

# What Role Conceptions Do Multi-Healthcare Professionals Have of Physicians and What Role Expectation Do They Have of Physicians in a Community?

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## Research Article

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# Abstract

**Background:** To create an effective community-based integrated care system, interprofessional collaboration based on the healthcare professionals' mutual understanding of their respective roles must be promoted. This study aimed to identify the role conception and role expectation that other healthcare professionals have towards physicians in the context of community-based integrated care system.

**Methods:** We organized focus groups and adopted 'Role Theory' as a theoretical framework. We collected data for healthcare professionals attending a conference on community-based integrated care systems in Japan. Fifty-four healthcare professionals other than physicians consented to participating in 7 focus groups. Theme analysis based on the recorded and verbatim transcripts was conducted on collation with the research questions.

**Results:** The role conception of physicians is as a figure of intellectual authority positioned at the top of a traditional hierarchy, with a personal character of criticism/autonomy/closedness, not accommodating any interference from others, and upholding the Biomedical Model as an absolute standard. In response to it, the role expectation of physicians in a community is that they undertake actions that only physicians can undertake to ensure that a flat organization functions properly to provide medical explanations during transitions and to offer healthcare support for patients who are difficult to access. The role expectation also includes a perception of patients as human beings, with physicians adapting to the Bio-Psycho-Social Model, explaining to patients about their disease as an authoritative voice based on an understanding of psychosocial circumstances, and sharing the prognosis of disease or disability. The personal character expected was for someone with an open mind who allows others to seek advice, as well as a sense of approachableness which makes it easier for others to seek advice.

**Conclusion:** In the context of a community-based integrated care system, physicians should consider understanding of the role conception and role expectation that other professionals have of them, and need to endeavor to create an open relationship with all healthcare professionals and give careful thought to their own roles.

## Background

Many developed countries are experiencing an upsurge in healthcare needs because of the increase in the number of elderly people, who are more prone to multimorbidity and are affected by psychosocial factors <sup>1</sup>. To address this situation, healthcare professionals must strengthen not only their own professionals' point of view but also understand that of others' and share information so that they can offer seamless services that meet patient needs <sup>2</sup>. In particular, the super-aging society has arrived in Japan, ahead of the rest of the world. The Japanese Government has announced its aim of creating a community-based integrated care system by 2025 that seamlessly links care and support in the community with the treatment of diseases <sup>3</sup>. To create such a system, interprofessional collaboration forged on an understanding of multi-professions' role is essential <sup>4</sup>.

As a theoretical framework of the understanding of these roles, our study has referred to 'Role Theory'<sup>5</sup>. The term of "Role" includes exhibited behavior in addition to expected behavior<sup>6</sup>. According to Role Theory, roles can be normative roles defined from an overall perspective or interpretative roles defined from closer focus on individual subjects<sup>5</sup>. In role behavior occurring in a complex system such as a community-based integrated care system, the key is to understand the realistic roles of multi-profession not as a traditional normative role. Rather, because the role is defined by continual interpretation of social circumstances surrounding individuals, it is essential to understand the mutual interpretations of actual roles by professionals in multi-professional teams. Notably, in the context of the community, where issues that arise are diverse, role conception and role expectation, which are interpretative roles, are influential. This influence is in addition to that of the normative role, which is of a fixed nature<sup>5</sup>. Even if a physician has internalized a Bio-Psycho-Social Model as an interpretative role<sup>7</sup>, other healthcare professionals may observe the physician's exhibited behavior, and may find it impossible to build a flat relationship in the face of the physician's uncompromising role conception based on the Biomedical Model. To mirror this, the other healthcare professionals then come to adopt a tacit role expectation contrary to physicians' self-image as well as the complexity of dealing with the conflicting charged domains of idealism and realism in the occupational realities that medical students aspire to<sup>8</sup>. What is therefore required, as one of the interpretative roles of physicians, is for the physicians to understand the discrepancies that exist between role conception - which is affected by exhibited behavior - and role expectation - which is affected by expected behavior. This is because physicians have to play the hub role between medical care based on diagnosis and medical treatment within a community-based integrated care system.

