

ORIGINAL ARTICLE

Impact of using the Model of Human Occupation: A survey of occupational therapy mental health practitioners' perceptions

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Abstract

Aim: While little is known about how occupational therapists perceive the use of occupation-focused theory in their practice, evidence indicates that it has been called for in the profession. To date, the Model of Human Occupation (MOHO) is the most widely used model internationally. The aim of this study is to document practitioners' perceptions of how using MOHO impacted on their practice. **Methods:** A descriptive study using an Internet-based survey study design was conducted with 429 therapists in six National Health Service (NHS) trusts in the UK. **Results:** Of the 429 therapists, 262 completed the survey, for a response rate of 61.07%. Most were female (85.5%) with a varying range of years of experience. Most worked in community and/or inpatient mental health settings; 92.1% responded that they use MOHO as their primary model. Therapists reported using MOHO moderately to greatly improve their assessment, goal setting, and conduct of relevant interventions as well as professional identity as an OT in their mental health occupational therapy practice. **Conclusion/Implications:** This study examined therapists' perceived impact of using an occupation-focused model in mental health practice. The findings of this study provided promising results. Findings suggest that the utilization of MOHO increases service for clients and professional stature and identity for therapists.

Key words: *theory use, occupation-focused practice, evidence-based practice, Clinical decision*

Introduction

Background

Kielhofner's Model of Human Occupation (MOHO) (1) describes a dynamic process in which clients engage in various occupations of interest. Using MOHO, therapists have an easy language to explain how their clients' occupations are motivated, transformed into routines and habits, and performed capably within given social and physical environments (1).

Evidence indicates that the Model of Human Occupation (MOHO) (1) is the most widely used occupation-focused model nationally and internationally (2–8). This uptake positively mirrors the emphasis on the occupation-focused practice that reflects the profession's core during past decades (9–15).

Several factors may account for the extensive use of MOHO in practice. First, a recent analysis of occupation-based practice models indicates that MOHO has a substantially larger evidence base

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than other models (16). In an era of increased focus on evidence, practitioners may select MOHO because of its significant evidence base. Second, MOHO is the first model proposed to guide occupation-focused practice in the field (17). The fact that it has been around longer than other models may account for its uptake in practice. Studies also indicate that OTs value the holistic approach of MOHO, its client-centered focus, and the ease with which other practice models can be incorporated along with this model (6,18).

Additionally, there has been a constant emphasis on linking this model's development with current and future practice needs and with the pressure for more standardized pathways of care (19). MOHO has substantial resources to guide its use. Research indicates that therapists find this model and its resources useful for practice (5,6). In a national sample survey study in the United States, Lee, Taylor, and Kielhofner (5,6) found that therapists perceived that MOHO influenced their practice in three aspects. These included client-centered practice, treatment planning and monitoring, and professional identity and practice. An overwhelmingly high percentage of therapists reported that MOHO facilitates client-centered practice by providing a holistic view of clients, enhancing their ability to relate to clients and prioritize needs, and enhancing clients' satisfaction with OT services. Therapists reported that MOHO influenced their practice by providing a strong base for generating treatment goals and helping them identify a rationale for intervention. Also, therapists indicated that using MOHO enhanced more occupation-focused practice, gave them confidence as an OT, and provided better ways of communicating with clients.

With such benefits of using MOHO echoing the profession's call for occupation-focused practice, efforts to link MOHO to practice have been attempted internationally. The most prominent example is the work of the United Kingdom Center for Outcomes Research and Education (UKCORE). Through UKCORE, a series of practice development (continuing education and supervision) efforts to translate MOHO into practice have been undertaken over the past several years with the aim of preparing therapists in England to respond to the National Health Service (NHS) vision of more effective, occupation-focused, and evidence-based services (20-22). UKCORE's efforts have sought to enhance occupational therapists' understanding of MOHO. Additionally, UKCORE has sought to increase therapists' competence in the use of standardized assessment tools and to fortify the development of client-centered treatment goals (20).

