REVIEW ARTICLE

# Aid for Decision Making in Occupation Choice (ADOC) as a Tool to Address Activities and Participation: A Scoping Review

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## ABSTRACT

Aid for Decision-Making in Occupation Choice (ADOC) was developed to encourage shared decision-making and collaborative goal-setting in daily living activities. This scoping review aimed to review and synthesize research literature regarding ADOC and to identify any existing knowledge gap related to ADOC. The PRISMA-Scoping review was used as a guide. A literature search was retrieved from January 2011 until December 2021 based on four databases; Scopus, Google Scholar, PubMed and CINAHL. A total of nine articles (N=9) were included in this review. The findings were arranged in five themes; i) clinical purpose, ii) validity and reliability, iii) target population, iv) utility of ADOC and v) domains and items of ADOC. ADOC provides a client-centred and collaborative approach, highlighting meaningful occupations in daily living and the use of technology in rehabilitation. This review suggests the need for cross-cultural translation and validation of ADOC into the native language before it can be used.
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## INTRODUCTION

Goal-setting is a significant rehabilitation process (1) and is ultimately geared towards helping clients enhance functional progress in their recovery (2). Goal-setting can boost clients' motivation, allow them to monitor the rehabilitation process, improve the effectiveness of rehabilitation and facilitate collaborative decision making, thus leading to the person-centeredness of rehabilitation services (3). The Cochrane systematic review shows that goal-setting can improve psychosocial effects, for examples health-related quality of life, emotional status, and self-efficacy (3). Despite this evidence, clinical practitioners still experienced some concerns integrating their clients in the goal-setting process (1).

One of the growing and emerging iPad applications that has been extensively used is Aid for Decision-Making in Occupation Choice (ADOC). It was originally designed and developed by Tomori et al. (4) in Japan to encourage shared decision-making in the occupation-based goal-setting process in order to identify clients' needs and desires in activities and participation. Generally, ADOC primarily involves the selecting of 94 illustrations describing daily activities related to "activities and participation" in the International Classification of Functioning, Disability, and Health (ICF) (5). The variety of ADOCs include; i) ADOC-E for the English version (6), ADOC-H for upper extremity condition (7) and ADOC-S for school (8). Each tool has different pictures and illustrations, but the main objectives are the same which are to guide both the therapist and client in decision making and help the clients to confront their problems through a step-by-step approach (4,6,7). To date, ADOC has been proved clinically for validity and reliability in Japan for clients with variety of health conditions ranging from acute to chronic stage (4,6).

The uniqueness of ADOC, when compared to other client-centred tools, is the illustrations and pictures related to activity and participation. Additionally, ADOC can be accessed, used and it is available on iPad and in paper version (7). The illustrations and images guide the therapist and client by providing clear and visual

pictures to identify the problems that arise related to activities of personal daily living, domestic, driving and recreational activities (4). The use of digital technology and electronic tools such as apps and websites has been shown to promote user engagement in meaningful goal setting and facilitating collaborative decision making between clients and healthcare practitioner (2,9,10).

ADOC is superior to other client-centred assessment tools because it can recognize occupational needs through images and illustrations even for clients lacking verbal communication (11). These pictures assist client views on how they might be able to achieve the activities and promote engagement in clinical decision making (7). This study offers major implications in rehabilitation especially in occupational therapy practice since the resources and literature of ADOC is still emerging, growing and debatable. To date, ADOC is only available in Japanese (4) and English version (6). There is a need for cross-cultural translation and validation of ADOC to other native languages before it can be confidently used in clinical practice.

Although studies on ADOC have been published for a decade, there is still no review yet on the use of ADOC in any settings. To our best knowledge and reading, this is the first study that reviewed and discussed about the use of ADOC in occupational therapy practice. This scoping review goals to map the available literature about ADOC in occupational therapy settings to demonstrate its characteristic, need and target users, and identify gaps to improve practice, policy and future research potential. Therefore, this scoping review aimed to review and synthesise research literature regarding ADOC and to identify any existing gap in the body of knowledge related to ADOC.