Previous findings show that different healthcare professional hold different images of the interpretative role of physicians. Nurses working in clinical settings recognize the physician as the role that should communicate the patient's needs<sup>9</sup>. Pharmacists expect physicians in their partnership to enhance the pharmacists' abilities and to exercise leadership in the clinical scene<sup>10</sup>. Psychiatric social workers expect physicians to not only provide patient care but also give guidance and support to the professional team. Because it is sometimes difficult to exchange information in a timely manner with specialist physicians, other healthcare professionals have reported bypassing general physicians and seeking advice directly from specialists<sup>11</sup>. This illustrates the fact that each healthcare profession has different expectations of physicians, and that physicians therefore need to understand the roles and responsibilities of different professionals and to give them recognition<sup>12</sup>. Past findings have indicated that multi-professional relationship building encounters obstacles where there is no sharing of mutual expectations<sup>13</sup>. Despite this, knowledge about how different healthcare professions interpret community physicians is scarce.

Therefore, by clearly identifying physicians' role conception and role expectation, we can share how other healthcare professionals understand physicians. In the current context of a community-based integrated care system, the sharing of physicians' interpretative role - which becomes evident in dynamic mutual-process action - will assist physicians in coming to understand their own roles and responsibilities.

In this study, we aimed to identify the role conception and role expectation of community physicians using focus groups (FGs) for healthcare professions other than physicians.

## Methods

### Theoretical framework

This study is focused on the knowledge-cognitive aspects of role conception and role expectation based on Role Theory. We deliberately did not include “role enactment,” which is a cognition-behavior aspect. Role Theory considers that a normative role affects role conception and role expectation, and the mutual interaction of factors with the addition of role enactment makes the roles apparent (Fig. 1). However, role enactment is greatly influenced by individual behaviors based on their character as well as the history, culture and values of the community, and it is therefore possible for local characteristics or ‘color’ to be overly represented. Thus, we focused on the knowledge-cognitive aspects of multiple healthcare professionals by elucidating intersubjective facts

### Study design

Focus groups (FGs), which is intended for open-ended responses conveying thoughts or feelings, were adopted as the research design <sup>14</sup>.

### Population and setting

We selected a community in X Prefecture, Japan. JH had worked in this community’s 30-bed public hospital, which provides outpatient services and home visits in the community, between 2015 and 2017. JH had established relationships with healthcare professionals in this hospital but no longer worked there. The community is located in a city with a population of 70,000 at the center of the prefecture. The community public hospital provides primary healthcare services that meet community needs, and also cooperates with an advanced treatment hospital located 10 min away by car, as well as other clinics and welfare institutions. In total, the community has around ten medical establishments, including a 36-department, 500-bed prefectural central hospital, a 100-bed hospital with mix of acute and chronic/rehabilitation beds, a hospital that combines general wards and long-term care facilities, and outpatient-only clinics. In addition, there are approximately five home nursing stations and fifty care managers working as healthcare professionals, who mainly support at-home needs of patients/users within the community-based integrated care system.

### Data collection

FGs for healthcare professions in the community were held in January 2019. The healthcare participants were divided into groups of eight and given 30 minutes to hold discussions. One of the authors (JH) presented the groups with prompting questions without joining the groups. The other authors (SO, RG, and TM) did not participating in FGs and staffs in the community general support center played role of

moderators. JH asked moderators to listen participants' opinions well to find the right moments for prompting questions flexibility. Prompting questions were developed among the JH, RG, and SO according to research questions and theoretical framework. Thus, the participants were asked the prompting main questions on "what image they had physicians they have been at work" and "what they expected of physicians in a community-based integrated care system". FGs were conducted in a quiet room in a community center. All audio-records of FGs were transcribed verbatim. JH, SO and TM are general practitioners, and RG is a physical therapist. JH received training in qualitative research as part of a PhD program, while SO, RG, and TM received this training after obtaining their PhD degrees.

## Participants

We called on healthcare professionals who attended a care conference in January 2019 to take part in the study as purposive sampling. In each care conference, the participants were mainly welfare staff, with relatively few medical staff. In this study, these professionals have the opportunity to exchange information with physicians who work in the community public hospital and other establishments mentioned above. Participants comprise a wide variety of professions, including nurses and pharmacists, as well as administrative staffs (including care worker, social worker), occupational therapists, physical therapists, care managers, and medical social workers. Administrative staffs (including care workers, social workers) often propose community-wide policies and take care of severe users who are on welfare or have mental disorders. Care managers are responsible for planning care services provided under long-term care insurance. Facility caregivers assist the facility residents with activities such as meals, toileting, and bathing.

At the start of the FGs, they were briefed on the research being conducted and informed that they would be put at no disadvantage if they did not agree to participate. First, the participants filled in a list with questions about their personal background, including sex and main profession in the community. After this, the participants were divided into seven FGs such that the professions and places of work in each group differed. The researchers did not participate in each FGs, but managed the whole project.

