

**ORIGINAL ARTICLE**

# Mentorship for young gay men in Hong Kong: A pilot mixed-methods randomized controlled trial

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**Abstract**

This study examined whether mentorship could promote young gay men's identities and well-being, and whether a mentor's sexual orientation matters. A randomized control trial compared outcomes across three conditions: Arm A (a mentee matched with a sexual minority mentor), Arm B (a mentee matched with a heterosexual mentor), and a control arm receiving psychoeducation only. A community sample of 60 mentees aged 18–25 years was randomly allocated to the three arms and completed questionnaires at baseline, 3 months into the intervention, and at the end of the 6-month program. Fifteen mentees recounted their mentoring experiences through in-depth interviews. Linear mixed effects models showed that for both intervention and control conditions, internalized homonegativity declined while resilience, loneliness, and body acceptance improved over time. No time and group interactions were found. Meanwhile, a mentor's sexual orientation did not drive differential quality and outcomes of mentorship. Interviewees cited various benefits of mentorship, including providing companionship, enriching connection with lesbian, gay, bisexual (LGB) communities, and adding knowledge and perspectives of LGB lives and identities. Although quantitative data did not support any exclusive benefits of mentorship, most mentees recognized mentorship as a vital source of affirmation and companionship. Implications for research and mentoring programs are discussed.

**KEYWORDS**

gay men, Hong Kong, mentorship, mixed-methods, randomized control trial

**Highlights**

- Mentorship has been suggested as a community-based program to improve LGB people's mental health.
- This study found equivocal quantitative evidence for short-term effects of a mentorship.
- Qualitative interviews reveal potential benefits of mentorship for young gay mentees.
- Mentors' sexual orientations did not play a major part in the quality and outcomes of mentorship.

**BACKGROUND**

Sexual minority people (i.e., nonheterosexual people, including but not limited to homosexual, bisexual, pansexual, or asexual) are prone to emotional and behavioral

problems due to stigma-based stressors. Literature reviews have concluded that compared to their heterosexual counterparts, sexual minority young people are more likely to be depressive (Lucassen et al., 2017), suicidal (Miranda-Mendizábal et al., 2017) and prone to body image

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disturbance (He et al., 2020). A survey of 1050 Hong Kong sexual minority adults shows that approximately one in three respondents reported moderate or severe depressive symptoms, disproportionately higher than the general population (Yu et al., 2012). The heightened risks of psychological disturbance among sexual minority young people have been attributed to societal rejection and marginalization in the forms of minority stress (Meyer, 2003), structural, interpersonal, and internalized stigma (Herek et al., 2009), and micro-aggression (Balsam et al., 2011). Specifically, as family rejection is common and detrimental to the mental health of sexual minority young people, community-based support from extra-familial figures is imperative (Bird et al., 2012; Perrin-Wallqvist & Lindblom, 2015).

Various individual-oriented intervention programs based on cognitive- or mindfulness-based models have been found effective in fostering coping capabilities and resilience among sexual minority young people (Huang et al., 2020). Given that relationship disruption, sense of isolation, and fear of rejection are at the heart of their experiences of stigma, helping professionals have also called for relational-focused, community-based intervention to promote the mental health of sexual minority young people (Allen et al., 2012). Mentorship has long been suggested as a promising source of support for marginalized youth (DuBois et al., 2002). A meta-analysis of 70 outcome studies of youth mentoring programs concluded that mentoring yields a medium size effect in improving a wide range of youth developmental outcomes, including school, cognitive, health, psychological, and social outcomes (Raposa et al., 2019). Focused on naturally occurring mentorship for African American sexual and gender minority youth, Kaufman et al. (2021) also reported that mentorship could provide space for a mentee to address a wide range of issues, including sexual and gender identity, transitioning from adolescence to adulthood, relationship issues, and health. Mentees also highlighted several benefits of a mentoring relationship for them, including a trusted confidant, a source of support, and the ability to be authentic (Kaufman et al., 2021). However, there is a paucity of research documenting and evaluating a formally organized mentorship program aimed at promoting psychosocial development among sexual minority young people.

In response to these service and research gaps, a mentorship program was created and piloted with a community sample of sexual minority young gay men in Hong Kong, *Men2ship*, symbolizing our view of mentorship as two men sailing together on a yacht, implying their partnership in overcoming the hardship they face during the journey of being a sexual minority individual in a heterosexist society. Unlike professional-led and manualized intervention programs, *Men2ship* features a semi-structured design and community-based participation model to foster organic relationship-building and create a safe space to enable a mentor to offer the mentee guidance and support. This article reports on the process

and provides preliminary evidence about the outcomes of *Men2ship*.

## Theoretical underpinnings

This mentorship program designed for sexual minority individuals is underpinned by three theories. First, minority stress theory suggests that sexual minorities experience additional stress and psychological distress by virtue of their membership of a minority group (Meyer, 2003). The mental health disparities among sexual minority young people can be largely explained by the dual stress processes. Distal stress comprises homophobic culture, discriminatory treatments, and interpersonal rejection and victimization. Proximal stress is experienced through expected rejection, concealment, and internalized homonegativity. Although the experience of minority stressors heightens mental health risks, social support has a protective function in buffering the adverse effects of these social stressors. Thus, engagement in a steady mentoring relationship could provide sexual minority young mentees with additional support (Torres et al., 2012), particularly when parental support is weak or even absent (Drevon et al., 2016; Rhodes et al., 2006).

Second, the Psychological Mediation Framework (Hatzenbuehler, 2009) highlights the importance of sexual minority young people developing adaptive coping skills to attenuate the adverse effect of stigma-based stress. This theoretical model suggests that discrimination takes its toll on minority individuals by disrupting their interpersonal relationships and inducing maladaptive coping responses and cognitive schemes. In a mentoring relationship, a safe connection with a nurturing mentor can increase a mentee's sense of security and create "a sounding board" (Rhodes et al., 2006, p. 693) through which to develop cognitive coping and interpersonal skills that can be applied to other relationship domains.

Third, role modeling also accounts for the mechanisms of change in mentorship. A mentee can view an adult with experience of life circumstances and successful goal-achievement as an admirable figure. Observation and the juxtaposition of a mentor as a "possible self" (Markus & Nurius, 1986) may promote a mentee's aspirations, inform their decision-making and behavior, and therefore contribute to positive identity development (Bird et al., 2012; Rhodes et al., 2006).

## Sexual orientation matching

Matching is key to successful mentorship. Deng et al. (2022) highlighted three matching methods conducive to mentorship: (1) matching based on deep-level similarities (e.g., interests, values, beliefs, and personality); (2) considering the mentee's developmental needs; and (3) seeking input from the dyads to finalize matches. An

intriguing issue is the implication of the mentor's sexual orientation for mentorship outcomes. Support for matching based on a shared background (i.e., a gay mentor and a gay mentee) comes from role model theory that a mentor who shares similar experiences can better help a mentee envision himself to overcome similar obstacles and achieve desired goals (Alexander, 1999; McAllister et al., 2009; Syed et al., 2011). Social identity theory provides another layer of support that attitudinal and characteristic commonalities can augment mentoring efficacy through a mentee's higher perception of support and comfort within the relationship (Ensher et al., 2002; Parra et al., 2002). Particularly for sexual minority young people, connections with someone with a shared identity and similar experience can become an empowering vehicle to see oneself as a member of a larger community, contextualize the experience of discrimination, and foster resilience (Wexler et al., 2009).

Another promising type of mentorship is built upon “allyhood”—an affirming relationship formed between a heterosexual mentor and a gay mentee (Zammitt et al., 2015). Although sexual minority young people may not always find support from heterosexual friends available or necessarily helpful compared to support from sexual minority peers (Doty et al., 2010; Friedman & Morgan, 2009), research has reiterated the salubrious impact of sexual minority young people's perception of heterosexual friends' acceptance on their self-acceptance and well-being (Hall, 2018; Snapp et al., 2015). Hence, a supportive connection with heterosexual people may allow sexual minority young people to validate their feeling of being different and to undo the negative impact created by the devaluation of their sexuality (McCormick et al., 2014).

## The current study

Considering the robust gender differences in the experiences and identity concerns of sexual minority young people (Shao et al., 2018; Wong et al., 2019), this project involved young gay men and male mentors only. With the goals to enhance young gay mentees' mental health, coping capacities, and connectedness, *Men2ship* adopts the cross-age peer mentoring model marked by: (1) an older mentor and (2) a focus on the relationship itself rather than tasks (Karcher, 2005). The study has three objectives to: (1) examine the efficacy of a mentoring program in promoting young gay men's mental health and self-acceptance; (2) delineate the differential effects of mentoring relationships with a sexual minority and a heterosexual mentor; and (3) document the course of a mentoring relationship and identify the mechanisms involved in changes in outcomes. The primary hypothesis to be tested by this study is that young gay men provided with mentorship would report a greater degree of changes in mental health and self-acceptance than those

who receive treatment as usual (i.e., online psychoeducation). The outcome indicators that have been shown to be affected by mentorship include depression, anxiety (Raposa et al., 2019), internalized homophobia (Bird et al., 2012), loneliness (Keller et al., 2020), resilience (Rhodes & Lowe, 2008), and acceptance of body image (Ranzenhofer et al., 2020). Due to the lack of literature on the comparative benefits for a mentee between a sexual minority mentor and a heterosexual mentor, no a priori hypothesis was posed for such comparison, and the investigation into their differential effects is exploratory.