Two studies documented these efforts. Wimpenny et al. (23) conducted a participatory action research

study to investigate the implementation of MOHO (1) across a mental health occupational therapy service. The key methods employed involved preparatory workshops and 12 months of team-based, monthly group reflective supervision sessions, facilitated by a colleague from education, with follow-up contact with the therapists 12 months thereafter. It was found that implementing MOHO supported the therapists in strengthening their professional profile and adopting more occupation-focused practice. The study also underscored that development of a community of practice required nurturing and taking into account a number of interconnected influences, including those of self, peer, and facilitator, as well as contextual and theoretical relationships.

The second study, conducted by Melton, Freeth, and Forsyth (24), was a qualitative investigation that examined the process of integrating MOHO concepts and assessments into routine occupational therapy practice. This study followed UKCORE efforts to support the use of theory and evidence in practice using a multifaceted professional development (PD) initiative in a mental health NHS Trust in England. The PD initiative included in-service training in the use of MOHO theory, schooling in conducting MOHO assessments, opportunities to utilize MOHO knowledge in routine practice, reflective supervision, and guidance through structured MOHO-based practice standards. Melton and her colleagues examined individual journeys in depth to discern variation in outcomes and the mechanisms that supported or inhibited the development of MOHO-informed practice. They found four stages of integration of theory, which they characterized as level one (pre-exploration or dismissal), level two (exploration), level three (action), and level four (action achievement), each representing a higher level of adoption of theory and evidence in practice. The authors found two contextual features that differed between individuals and influenced outcomes. These features were the therapists' personal attributes and their immediate team contexts. The personal attributes refer to each therapist's circumstances such as therapist's own health, well-being, interest, ambition, drive, and capacity for managing competing demands, etc. The immediate team contexts refer to, first, the support through the immediate local team for the occupational therapist to engage in the MOHO-based activities and, second, the contact with other occupational therapists who were engaged in the same PD program. Six mechanisms (building confidence, finding flow, accumulating reward, conferring with others, constructing know-how, and channeling time) were identified. Different levels of activation of these mechanisms either supported or inhibited routine use of MOHO.

While these two studies provide extensive information about PD efforts to fortify the use of MOHO among practitioners and subsequent outcomes observed, little is known about therapists' perceived impact of using MOHO in their practice from their voice. When therapists were prepared with knowledge about a practice model in a supporting environment with professional development efforts – which was identified as a barrier to use a theory – they are more likely to use that theory. To support therapists' use of occupation-focused and evidence-based practice models in practice, research found that various aspects regarding use of theory would need to be considered (4,25-30). Exploring the perceived impact of using a theory as evidence from an experts' group could provide more cohesive information that would allow us to gauge the usefulness of the theory (i.e. how this model is influencing occupational therapy practice). The enhancement of evidence-based practice in occupational therapy will best be served by creative approaches to research that focus foremost on creating knowledge that will be utilized (31). Collecting therapists' voices on how the generated knowledge was valuable would be an effective way to confirm the practicality of that knowledge.

Purpose of the study

The aim of this study is to document practitioners' perceptions of how using MOHO affected their practice. In particular, the study asks, first: "To what extent have therapists adopted practice theory (MOHO) and standardized assessments in their everyday work?" Second, it also asks: "Do therapists who use MOHO see benefits accruing from the adoption of practice theory and standardized assessments?"

Material and methods

Design

This descriptive study used an Internet-based survey. It used a purposive sample of occupational therapists working in mental health settings in England. The study was approved by the University of Illinois at Chicago (UIC) Institutional Review Board (IRB) (IRB No. 2010-0179).

The survey questionnaire was posted on the Web using SurveyMonkey (<http://www.surveymonkey.com>). Potential respondents received an initial invitation to participate by email from UIC. This email invitation provided a website link for the survey at SurveyMonkey, along with brief instructions. The website provided contained the informed consent letter page, a place for therapists to indicate willingness to participate, and the electronic survey. Once a respondent agreed to participate in the study by

indicating "yes" to the consent question, she/he moved on to the actual survey. The entire online survey procedure took approximately 30 minutes. Therapists who completed the survey were not asked for their names or any identifying information, in order to maintain anonymity. When survey responses were received, the responses were not linked to the therapists who completed the surveys.

To ensure acceptable response rates, researchers used a recommended approach as a follow-up method for online surveys (32,33). Within a week of the initial survey mailing, a follow up email was sent to all invited participants thanking those who had responded and asking those who had not done so to respond. Two weeks after the first email was sent, another email was sent to all invited participants. Three weeks after the initial email, a final, "third attempt" email was sent.