## METHODS

### Study Design

The study used the PRISMA extension for scoping review (PRISMA-ScR) checklist for scoping review as a guide that includes identifying the title and structured summary, identifying rationales, objectives, and methodology, documenting the data, analysis and reporting of findings, and finally discussing the findings (12). PRISMA-ScR is the international standard guideline for a thorough review and reporting the findings. Scoping reviews have grown in popularity, particularly in the health and social science area, and are widely recognised as a useful tool for informing new research projects (13,14). The rationale of using the design is because it allows the researchers to recognize knowledge gaps, scope a body of literature, explain concepts, analyse research conduct andto guide a systematic review (15).

### Search strategy

Four databases were used to examine the related published articles namely; Scopus, PubMed, CINAHL, and Google Scholar. The keywords employed for the literature search were based on the medical subject heading (MESH) and text word (tw). The database search strategy was used in search keywords, terms and boolean operators are; “ADOC” OR “Decision Making” OR “Aid” AND “Occupation*” AND “Activit*” AND “Participat*”.

### Eligibility criteria of the study

The inclusion criteria include; 1) peer-reviewed articles or papers that have been published from January 2011 to December 2021, 2) focusing on ADOC, and 3) discussing decision making in meaningful occupations. Some articles were excluded if they are: 1) published studies in other languages except English, 2) systematic review and scoping review papers, and 3) published in non-peer-reviewed journals such as abstracts, paper presentations and e-books. The review process was performed by five authors. The first and the last authors searched for related articles using MeSH headings and variations of text word. Duplicate articles were removed from the selected databases as the part of the procedure. The first and last authors screen the titles, abstracts and full texts according to the inclusion and exclusion criteria. Finally, each author completed the admissibility process separately and manually. Any disagreement was resolved through discussions until a consensus was achieved. All authors examined and extracted the data.

### Data extraction

In developing the themes, the design, populations and findings of the studies were extracted. Table I summarised the findings of each investigation. All of the studies that included were analysed and synthesized.

### Data analysis

The findings were arranged according to five themes; i) clinical purpose, ii) validity and reliability, iii) target population, iv) utility of ADOC and v) domains and items of ADOC. Each study was summarised and integrated into the results and discussions parts.

## RESULTS

A total of 235 suitable articles were found through a comprehensive search of the electronic databases. Only nine articles (n=9) were included in this study after duplicates were removed and screening were done according to the inclusion and exclusion criteria. Fig. 1 shows the search and study selection procedure in this scoping review.

### Overview of study characteristics

Six studies utilised mixed methodologies, one study used the quantitative approach (experimental) and two articles employed the qualitative method. Table II shows the approach and research design applied in the various reviewed studies. The majority of the studies were done in Japan (n = 7) where the ADOC was developed and