## METHODS

### Study design

This study adopted a concurrent mixed-methods design to collect and analyze quantitative and qualitative data in parallel to investigate the complex processes and systems involved in mentorship (Fetters et al., 2013). A three-arm randomized control trial (RCT) design was employed to discern the outcomes among three conditions: Arm A—mentorship provided by a sexual minority mentor, Arm B—mentorship provided by a heterosexual mentor, and a control arm receiving psychoeducation only. Active control is a common and ethical design in research that involves marginalized communities (e.g., Pachankis et al., 2019). Young gay men allocated to the control arm were provided with psychoeducation and professional support or counseling made available if needed. Participants in Arm A and Arm B were matched with a mentor to engage in a one-on-one, 6-month mentorship. Compared to the control arm, participants in Arm A and Arm B were hypothesized to exhibit greater improvement in their mental health and self-acceptance. This study was approved by the Human Research Ethics Committee of The University of Hong Kong (#EA1912108).

### Sampling

The sample size for this study was estimated by a power analysis applying a power (0.80) and a significance level ( $\alpha = .05$ ) for a test of three independent groups. At the time this study was designed, we were unable to locate a precise effect size of mentorship programs for sexual minority young people. An average target effect size of 0.33 in mental health RCTs was applied to estimate the sample size (Rothwell et al., 2018). G\*Power calculation determined that the required sample size for conducting three repeated measures tests with within-between group interactions was 58 participants.

Purposive sampling was used for both mentee and mentor recruitment to generate this target sample size. Pages on social media platforms (e.g., Facebook and

Instagram) were created and updated frequently to extend the coverage of the advertisements and to enable prompt communication with potential participants. We also sought assistance from local community organizations providing services to sexual minorities and invited key opinion leaders to circulate the advertisement materials. Interested participants completed an enrollment questionnaire to indicate their level of interest in and eligibility to participate. The research team screened all applications.

The screening for eligibility was separate for mentees and mentors. Mentees needed to: (1) be 18–25 years old, (2) self-identify as a cisgender man, (3) self-identify as gay or sexually or romantically attracted to men, (4) wish to receive guidance on their life as a sexual minority, and (5) not previously have participated in any mentorship program. Exclusion criteria included a clinical diagnosis of a mood or psychotic disorder, psychosis, and/or suicide attempts, because these conditions demand intensive professional treatments. Those indicating a need that might be too difficult to handle by a mentor, such as trauma, sexual abuse, and psychosis, were advised to seek professional help. Since we prioritized mentees' intention to participate and their self-perceived needs, no intake interview was conducted, and the assessment primarily relied upon mentees' written applications. Sixty gay-identified mentees were recruited.

Mentors were eligible if they: (1) were between 25 and 35 years old, (2) self-identified as a cisgender man, (3) were friendly and accepting towards sexual minority people, (4) did not have a diagnosis of mental disorder, and (5) were willing to undergo training and supervision. We required mentors to demonstrate a stable mental status and positive character because of their crucial role in providing direct intervention to the mentees. Although experiencing mental illness does not necessarily make someone unsuitable as a mentor, the project team decided to include this exclusion criterion, because it did not include a mental health professional to handle situations that may require clinical interventions during the mentorship. Screening of mentors for eligibility first required prospective participants to complete a brief questionnaire followed by in-person interviews with candidates to assess their ability to perform the mentor role by investigating their expectations, lived experiences, values towards sexual minority issues, and resilience. Following the interview, all mentors were required to undergo a reference check and declare no record of criminal convictions or psychosis diagnosis. After excluding unsuitable or unqualified applicants, 35 mentors were recruited. Twenty-five mentors self-identified as sexual minorities (22 gay, two bisexual, and one pansexual), and 10 self-identified as heterosexual. Notably, the bisexual and pansexual mentors were included because they shared the identities and experiences with the mentees as members of sexual minority communities.

## Randomization

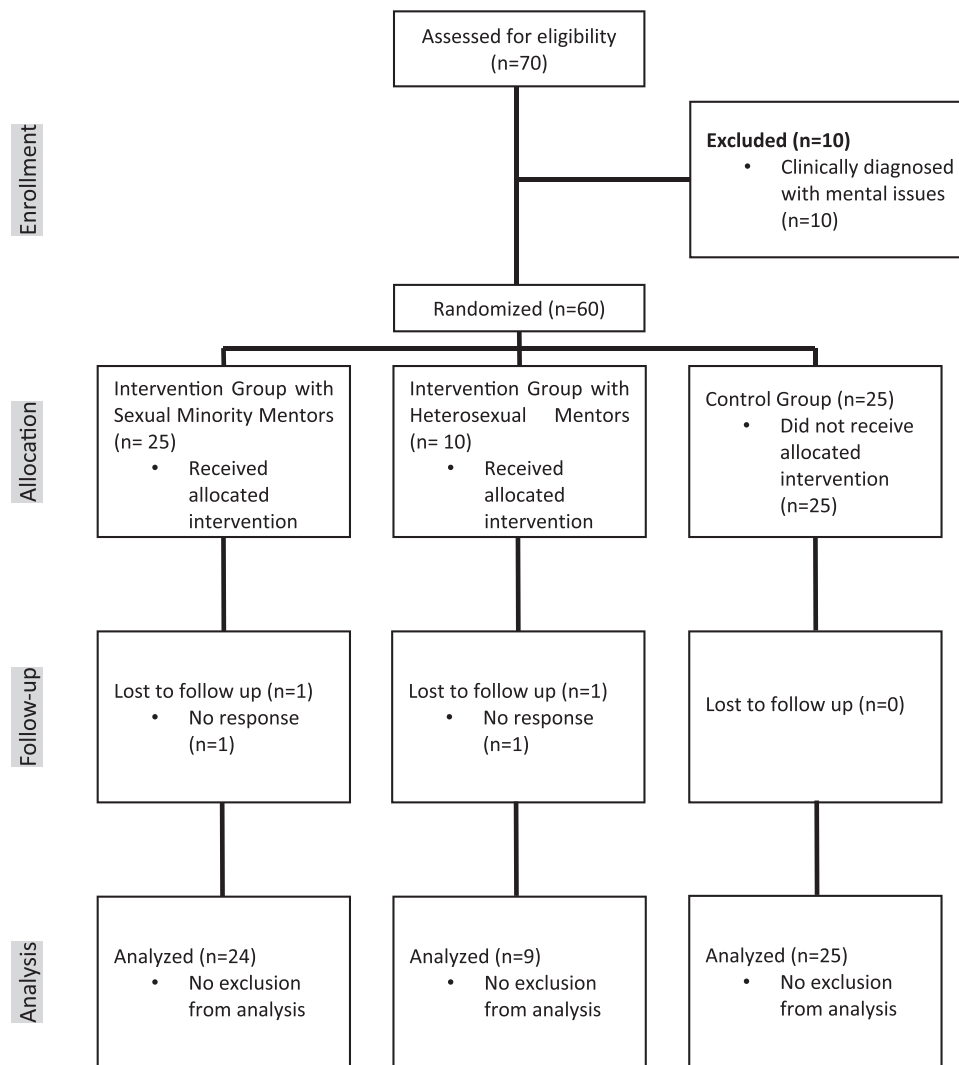
All eligible mentees were first randomly assigned an ID from 001 to 060 and sorted in ascending order. Given the number of mentors recruited, the first 35 mentees were allocated to the intervention group and the remaining 25 mentees were allocated to the control arm, constituting a ratio of 1:0.714. Within the intervention group, each mentee was given another random value from 1 to 35 and sorted ascendingly to determine which arm they were allocated to. The first 25 mentees were allocated to Arm A, paired with a sexual minority mentor and the remaining ten were paired with a heterosexual mentor (i.e., Arm B). The ratio of Arm A, Arm B, and the control arm was 10:4:10. Although no official dropouts occurred, one mentee from Arm A and Arm B, respectively, did not respond to the invitation to complete the survey. Thus, the final sample was 24 in Arm A, nine in Arm B, and 25 in the control group. Figure 1 shows the CONSORT flow chart.

## Overview of *Men2ship*

We followed the best practice suggested by MENTOR (2009) to design and deliver the *Men2ship* program that comprised the following procedures: (1) recruitment, (2) eligibility and screening, (3) training for mentors, (4) matching, (5) mentorship support and research team supervision, and (6) closure. The first two steps are described in detail above.

## Training for mentors

*Men2ship* offered two training sessions to all mentors to ensure that they could be a constructive and positive role model to the mentees. These training sessions were mandatory and conducted before commencing the mentorship intervention by professional trainers and counselors. Specifically, the training centralized effective communication and empathy because mentors were expected to assist mentees to identify their psychological and emotional issues. These attributes and skills have been highlighted as significant contributors to mentees' perceptions of mentorship quality and the longevity of the relationship (Deane et al., 2022). The first training session described the landscape of Hong Kong's sexual and intimacy culture, covering topics on online dating culture, sex hierarchy, and sexual orientation identity development. The second session focused on relevant counseling skills. The two sessions prepared the mentors to build an empathetic, supportive, and positive relationship with their mentees. Particularly for the heterosexual mentors, the training sessions prepared them to be more sensitive to their own social positions and open to sexuality and lived experiences among lesbian, gay, bisexual (LGB) people.