Participants

The sample for this study was purposive. The invited research participants were occupational therapists practicing in inpatient and outpatient mental health settings in six National Health Service (NHS) trusts in England: Central and North West London NHS Foundation Trust, Cumbria Partnership NHS Foundation Trust, Derbyshire Mental Health Services NHS Trust, South West London and St George's Mental Health NHS trust, South West Yorkshire Partnership NHS Foundation Trust, and 2gether NHS Foundation Trust. Therapists in these trusts were selected for the sample because they all, to some extent, have a relationship with UKCORE. Some of the trusts have completed a long PD process designed to promote the use of MOHO in practice. Others are in the process of implementing this PD. One trust has not implemented the PD, but has collaborated with UKCORE and conducted some MOHO training.

At the time of this study, 495 occupational therapists were identified as working in the six National Health Service (NHS) trusts. Of these therapists, 66 were identified as being on leave during the study time period. Thus, a total of 429 therapists were invited to participate in the study.

Instrumentation

A survey was developed in several stages, as recommended by the literature (32,33). An initial draft of the survey was developed based on previous studies that investigated the extent and impact of using MOHO in practice (5,6). Several drafts of the survey were sent iteratively to 10 therapists in leadership positions in mental health trusts in the UK who reviewed the survey and provided feedback. Once the survey was transferred to the Web program (<http://www.surveymonkey.com>),

these therapists also took the survey online and provided feedback about the content and layout of the survey. Following this step, a small group of occupational therapists in the UK completed the survey as a field test. They provided feedback on the survey questions with respect to relevance and clarity. This feedback resulted in further revisions that are reflected in the final survey instrument.

The survey collected the following information: demographic characteristics of the respondents, the extent to which therapists have adopted MOHO in their everyday work, and the perceived impact of adopting MOHO as a practice model.

Data analysis

All data were entered into SPSS (version 17.0) for analysis. Descriptive statistics were used to characterize the extent to which therapists adopted MOHO in their practice and perceived impacts of MOHO for their practice.

Results

Of the 429 therapists who were invited to participate in the study, 262 completed the survey. This is a response rate of 61.07%. Missing data were averaged 1.10% across the sections of the survey; all percentages reported in this paper are based on valid responses.

Characteristics of therapists

Most participants were female (85.5%). Of respondents, 69% held a bachelor’s degree, 19% had a master’s degree, and the remainder had other post-graduate training. They had varying levels of professional experience: 33% had less than five years of experience, 54% had between six and 20 years of experience, and 13% had over 20 years of experience. Because therapists in mental health trusts often work in more than one setting, each respondent was asked to characterize her/his primary and secondary work contexts. Over half of respondents (58.0%) indicated that their primary setting was the community; just under half (41.0%) indicated that their primary setting was inpatient. Only 1% reported residential settings as their primary setting. The major secondary setting was community (26.0%), followed by inpatient (24.0%), and residential (9.0%).

Use of theory in practice

Therapists were asked what they used as the primary theoretical framework for their practice. A total of 223 (92.1%) reported that they used the Model of Human Occupation (MOHO) as the primary model.

Table I. Occupational therapists’ use of MOHO as primary model and UKCORE professional development efforts (*n* = 223).

Have you participated in UKCORE Professional Development activities?	I use MOHO as my primary model
Yes	172 (77.8%)
No	49 (22.2%)
Total	221 (100.0%)

Of these, 17.0% indicated that they were at the first level of utilization (i.e. trying to reason with MOHO and learning more about it and its assessments) of the model of Melton and her colleagues (2010); 41% reported that they were starting to reason with MOHO and were learning to use the assessments; 42% reported they were consistently and confidently reasoning with MOHO and helping others to learn this model. As indicated in Table I, of those who use MOHO as their primary model, over three-quarters indicated that they have participated in UKCORE PD activities. Less than a quarter responded that they use MOHO as their primary model, even though they had not experienced UKCORE PD activities. When comparing the extent of use of MOHO for those who participated in UKCORE PD efforts with those who did not, therapists who participated in UKCORE were significantly more likely to demonstrate a higher level of MOHO utilization than those who did not (i.e. low/non-use of MOHO and moderate/high use of MOHO) ($X^2(1) = 4.368, p = 0.037$).