**Table I: Description of articles in the scoping review**

| Authors & Study Location | Journal | Study Design | Samples & Population | Main Findings | Implications |
|---|---|---|---|---|---|
| Tomori et al., 2011<br>(Japan)<br>(4) | Occupational Therapy International | Cross-sectional survey & Focus Group | Therapists<br>n= 37<br>Clients<br>n=100 (physical disabilities, mental health, geriatrics, pediatrics) | The majority of the occupational therapists (>90%) felt that ADOC would be useful in their clinical practice for setting client goals.<br>More than 90% of the clients felt that they could give their thoughts in goal setting when using ADOC. | The findings indicate that ADOC is a valuable and satisfactory tool for both clients and occupational therapists in shared decision-making for occupation-based goal setting. |
| Tomori et al., 2013<br>(Japan)<br>(16) | Disability & Rehabilitation | Cross-sectional Reliability & Validity study | Therapists<br>n=36<br>Clients<br>n= 92<br>(Neurology, Psychiatric, Medical cases) | All occupational therapists stated that ADOC would be valuable and easy to use in clinical practice in setting for client's goal<br>78 clients contributed in the test–retest reliability study. The findings disclosed moderate correlation (ICC = 0.712, p < 0.001).<br>Satisfaction with ADOC significantly correlated with Life Satisfaction Index K (LSIK) Factor 1 (r = 0.297, p < 0.01) | ADOC Japanese version is a valid and reliable tool for measuring client satisfaction with individualised occupational performance |
| Tomori et al., 2015<br>(Japan)<br>(17) | Disability & Rehabilitation | Cross sectional study | Clients<br>n=116<br>Dementia clients, from five institutions | An MMSE score of 8 was the cut-off for choosing meaningful activities using ADOC. Sensitivity and specificity were 91.0% and 74.1%, respectively. | ADOC can offer individualized data regarding meaningful activities for patients with moderate dementia. |
| Nagayama et al., 2016<br>(Japan)<br>(18) | PLOS ONE | Pilot Cluster RCT | ADOC group:<br>(n=23)<br>Control group:<br>(n=21)<br>(Older or geriatric clients with progressive diseases such as Alzheimer and vascular dementia) | After the 4-month intervention, the ADOC group had a significant greater change in the Barthel Index (BI) score (P = 0.027, 95% CI 0.41 to 6.87, intracluster correlation coefficient = 0.14). The incremental cost-effectiveness ratio, calculated using the change in BI score, was $63.1. | An occupational therapist using the ADOC for older residents might be effective in improving functional outcomes and reducing treatment costs. The study also found that conducting an RCT in the occupational therapy setting is feasible |
| Ohno et al., 2017<br>(Japan)<br>(7) | British Journal of Occupational Therapy | Delphi Method | Therapists<br>n=10<br>Clients<br>n=10<br>(Stroke & Cervical spondylitis myelopathy) | 130 items were selected after four Delphi rounds, representative activities of daily life that were organised into 16 categories.<br>Of 130 pictures, 128 were recognisable to clients as intended activities. ADOC-H is suitable to be used in clinical practice. | The ADOC-H process may promote daily upper extremity use. However, this application needs to be clinically tested in its digital form (iPad version). |
| Levack et al., 2018<br>(New Zealand)<br>(6) | BMJ Open | Delphi Method | Therapists<br>n= 14 from New Zealand (4), Australia (4), UK (2) and USA (4).<br>Clients<br>n=24 rehabilitation and residential care service users (Physical disabilities and elderly) | Four Delphi rounds were performed to reach a consensus with the experienced occupational therapists on the content of ADOC-E, ended up with 100 items covering daily activities that people do and participate in.<br>95% of ADOC-E components could be properly identified by over 80% of service user participants with either unprompted or prompted recognition | The ADOC-E improved the practice and usage for a diversity of English-speaking countries. However, this tool only tested the ADOC-E images with health service users in one country (New Zealand) and with a client who has neurological or age-related impairments. |
| Tomori et al., 2019<br>(Japan)<br>(18) | Journal of Occupational Therapy, School and Early Intervention | Delphi Method & Focus Group | Therapists<br>n= 8<br>Client<br>n= 1 case studies (Attention Deficit Hyperactivity Disorder) | After two Delphi rounds, a consensus was achieved for 68 components in four categories of the ADOC-S: Self-care (17 items); Communication (9 items); School life (22 items); and Play (20 items).<br>The case study demonstrated how to use the ADOC-S and its efficacy for school based occupational therapy setting during collaborative goal and shared decision making. | The ADOC-S seems to promote collaborative goal-setting between parents, teachers and occupational therapists in the school-based setting. |
| Ohno et al., 2020<br>(Japan)<br>(19) | Journal of Hand Therapy | A prospective case series and a clinical survey for occupational therapists | Therapists<br>n=4<br>Clients<br>n=8 clients with distal radius fractures, treated using Volar locking plates | The ADOC-H presented 158 activities and the clients were instructed to use the injured hand for daily routine.<br>The response and case studies proposed that the ADOC-H was useful for clients who were afraid in using the injured hand.<br>Interestingly, this study found that clients were able to use their hands without pain or other associated difficulties. The survey findings revealed that most therapists found the ADOC-H effective in facilitating real-life use of the injured hand. | The ADOC-H paper printed version is a valuable tool that can be functional to facilitate clients with distal radius fractures to use their affected hands in real-life environment. |
| Strubbia et al., 2021<br>(New Zealand)<br>(20) | JMIR Rehabilitation and Assistive Technologies | Qualitative Descriptive Study | Practitioners (n= 8)<br>health professionals<br>(3 occupational therapists, 3 physiotherapists, 2 speech therapist)<br>Clients (n=8)<br>clients from 3 acute and post-acute care rehabilitation wards in both public and private organizations in New Zealand | Six main themes developed from the data analysis: i) changing patients' perspective on what is possible, ii) changing health professionals' perspective on what is important, iii) facilitating shared decision-making, iv) lack of guides for users, v) logistic and organisational barriers, vi) app-related and technical issues. | The use of ADOC promoted a client-centred approach that empowered clients to engage in collaborative goal-setting in perform meaningful occupations. Furthermore, the results suggest that ADOC has the potential to be incorporated into clinical practice and be used by multidisciplinary practitioner. |