## Analysis

A verbatim record of the FGs was analyzed by JH using theme analysis and the validity of the findings was discussed with SO and RG based on "Role theory". This allowed the identified themes to then emerge consistently across a series of data in FGs. Then, TM confirmed the consistency between the data presented and findings, and the transferability. The all researchers finally reviewed the data including its appropriateness in sampling, and critically examined these themes to maintain the robustness of the data and analyses<sup>15</sup>. To ensure the validity of the analysis findings, member checking was conducted among multi-profession participants who attended a care conference in April 2019.

## Ethical approval

This study was reviewed and approved by the research ethics committee of the University of Tsukuba (No 1353-1). All study participants provided informed consent prior to participation. To protect the anonymity of the participants, quotes in this paper are identified by randomly assigned professions and alphabet codes rather than participants' names or initials.

## Results

### Participants

Of the 55 participants, one participant did not consent to taking part in the study. Therefore, data from this participant's group was not used in the analysis. Table 1 shows the background of the study participants.

Table 1. Backgrounds of study participants

Gender	Number
Male	18
Female	37
Professions	
Nurse	2
Care manager	15
Administrative staff	9
Occupational therapist	6
Physical therapist	4
Pharmacist	3
Facility caregiver	3
Medical Social Worker (MSW)	3
Others	10
Total	55

### Findings

#### 1. Role conception

Three themes emerged through the analysis of role conception: 1) Traditional hierarchy, 2) Physician-centered biomedical model; and 3) Personal character of criticism/autonomy/closedness. Two to three sub-themes were sampled for each theme (Table 2).

Table 2: Theme Analysis for role conception

Theme	Sub-theme	Example of text
Traditional hierarchy	Paternalistic intellectual authority	<i>A MSW said, "I was told to go into a care facility because I cannot live alone at home, in a top-down attitude, or I was told not to go out on my own anymore."</i>  <i>B pharmacist said, "Should we consult with a physician directly about such a casual thing?"</i>
	Unreachable and of superior rank in hierarchy	<i>C care manger said, "We have the preconception and strong notion that because they are physicians we have to be careful in the way we communicate."</i>  <i>D care manger said, "How can we speak to physicians tactfully so that they would 'come down' to our level?"</i>
	Unchallengeable authority	<i>E care giver said, "Simply because they are physicians, we tend to stand on guard."</i>
Physician-centered Biomedical Model	Adherence to physician's diagnosis of disease, excluding all else	<i>F occupational therapist said, "We cannot speak out (even if we have doubts) against physicians' diagnosis and such things, so we just listen." (some physical therapist agreed)</i>  <i>G government staff said, "We hear from patients that they were only able to tell the physician a few things when they come face to face."</i>
	Absolute value of recovery from disease	<i>H MSW said, "It's about individual words that are used but we want physicians to make a clearer distinction between the positive and negative (when explaining about the disease). We don't know what to do when physicians tell us what not to do (in order to get better from an illness)."</i>
Personal Character	Criticism	<i>I MSW said, "We can't say anything because we would be in trouble if someone says 'the care manager said so without consultation.'"</i>
	Autonomy	<i>J care manager said, "There are physicians who do not see patients even if patients request it."</i>  <i>K pharmacist said, "Physicians sometimes prescribe drugs without sufficient knowledge (about new drugs), which creates problems for us."</i>
	Closedness	<i>L care manager said, "I don't want us to be apportioning blame to each other but we find it difficult when we are told caregiving is for you to do and dispensing drugs is for us to do, and so on."</i>  <i>M Daily-life Support Coordinator said, "Do all physicians get notified by letter when a community-based integrated care conference is held? We never get physicians to attend."</i>

## 1-1 Traditional hierarchy

Physicians are perceived as figures with paternalistic intellectual authority, and some participants had negative feelings about them. Meanwhile, some perceive physicians to be at the top of the hierarchy, figures who are out of their reach and with whom they do not share a common language or platform, and therefore cannot engage with them in discussion on an equal level on the same plane. Physicians were also regarded as figures of authority who cannot be challenged.

