIV, (b) Respondents who had been diagnosed with HIV by a doctor, (c) Respondents who had received VCT (Voluntary Counseling and Testing) counseling, The exclusion criteria for respondents were as follows: (a) having comorbidities such as Tuberculosis, Kaposi's sarcoma, and diarrhea (b) not willing to be respondents in this study.

Data collection was conducted in the education room at the Outpatient Clinic for people living with HIV at Ibnu Sina General Hospital, Gresik. We identified patients who met the inclusion criteria. After outpatient treatment, they completed a self-report questionnaire in the outpatient education room.

Written informed consent and signatures were obtained from the participants after the researcher provided brief information about the study. Furthermore, participants completed three anonymous self-report measures to avoid biased responses. Because the questionnaire was anonymous, individual participants could not be identified. We explained that participants could withdraw from the study at any time. Each participant took about 15 to 20 minutes to complete the questionnaire. The questionnaire was given to participants through nurses in the outpatient clinic for people living with HIV and was filled out by participants themselves in the Outpatient Clinic Education Room, who had previously received brief information about the study.

Measures

We measured social support using the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al., 2010). In this study, social support was designed using the Indonesian version to measure the social support experienced by people with AIDS, consisting of 12 items spread across three domains: family support (4 items), friend support (4 items), and personal support from others (4 items). Items were rated on a 5-point Likert scale: 1 = *strongly disagree* to 5 = *strongly agree*, with Cronbach's alpha at 0.91.

As for the questionnaire used in this study, we developed it according to the Dispositional Hope Scale (DHS) (Snyder et al., 1991), which was designed in Indonesia to assess the level of hope in people with AIDS. In this study, the Indonesian version of the hope questionnaire was used to measure the hopes of PLH, consisting of 12 items spread across two domains: pathways (6 items) and agency (6 items). Items were rated on a 5-point Likert scale, from 1 = *definitely false* to 5 = *true*, with a Cronbach's alpha of 0.78.

We measured psychosocial adjustment using the Psychosocial Adjustment to Illness Scale-Self-Report (PAIS-SR) developed by Karus, Siegel, and Raveis for non-Hispanic, African-American, Puerto Rican, and white women with HIV/AIDS (Karus et al., 1999). Furthermore, we used the Indonesian version of the PAIS-SR to measure psychosocial adjustment in people living with HIV. It consists of 24 items rated on a 5-point Likert scale, from 1 = strongly disagree to 5 = strongly agree, with a Cronbach's alpha of 0.78.

Statistical Analysis

The data were processed using Microsoft Excel and IBM SPSS Statistics 24. We employed statistical analysis techniques from Hayes, including descriptive tests, correlation tests, and mediation tests using Macro PROCESS v3.4 (Hayes, 2013) in SPSS.

Results

Descriptive Statistics of the Respondents

As seen in Table 1, almost half of the respondents (65 individuals, or 42.2% of the total) were 31–40 years old. Most were male (91, or 59.1%), and almost half were married/cohabiting (61, or 39.6%). The majority (80, or 51.9%) had completed senior high school. Most of the respondents worked in the private sector (89, or 57.8%); 39 (25.3%) had a monthly income between 2,000,000 and 3,000,000 rupiahs, and 31 (20.1%) had a monthly income < 500,000 rupiahs, which indicates that some respondents were still living in deprivation. Furthermore, most of the PLH were heterosexual (89, or 57.8%), while the source of infection was almost entirely sex (145 individuals, or 94.2% of the total). As for smoking behavior, the majority (119, or 77.3%) did not smoke, and almost all 133 (86.4 %) did not consume alcohol. Regarding living arrangements, most of them lived with other people (130, or 95.1%). As for the use of antiretrovirals (ARVs), almost all of them used ARVs regularly (146, or 94.8%).

NO	Demographic Data	n (%)	(Mean ± SD)
1	Age		2,08 ± 1,00
	20 <	5 (3,2)	
	20 - 30	39 (25,3)	
	31 - 40	65 (42,2)	
	41 - 50	30 (19,5)	
	51 - 60	14 (9,2)	
	> 61	1 (0,6)	
2	Gender		1,41 ± 0,49
	Men	91 (59,1)	
	Women	63 (40,9)	
3	Marital status		1,88 ± 0,77
	Single	56 (36,4)	
	Married / Cohabiting	61 (39,6)	
	Divorced/Widowed/Widowed	37 (24,0)	
4	Education		2,73 ± 0,89
	Elementary School	20 (13,0)	
	Junior High School	28 (18,2)	
	Senior High School	80 (51,9)	
	Diploma / Bachelor's degree	26 (16,9)	
5	Work		2,44 ± 0,80
	Student/Home Worker	28 (18,2)	
	Unemployment	34 (22,1)	
	Private sector employee	89 (57,8)	
	Civil Servants / ABRI / POLRI	3 (1,9)	
6	Income		2,16 ± 1,47