* Notes: RCT = randomised control trial, N = number of participants or sample size, CI = confidence interval

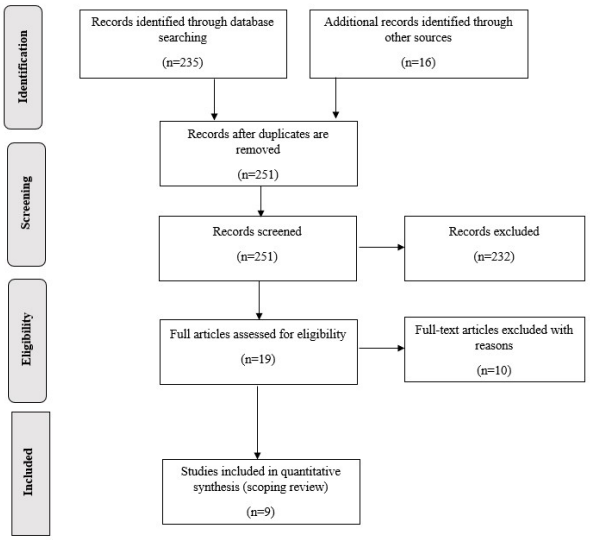


**Figure 1: Flow diagram for the search and study selection.**

the two other studies were conducted in New Zealand (n=2).

**Theme 1: Clinical Purpose of ADOC**

The main clinical purpose of ADOC is to encourage shared decision-making in an occupation-based goal setting and only available in Japanese (4,16,17,18,20). ADOC-E was designed for use by disabled clients in English-speaking nations. Both ADOC and ADOC-E could measure the client's perception of engagement in each illustrations occupation as outcome of intervention. Ohno et al. (7,19) described ADOC-H as relevant in clinical setting for improving the usage of meaningful occupation-based training for client with upper extremity disabilities and related hand problems. The ADOC-S was developed for shared decision-making between parents, teachers and occupational therapists, and also for identifying the occupation-focused goal and specific short-term and long-term goals related to school-based occupational therapy (8). ADOC-H and ADOC-S have no process of measuring satisfaction for the selected occupations.

**Theme 2: Validity and Reliability of Tool**

Regarding the goal-setting process of ADOC, it is a systematic, flexible and reliable tool for measuring client's perception of participation their chosen daily activities (4,17). These steps were reviewed by 37 occupational therapists and 94 clients using an original questionnaire developed by the authors. A nominal group methodology and Delphi survey consensus procedures were used to confirm the face and content validity for items and pictures (4). The test-retest ICC ranged from 1 to 5 on the ADOC's average satisfaction scale for the reliability and validity of the satisfaction measurement of ADOC showed a value of 0.71 (16). All the values were remarkable at $p < 0.001$ indicating good or moderately satisfactory reliability. ADOC is a reliable tool for determining clients' satisfaction. The total scores for satisfaction measurement were significantly associated with the LSIK Factor 1 in terms of validity. Convergent and discriminant validity with the ability to assess satisfaction specifically are included in the ADOC's satisfaction measurement component (16). In ADOC-E, the items and pictures were reviewed by the occupational therapists and clients to achieve the consensus between English-language countries (6).

