

Original Research Article

## **Relationship between career anchors, choosing specialty, and life satisfaction among female physicians**

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**Abstract:** With the increase in the number of female physicians in Japan, breaks in their career associated with life events have become more apparent. Based on Schein's conceptual theory of career anchors, this study examined the relationship between career anchors, choosing specialty, and life satisfaction among female physicians who had worked in rural practice. A career anchor questionnaire was distributed to 100 female physicians who had graduated from Jichi Medical University (JMU) and worked in rural practice. They were asked to choose their most important career anchor from eight anchors. Changes in the level of importance of "career development," "work-life balance," "worthwhile work," and "human relations" was evaluated from 1 to 5 at present in comparison with 3 during their medical school days. A visual analog scale (VAS) score was used to measure their level of current satisfaction. The response rate was 60%. "Lifestyle" was the most important career anchor (62% of respondents), followed by "Service and Dedication to a Cause" and "Technical and Functional Competence." The importance of "work-life balance" and "human relations" had increased compared with what it was during their medical school days. Although the VAS score was relatively high, statistically significant differences were found regarding career anchors and changes in motives from their medical school days. Concerning the main career anchor, the VAS score was not significantly different between those who selected "Lifestyle" and those who did not. However, the importance of "career development" was significantly lower in the group that listed "Lifestyle" as their most important career anchor compared with other groups. Regarding the reason for choosing specialty, the VAS score of those who selected "work-life balance" was relatively low compared with those who selected "I like it." Female physicians who graduated from JMU tend to consider work-life balance when choosing the most suitable specialty. In order to improve female physicians' life satisfaction and enable them to continue their work, providing them with a support system that can help them maintain their lifestyle is important.

**Keywords:** Female physician, rural practice, Career anchor, Work-life balance.

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### **INTRODUCTION**

With the increase in the number of female physicians in Japan, breaks in their career associated with life events have become more apparent [1]. Jichi Medical University (JMU), in collaboration with Japan's 47 prefectures, was established to educate dedicated doctors with an ethical standing in order to provide highly skilled medical care in remote areas of Japan where medical aid is limited, to promote the health and well-being of people living in rural communities, and to contribute to the advancement of medicine [2]. JMU enrolls two or three students from each prefecture every year. The School of Medicine at JMU has an academic loan program to tentatively exempt all incoming students from the payment of all tuition and admission

fees. Students are exempt from repaying these loans if they work for a public hospital or clinic in their home prefecture for a period of nine years, including four to five years at a designated hospital or clinic in a remote area. Since its foundation 44 years ago, more than 3,700 JMU alumni have become doctors, and have worked as general practitioners at various medical institutions and clinics in remote areas and islands across Japan.

There are few reports related to physicians who graduated from JMU [3, 4]. Oki *et al.*; [3] examined the issues in balancing professional obligations with family needs, especially parenting, for female physicians who had graduated from JMU. According to their report, for example, many female physicians did not live with their

parents when working in rural areas, and female physicians or their parents were usually responsible for caring for children when they fell ill. Nojima *et al.*; [4] investigated the job and life satisfaction of physicians in the rural and remote islands. According to their report, most physicians were satisfied with “team work” and “salary.” On the other hand, the majority of physicians were unsatisfied with the “opportunity to continue professional development.” On the other hand, from the perspective of medical education for female students, Ishikawa *et al.*; [1] reported the need for career development and work-life balance programs for female students at JMU. According to their report, 71% and 68.6% of all female students wanted to marry and have a child, respectively, during their nine-year obligation term. The percentage of female students anxious about childbirth and work-life balance after graduation was 80.0% and 78.1%, respectively. In addition, over 80% of all subjects answered that they wanted to attend lectures and group meetings conducted by female

physicians, and wished to receive information regarding support systems and career development.

This study aimed to identify the main career anchors, which proposed by Schein [5], of female physicians who had worked in rural practice and to find out whether there are any correlations between these motives and their satisfaction with the chosen specialty.

**METHODS**

**Participants**

Five hundred five students graduated from JMU from 2006 to 2010. A career anchor questionnaire was sent to all 100 female physicians (19.8%) who graduated from JMU during this period and who completed the obligation term, including working in rural practice.