Therapists who reported using MOHO were also asked about the impact of using MOHO in their practice. Table II shows their responses (*n* = 223) regarding the impact on their practice. Over three-quarters reported that their assessment of services users was moderately to greatly improved, using MOHO. Approximately two-thirds or more of therapists felt that using MOHO moderately to greatly improved their goal setting, conduct of relevant interventions, and the extent to which their service is occupation-focused. About 60% felt that using MOHO improved the outcomes of their services moderately to greatly.

Table III shows therapists’ responses regarding the impact of using MOHO on others’ perceptions of occupational therapy services in their practice setting. About half or more felt that using MOHO improved service outcomes and service users’ satisfaction with services. More than a third felt it improved multidisciplinary staff’s understanding of occupational therapy services and improved the value attached to occupational therapy services.

Table IV shows therapists’ indication of the impact of using MOHO on professional identity and

Table II. Therapists' report on impacts of using MOHO in practice ($n = 223$).

Impact on practice	No impact		Slightly improved		Moderately improved		Greatly improved	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
My ASSESSMENT of service users	9	4.1	27	12.2	82	37.1	103	46.6
My ability to SET TREATMENT GOALS	12	5.4	59	26.6	102	45.9	49	22.1
My ability to do RELEVANT INTERVENTION	21	9.5	58	26.2	94	42.5	48	21.7
The extent to which my service is OCCUPATION-FOCUSED	24	10.8	42	18.9	81	36.5	75	33.8
The OUTCOMES of my services	17	7.8	66	30.1	87	39.7	49	22.4

confidence. Over 70% felt it improved their professional identity and confidence.

When we looked at whether there was a significant difference in therapists' responses between MOHO users as a primary model with UKCORE PD opportunities ($M = 2.40$, $SD = 1.03$) and MOHO users as a primary model without UKCORE involvement ($M = 2.00$, $SD = 0.74$) regarding their perceived impacts on areas described earlier, therapists who were involved with the UKCORE involvement reported more improvement in the extent to which multidisciplinary staff value their service ($t_{44} = 34.60$, $p = 0.028$).

Discussion

This study examined the use of MOHO among therapists in six mental health trusts in England. It also examined therapists' perceptions of the impact of using this model. The vast majority of therapists (92.1%) indicated that they were using MOHO as their primary practice model. A recent random study of therapists practicing across practice settings in the United States found that over 80% of therapists used MOHO in their practice (5). Thus, the high percentage of use of this theory is not surprising. Since all but one of the trusts in this study have been involved in PD efforts to increase therapists' use of MOHO, it is likely that the percentage of therapists using MOHO as their primary practice model is higher than other trusts in the UK.

This finding directly supports the conclusion that UKCORE PD efforts have had an impact on therapists' use of MOHO. Studies have indicated that a major barrier to therapists' use of theory is their lack of understanding of theory and how to apply it (4,27). By providing teaching and mentoring in the use of theory, UKCORE efforts have likely addressed this barrier. Additionally, studies suggest that occupational therapists' use of theory is highly influenced by their context (3,26,29). By creating a context in which there are multiple sources of support for the use of MOHO, UKCORE has also created an important resource to support therapists' use of a practice theory. The vast majority of therapists reported that their use of MOHO had a positive impact on their ability to assess service users, set treatment goals, do relevant interventions, conduct occupation-focused practice, satisfy clients, and achieve positive outcomes. These findings are consistent with the findings of studies of American therapists who use MOHO (5,18).

While therapists who were involved with UKCORE PD opportunities felt more improvement in how their multidisciplinary staff value their services than those who were not involved in UKCORE PD efforts, there was not much difference in their perception of the impact of using MOHO on their practice overall; therapists from both cohorts felt that using MOHO as a primary model in their practice had about the same level of positive impact on their practice. The fact that participant therapists as a whole belong to an expert group who chose to use MOHO as a primary

Table III. Therapists' report on impacts of using MOHO on others' perceptions of OT services ($n = 223$).