As for ADOC-H, Ohno et al. (7) performed a Delphi technique; phase one: consensus on the content of categories and items, phase two: development of pictures for items in ADOC-H, phase three: development and testing of a prototype for the application and phase four: development of the iPad application (7). For ADOC-S,

**Table II: Approach and research design of the reviewed articles**

| Authors | Focus group | Delphi method | Case studies | Survey | Interview | RCT |
|---|---|---|---|---|---|---|
| Tomori et al. (2011) | X | X | | X | X | |
| Tomori et al. (2013) | | X | | X | X | |
| Tomori et al. (2015) | | | | | X | |
| Nagayama et al. (2016) | | | | | | X |
| Ohno et al (2017) | | X | | | X | |
| Levack et al. (2018) | | X | | | X | |
| Tomori et al. (2019) | X | X | X | | | |
| Ohno et al (2020) | | | X | X | | |
| Strubbia et al (2021) | | | | | X | |

*RCT = randomised control trial

Tomori et al. (8) performed a focus group method to develop the concept and prototype of ADOC-S, and subsequently they conducted the Delphi technique to extent agreement and consensus among occupational therapists to improve the content validity (8).

**Theme 3: Target Population**

Basically, ADOC, ADOC-E and ADOC-H are intended for adults and ADOC-S is applied to pediatric age group. Although there is no limitation for age in these applications, ADOC was estimated the cut-off score of 8 points in Mini-Mental State Examination. ADOC and ADOC-E were tested with various conditions; stroke (4,16,18,20), Alzheimer disease and vascular dementia (17,18); Parkinsons (17), arthritis/bone fracture (4,16,17,18), neuromuscular disease (4,16,17), schizophrenia, heart condition, diabetes, disuse syndrome and spinal cord injury (4,16), hip fracture, chronic heart failure, osteoarthritis and spinal canal stenosis (18), traumatic brain injury (6,20), wound skin grafting and chronic ulcer leg (20).

ADOC-H was designed and created to encourage the use of an injured hand in real-situation. Therefore, the target population is those with upper limb problems such as stroke and hand fractures. Ohno et al. (7) suggested that this ADOC-H might be useful for clients with cognitive impairment to promote the use of upper extremity in some cases such as aphasia, dementia and Alzheimer (7). Subsequently, in 2020, ADOC-H was tested clinically for hand therapy clients for use of the injured hand in real-situation specifically for clients with distal radius fracture (19). As for ADOC-S, the case study used was a client with ADHD, but the researchers suggested that this tool could be useful for children as young as four years old (8).

**Theme 4: Utility of ADOC**

In order to use ADOC as a guide in the decision-making process, there are three steps in the application for users to go through: i) entry of client information, ii) selection of occupation and satisfaction measurement and iii) documentation process (4). The average time to administer ADOC was 27.3 minutes with a range of 10 to 70 minutes. However, ADOC did not save time based on experienced of application by one-third of occupational therapists. (4). As for ADOC-H, six processes are provided in the user guide for ADOC-H, which includes: i) entry of client information, ii) activity choice, iii) documentation, iv) attempt of upper extremity use in daily life, v) problem solving, and vi) achievement evaluation (7). For ADOC-S, the procedures and guidelines were classified into six steps: i) login basic information, ii) selection of occupation based on illustrations, iii) consensus regarding the priority of occupation, iv) short term goal, v) long term goal and vi) preparing documentation (8). All apps are available on Appstore. ADOC-H paper version (free) has been provided on Website (URL).