*A care manager said, "It is difficult to talk with physicians, but even if I want to listen to the issues of patients on the phone, it does not happen."*

## 1-2 Physician-centered Biomedical Model

Physicians seem to have confidence in their control of the Biomedical Model which other professionals do not possess. Based on this confidence, they believe in the absoluteness of their own diagnoses and exclude all other interests, leading sometimes to their disregarding concerns raised by patients or other professionals. When these experiences are repeated, patients and other professionals have found it impossible to ask physicians about diseases. They had also developed a mental image of physicians behaving in such a way as to give absolute credence to that treatment/recovery criteria based on the Biomedical Model, and to disregard factors that exacerbate the disease.

*A MSW said, "I think it's common for physicians in hospitals to ask only about disease."*

## 1-3 Personal character of criticism/autonomy/closedness

Physicians sometimes seem to powerfully exercise the autonomous decision-making they possess as specialist professionals, refusing to take patient wishes into consideration and engaging in healthcare activities they are unfamiliar to other professionals but without consulting them. They sometimes take an attitude of criticism if their autonomy is infringed. Such actions by physicians have created issues for other professionals. An image of closedness has emerged, because physicians and healthcare professionals are not proactive in building partnerships among themselves.

*A Daily-life Support Coordinator said, "Physicians running private clinics don't have networks with other practitioners."*

## 2. Role expectation

Similarly, three themes were explored for role expectation: 1) Flat organization as a community team member; 2) Bio-Psycho-Social Model; and 3) Personal character of open-mindedness and approachableness that facilitates requests for advice. Two to three sub-themes were sampled for each theme (Table 3).

Table 3: Theme analysis for role expectation

Theme	Sub-theme	Example of text
Flat organization	Smooth coordination/referral between physicians	<p><i>N care manager said, "In the early stages, it's all right just to see patients in ordinary clinics but when specialist treatment becomes necessary, we'd like physicians to make referrals to other physicians."</i></p> <p><i>O nurse said, "We'd appreciate it if physician-to-physician, they can adopt the style and approach that they are 'treating a particular patient.'"</i></p>
	Transitional support in the healthcare frontline (Transition)	<p><i>P MSW said, "If physicians can give specific advice, I think families would find it easier to accept when I talk to them. For example, in caregiving, if physicians can tell them that in such a situation, you can still cope at home using this method, or there is this good way of doing things, and so on."</i></p> <p><i>Q care manager said, "When patients move new hospitals, there are some things that care managers cannot explain, things relating to our role in the new hospital or coordination with the patient's attending physician, so we would like physicians to give a medical briefing to the staff at the new hospital when a patient is transferred to a different hospital. There are patients who don't fully understand that there are changes in roles."</i></p>
	Support that connects to healthcare (Connect)	<p><i>R care manager said, "If physicians can become part of the healthcare team in the case of patients who cannot connect to welfare services or healthcare due to refusal, and if they can then connect them to healthcare, would it be one form of support?"</i></p>
Bio-Psycho-Social Model	Attitude of treating patients as individual persons	<p><i>S care manager said, "I'd like to see physicians adopt the role of not just dealing with the disease but of adding enjoyment or meaning to patients' lives. Often patients are asked only about their illness when visiting hospitals, but it would be good if they could also be asked about what gives them purpose in life or about their daily activities."</i></p>
	Explanation from someone of authority in medical science	<p><i>T care manager said, "I'd like to see physicians say things more sternly to patients (even those with psycho-social issues) when necessary. This will enable co-medicals to give them support in their daily lives."</i></p>
	Explanation about diseases that affect their daily lives and about the paths to recovery	<p><i>U MSW said, "In particular, physicians should teach patients or family how to conduct rehabilitation and take care of the patient at home. I think families will easily accept such teaching by physicians and they commit to do them at home."</i></p> <p><i>V care manager said, "If physicians can explain to patients even a little about their recovery prospects, we can form a practical vision of daily life."</i></p>
Personal Character	Open mind	<p><i>W pharmacist said, "There are 13 or 14 drugs that are similar – as specialists on medicines, we can explain these things, (...) so we really want physicians to listen to our advice."</i></p>

*X daily-life support coordinator said, "It is better if physicians can come down from their high mountain and be more approachable. It would be good if they can come to a forum like this."*

Approachableness

*Y care manager said, "We understand that physicians are busy but we'd be glad if they could be easily accessed for consultation either by phone or fax."*

## 2-1 Flat organization as a community team member

Regarding the role of team members of the community, other healthcare professionals expect physicians to play a role that only physicians can play. With regard to issues relating to disease, they expect physicians to coordinate with each other if they encounter difficulties in diagnosis or treatment. They expect physicians to provide explanations as medical experts about the transition of healthcare location and scope of at-home healthcare. They also expect physicians to actively intervene for patients who do not have access to healthcare despite having an existing healthcare need.