	< 500.000	31 (20,1)	
	500.000 - 1.000000	26 (16,9)	
	1.000.000 - 2.000.000	21 (13,6)	
	2.000.000 - 3.000.000	39 (25,3)	
	> 3.000.000	37 (24,1)	
7	Sexual Orientation		1,81 ± 0,62
	Homosexual	47 (30,5)	
	Heterosexual	89 (57,8)	
	Bisexual	18 (11,7)	
8	Source of Infection		2,03 ± 0,24
	Inject	2 (1,3)	
	Sexual	145 (94,2)	
	Other	7 (4,5)	
9	Smoke		1,79 ± 0,42
	Yes	34 (22,7)	
	No	119 (77,3)	
10	Alcohol Consumption		1,88 ± 0,34
	Yes	20 (13,6)	
	No	133 (86,4)	
11	Living Arrangements		1,86 ± 0,36
	Living alone	23 (14,9)	
	Living with Others	130 (85,1)	
12	Use of ARVs		1,05 ± 0,22
	Regular use	146 (94,8)	
	Don't use it regularly	8 (5,2)	

Table 1 Univariate Associations of Sociodemographic with Psychosocial Adjustment (n = 154)

Descriptive Statistics for Each Variable

Table 2 shows that psychosocial adjustment has a mean and standard deviation (M = 108; SD = 10.6205), indicating a relatively good level, which we categorized as medium. Furthermore, social support revealed a mean and standard deviation (M = 48; SD = 6.3822), indicating a moderate level of social support. This indicates that, on average, respondents feel they receive sufficient support from family, peers, and other people whom they consider to be significant in their lives. The results also report that expectations have a mean and standard deviation (M=42; SD=5.5571), so we included them in the medium category. This suggests that PLH have enough hope that they can successfully set expectations according to desired goals for their future.

Variable	n	Min	Max	Mean	SD	Skewness	Kurtosis
Psychosocial adjustment	154	64	131	108	10,62	-,23	1,04
Social Support	154	35	60	48	6.38	,16	-,39
Hope	154	28	59	42	5.55	,10	-,55

Table 2 The Categorization of Each Variable

The Correlation Analysis of Each Variable

As portrayed in Table 3, all variables had positive and significant relationships between social support and psychosocial adjustment (r = 0.277**; p < 0.01), hope (r = 0.348; p < 0.01), and hope with psychosocial adjustment (r = 0.521**; p < 0.01). This means that the more social support a person receives, the greater his/her ability to make psychosocial adjustments. Furthermore, high expectations were caused by a high level of social support provided. The psychosocial adjustment of PLH tends to improve when they experience more social support.

Variable	1	2	3
Psychosocial Adjustment	1	-	-
Social support	,27	1	-
Hope	,52	,34	1
***p* < ,001			

Table 3. The Corelation Analysis of Each Variable

Mediation Results

At least four conditions were met to test the mediation model. The independent variable was significantly correlated with the dependent variable and positively correlated with the mediator variable. Furthermore, the mediator variable was significantly correlated with the dependent variable, and the strength of the correlation between the independent and dependent variables weakened when analyzed together with the moderator variable (Khatun, 2021) This demonstrates the need to determine the correlation of each variable before carrying out a mediator analysis. Table 4 indicates that social support has a positive and significant effect on psychosocial adjustment by mediating hope (βc = 0.3997; p < 0.01) compared to social support, with βc1 = 0.2093 (indirect causality through hope). This implies that, to make good psychosocial adjustments, PLH need social support that can increase hope. These results support the proposed hypothesis that hope mediates the influence of social support on psychosocial adjustment.

Antecendent		Outcome							
Variable		M (Hope)				Y (Psychosocial Adjustment)			
		Coeff (β)	SE	*p*			Coeff (β)	SE	*p*
X (Social Support)	βa	0,39	0,09	***p* < ,001		βc[1]	0,20	0,14	*p* < ,999
						βc	0,39	,08	***p* < ,000
M (hope)		-	-	-		βb	0,80	,12	***p* < ,000
Constanta	[i]M	31,40	3,77	***p* < ,001		[i]Y	61,14	6.78	***p* < ,000
		R^2 ,12					R^2 ,28		
		F 20.94; ***p* < ,005					F 29.58; ***p* < ,005		

Table 4. Mediation Results

Discussion

This research shows that hope is an important mediator in the relationship between social support and psychosocial adjustment, and clarifies statements suggesting that using attributes of mental resilience (such as internal hope) is an important dimension in successful coping strategies for PLH (Kylma, 2001) because efforts toward psychosocial adjustment are a form of adaptive coping (Baqutayan, 2015). This is also reflected in several components of hope, including (a) the goal to be achieved, (b) the path planned to achieve the goal, and (c) the tendency to motivate oneself by mobilizing all the energy one has and the path that has been planned to achieve goals (Snyder, 2002). Hope is confirmed by the social support one receives (R. Wang et al., 2023) because individuals will feel meaningful support if it is in line with the desired expectations.

The perception of meaningful social support makes someone more confident in adapting to psychosocial problems in their living environment because he/she believes that others are a source of support (Bender et al., 2019). Hope is an important factor for people with low well-being and is positively related to psychological well-being and physical health (Gum & Snyder, 2002). Thus, someone can become more confident in adjusting to his/her living environment if he/she receives emotional support (Ke et al., 2020), in addition to appreciation and instrumental and informational support.