**FIGURE 1** CONSORT flow chart for *Men2ship*.

## Matching

Written information was utilized as a key reference for matching, including participants' age, sexual orientation, academic/professional background, and expectations about a mentee's wishes for support or how a mentor can support a mentee. In the screening form, mentees indicated their preferred mode language of communication and their readiness to have a mentor with a different sexual orientation from their own. An explicit request for a mentor with a specific sexual orientation was only noted but not taken into account during the allocation process. In the mentor training, each mentor drafted a six-item self-profile, that is, (1) preferred interaction mode and frequency, (2) roles in their life perceived to inform mentorship, (3) preferred mode for building social relationships, (4) hobbies, (5) characteristics perceived as assets for being a mentor, and (6) worries and concerns about being in a mentoring relationship. Mentors and mentees were requested to complete a brief survey identifying three issues related to their sexual identity

that most concerned them; additionally, mentors were further asked to identify three issues that they felt gave them the confidence to support a mentee. The identified issues were used to inform the matching process. Other matching criteria included a minimum 3-year age difference between a mentor and mentee, shared interests/hobbies, and a common sexual orientation in the case of sexual minority mentors and mentees. The latter incorporated a wide variety, such as gay, bisexual, pansexual, and asexual, and similar expected relationship/interaction styles. Online meetings were arranged to confirm the results of the matching process and launch the mentoring activity.

## Mentorship support and research team supervision

Mentees engaged in one-on-one interaction, either online (e.g., Zoom meetings, social media, or online communication apps) or offline, with their mentors for at least

two hours every month. The purpose of the interaction was to establish trust and bonding between mentees and mentors by sharing their life stories, discussing issues they experienced, and engaging in activities related to shared interests. We adopted a semi-structured approach to keeping the mentoring process exploratory and organic, allowing for space and freedom for participants to explore the mentoring relationship together and strengthen the dyad interaction following consultation with several local non-profit organizations that had run a mentorship program for sexual minority young people.

The research team conducted monthly seminars of 30–60 min duration for both mentees and mentors to enrich participants' experiences and provide psychoeducation. Seminar topics focused on contemporary LGB and mental health-related issues, each led by an expert in the area or with lived experiences. Examples of topics included dating app culture, sexual health, coming-out, gender fluidity, and body image. The seminars were video recorded so that participants could revisit them. The seminars offered useful information for participants and prompted a conversation between mentors and mentees, providing additional grounds for building a positive relationship. Control arm participants also received the video recordings as psychoeducation materials. Mentors were required to submit a monthly report on how the mentorship had been going, such as the number of hours and the nature of activities, and a brief update on progress and challenges encountered for supervision purposes. The research team also scheduled monthly check-in sessions for mentors to recount their mentoring relationship and share their experiences. If a mentor reported difficulties in offering mentorship, the research team and other peers offered relevant advice to enhance the mentor's sense of autonomy, trust, and integrity. By doing this, the research team decentralized most of the supervision power to the mentors themselves. These monthly check-in sessions were only available to mentors to avoid the research team directly intervening with mentees, which might confound the impact of the intervention. However, mentees could contact the research team if they experienced psychological distress or conflict with their mentors.

## Closure

At the end of the 6-month mentorship program, two formal closure sessions were organized, one for mentors only and the other for mentors and mentees together. Although the formal program had ended, the research team encouraged the participants to continue the relationship. Similar to the monthly check-in sessions, the closure session for mentors was designed to consolidate their overall mentoring experiences. The joint closure session focused on the program journey and dyad relationship.

## Data collection

Participants in both the intervention and control arms were asked to complete an online survey on Qualtrics at three time points: baseline, the end of the third month, and the end of the sixth month. Participants' socio-demographic characteristics, including age, gender identity, sexual orientation, educational attainment, employment status, income, relationship status, and living arrangements (i.e., who they lived with), were collected at the baseline assessment.

## Measurement

Chinese versions of the Patient Health Questionnaire (PHQ-9) (Wang et al., 2014) and General Anxiety Disorder-7 Item (GAD-7) (Sun et al., 2021) assessed changes in mentees' depression and anxiety over the 6-month period. As the mentorship program was hypothesized to provide social support and companionship, we also used the Chinese version of the 6-item De Jong Gierveld Loneliness Scale (Leung et al., 2008) to assess mentees' sense of loneliness. The psychometric properties of these three primary outcome measurements were established with Chinese samples (Leung et al., 2008; Sun et al., 2021; Wang et al., 2014/

The 11-item Chinese Internalized Homophobia Scale, developed for and validated with Chinese samples, was used to assess mentees' level of self-acceptance as gay men (Ren & Hood, 2018). A sample item is "if possible, I would prefer to be a heterosexual." Responses range from 1 (*strongly disagree*) to 5 (*strongly agree*). A higher mean score represents higher internalized homophobia.

The research team translated and back-translated Toomey et al.'s (2016) Sexual Orientation Identity Development Scale to observe changes in mentees' identity development. The scale includes seven items measuring respondents' identity exploration (e.g., "I have participated in activities that have taught me about my sexual orientation"), resolution ("I know what my sexual orientation means to me"), and affirmation ("I feel positively about my sexual orientation"). Responses range from 1 (*does not describe me at all*) to 4 (*describes me very well*). A higher mean score represents stronger identity affirmation.

The Chinese version of the Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003) was authorized by the scale developers to assess participants' resilience. CD-RISC contains 25 items assessing five dimensions of resilience, personal competence (e.g., you work to attain your goal), trust in one's instincts (e.g., I can act on a hunch), positive acceptance of change (able to adapt to a change), control (e.g., in control of your life), and spiritual influences (sometimes fate or God can help). Responses range from 1 (*never*) to 5 (*always*). The psychometric properties of CD-RISC were previously

examined with Chinese populations (Yu & Zhang, 2007). A higher mean score represents greater resilience.

The short form of the Body Image Acceptance and Action Questionnaire (Basarkod et al., 2018) comprising five questions to measure participants' acceptance of one's thoughts, feelings, and emotions towards the body (e.g., worrying about my weight makes it difficult for me to live a life that I value). A higher mean score represents more negative attitudes toward one's body. He et al. (2021) validated the short Chinese version of this scale with Chinese samples.

The research team translated and piloted two scales for this study, the Quality of Mentoring Relationship Engagement Scale and the Global Mentoring Relationship Quality Scale (G-MeRQS) (Ferro et al., 2014). QRMEs includes 22 items assessing mentees' perceptions of the level of action-oriented characteristics of the mentoring relationship (e.g., my mentor asked to do things together). Responses range from 1 (*not very true*) to 3 (*very true*). A higher mean score indicates higher levels of respondents' engagement in the mentoring relationship. G-MeRQS comprises five items measuring the mentees' perceptions of the mentorship's global qualities, focusing on the relationship characteristics and the mentor–mentee bond. Sample questions include “would you say that your relationship with the mentor is a (1) trusting relationship? (2) warm relationship? (3) close relationship? (4) happy relationship? (5) respectful relationship? Responses range from 1 (*not very true*) to 3 (*very true*). A higher mean score indicates better mentoring relationship quality.

## Interviews

Individual in-depth interviews averaging one hour were held with 15 mentees and 15 mentors (10 from Arm A and five from Arm B). Each interview was facilitated by one to two research team members, all of whom had postgraduate/PhD degrees and extensive research training. Participants were guided to share (1) their overall experiences within the mentoring relationship; (2) key events and special moments over the duration of the program; (3) the mentor's role in the mentee's life, and (4) benefits, costs, and meaning associated with the mentoring program.

## Data analyses

### Quantitative data

Descriptive statistics were used to describe sample characteristics and the distribution of all study variables.  $\chi^2$  tests and analysis of variance were used to compare participants' characteristics and baseline conditions in the three arms. A series of linear mixed effects models

was performed to examine changes in outcome variables across three time points and groups. First, we compared the intervention and control conditions by examining the main effects of group, time, and their interaction with a random intercept included. Second, we compared the changes in outcomes between Arm A and Arm B by examining the main effects of group, time, and their interaction, with a random intercept included. Participants' perceptions of mentoring relationship engagement and quality were compared using independent sample *t* test. IBM® SPSS® Statistics 25.0 was used for all statistical analyses.

### Qualitative analysis

All interviews were recorded, transcribed verbatim, and analyzed using Braun and Clarke's (2006) thematic analysis approach comprising initial and focused coding to encapsulate the procedures and qualities of the mentoring program, paying particular attention to the specificities of sexual minority versus heterosexual mentors. Following Braun Clarke's (2006) instruction, the analysis consists of six steps: In the initial stage, a coder closely examined the transcripts to become familiar with the original data. The second stage involved conducting initial line-by-line coding, assigning descriptive codes to capture the meanings of each line. The third stage focused on coding to identify themes related to the experiences of *Men2ship* and the relationships between the dyads. In the fourth stage, the themes were reviewed by assessing the coherence among narratives, codes, and themes. During Stage Five, researchers named the themes concisely and reflectively based on their understanding of the underlying codes and data, as well as their relevance to the research questions. The final stage included writing the report, presenting an illustrative account of the data based on the identified themes. Analytical rigor was maintained by thick and contextual descriptions of the results and team discussion. Only mentees' data are reported in this article. Pseudonyms are used to ensure participants' confidentiality.

