The Effects of Makeup Adaptations on Individuals with Upper Extremity Hemiplegia

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Introduction

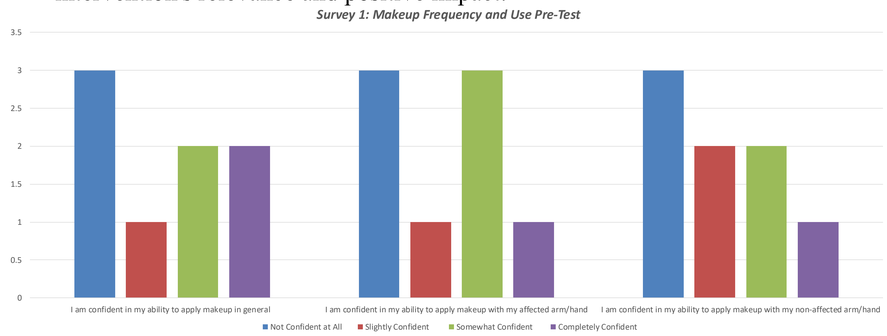
- Makeup application is a meaningful self-care occupation that supports identity, confidence, and emotional well-being (Aguinaldo & Peissig, 2021). For women with upper extremity hemiplegia, motor impairments, coordination challenges, and reduced functional use of the affected limb can make makeup routines difficult to perform independently (Van Ommeren er al., 2018). These barriers often limit autonomy, diminish self-esteem, and restrict participation in daily occupations.
- Occupational therapy practitioners play a key role in addressing such challenges by adapting task, tools, and environments to promote independence and engagement in meaningful activities (AOTA, 2020). Adaptive devices, such as ergonomic brushes, stabilizers, and one-handed supports, have shown promise in improving functional performance during grooming tasks (De-Rosende-Celeiro et al., 2019). However, research specifically examining adaptive makeup interventions for individuals with hemiplegia remains limited, despite the personal and psychosocial significance of cosmetic routines.
- This study was developed to address this gap by exploring how an adaptive makeup program could enhance confidence, functional ability, and participation in grooming occupations among women with upper extremity hemiplegia.

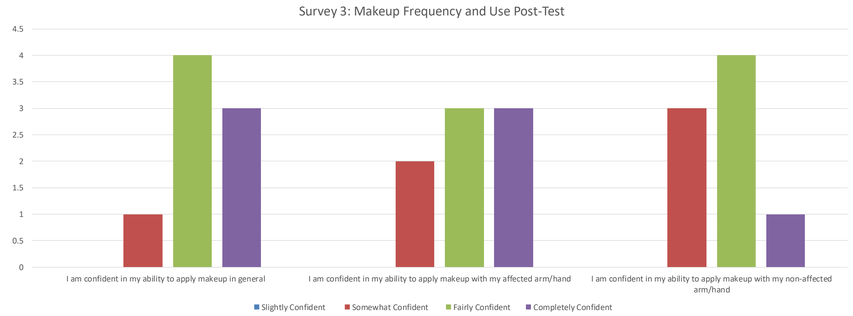
Methods

- Five-week adaptive makeup program conducted at Valley View Health and Rehabilitation.
- Program Designed for older adult women with upper extremity hemiplegia.
- Weekly sessions focused on one-handed makeup application.
- Intervention included:
  - Adaptive tools (ergonomic brushes, stabilizers, pump dispensers, tubing grips, universal cuffs, and one-handed supports).
  - Graded techniques and step-by-step demonstrations.
  - Guided practice with individualized feedback.
  - Environmental and task Modifications
- Participants:
  - 8 women with hemiplegia from Valley View Health and Rehabilitation, recruited through flyers, staff referral, and word-of-mouth; all provided informed consent in accordance with IRB and HIPAA protocols.
  - All completed pre- and post-intervention surveys.
- Data Collection:
  - Qualtrics surveys measuring confidence, functional ability, motivation, and ease of makeup tasks.
  - Pre- and post-intervention Likert-scale data analyzed using descriptive statistics.
  - Observations and participant feedback recorded each week.

Results

- All 8 participants completed the program and all three surveys. Baseline results (Survey 1) showed low makeup use and limited confidence, especially with affected upper extremity, while post-intervention data (Survey 3) demonstrated clear increases in overall confidence, independent makeup skills, and comfort using both the non-affected and affected arm.
- Participants described meaningful functional carryover to other self-care activities, including brushing teeth and eating, and weekly observations reflected progressive increases in independence, engagement, and fine motor control throughout the five-week program.
- Satisfaction with the program was consistently high. Participants valued the adaptive tools, individualized support, and session structure, and all participants strongly agreed they would recommend the program to others, reinforcing the intervention's relevance and positive impact.





Discussion

- The five-week adaptive makeup program improved participants' confidence and functional ability in completing one-handed makeup tasks, with many reporting that sessions were meaningful, motivating, and appropriately matched to their abilities.
- Participants described carryover skills to other self-care tasks (e.g., brushing teeth, eating) and reported high satisfaction with adaptive tools, individualized instruction, and supportive facilitation.
- Findings highlight the value of occupation-based, client-centered interventions that promote both motor performance and psychosocial well-being through meaningful, identity-affirming activities.
- Results demonstrated the role of OT in integrating adaptive tools and graded strategies to improve participation in everyday grooming and enhance autonomy and self-expression.
- Limitations:
  - Small sample size and single-site setting.
  - Short, five-week program duration.
  - Reliance on subjective self-report.
  - Future work should include larger samples, extended follow-up, and comparison groups to examine long-term outcomes and generalizability.

Conclusion

- The adaptive makeup program demonstrated that meaningful self-care occupations can enhance confidence, independence, and functional engagement for women with upper-extremity hemiplegia. Participants reported improved one-handed performance, greater comfort with adaptive tools, and increased motivation to engage in grooming routines. Key outcomes include:
  - Improved confidence and functional ability in makeup application.
  - Greater ease using adaptive tools and techniques.
  - Enhanced engagement in meaningful, identity-supporting self-care.
- These findings highlight the value of occupation-based, client-centered interventions and the need for continued development of accessible cosmetic adaptations within OT practice.

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