*A care manager said, "I would like physicians to give me a medical explanation at the time of transfer to the community or home."*

## 2-2 Bio-Psycho-Social Model

There was a Role Expectation for physicians not only to use a reductionistic Biomedical Model for patients but to treat patients as human beings in a Bio-Psycho-Social perspective, as multi-faceted and interrelated beings. If patients in their daily lives do not have an adequate grasp of their disease, other healthcare professionals expect physicians to provide an explanation, not only in purely diagnostic terms but also in daily-life terms from the point of view of a person with medical authority. They also expected physicians to provide advice on the prognosis of a disease or disability from the perspective of the provision of daily-life support.

*An OT said, "I hope that physicians will play a role in listening to ideas about a more meaningful life, not just for diseases, but also with regard to background, illness, and fun."*

## 2-3 Personal Character of open-mindedness and approachableness

Other healthcare professionals expected physicians to have an open mind, allowing them to consult other professionals proactively when confronted with complex issues. Also, they wanted to create a relationship of approachableness, which would allow them to seek advice from physicians.

*A care manager said, "I want physicians to convey a mood that makes them easy to talk to."*

# Discussion

The role conception of physicians is as a figure of intellectual authority positioned at the top of a traditional hierarchy, with a personal character of criticism/autonomy/closedness, not accommodating any interference from others, and upholding the Biomedical Model as an absolute standard. In response to it, the role expectation of physicians in a community is that they undertake actions that only physicians can undertake to ensure that a flat organization functions properly; that is, to liaise with other physicians, to provide medical explanations during transitions, such as when patients are transferred to different settings, and to offer healthcare support for patients who are difficult to access. The role expectation also includes a rounded perception of patients as human beings, with physicians adapting to the Bio-Psycho-Social Model, explaining to patients about their disease as an authoritative voice based on an understanding of psychosocial circumstances, and sharing the prognosis of disease or disability. The personal character expected was for someone with an open mind who allows others to seek advice, as well as a sense of approachableness which makes it easier for others to seek advice.

Role conception is affected by exhibited behavior<sup>5</sup>. In the age when lives were lost due to infection or acute disease, medicine wielded total authority<sup>16</sup>. It is true that life expectancy rose benefiting from this. However, the disease model has changed alongside changes in society. Today, with the exception of cancer, lifestyle related diseases such as cardiovascular disease, cerebrovascular disease and diabetes sit at the top of the list of causes of death<sup>17,18</sup>. Especially in a community, considering aging of the population, intervention using the Biomedical Model alone cannot deal with frailty, and associated conditions such as aspiration pneumonitis. In this context, it may be anachronistic for physicians to have absolute authority<sup>19</sup>. These findings may reflect that physicians in a community consider themselves as a medical specialist and/or clung to Biomedical Model as normative role without finding out their role expectation. In other words, physicians are failing to verify a normative role that was originally internalized through education and the system prevailing in the past (Figure 1)<sup>20,21</sup>. The reason that physicians criticize others is perhaps a reaction due partly to reading today's trend, their lack of interpersonal skills and social interaction<sup>22</sup>.

The negative role conception of physicians held by other healthcare professionals corresponds with the role expectation they hold, namely that physicians should shift away from an unreachable top-hierarchical position and become team members of the community. For instance, physicians seem not to listen to other healthcare professionals' opinion since they may have few opportunities to listen to other healthcare professionals opinions owing to their educational position or advisory position<sup>10-12</sup>. Thus, the relationship between the role conception and the role expectation of physicians formed two sides of the same coin. Moreover, the ideal image of community physicians might be that of transformative leadership, in the context of community-based integrated care system in which we have moved away from the Biomedical Model to a Bio-Psycho-Social Model<sup>19</sup>. Transformative leadership is principle-driven, value-based and works on relationships<sup>23</sup>. By directing effort into these three core elements, a person generally metamorphoses into a transformational leader<sup>24</sup>. In a community-based integrated care system - a complex system - a well-functioning practice emerges under which independent specialties

becoming mutually dependent <sup>25</sup>. To achieve this, physicians should reflect on their roles in a present community and be transformational leaders.