### Integrative analysis

Applying the concurrent approach, quantitative and qualitative data were analyzed independently and then interpreted jointly to provide an integrative evaluation and description of *Men2ship*. In this intervention context, data in both forms were treated as fundamentally distinct and complementary means of accessing different aspects of the phenomenon (Moffatt et al., 2006). Specifically, quantitative data were utilized to determine the degrees of changes and effects associated with participation in an intervention. Conversely, qualitative data enabled the collection of experiential information, identification of

contextual factors that could affect the outcomes, and interpretation of the results after completion of the intervention (Fetter et al., 2013). In this study, data were reported in a contiguous manner, starting with quantitative results. Integration was undertaken following the separate analyses of quantitative and qualitative data, and is presented in the discussion.

## RESULTS

During the intervention period, mentors and mentees were expected to interact for at least two hours every month. The interaction could be in-person or virtual due to the COVID-19 epidemic. Over the course of *Men2ship*, mentees in Arm A engaged in interactions with their mentors ranging between zero and 30 hours per month with a mean of 5.16 (SD = 6.83); the interaction between dyads in Arm B ranged between 0 and 12 hours per month, with a mean of 3.13 (SD = 2.10). Recorded in their monthly reports, mentors reported discussing issues related to sexual minority communities, such as sexual identity, dating/relationships, sexual health, self-image, religion, gender expression, and concerns about coming out to family. They also talked about daily activities and developmental tasks, such as schooling, career, friendships, and family. To facilitate such conversations, the dyads meeting up in-person reported engaging in activities such as going on picnics, hiking, watching movies, shopping, and partaking in sports games. Mentors also facilitated their mentees to learn about the culture and history of their local sexual minority community through participating in LGBT events and visiting LGBT-centered establishments, such as bookstores and bars. Some mentors also utilized their own network or connections with other mentor-mentee pairs to provide opportunities for their mentees to socialize with other sexual minority men. These forms of activities helped foster mentor-mentee relationships and allowed mentors to support their mentees to develop a sense of community connectedness.

### Quantitative results

Participants across the three arms had similar sociodemographic profiles (see Table 1). They had a mean age of 22.31 (SD = 2.51) and most had a bachelor's degree ( $n = 38$ , 65.5%). Thirty-one participants (53.4%) were at school and 22 (37.9%) were in full-time employment. Nine participants (15.5%) were in a romantic relationship. No group differences were found. At baseline, participants across the three arms largely reported similar outcomes, except participants in the control arm who showed lower resilience.

Table 2 displays the linear mixed effects model showing significant changes over time in internalized homonegativity, resilience, loneliness, and body image concern. However, we did not find between-group differences in any of these outcomes. These results mean

that, overall, participants reported positive changes in these outcomes although the mentorship program produced no stronger effects than the psychoeducation received by the control arm. Moreover, the time  $\times$  group interaction term resilience was significant where the rate of increase appears more pronounced in the control group than in the intervention group.

Arm A and Arm B were compared to investigate the role of a mentor's sexual orientation in the outcomes and perceived mentorship relationship quality. Table 3 displays linear mixed effects models showing significant changes over time in internalized homonegativity, resilience, loneliness, and body image concern whereas no group differences were found. Moreover, no time  $\times$  group interaction was significant, meaning that a mentor's sexual orientation made no difference to the changes in the outcomes. In addition, no significant differences in the quality of mentoring relationship engagement and quality were found between Arm A and Arm B.

### Qualitative results

Fifteen mentees participated in the individual interviews to recount their experiences of *Men2ship*. We focused on the benefits associated with mentorship and sought to discern differences in the mentoring experiences and relationship between a sexual minority mentor and a heterosexual mentor.

#### Benefits of mentorship

##### *Emotional support and companionship*

The mentoring relationship had been a source of emotional support and companionship for most mentees, particularly under the strict social COVID-19 distancing measures. For those who had not come out to family and friends, mentors provided affirmative support and a safe space to navigate the challenges of being a sexual minority man. Ricky, an Arm A mentee, shared that his mentor provided companionship, helping ameliorate his negative emotions in the wake of the pandemic:

Before joining *Men2ship*, my mental status was not good due to the restriction of social activities and gatherings, and I did not have anyone to talk to...In our first meet up my mentor gave me a very nice impression and we started to keep contact. At least there was someone to accompany me when I was in quarantine before I got too negative.

For some mentees, the fact that the mentor was someone outside their social circles created a safe space for them to talk about personal and sensitive topics. Hector (Arm B) recounted that his mentor became



**TABLE 1** Participant sociodemographic and outcome variables at baseline by groups.

	Full sample	Arm A ( <i>n</i> = 24)	Arm B ( <i>n</i> = 9)	Control Arm ( <i>n</i> = 25)	Significance
Age	22.31 (2.51)	22.33 (2.70)	22.67 (1.94)	22.16 (2.58)	$F = 0.133$
Gender					$\chi^2 = 2.734$
Male	56	24	9	23	
Nonbinary	2	0	0	2	
Education attainment					$\chi^2 = 3.760$
High school	8	6	1	1	
Associate degree	8	2	1	5	
Bachelor's degree	38	15	6	17	
Master's degree	3	1	1	1	
PhD	1	0	0	1	
Employment status					$\chi^2 = 3.979$
Full-time	22	10	4	8	
Part-time	2	0	0	2	
At school	31	13	5	13	
Unemployed	3	1	0	2	
Relationship status					$\chi^2 = 1.637$
In a relationship	9	2	2	5	
Not in a relationship	49	22	7	20	
Anxiety (1–4)	1.78 (0.54)	1.76	1.81	1.77	$F = 0.03$
Depression (1–4)	1.68 (0.43)	1.61	1.76	1.72	$F = 0.57$
Internalized homonegativity (1–5)	3.01 (0.81)	3.04 (0.82)	2.92 (0.84)	3.01 (0.83)	$F = 0.06$
Sexual identity development (1–4)	2.65 (0.51)	2.75 (0.54)	2.75 (0.45)	2.51 (0.49)	$F = 1.64$
Resilience (0–4)	2.28 (0.59)	2.43 (0.53)	2.49 (0.71)	2.07 (0.55)	$F = 3.24^*$
Loneliness (1–3)	2.16 (0.41)	2.17 (0.34)	1.96 (0.57)	2.07 (0.59)	$F = 1.27$
Body image concern (1–7)	3.5 (1.19)	3.63	4.04	3.22	$F = 1.84$

\* $p < .05$ .

someone he felt comfortable with revisiting past traumatic experience:

I experienced sexual violence by other men in the past. This trauma is difficult to bring up with anyone, even close friends because they may not be able to understand or may be very worried. Mentorship is interesting at this point because with a certain degree of distance with my mentor, I could feel safe to talk about my trauma. My mentor never experienced sexual violence, but he could still respond to my emotions and be there for me to revisit what I have been through.

#### *Wider connection with the LGB communities*

Given that most participants had expressed their expectation of gaining more friends, another commonly shared benefit involved expanding mentees' interpersonal relationships both within and outside sexual minority communities. Grant (Arm A) said:

I used to really want to know how to make more friends in this community, but people I met on dating apps did not want to be your friend but were only looking for fun and sex. Through my mentor I learned about LGB-specific organizations that hold activities for us to make friends.

**TABLE 2** Linear mixed effects model between intervention and control groups.

	<b>Intervention group (n = 32)</b>	<b>Control group (n = 24)</b>	<b>Group</b>	<b>Time</b>	<b>Group × Time</b>
<b>Anxiety</b>			0.58	0.18	0.60
Baseline	1.78 (1.57–1.98)	1.78 (1.54–2.01)			
3 months	1.99 (1.78–2.19)	1.83 (1.59–2.07)			
6 months	1.80 (1.59–2.00)	1.75 (1.51–1.98)			
<b>Depression</b>			0.91	0.99	0.19
Baseline	1.65 (1.50–1.81)	1.72 (1.54–1.90)			
3 months	1.75 (1.59–1.90)	1.63 (1.44–1.81)			
6 months	1.64 (1.48–1.80)	1.73 (1.54–1.61)			
<b>Internalized homonegativity</b>			0.69	<0.001	0.54
Baseline	3.01 (2.75–3.27)	3.02 (2.72–3.31)			
3 months	2.87 (2.61–3.13)	2.78 (2.48–3.08)			
6 months	2.71 (2.46–2.97)	2.58 (2.28–2.88)			
<b>Sexual identity development</b>					
Baseline	2.75 (2.58–2.92)	2.51 (2.31–2.70)	0.11	0.15	0.13
3 months	2.74 (2.58–2.92)	2.67 (2.47–2.87)			
6 months	2.85 (2.68–3.02)	2.59 (2.39–2.78)			
<b>Resilience</b>			0.12	<0.001	<0.05
Baseline	2.45 (2.25–2.65)	2.07 (1.84–2.30)			
3 months	3.34 (3.14–3.54)	3.25 (3.02–3.48)			
6 months	3.40 (3.20–3.60)	3.21 (2.98–3.44)			
<b>Loneliness</b>			0.46	<0.001	0.73
Baseline	2.12 (1.97–2.26)	2.21 (2.04–2.38)			
3 months	1.96 (1.81–2.11)	1.99 (1.82–2.17)			
6 months	1.92 (1.77–2.07)	2.01 (1.84–2.19)			
<b>Body image concern</b>			0.10	<0.05	0.66
Baseline	3.75 (3.34–4.15)	3.22 (2.76–3.68)			
3 months	3.52 (3.12–3.93)	3.00 (2.53–3.46)			
6 months	3.37 (2.97–3.78)	3.02 (2.56–3.49)			

Note: Values are estimated mean (95% confidence interval) and *p* values are for the individual effects of group and time, and their interaction.