Family members, peers, or people who are considered significant in the lives of PLH and who often spend time together have great opportunities to learn from and understand each other better by sharing their ideas, thoughts, feelings, and emotions (Rochat et al., 2011) [84]. Furthermore, those who are considered a source of mental strength can assist under set expectations, as reported in this study (Wedajo et al., 2022). Likewise, families understand what assistance should be given to PLH because they know their capacities and capabilities and because they interact most often. This makes family members know what PLH want, both now and in the future, and PLH perceive this as a caring attitude (H. Wang et al., 2022).

This meaningful relationship makes PLH feel that their family, peers, and other important people in their lives understand their situation and psychological condition (Singh et al., 2023). Therefore, families who successfully eliminate the obstacles they experience make PLH feel confident that they can face challenges (Wei et al., 2016); for these needs, hope is a factor that can predict psychosocial adjustment by using attributes of hope (Rustøen et al., 2010).

As such, hope is a source of mental resilience that makes a huge contribution to individuals' formation of assertive behaviors (Hartmann et al., 2018). Psychosocial adjustment is perceived as psychological flexibility to successfully condition one's emotions and behavior when making a transition in the living environment (Kapadi et al., 2022) so that individuals can change their behavior. This is related to the adaptation process (Siu et al., 2024). Likewise, having a positive self-concept can lead to success in facing difficult situations arising from adversity (Xiang et al., 2023). This is what makes PLH able to set realistic expectations that they adjust to the resources they have for the future. This is because they actively explore personal resources both internally within themselves and in the environment, which they use to choose coping alternatives (Parcesepe et al., 2023). When someone feels stressed, he/she can control his/her situation and conditions and feel optimistic about the efforts he/she has made, so he/she can predict his/her expectations (Laranjeira & Querido, 2022).

The results of the correlation test indicate that hope and psychosocial adjustment show higher values and are in line with previous research reports that PLH with high hopes can more easily achieve psychosocial adjustment in stressful settings (Harris & Larsen, 2008). This is because when individuals have strong social capital regarding the adaptation process and mental resilience, such as hope, it is easier to make psychosocial adjustments. However, some PLH still experience difficulties in developing social interactions and adaptation processes because stigma and discrimination always haunt their lives (Toppenberg et al., 2015). With the social support that they receive, they can make sufficient psychosocial adjustments (Turner-cobb et al., 2002). This is because most respondents live in neighborhoods, although some PLH live separately and far from their families or people whom they consider important in their lives also reported that living with the people closest to oneself and building closeness between family members reflect Indonesian culture, which is maintained today and perhaps also will be in the future (Nasir et al., 2023), making it easier for individuals to make psychosocial adjustments because everyone understands each other's feelings thanks to the support provided.

Implications

This research provides several important contributions to the existing literature on positive psychology through the examination of constructs such as social support, hope, and psychosocial adjustment to cope with stressful conditions such as psychological vulnerability. Despite the limitations noted above, this study presents several important contributions to the existing literature on positive psychology through the examination of constructs such as psychosocial adjustment, hope, and social support for use as tools to reduce psychological distress. Counseling services and other professionals should consider the role of social support and develop psycho-educational programs including social support to improve well-being. In addition, although hope as a psychological force is always associated with an individual's ability to see positive aspects in the future, and this is always related to the goals to be achieved and the direction of the desired goal, hope is an impossible trait and can be learned, because it becomes weak if a hostile situation persists continuously (Rustøen et al., 2010). Therefore, counseling programs aimed at increasing hope can be an effective method for reducing psychological vulnerability and increasing subjective well-being.

Conclusion

This study examines the relationship between social support, hope, and psychosocial adjustment. This study builds a mediation model of social support related to psychosocial adjustment due to the existence of hope attributes that can strengthen mental emotionality as a mediating factor. These findings underline the importance of social support tailored to hope for people living with HIV as a source of moral strength in psychosocial adjustment in the community.

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Author Contributions

Conceptualization: AN, AM, RHM, IW. **Data curation:** AN, HF, NH. **Formal analysis:** AN, AM, SH. **Methodology:** SH. AKS, NH. **Supervision:** NABSS, AM, AN. **Validation:** SG.

NABSS, HF. **Writing – original draft:** AN, IW, RHM. **Writing – review & editing:** ANa, NABSS.

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Data Availability

Due to the sensitivity of the area of study and for data protection purposes, the data used in this study cannot be accessed publicly. However, researchers who wish to obtain the dataset for research purposes can directly email the corresponding author upon reasonable request and with the necessary permission

Declaration Ethical Approval

This study was approved by the Ethics Committee under file number *071/064/437.76/2023*, dated June 27, 2023. Participants were provided sufficient time to review and comprehend the information sheets. Written consent was obtained from each participant before the commencement of the study. All participants included in the study provided informed consent. The research was conducted under the Declaration of Helsinki and Good Clinical Practice guidelines.

Consent for Publication

Not applicable.

Competing Interests

The authors declare no competing interests.

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