This study had main three limitations. First, this study is limited in scope by its focus solely on the knowledge-cognitive aspects of role conception and role expectation. We hope to conduct research with future field work with a focus on cognition-behavior aspects as a means of investigating role enactment, which has an impact on clinical practice, and thereby refine the role theory about the physicians in a community. Second, though participants were asked the questions what the image and the expectation of physicians in a community-based integrated care system, participants may image the general role conception of physicians. Third, the participants in this study were healthcare professionals who were able to give honest opinions to the physicians who attended the conference in a community. Thus, it is needed to be careful to apply the findings. Nevertheless, our present findings are expected to have opportunities for physicians to reflect on their own behaviors in a community.

In summary, this study shows that what is sought from physicians working within a community-based integrated care system is that they form an open relationship with other healthcare professionals. To achieve this, physicians should consider understanding of the role conception and role expectation that other professionals have of them, and thereby become critical of the normative role that was unconsciously implanted in and adopted by them through their education and prevailing systems, and flexibly adjust their role to current new environment.

## **Conclusion**

Healthcare professionals have the role conception that physicians who work in a community are closed authoritative figures sitting at the top of the hierarchy and wielding the Biomedical Model. Their role expectation is that they be interdependent as team members with other healthcare professionals. Physicians working in community-based integrated care systems should build open relationships with other healthcare professionals, understand their interpretative role and become role-adjusting transformative leaders.

## **Abbreviations**

FGs: Focus groups

## **Declarations**

## **Ethics approval and consent to participate**

All participants were informed about the study orally and with written information and provided written informed consent prior to being enrolled in the study. This study was approved by the University of Tsukuba medical ethics board (No 1353-1), and was performed in accordance with the Declaration of Helsinki.

## Consent for Publications

Not applicable.

## Availability Of Data And Materials

All data analyzed during the current study are available from the corresponding author on reasonable request.

## Competing Interest

The authors report no declarations of interest

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## Author Contributions

JH, GR, SO and TM contributed to the research design and collecting data. JH, GR and SO contributed to the analysis of the results. JH, GR, SO and TM contributed to the writing of the manuscript.

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## Figures

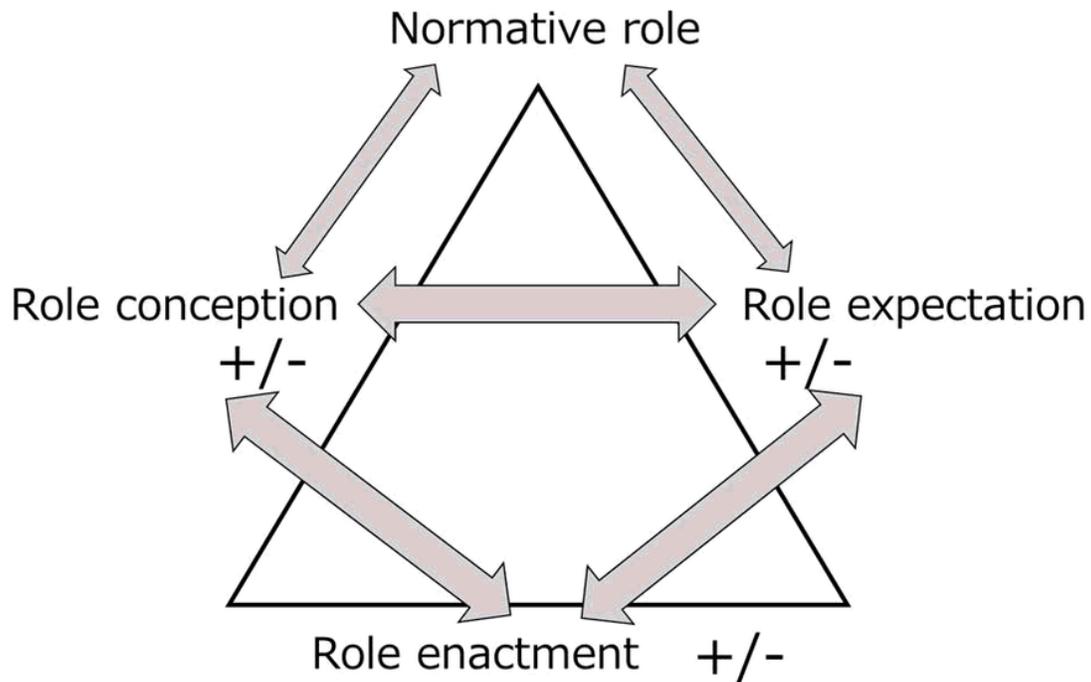


Figure 1

Relationships among role conception, role expectation, and role enactment