Interestingly, heterosexual mentors, despite their limited connection with LGB communities, also managed to expand mentees' social ties. Perry (Arm B) shared that his mentor introduced him to a gay friend:

Although my mentor is not a member of the LGBT community, he has done everything he could to help. One time he took me to meet his senior schoolmate who happened to be gay and active in the gay circle. That person talked about how gay people used to be treated badly and what policies are

needed. He also taught me how and where to meet people and reminded me to take care of my health and safety. Although my mentor did not have many resources, he supported me in this way.

*Source of knowledge and new perspectives in LGB lives and identities*

Most mentees saw their mentor as someone who was slightly older with more experience, and who had developed capacities to overcome problems that

**TABLE 3** Linear mixed effects model between Arm A and Arm B.

	Arm A ( <i>n</i> = 23)	Arm B ( <i>n</i> = 9)	Group	Time	Group × Time
<b>Anxiety</b>					
Baseline	1.76 (1.52–2.00)	1.81 (1.42–2.20)	0.44	0.13	0.65
3 months	1.95 (1.71–2.19)	2.08 (1.69–2.47)			
6 months	1.73 (1.48–1.97)	1.98 (1.60–2.37)			
<b>Depression</b>					
Baseline	1.61 (1.44–1.78)	1.77 (1.48–2.05)	0.62	0.46	0.65
3 months	1.74 (1.57–1.92)	1.75 (1.47–2.03)			
6 months	1.63 (1.45–1.80)	1.67 (1.39–1.95)			
<b>Internalized homonegativity</b>					
Baseline	3.04 (2.75–3.34)	2.93 (2.45–3.41)	0.73	<0.01	0.98
3 months	2.89 (2.60–3.19)	2.81 (2.33–3.29)			
6 months	2.74 (2.44–3.03)	2.66 (2.18–3.14)			
<b>Sexual identity development</b>					
Baseline	2.75 (2.56–2.94)	2.75 (2.45–3.06)	0.87	0.20	0.73
3 months	2.77 (2.58–2.96)	2.68 (2.38–2.98)			
6 months	2.84 (2.65–3.03)	2.85 (2.55–3.16)			
<b>Resilience</b>					
Baseline	2.43 (2.20–2.67)	2.49 (2.11–2.87)	0.78	<0.001	0.69
3 months	3.31 (3.07–3.54)	3.43 (3.05–3.82)			
6 months	3.40 (3.17–3.64)	3.39 (3.01–3.77)			
<b>Loneliness</b>					
Baseline	2.17 (2.00–2.35)	1.96 (1.67–2.25)	0.21	<0.05	0.97
3 months	2.01 (1.83–2.19)	1.83 (1.54–2.13)			
6 months	1.97 (1.79–2.15)	1.78 (1.49–2.07)			
<b>Body image concern</b>					
Baseline	3.63 (3.11–4.15)	4.04 (3.20–4.89)	0.57	0.05	0.32
3 months	3.53 (3.01–4.06)	3.51 (2.66–4.36)			
6 months	3.26 (2.74–3.79)	3.67 (2.82–4.52)			
<b>Quality of mentoring relationship engagement</b>					
Global mentoring relationship quality scale	2.24 (0.38)	2.41 (0.37)	0.25		
Global mentoring relationship quality scale	2.34 (0.41)	2.53 (0.36)	0.22		

Note: Values are estimated mean (95% confidence interval) and *p* values are for the individual effects of group and time, and their interaction.

sexual minorities may encounter. Mentors became a source of knowledge about LGB-related issues and guided mentees to tackle issues they have never grappled with. Joel (Arm B) described his mentor as “Yahoo Knowledge” whom he could ask various questions and get an answer. Logan (Arm A) shared that his mentor offered useful advice and understanding about intimate relationships:

Especially for me, who never had an intimate relationship with a man, my mentor gave me some new perspectives even though he did not have many relationship experiences. Once I had a feeling towards someone who was already in a stable relationship; my mentor might have a broader view on this than mine. At least he knew better how to

handle this, given that I am still in the closet and have never been in a relationship.

Wayne (Arm A) recognized the unique feature of the mentorship program because his mentor was able to provide him with new perspectives:

My current social circles are limited to my workplace or church, and people I know from these circles could hardly offer me new perspectives. Age makes a difference. How could I get to know someone who is ten years older than me? I mean, it is rare that you can build a meaningful relationship with someone older than you.

### Does the mentor's sexual orientation make a difference?

Another focus of the interview was whether a mentor's sexual orientation played a part in the mentorship. It is important to note that in the interview, mentees were prompted to comment on the (dis)advantages of having a mentor with the same or a different sexual orientation, although they did not have an opportunity to experience and compare both situations. The data indicate the differential benefits and limitations of sexual minority versus heterosexual mentors.

### Sexual minority mentor

Mentorship provided by a sexual minority mentor was marked by empathy and mutual understanding. Mentees perceived that a sexual minority mentor could better understand their experiences and needs, thus providing relevant advice:

The connection between a mentee and mentor depends on whether they have something in common and whether they link up in their identities. Taking drag queens or a drag show, I would see these shows as very ordinary, but if I go to watch a show with a straight mentor, and if he is not an ally or not familiar with LGBTQ culture, he might perceive it as crossdressing. Sometimes a gay mentee may even need to teach a straight mentor about LGBT issues (Nathan, Arm A).

Dylan (Arm A) thought that a gay mentor could provide guidance that would better meet his needs:

It would be better to have a gay mentor. After all, we are a minority. Straight people are everywhere, and their opinions could be

very general. But I would like to know more about being a gay man, so a gay mentor is preferable to me.

### A heterosexual mentor

In contrast, mentees paired with a heterosexual mentor tended to comment on the differences and distance in their mentorship relationship. Several mentees cited their hesitation and reservation in their interaction with mentors mainly due to the perceived "differences". For instance, Roland (Arm B) expressed that "there seems a wall between us"; another mentee, Grant (Arm A) thought it would be embarrassing to ask a heterosexual mentor questions about sex. Ricky (Arm A) said:

It is easier to share my thoughts or anything related to LGBT communities with another gay man. I am not saying there is nothing good about having a heterosexual mentor, but there is always a gap there. When we are all sexual minorities, it is easier to open up to talk about what is happening in this community.

At the same time, several mentees described that having a heterosexual mentor reduced the possibility of crossing boundaries and developing an intimate relationship. Roland (Arm B) said, "we would not fall in love with each other." Colin (Arm B) recounted that, "my mentor told me he had a girlfriend at the beginning, so I didn't have any idea about developing a romantic relationship with him at all." Perry (Arm B) emphasized that, "this is good for us because I don't need to think that he would have feelings toward me." Overall, despite the perception of inherent differences between gay and heterosexual people, no mentee reported a barrier or discontentment in the relationship with straight mentors as long as the mentors were sincere and caring.

Moreover, some mentees recognized that *Men2ship* provided them with a distinctive opportunity to feel accepted and understood by heterosexual people. Hector (Arm B), who perceived his relationship with his heterosexual mentor as very affirmative, expressed that "being accepted by a heterosexual man is much more powerful than being accepted by another gay man." Two mentees also appreciated the opportunity to feel part of mainstream heterosexual men's circles to which they used to feel they did not belong. Colin (Arm B) said, "I was able to know more about what straight guys are thinking." Perry (Arm B) felt that having a straight mentor could broaden his perspective:

With my (straight) mentor, we talked about things related to straight circles, which made me feel secure. Someone could understand what I have been through. A group of gay people

usually get together to have fun, but we would not do things that straight men would like to do, like watching sports or talking about future planning. Gay men do not often think about these issues, but straight people share more about these things.

## DISCUSSION

This study is the first RCT to evaluate the effectiveness of mentorship for a group of young gay men in Hong Kong. *Men2ship* pursued multiple aims to increase young gay men's social capital, foster self-worth and acceptance, and enhance their coping and resilience. We adopted an experimental, mixed-methods approach to examine the outcomes, processes, and participant experiences of this complex intervention to ensure rigor and internal validity. It should be acknowledged that this study might have been under-powered to detect the effects of mentorship due to the insufficient sample size. Although a future trial with adequate statistical power is warranted, this study provides pilot and novel findings on the feasibility, acceptability, and promises of a mentoring program.

The quantitative results did not support the hypothesis that a mentoring relationship yields stronger effects than psychoeducation. On the one hand, mentees did not report any significant changes in depression, anxiety, and sexual identity development, meaning that the mentoring relationship did not strengthen these aspects. On the other hand, both intervention and control arms reported significant reductions in internalized homonegativity and loneliness along with an increase in resilience and acceptance of body image. Nevertheless, the qualitative data allowed for the identification of the favorable effects of engagement in a mentoring relationship. Several mentees recognized that mentorship had been helpful by offering emotional support, expanding social relationships, and providing them with new perspectives on their sexual identities and practice of intimacy. Similar to Kaufman et al.'s (2021) study, participants also had space to talk about concerns beyond their sexual identities. Despite the failure to quantitatively demonstrate effectiveness in improving the chosen outcomes, *Men2ship* was well-received and appreciated by mentees as a pivotal source of affirmative support for sexual minorities, particularly during pandemic-related social distancing.