**Theme 5: Domains and items of ADOC**

The categories and occupations illustrated in ADOC were related to components in the ICF. The ICF consist of body function, body structure, activity and participation (5). A total of 94 items and illustrations are present in the original ADOC (4,16). The items include self-care, mobility, domestic life, work/education, social life, sport and leisure related to second-level terms of the ICF in the chapter activity and participation. The development of ADOC was also in accordance to Functional Independence Measure (FIM), Activity Card Sort (ACS) and Occupation List in COPM during focus group technique. ADOC-E is the extension from Japanese version of ADOC. ADOC-E contains 100 items that encompass daily activities and social roles that people engage in. It is based on the original ADOC with the addition of six items (6).

There are 130 items in ADOC-H related to the activities of daily living organized into 16 categories; i) eating, ii) hand washing, iii) face washing, iv) dental care, v) dressing upper and lower body, vi) toileting, vii) bathing, viii) cooking, ix) dishwashing, x) cleaning, xi) switch/remote control, xii) laundry, xiii) tools, xiv) moving around indoors and xv) shopping (7). Preliminary items for ADOC-H were developed from the 12 instruments and scales namely; FIM, Tokyo Metropolitan Institute of Gerontology Index of Competence, Lawton Instrumental Activities Daily Living (IADL), Klien-Bell ADL Scale, McMaster Stroke Assessment, Paralytic Arm Participation, Home Skill Assignment List, Motor Activity Log, Motor Ability Test, Hand20, Disability Arm Shoulder and Hand (DASH) and Quick DASH. All the instruments related and covered to the upper extremities in daily living.

ADOC-S components mostly referred and related to the ICF child and youth version (21) during the focus group discussion (8). There are 68 items in four categories including self-care, communications, school life and play for school-based occupational therapy. Overall, the activities and participation components emerged from the standardized assessments and tools as shown in Table III.

## DISCUSSION

The purpose of this study was to examine and synthesise published studies on ADOC in order to identify any existing gaps. Interestingly, ADOC can be used in different conditions and settings and is also applicable in paper printed versions. ADOC provides a client-centred and collaborative approach, highlighting meaningful daily occupation and the use of current technology in rehabilitation.

The application of ADOC in clinical setting emphasises the importance of client-centred models in rehabilitation. Several client-centred models and standardized

**Table III: Domains of Activities and Participation in the ADOC**

| Activities & Participation | ADOC (Tomori et al., 2011) (4) | ADOC-H (Ohno et al., 2017) (7) | ADOC-E (Levack et al., 2018) (6) | ADOC-S (Tomori et al., 2019) (8) |
|---|---|---|---|---|
| Self-Care/ADL | X | X | X | X |
| IADL | X | X | X | |
| Mobility | X | X | X | |
| Domestic | X | X | X | |
| Work | X | | X | |
| Education | X | | X | |
| Social Life | X | | X | |
| School | | | | X |
| Sport | X | | X | |
| Leisure/hobbies | X | | X | |
| Communication | | | | X |
| Play | | | | X |
| Shopping | X | X | X | |
| **Sources of Assessment /Tool** | | | | |
| ICF (Activities) | X | | X | |
| ICF (Participation) | X | | X | |
| FIM | X | X | X | |
| ACS | X | | X | |
| COPM | X | | X | |
| Lawton IADL | | X | | |
| Motor Activiti Log | | X | | |
| Arm Motor Ability Test | | X | | |
| DASH | | X | | |
| QuickDASH | | X | | |
| ICF-child youth | | | | X |

assessments have been created and implemented such as Canadian Occupational Performance Measure (COPM) (22), Kawa-model (23), Occupational Performance History Interview (24) and ACS (25,26). The strength and advantage of ADOC when compared to other client-centred methods such as COPM because the illustrations and pictures are related to activities and participation, which are accessible, useful and available on iPads (7). These pictures facilitate clients' views on how they might be able to performed the activities, thus improve their participation and engagement in clinical decision-making. The picture superiority effect (7) could perhaps explain this mechanism when clients are more likely to remember information if it is presented with images, rather than words (27). ADOC can help clients with moderate dementia to choose their meaningful occupation (16). However, there is no evidence of how ADOC could actually facilitate the client's engagement in decision-making as compared to other tools. This gap requires further exploration in future studies.