**Materials and procedure**

The career anchor questionnaire was developed based on the literature for career anchors proposed by Schein (Table 1) [5].

**Table 1: Career anchor**

<b>Career anchor category</b>	<b>Traits</b>
<b>Technical/Functional Competence</b>	This kind of person likes being good at something and will work to become a guru or expert. They like to be challenged and then use their skills to meet the challenge, doing the job properly and better than almost anyone else.
<b>Managerial Competence</b>	These people want to be managers. They like problem-solving and dealing with other people. They thrive on responsibility. To be successful, they also need emotional competence.
<b>Autonomy/Independence</b>	These people have a primary need to work under their own rules and ‘steam’. They avoid standards and prefer to work alone.
<b>Security/Stability</b>	These people seek stability and continuity as a primary factor of their lives. They avoid risk and are generally ‘lifers’ in their job.
<b>Entrepreneurial Creativity</b>	These people like to invent things, be creative and most of all to run their own businesses. They differ from those who seek autonomy in that they will share the workload. They find ownership very important. They get easily bored Wealth, for them, is a sign of success.
<b>Service/Dedication to a Cause</b>	Service-orientated people are driven more by how they can help other people than by using their talents. They may work in public services or in areas such as human resources.
<b>Pure Challenge</b>	People driven by challenge seek constant stimulation and difficult problems that they can tackle. Such people will change jobs when the current one gets boring, and their career can be varied.
<b>Lifestyle</b>	Those who are focused first on lifestyle look at their whole pattern of living. Rather than balance work and life, they are more likely to integrate the two. They may even take long periods of time off work in which to indulge in passions such as travelling.

Carrier anchor is the most important element that helps people choose their career. It could be values or desires that one will not sacrifice, even if there are changes in their circumstances, and that remains firm in their minds. The respondents were asked to choose the most important career anchor from eight anchors. A visual analog scale (VAS) score (values ranged from 0 to 100) was used to determine their level of satisfaction with their current situation. Changes in the level of importance of “career development,” “work-life

balance,” “worthwhile work,” and “human relations” was evaluated from 1 to 5 at present in comparison with all retrospectively scored 3 during their medical school days for convenience. Data collection took place during January to March 2015. Participants gave written informed consent, and data were collected with permission for use for research purposes only.

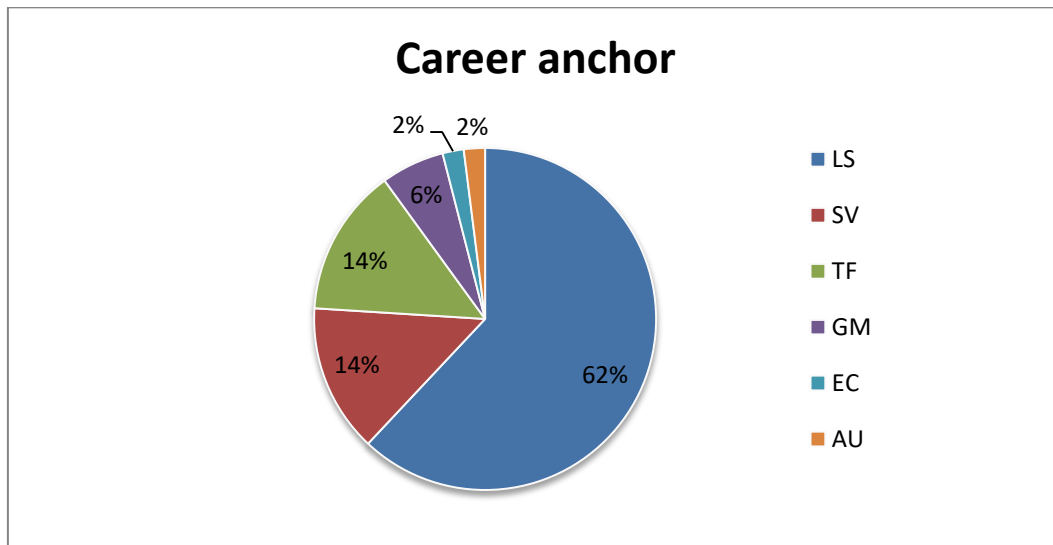
**STATISTICS**

To compare the subgroups, we used Mann-Whitney U test. A *p* value of <0.05 was considered statistically significant.