The qualitative data and our observations on the benefits of mentorship resonate with the guiding theories of a mentoring program for LGB young adults. First, the theme of “emotional support and companionship” is consistent with minority stress theory (Meyer, 2003) highlighting that supportive companionship from mentors affords a safe space for mentees to process the unpleasant feelings and experiences of homophobic

attitudes and behaviors and to offset the adverse impact of these negative treatments. Although none of them engaged in confrontational forms of coping, mentors provide a source of empowerment and resilience. The second benefit of “wider connection with the LGB communities” can be understood through the Psychological Mediation Framework (Hatzenbuehler, 2009). Exposure to stigma-based stressors could lead to psychopathology when sexual minority individuals engage in maladaptive coping, develop dysfunctional cognitive patterns, or become socially isolated. In the face of general and LGB-specific stressors, most mentees did not report worsening mental health conditions partly because of the access to mentors to discuss different coping approaches and to stay connected, altering the pathway to develop psychological distress. Lastly, regarding the “source of knowledge and new perspectives in LGB lives and identities,” mentors also became role models (Bird et al., 2012) for the mentees by exhibiting diverse ways of living a thriving life and forms of intimate relationships. Some mentors felt they had an equal status with their mentees and shared their own experiences for inspiration as role models.

Mentees' attributes and baseline needs might have determined for whom and in what ways mentorship could be beneficial. An RCT of a school-based mentoring program underscored the moderating effects of age and sex, because the salubrious effects of mentorship were not shown among high school boys and young girls (Karcher, 2008). A meta-analysis also suggested that mentoring programs that adopted a nonspecific approach for not at-risk participants only showed a small size of effect (Christensen et al., 2020). All mentees in *Men2ship* were young gay men without clinically noticeable mental health problems, which might account for this community-based intervention's failure to yield significant effects on participants' depression, anxiety, and sexual identity development. In contrast, the mentees reported higher acceptance of their identity, body image, resilience, and lower loneliness over the course of *Men2ship*. These attributes and needs might become more prominent during this developmental stage and could be met through a supportive relationship with mentors. The qualitative data also captured the benefits not measured in the survey, including the sense of connectedness and additional knowledge about intimacy. In fact, a meta-analysis of a mentoring program for school-aged youth concluded that mentorship only had a small negative effect ( $d=0.20$ ) on negative affect but appeared more effective in improving positive outcomes, such as self-esteem ( $d=0.45$ ) (Claro & Perelmiter, 2022). These findings highlight that a mentoring relationship can work pragmatically to fulfill mentees' diverse needs.

It is encouraging to find that the online psychoeducation delivered to the control arm also increased participants' resilience and acceptance of body image and decreased their internalized homonegativity and

loneliness. Although this finding did not support the hypothesis regarding a stronger effect of mentorship, it suggests the potential of online-based psychoeducation programs to improve young gay men's health and development. Although numerous studies have supported the efficacy of web-based psychotherapy to attenuate psychological and emotional symptoms in sexual minority men (e.g., Craig et al., 2021; Fleming et al., 2017), this study provided preliminary evidence for a nontherapeutic, peer-led program as another promising strategy to support sexual minority individuals in community settings.

The investigation of two matching models (i.e., sexual minority mentors and heterosexual mentors) generated important findings on providing mentorship to support LGB people. Although interview data illustrated mentees' favorable attitudes towards having a mentor sharing a similar background and lived experiences, the quantitative data largely supported comparable outcomes and process indicators between Arm A and Arm B. In other words, a mentor's sexual orientation was not found to play a major part in the cultivation and function of a mentoring relationship. This is consistent with the mentorship literature suggesting that a mentor's characteristics, such as gender and race, are not as influential as the program experiences (Weiler et al., 2019), mentee's social skills (Schenk et al., 2020), and the quality of the mentoring relationship (Blake-Beard et al., 2011). Given that the core functions of mentorship are to provide companionship and guidance, mentors could play a diverse and broader role in supporting mentees. This is particularly the case for some mentees who were keen to seek opinions on their lives and career development. This finding thus emphasizes the versatile and organic nature of mentorship, which is only partially shaped by mentors' demographic characteristics.

The integration of both quantitative and qualitative data shows mixed findings. Although quantitative data provide limited evidence for the greater effectiveness of *Men2ship* than psychoeducation, qualitative data suggest that participating in the intervention produced positive outcomes. Importantly, these findings should not be understood as negating the value of this intervention because we viewed these mixed-methods data as complementary, providing a deeper understanding of the process and outcomes of *Men2ship*. Additionally, Moffatt et al. (2006) proposed that inconsistencies between qualitative and quantitative data could stem from methodological issues, emphasizing the need for discussing reasons behind the discrepancies, exploring theoretical explanations, and suggesting future research directions. First, the development and intended goals of mentorship in this cross-age peer mentoring project could hardly be standardized. With the mentoring relationship as the key intervention component, the strength and processes of relationship formation could vary from dyad to dyad (Karcher et al., 2006). Although

the measures of mentorship quality and engagement indicate mentees' overall satisfaction with their mentoring relationships, our observations and the interview data suggest that the mentoring relationships are highly individual and context-specific, and their intensity and properties appeared distinct. In a community-based mentorship program for women, Boddy et al. (2012) identified three key components that determine the success of mentorship: relational qualities, such as trust, engagement, and authenticity; mentees' readiness to change and abilities to overcome difficulties; and mentors' practical assistance with tasks and overcoming obstacles. Given that the evolution of mentorship depends upon a myriad of individual and environmental factors, holding the intervention consistent is both difficult and undesirable.

Second, our intentional adoption of a semi-structured approach coupled with programmatic challenges (e.g., manpower issues, recruitment, and COVID-19 social distancing measures) also meant it was impossible to fully ensure treatment fidelity in this mentorship intervention, which is fundamental to an RCT evaluation (Karcher, 2008; Spillane et al., 2007). Moreover, the primary goal of the *Men2ship* program is to foster a mentorship relationship to meet mentees' psychosocial needs and enhance their mental health, self-acceptance, and sense of connectedness. Compared to instrumental or career-oriented mentorship programs, developmental mentorship appears organic because each dyad may have distinct agendas to address. While mentees brought into the program unique expectations, needs, and traits, mentors also had different skillset and limitations. This variability and personalization could undermine uniformity; thus, mentorship may not be amenable to quantitative evaluation (Wadhwa & Cook, 2019).

## Limitations

This study was exposed to certain threats to internal and external validity. First, the intervention was conducted during the COVID-19 pandemic. This historic event not only impeded intervention administration by confining the intensity and quality of the mentoring relationship but also posed stresses and risks to mentees' mental health. This collective negative experience might partly explain the absence of effects on participants' depression and anxiety. The second threat to internal validity stems from contamination, where the control group also received active intervention. In fact, contamination is not uncommon for complex mental health interventions (Magill et al., 2019). In this study, for ethical reasons and as a strategy to retain participants in the control arm, contact was maintained with the control arm through psychoeducation materials, regular communication, and survey administration, which could have produced psychosocial effects by giving these participants a sense



of being supported by the research team. In addition, the active intervention component in this trial was a mentoring relationship and it was impossible to ensure that those in the control arm had no access to existing or new mentorship relationships. This intervention component is not exclusive to this experimental setting, resulting in the dilution of the treatment contrast, because the control arm may report changes similar to the active intervention arms (Magill et al., 2019). This may result in our inability to identify distinctive changes associated with a mentoring relationship.

The small sample size confined the external validity of this trial. While the sample size of this current pilot study was estimated by a power analysis using an average effect size for mental health RCTs, a recent meta-analysis indicated a small effect size of 0.11 for nonspecific youth mentoring programs (Christensen et al., 2020). The sample size of the current study may render the statistical power of the analysis inadequate to detect small changes in the key outcome measures. Another source of bias stems from the sampling process. Despite an open recruitment strategy, enrollment required participants' exposure to recruitment information and to take the initiative to register. As a result, most participants might have been active and resourceful in the local community with adequate motivation to engage in a mentoring relationship. It is thus uncertain whether young gay men with lower levels of community connectedness or motivation could likewise benefit from mentorship. In addition, other baseline characteristics, such as outness and whether the mentees have someone they considered to be a mentor, were potential confounders that were not considered in this study. The pandemic also undermined external validity by inflating the contextual specificity of the findings, thus limiting their generalizability in the postpandemic era.

## CONCLUSION

Mentorship has been implemented and established in various settings. This pilot study provides comprehensive and quality data to address a service and research gap in applying a mentoring relationship model to serve young gay men in Hong Kong. Although the pilot study produced no strong quantitative proof of the benefits of mentorship, its potential impact is supported by the qualitative feedback. We have also provided details about the design and procedures to inform further implementation and fully powered trials. This study also contrasted the process and outcomes between mentors with similar and different sexual orientations to their mentees. A mentoring program to facilitate relationship building tailored to sexual minority young people in need of psychosocial and affirmative support would strengthen efficacy.