In addition to that, ADOC is widely applied to clients with various conditions and rehabilitation settings. The items cover the domain of "activity and participation" based on the ICF. WHO developed the ICF and now it is globally standard framework to describe activities and participation. ADOC and ADOC-E were developed based on the domain "activities and participation" in the ICF, including self-care, IADL, mobility, domestic activities, work, education, social, school, and sport. Tomori et al. selected 94 items of ADOC based on the usual daily activities of 100 people (4). 95% of ADOC-E item could be correctly identified by over 80% of clients in New Zealand with either unprompted or prompted cues (6). Meanwhile, ADOC-S was developed based on the ICF-child youth framework, covering living skills, social interaction, play, and school activities (8). For ADOC-H, the sources and tool are based on 12 existing standardized and validated assessments related to upper extremities function in daily activities (7) in the ICF. However, these studies have been conducted in Japan and New Zealand. It remains unclear the pertinence of ADOC in Malay culture of daily activities. Some of the pictures need to be modified and added to suit the Malay culture and local daily activities. Therefore, practitioners need to consider evaluating daily activities based on individuals' habits, routines, and roles in their unique culture and native language. Occupational Therapy Practice Framework (OTPF) 4th Edition emphasizes that daily activities may be associated with different lifestyles, contexts and time use (28).

The emergence of digital technology in rehabilitation as a decision aid is useful to help in the assessment and intervention strategy with clients. Digital technology has a better outcome and promoted numerous opportunities for augmenting traditional rehabilitation setting (6). Previous research reported by Stacey et al. (29) revealed that the decision aids showed positive outcome when compared to the usual care interventions in aspects of better knowledge, reduction decision conflict related to unclear personal values, and a lower proportion of people who remained undecided post-intervention when incorporating digital technology. ADOC was developed in both apps and paper versions (4). It is available in iPad application to be used by clients for shared decision making. Nowadays, most of the facilities and practitioners have mobile devices or tablets for daily use. In practice, iPad applications have been utilised to help clients with communication (30) and vision impairments (31) in order to improve independence and social connectivity. The use of iPad at workplace is easier, readily accessible and save more time in goal-setting (20). Therefore, using ADOC in daily clinical practice might be more efficient, less paper used, and is consistent with technology in rehabilitation. However, it is still unclear whether ADOC could significantly facilitate to increase the efficiency in rehabilitation

process.

This scoping review has a few limitations. Firstly, this study did not include articles beyond 10 years ago, hence the number of articles fulfilling the inclusion criteria being recruited for review were small. However, the study scope is limited to the ADOC itself. Besides, this study only used four databases to review the included article. Furthermore, this review does not include other scoping and systematic reviews as most previous studies focused on the development of ADOC rather than its clinical use to the client in terms of validity and reliability.

## CONCLUSION

In conclusion, ADOC is one of the beneficial tools to practitioners and assists clients in decision making to address their occupational performance problems. However, the validity of items and pictures depends on the culture. A multi-cultural translation and validation study are needed to increase its usage and to allow other countries except Japan or English-language countries to benefit from it during shared decision making. Future studies should expand the search in more databases and warrant a systematic review. However, more studies are required to conclude the evidence of ADOC as a tool that aids in decision making by clients and practitioners. A knowledge gap has been identified in which this study suggests conducting cross-cultural translation, adaptation, and validation of ADOC into different languages.

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The selling of ADOC application has no financial benefit to the authors of this paper. Dr. Tomori is the director of ADOC Software, who manages the ADOC application used in this project. ADOC project functions as a non-profit organization. All income from the sale of ADOC application is used for the maintenance of the software (i.e., programming, updating operating system) and for further development of the application (i.e. illustrations and coding).

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