**RESULTS**

The response rate was 60%. Of all respondents, the responses of 50 that did not have missing values were analyzed. Among the 50 participants, 46 (92%) were clinicians, 2 (4%) were government doctors, and 2 (4%) were research physicians. The classification according to work type was as follows: 43 (86%) worked full-time, 5 (10%) worked part-time, and 2 (4%) had flexible work time.

Regarding the reason for choosing specialty, 42 selected “I like it,” and 8 selected “work-life balance is easy to maintain.” Of all participants, their current level of satisfaction ranged from 50 to 100 (mean 84.6 ± 14.7) in the VAS score. “Lifestyle” was the most important career anchor (62% of respondents), followed by “Service and Dedication to a Cause” (14%) and “Technical and Functional Competence” (14%), “General Managerial Competence” (6%), “Entrepreneurial Creativity” (2%) and “Autonomy and Independence” (2%). “Security/Stability” and “Pure Challenge” were not answered in this study (Figure 1).

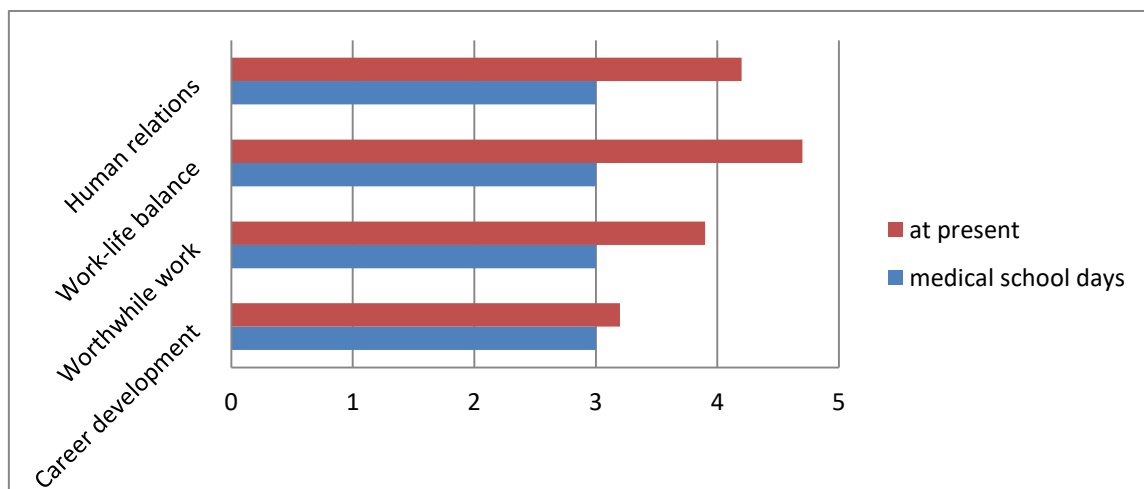


**Fig 1: Main career anchor**

(LS: Lifestyle, SV: Service and Dedication to a Cause, TF: Technical and Functional Competence, GM: General Managerial Competence, EC: Entrepreneurial Creativity, AU: Autonomy and Independence)

Changes in the level of importance between medical school days and at present are shown in Figure 2. The importance of “work-life balance” and “human

relations” had increased compared to what it was during their medical school days.



**Fig 2: Changes in the level of importance between medical school days and at present**

(Note: the range is from 1 to 5 at present in comparison with 3 during medical school days)

Regarding the main career anchor, the VAS score was not significantly different between those who selected “Lifestyle” and those who did not (Table 2). However, the importance of “career development” was significantly lower in the group that listed “Lifestyle” as the main career anchor compared with the group that did not mention it.

Regarding the reason for choosing specialty, the VAS score of those who selected “work-life balance” was relatively low compared with those who selected “I like it” (Table 3).