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## REFERENCES

- Alexander, C. J. (1999). Mentoring for gay and lesbian youth. *Journal of Gay & Lesbian Social Services, 10*(2), 89–92. [https://doi.org/10.1300/J041v10n02\\_05](https://doi.org/10.1300/J041v10n02_05)
- Allen, K. D., Hammack, P. L., & Himes, H. L. (2012). Analysis of GLBTQ youth community-based programs in the United States. *Journal of Homosexuality, 59*(9), 1289–1306.
- Balsam, K. F., Molina, Y., Beadnell, B., Simoni, J., & Walters, K. (2011). Measuring multiple minority stress: The LGBT People of Color Microaggressions Scale. *Cultural Diversity and Ethnic Minority Psychology, 17*(2), 163–174.
- Basarkod, G., Sahdra, B., & Ciarrochi, J. (2018). Body image—Acceptance and Action Questionnaire—5: An abbreviation using genetic algorithms. *Behavior Therapy, 49*(3), 388–402. <https://doi.org/10.1016/j.beth.2017.09.006>
- Bird, J. D. P., Kuhns, L., & Garofalo, R. (2012). The impact of role models on health outcomes for lesbian, gay, bisexual, and transgender youth. *Journal of Adolescent Health, 50*(4), 353–357. <https://doi.org/10.1016/j.jadohealth.2011.08.006>
- Blake-Beard, S., Bayne, M. L., Crosby, F. J., & Muller, C. B. (2011). Matching by race and gender in mentoring relationships: Keeping our eyes on the prize. *Journal of Social Issues, 67*(3), 622–643. <https://doi.org/10.1111/j.1540-4560.2011.01717.x>
- Boddy, J., Agllias, K., & Gray, M. (2012). Mentoring in social work: Key findings from a women's community-based mentoring program. *Journal of Social Work Practice, 26*(3), 385–405. <https://doi.org/10.1080/02650533.2012.670103>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Christensen, K. M., Hagler, M. A., Stams, G. J., Raposa, E. B., Burton, S., & Rhodes, J. E. (2020). Non-specific versus targeted approaches to youth mentoring: A follow-up meta-analysis. *Journal of Youth and Adolescence, 49*, 959–972.
- Claro, A., & Perelmiter, T. (2022). The effects of mentoring programs on emotional well-being in youth: A meta-analysis. *Contemporary School Psychology, 26*(4), 545–557. <https://doi.org/10.1007/s40688-021-00377-2>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety, 18*(2), 76–82. <https://doi.org/10.1002/da.10113>
- Craig, S. L., Iacono, G., Pascoe, R., & Austin, A. (2021). Adapting clinical skills to telehealth: Applications of affirmative cognitive-behavioral therapy with LGBTQ+ youth. *Clinical Social Work Journal, 49*, 471–483. <https://doi.org/10.1007/s10615-021-00796-x>
- Deane, K. L., Boat, A. A., Haddock, S. A., Henry, K. L., Zimmerman, T. S., & Weiler, L. M. (2022). The comparative roles of mentor self-efficacy and empathy in fostering relationship quality with youth. *Journal of Youth and Adolescence, 51*(4), 805–819.
- Deng, C., Gulseren, D. B., & Turner, N. (2022). How to match mentors and protégés for successful mentorship programs: A review of the evidence and recommendations for practitioners. *Leadership & Organization Development Journal, 43*(3), 386–403. <https://doi.org/10.1108/LODJ-01-2021-0032>
- Doty, N. D., Willoughby, B. L. B., Lindahl, K. M., & Malik, N. M. (2010). Sexuality related social support among lesbian, gay, and bisexual youth. *Journal of Youth and Adolescence, 39*(10), 1134–1147. <https://doi.org/10.1007/s10964-010-9566-x>
- Drevon, D. D., Almazan, E. P., Jacob, S., & Rhymer, K. N. (2016). Impact of mentors during adolescence on outcomes among gay

- young adults. *Journal of Homosexuality*, 63(6), 821–837. <https://doi.org/10.1080/00918369.2015.1112583>
- DuBois, D. L., Holloway, B. E., Valentine, J. C., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology*, 30(2), 157–197. <https://doi.org/10.1023/a:1014628810714>
- Ensher, E. A., Grant-Vallone, E. J., & Marelich, W. D. (2002). Effects of perceived attitudinal and demographic similarity on protégés' support and satisfaction gained from their mentoring relationships. *Journal of Applied Social Psychology*, 32(7), 1407–1430. <https://doi.org/10.1111/j.1559-1816.2002.tb01444.x>
- Ferro, A., Wells, S., Speechley, K. N., Lipman, E., & DeWit, D. (2014). The measurement properties of mentoring relationship quality scales for mentoring programs. *Prevention Science*, 15(5), 663–673. <https://doi.org/10.1007/s11121-013-0392-8>
- Fetter, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed-methods design—Principles and practices. *Health Research Services*, 48, 2134–2156.
- Fleming, J. B., Hill, Y. N., & Burns, M. N. (2017). Usability of a culturally informed mHealth intervention for symptoms of anxiety and depression: Feedback from young sexual minority men. *JMIR Human Factors*, 4(3), e22.
- Friedman, C. K., & Morgan, E. M. (2009). Comparing sexual-minority and heterosexual young women's friends and parents as sources of support for sexual issues. *Journal of Youth and Adolescence*, 38(7), 920–936. <https://doi.org/10.1007/s10964-008-9361-0>
- Hall, W. J. (2018). Psychosocial risk and protective factors for depression among lesbian, gay, bisexual, and queer youth: A systematic review. *Journal of Homosexuality*, 65(3), 263–316. <https://doi.org/10.1080/00918369.2017.1317467>
- Hatzenbuehler, M. L. (2009). How does sexual minority stigma “get under the skin”? A psychological mediation framework. *Psychological Bulletin*, 135(5), 707–730.
- He, J., Cai, Z., Chen, X., Lu, T., & Fan, X. (2021). Validation of the Chinese version of the body image acceptance and action questionnaire and the mediating role of body image flexibility in the relationship between body dissatisfaction and psychological distress. *Behavior Therapy*, 52(3), 539–551. <https://doi.org/10.1016/j.beth.2020.07.003>
- He, J., Sun, S., Lin, Z., & Fan, X. (2020). Body dissatisfaction and sexual orientations: A quantitative synthesis of 30 years research findings. *Clinical Psychology Review*, 81, 101896.
- Herek, G. M., Gillis, J. R., & Cogan, J. C. (2009). Revised Internalized Homophobia Scale (IHP-R) [Database record]. *APA PsycTests*. In press. <https://doi.org/10.1037/t10966-000>
- Huang, Y.-T., Ma, Y. T., Craig, S. L., Wong, F. K. D., & Forth, M. W. (2020). How intersectional are mental health interventions for sexual minority people? A systematic review. *LGBT Health*, 7(5), 220–236. <https://doi.org/10.1089/lgbt.2019.0328>
- Karcher, M. J. (2008). The study of mentoring in the learning environment (SMILE): A randomized evaluation of the effectiveness of school-based mentoring. *Prevention Science* (9, pp. 99–113).
- Karcher, M. J. (2005). Cross-age mentoring. In D. L. DuBois, & M. J. Karcher (Eds.), *Handbook of youth mentoring* (pp. 223–258). Sage.
- Karcher, M. J., Kuperminc, G. P., Portwood, S. G., Sipe, C. L., & Taylor, A. S. (2006). Mentoring programs: A framework to inform program development, research, and evaluation. *Journal of Community Psychology*, 34(6), 709–725. <https://doi.org/10.1002/jcop.20125>
- Kaufman, M. R., Lin, C., Levine, D., Salcido, M., Casella, A., Simon, J., & DuBois, D. L. (2021). The formation and benefits of natural mentoring for African American sexual and gender minority adolescents: A qualitative study. *Journal of Adolescent Research*, 39(1), 53–76. <https://doi.org/10.1177/07435584211064284>
- Keller, T. E., Perry, M., & Spencer, R. (2020). Reducing social isolation through formal youth mentoring: Opportunities and potential pitfalls. *Clinical Social Work Journal*, 48, 35–45. <https://doi.org/10.1007/s10615-019-00727-x>
- Leung, G. T. Y., de Jong Gierveld, J., & Lam, L. C. W. (2008). Validation of the Chinese translation of the 6-item De Jong Gierveld Loneliness Scale in elderly Chinese. *International Psychogeriatrics*, 20(6), 1262–1272. <https://doi.org/10.1017/s1041610208007552>
- Lucassen, M. F., Stasiak, K., Samra, R., Frampton, C. M., & Merry, S. N. (2017). Sexual minority youth and depressive symptoms or depressive disorder: A systematic review and meta-analysis of population-based studies. *The Australian and New Zealand Journal of Psychiatry*, 51(8), 774–787. <https://doi.org/10.1177/0004867417713664>
- Magill, N., Knight, R., McCrone, P., Ismail, K., & Landau, S. (2019). A scoping review of the problems and solutions associated with contamination in trials of complex interventions in mental health. *BMC Medical Research Methodology*, 19(1), 4. <https://doi.org/10.1186/s12874-018-0646-z>
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41(9), 954–969.
- McAllister, C. A., Harold, R. D., Ahmedani, B. K., & Cramer, E. P. (2009). Targeted mentoring: Evaluation of a program. *Journal of Social Work Education*, 45(1), 89–104. <https://doi.org/10.5175/jsw.2009.200700107>
- McCormick, A., Schmidt, K., & Clifton, E. (2014). Gay–straight alliances: Understanding their impact on the academic and social experiences of lesbian, gay, bisexual, transgender, and questioning high school students. *Children & Schools*, 37(2), 71–77. <https://doi.org/10.1093/cs/cdu028>
- MENTOR. (2009). *Elements of effective practice for mentoring* (2nd ed.). <https://www.mentoring.org/resource/elements-of-effective-practice-for-mentoring/>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Miranda-Mendizábal, A., Castellví, P., Parés-Badell, O., Almenara, J., Alonso, I., Blasco, M. J., Cebrià, A., Gabilondo, A., Gili, M., Lagares, C., Piqueras, J. A., Roca, M., Rodríguez-Marin, J., Rodríguez-Jiménez, T., Soto-Sanz, V., Vilagut, G., & Alonso, J. (2017). Sexual orientation and suicidal behaviour in adolescents and young adults: Systematic review and meta-analysis. *British Journal of Psychiatry*, 211(2), 77–87. <https://doi.org/10.1192/bjp.bp.116.196345>
- Moffatt, S., White, M., Mackintosh, J., & Howel, D. (2006). Using quantitative and qualitative data in health services research – What happens when mixed method findings conflict? *BMC Health Services Research*, 6, 28. <https://doi.org/10.1186/1472-6963-6-28>
- Pachankis, J. E., McConocha, E. M., Reynolds, J. S., Winston, R., Adeyinka, O., Harkness, A., Burton, C. L., Behari, K., Sullivan, T. J., Eldahan, A. I., Esserman, D. A., Hatzenbuehler, M. L., & Safren, S. A. (2019). Project ESTEEM protocol: A randomized controlled trial of an LGBTQ-affirmative treatment for young adult sexual minority men's mental and sexual health. *BMC Public Health*, 19(1), 1086.
- Parra, G. R., DuBois, D. L., Neville, H. A., Pugh-Lilly, A. O., & Povinelli, N. (2002). Mentoring relationships for youth: Investigation of a process-oriented model. *Journal of Community Psychology*, 30(4), 367–388. <https://doi.org/10.1002/jcop.10016>
- Perrin-Wallqvist, R., & Lindblom, J. (2015). Coming out as gay: A phenomenological study about adolescents disclosing their homosexuality to their parents. *Social Behavior and Personality: An International Journal*, 43(3), 467–480. <https://psycnet.apa.org/doi/10.2224/sbp.2015.43.3.467>
- Ranzenhofer, L. M., Wilhelmy, M., Hochschild, A., Sanzone, K., Walsh, B. T., & Attia, E. (2020). Peer mentorship as an adjunct intervention for the treatment of eating disorders: A pilot