Impact on others' perceptions of OT service	No impact		Slightly improved		Moderately improved		Greatly improved	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
My SERVICE USERS' SATISFACTION with my services	57	26.4	52	24.1	70	32.4	37	17.1
How much MULTIDISCIPLINARY STAFF UNDERSTAND my service	49	22.1	90	40.5	61	27.5	22	9.9
How much MULTIDISCIPLINARY STAFF VALUE my service	53	24.0	69	31.2	67	30.3	32	14.5

Table IV. Therapists' report on impacts of using MOHO on professional identity and confidence (n = 223).

Impact on professional identity and confidence	No impact		Slightly improved		Moderately improved		Greatly improved	
	n	%	n	%	n	%	n	%
My IDENTITY as an occupational therapist	19	8.6	47	21.3	77	34.8	78	35.3
My CONFIDENCE as a professional	15	6.8	48	21.7	88	39.8	70	31.7

model could partially explain why they did not show much difference in terms of the perceived impact on practice. However, it appears that PD efforts increase therapists' perceived level of utilization of MOHO by providing systematic supports. Also, findings show that contextual support through PD efforts might have influenced therapists' perceived improvement on other staff's valuing OT services.

The findings of this study can be seen as providing promising results which suggest that the utilization of MOHO increases clients' satisfaction and professional stature and identity while also resulting in higher-quality services. The study also provides findings that are consistent with Melton's assertions about factors that influence the extent of utilization of a practice theory following PD. Additionally, the measures created for this study promise to be useful in such future research.

Limitations

This study had a number of limitations. First, data were collected from a convenience sample of occupational therapists and should be generalized with caution. Also, the findings were based on self-report on a survey. Further research into the use of this practice theory will add to the field's knowledge of how to achieve its vision of occupation-focused and evidence-based practice. To date, most studies along these lines have been surveys of practitioners. Different methodologies such as observational studies and clinical audits would help to triangulate the findings to date. While therapists' perceptions are important sources of findings, independently obtained measures of utilization and impact would contribute to this body of knowledge.

Conclusion

In this paper, therapists' views on the use of an occupation-focused model in mental health occupational therapy practice have been presented. Findings entailed therapists' perceived positive impacts of the use of the occupation-focused model on everyday practice, professional identity, and confidence as an occupational therapist. By documenting clinical

evidence on the impacts of an occupation-focused practice, this study has attempted to provide evidence that can support accountability of occupational therapy. This kind of participatory research is urgently needed in the present context where occupational therapy is being challenged to demonstrate its worth as a health care profession. Further research should be undertaken reflecting current practice, unwaveringly examining the relationship between professional development supports and the use of the occupation-based practice.

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References

1. Kielhofner G. Model of human occupation: Theory and application. 4th ed. Baltimore, MD: Lippincott Williams & Wilkins; 2008.
2. Brown GT, Rodger S, Brown A, Roeveer C. A comparison of Canadian and Australian pediatric occupational therapists. *Occup Ther Int* 2005;12:137-61.
3. Haglund L, Ekbladh E, Thorell LH, Hallberg IR. Practice models in Swedish psychiatric occupational therapy. *Scand J Occup Ther* 2000;7:107-13.
4. Law M, McColl MA. Knowledge and use of theory among occupational therapists: A Canadian survey. *Can J Occup Ther* 1989;56:198-204.
5. Lee SW, Taylor R, Kielhofner G, Fisher G. Theory use in practice: A national survey of therapists who use the Model of Human Occupation. *Am J Occup Ther* 2008;61:106-17.
6. Lee SW, Taylor RR, Kielhofner G. Choice, knowledge, and utilization of a practice theory: A national study of occupational therapists who use the Model of Human Occupation. *Occup Ther Health Care* 2009;23:60-71.
7. National Board for Certification in Occupational Therapy. A practice analysis study of entry-level occupational therapist registered and certified occupational therapy assistant