**Table 2: A comparison of VAS scores among 50 female physicians in different reasons for choosing specialty**

Reason for choosing specialty	n	VAS score	
I like it	42	86.2±13.8	p=0.07
Work-life balance	8	76.3±17.7	

**Table 3: A comparison of VAS scores in different career anchors**

Main career anchor	n	VAS score	Career development	Worthwhile work	Work-life balance	Human relations
Lifestyle	31	82.6±15.3	2.6±0.9	3.6±0.8	4.6±0.6	4.1±0.8
Others	19	87.9±13.6	3.6±1.0	3.7±1.2	4.4±1.0	4.2±0.8
		n.s.	p<0.01	n.s.	n.s.	n.s.

(Note: the range of scores for each is from 1-5.)

**DISCUSSION**

There are few studies regarding career anchors of dentists and nurses [6, 7]. However, to our knowledge, the present study is the first reported study that evaluated the career anchor, the selection of specialty and the level of satisfaction among female physicians. The current study demonstrated that “Lifestyle” is the most important career anchor for female physicians.

From 1972 to 2014, 254 female physicians graduated from JMU and completed the obligation term. This figure amounts to 7.1% of the total JMU alumni; the number of female students was extremely small during the initial period. The number of female medical students in recent years has increased by approximately 40% in JMU as well as in other medical universities. However, there is an additional factor for JMU students, i.e., the obligation term immediately after graduation.

Ishikawa *et al.*; [1] reported that female students at JMU tend to have great concerns about life events and issues such as marriage, childbirth, compatibility between work and home, and technology shortage for physicians. In addition, female students find it valuable to know how female physicians who have worked in rural practice feel during their obligation term. As well as female students, female physicians have great concerns about life events and their work during this obligation term. For example, female physicians or their parents demanded better access to day care and flexibility of their work in accepting sick children [3]. Nojima *et al.*; [4] stated that improving work satisfaction, providing outreach support programs for career development and professional support in rural practice, and building appropriate relationships between

physicians and people in the community might contribute to physicians’ decision to practice medicine in rural and remote islands.

Ueda *et al.*; [8] investigated the attitude towards lifestyle planning of female medical students at Tokyo Women’s Medical University. According to their report, the majority of subjects had concerns regarding pregnancy, childbirth, and family life; they also intended to marry. In addition, 79.3% of the subjects wished to give birth, and most prioritized postgraduate clinical training over having children, thereby choosing to plan their pregnancy around their training. Subjects were divided into two groups: those anticipating leaving their job for family issues, and those who did not. The former group perceived the role of wife as more positive and significant than did the latter group and had greater anxiety about maintaining work-life balance. They stated that active support for career continuation and education to maintain work-life balance are necessary for both men and women. Yamaguchi *et al.*; [9] evaluated the relationship between “interest in a medical career” and “intention to continue working after marriage” in female medical students. According to their report, a lower VAS score for “intention to continue working after marriage” was related to a lower score for “interest in a medical career.” Therefore, education and guidance for female medical students is important in order to reduce their anxiety about their future as a physician.

In the present study, the VAS score indicating the level of satisfaction with current situation was not significantly different between those who selected “Lifestyle” and those who did not. However, the

importance of “career development” was significantly lower in the group that selected “Lifestyle” as the main career anchor compared with the group that did not. Additionally, regarding the reason for choosing specialty, the VAS score was relatively low for those who selected “work-life balance” compared with those who selected “I like it.” Therefore, female physicians who graduated from JMU may tend to consider work-life balance and career development when choosing the most suitable specialty for them.

This study, however, had some limitations. A major first limitation is small sample size. We drew conclusions based on an examination of a comparatively small number of participants. For example, we observed no statistically significant difference in the VAS scores for reason for choosing specialty between physicians who selected “I like it” and those who selected “work-life balance,” which may be related to the small sample size. Second, we did not include factors such as age, marital status, family status, and years of employment in the analysis. Third, career anchors may vary depending on the situation. Although a career anchor seems permanent, it might in fact vary with time, as the individual gains new experiences in general, as well as actual work experience. Therefore, further research that overcomes these limitations is needed.

## CONCLUSIONS

The results of this study can be viewed as a basis for a number of recommendations to enable female physicians to continue their work. In order to improve female physicians’ life satisfaction and enable them to continue their work, providing a support system to help them maintain their lifestyle is important. Female medical students seem to expect work-life balance programs to provide them with role models in the form of female physicians.

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