- randomized trial. *International Journal of Eating Disorders*, 53(5), 767–779.
- Raposa, E. B., Rhodes, J., Stams, G. J. J. M., Card, N., Burton, S., Schwartz, S., Sykes, L. A. Y., Kanchewa, S., Kupersmidt, J., & Hussain, S. (2019). The effects of youth mentoring programs: A meta-analysis of outcome studies. *Journal of Youth and Adolescence*, 48(3), 423–443. <https://doi.org/10.1007/s10964-019-00982-8>
- Ren, Z., & Hood, R. W. (2018). Internalized Homophobia Scale for gay Chinese men: Conceptualization, factor structure, reliability, and associations with hypothesized correlates. *American Journal of Men's Health*, 12(5), 1297–1306. <https://doi.org/10.1177/1557988318768603>
- Rhodes, J., & Lowe, S. R. (2008). Youth mentoring and resilience: Implications for practice. *Child Care in Practice*, 14(1), 9–17.
- Rhodes, J. E., Spencer, R., Keller, T. E., Liang, B., & Noam, G. (2006). A model for the influence of mentoring relationships on youth development. *Journal of Community Psychology*, 34(6), 691–707. <https://psycnet.apa.org/doi/10.1002/jcop.20124>
- Rothwell, J. C., Julious, S. A., & Cooper, C. L. (2018). A study of target effect sizes in randomised controlled trials published in the Health Technology Assessment journal. *Trials*, 19(1), 544. <https://doi.org/10.1186/s13063-018-2886-y>
- Schenk, L., Sentse, M., Lenkens, M., Nagelhout, G. E., Engbersen, G., & Severiens, S. (2020). An examination of the role of mentees' social skills and relationship quality in a school-based mentoring program. *American Journal of Community Psychology*, 65(1–2), 149–159. <https://doi.org/10.1002/ajcp.12397>
- Shao, J., Chang, E. S., & Chen, C. (2018). The relative importance of parent–child dynamics and minority stress on the psychological adjustment of LGBs in China. *Journal of Counseling Psychology*, 65(5), 598–604. <https://doi.org/10.1037/cou0000281>
- Snapp, S. D., Watson, R. J., Russell, S. T., Diaz, R. M., & Ryan, C. (2015). Social support networks for LGBT young adults: Low cost strategies for positive adjustment. *Family Relations*, 64(3), 420–430. <https://doi.org/10.1111/fare.12124>
- Spillane, V., Byrne, M. C., Byrne, M., Leathem, C. S., O'Malley, M., & Cupples, M. E. (2007). Monitoring treatment fidelity in a randomized controlled trial of a complex intervention. *Journal of Advanced Nursing*, 60(3), 343–352. <https://doi.org/10.1111/j.1365-2648.2007.04386.x>
- Sun, J., Liang, K., Chi, X., & Chen, S. (2021). Psychometric properties of the Generalized Anxiety Disorder Scale-7 Item (GAD-7) in a large sample of Chinese adolescents. *Healthcare (Basel, Switzerland)*, 9(12), 1709. <https://doi.org/10.3390/healthcare9121709>
- Syed, M., Azmitia, M., & Cooper, C. R. (2011). Identity and academic success among underrepresented ethnic minorities: An interdisciplinary review and integration. *Journal of Social Issues*, 67(3), 442–468. <https://doi.org/10.1111/j.1540-4560.2011.01709.x>
- Toomey, R. B., Anhalt, K., & Shramko, M. (2016). An examination of the validity and reliability of a measure of sexual orientation identity exploration, resolution, and affirmation. *Self and Identity*, 15(4), 488–504. <https://doi.org/10.1080/15298868.2016.1157516>
- Torres, R. S., Harper, G. W., Sánchez, B., & Fernández, M. I. (2012). Examining natural mentoring relationships (NMRs) among self-identified gay, bisexual, and questioning (GBQ) male youth. *Children and Youth Services Review*, 34(1), 8–14. <https://doi.org/10.1016/j.chilcyouth.2010.12.018>
- Wadhwa, M., & Cook, T. D. (2019). The set of assumptions randomized control trials make and their implications for the role of such experiments in evidence-based child and adolescent development research. *New Directions for Child and Adolescent Development*, 2019(167), 17–37. <https://doi.org/10.1002/cad.20313>
- Wang, W., Bian, Q., Zhao, Y., Li, X., Wang, W., Du, J., Zhang, G., Zhou, Q., & Zhao, M. (2014). Reliability and validity of the Chinese version of the Patient Health Questionnaire (PHQ-9) in the general population. *General Hospital Psychiatry*, 36(5), 539–544. <https://doi.org/10.1016/j.genhosppsych.2014.05.021>
- Weiler, L. M., Boat, A. A., & Haddock, S. A. (2019). Youth risk and mentoring relationship quality: The moderating effect of program experiences. *American Journal of Community Psychology*, 63(1–2), 73–87. <https://doi.org/10.1002/ajcp.12304>
- Wexler, L. M., DiFluvio, G., & Burke, T. K. (2009). Resilience and marginalized youth: Making a case for personal and collective meaning-making as part of resilience research in public health. *Social Science & Medicine* (1982), 69(4), 565–570. <https://doi.org/10.1016/j.socscimed.2009.06.022>
- Wong, D., Zhang, W., Kwan, Y. W., & Wright, E. (2019). Gender differences in identity concerns among sexual minority young adults in China: Socioeconomic status, familial, and cultural factors. *Sexuality & Culture*, 23(4), 1167–1187. <https://doi.org/10.1007/s12119-019-09607-5>
- Yu, X., Tam, W. W. S., Wong, P. T. K., Lam, T. H., & Stewart, S. M. (2012). The Patient Health Questionnaire-9 for measuring depressive symptoms among the general population in Hong Kong. *Comprehensive Psychiatry*, 53(1), 95–102. <https://doi.org/10.1016/j.comppsy.2010.11.002>
- Yu, X., & Zhang, J. (2007). Factor analysis and psychometric evaluation of the Connor-Davidson Resilience Scale (CD-RISC) with Chinese people. *Social Behavior and Personality*, 35(1), 19–30. <https://psycnet.apa.org/doi/10.2224/sbp.2007.35.1.19>
- Zammitt, K. A., Pepperell, J., & Coe, M. (2015). Implementing an ally development model to promote safer schools for LGB youth: A trans-disciplinary approach. *Journal of Homosexuality*, 62(6), 687–700. <https://doi.org/10.1080/00918369.2014.998953>

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