- practice. OTJR: Occupation, Participation and Health 2004; 24:S1-3.
8. Wikeby M, Lundgren B, Archenholtz B. Occupational therapists' reflection on practice within psychiatric care: A Delphi study. *Scand J Occup Ther* 2006;13:151-9.
 9. Christiansen C. Defining lives: Occupation as identity. An essay on competence, coherence, and the creation of meaning. *Am J Occup Ther* 1999;53:547-58.
 10. Clark F. Occupation embedded in a real life: Interweaving occupational science and occupational therapy. *Am J Occup Ther* 1993;47:1067-77.
 11. Fisher AG. Uniting practice and theory in an occupational framework. *Am J Occup Ther* 1998;54:509-21.
 12. Law M. Client-centered. occupational therapy. Thorofare, NJ: Slack; 1998.
 13. Townsend E. Occupation: Potential for personal and social transformation. *JOS* 1997;4:18-28.
 14. Wilcock AA. Occupational science: The key to broadening horizons. *Br J Occup Ther* 2001;4:56-61.
 15. Wood W. It is jump time for occupational therapy. *Am J Occup Ther* 1998;52:403-11.
 16. Lee J. Achieving best practice: A review of evidence linked to occupation-focused practice models. *Occup Ther Health Care* 2010;24:206-22.
 17. Kielhofner G, Burke J. A model of human occupation, part one. Conceptual framework and content. *Am J Occup Ther* 1980;34:572-81.
 18. Munoz JP, Lawlor M, Kielhofner G. Use of the Model of Human Occupation: A survey of therapists in psychiatric practice. *Occup Ther J Res* 1993;13:117-39.
 19. Lee SW, Morley M, Taylor RR, Kielhofner G, Garnham M, Heasman D, et al. The development of care pathways and packages in mental health based on the Model of Human Occupation Screening Tool. *Br J Occup Ther* 2011;74:284-94.
 20. Forsyth K, Melton J, Mann LS. Achieving evidence-based practice: A process of continuing education through practitioner-academic partnership. *Occup Ther Health Care* 2005; 19:211-27.
 21. Forsyth K, Summerfield-Mann L, Kielhofner G. A scholarship of practice: Making occupation-focused, theory-driven, evidence-based practice a reality. *Br J Occup Ther* 2005;68: 261-8.
 22. Melton J. Occupational therapy service strategy for service development and research programme. Gloucestershire, UK: Gloucestershire Partnership NHS Trust; 2002.
 23. Wimpenny K, Forsyth K, Jones C, Matheson L, Colley J. Implementing the Model of Human Occupation across a mental health occupational therapy service: Communities of practice and a participatory change process. *Br J Occup Ther* 2010;73:507-16.
 24. Melton J, Forsyth K, Freeth D. A practice development programme to promote the use of the Model of Human Occupation: Contexts, influential mechanisms and levels of engagement amongst occupational therapists. *Br J Occup Ther* 2010;73:549-58.
 25. Javetz R, Katz N. Knowledgeability of theories of occupational therapy practitioners in Israel. *Am J Occup Ther* 1989;43: 664-75.
 26. Crowe TK, Kanny EM. Occupational therapy practice in school systems: A survey of northwest therapists. *Phys Occup Ther Pediatr* 1990;10:69-83.
 27. Elliott SJ, Velde BP, Wittman PP. The use of theory in everyday practice: An exploratory study. *Occup Ther Health Care* 2002;16:45-62.
 28. O'Neal S, Dickerson A, Holbert D. The use of theory by occupational therapists working with adults with developmental disabilities. *Occup Ther Health Care* 2007;21:71-85.
 29. Storch BA, Eskow KG. Theory application by school-based occupational therapists. *Am J Occup Ther* 1996;50: 662-8.
 30. Van Deusen-Fox J. Occupational therapy theory development: Knowledge and values held by recent graduates. *Occup Ther J Res* 1981;1:79-93.
 31. Forsyth K, Duncan E, Summerfield-Mann L. Scholarship of practice in the United Kingdom: An occupational therapy service case study. In Crist P, Kielhofner G, editors. *The scholarship of practice*. New York: Haworth Press; 2005. p 17-30.
 32. Forsyth K, Kviz FJ. Survey research design. In Kielhofner G, editor. *Research in occupational therapy*. Philadelphia, PA: F.A. Davis; 2006. p 91-109.
 33. Kviz FJ. Nonresponse in sample surveys. In Cotton T, Armitage P, editors. *Encyclopedia of biostatistics*. Chichester, UK: Wiley; 1998. p 1392-5.

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