Application of Knowle's Adult Learning Theory to the Education of Rotating Residents in Geriatric Rotation

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Introduction

- Each year, Laval University welcomes 200 residents and between 50 to 60 will have a geriatric rotation.
- In 2019, people aged 65 and over accounted for 20% of Canadian population.
- Age is an important risk factor for many diseases.
- 23% of seniors have 7 chronic diseases.
- Many medical specialists will have to care for seniors during their careers.

Education Problem

- Currently, there is a lack of structure for the geriatric rotation offered to rotating residents. Regardless of background, specialty and goals, they receive almost the same teaching.
- There is a gap between residents' knowledge and ability to care for elderly.

Objectives

1. To improve structure of geriatric rotations.
2. To meet rotating residents' needs and enable them to achieve their learning goals.
3. To help physicians develop skills to provide care for seniors in their respective specialities.
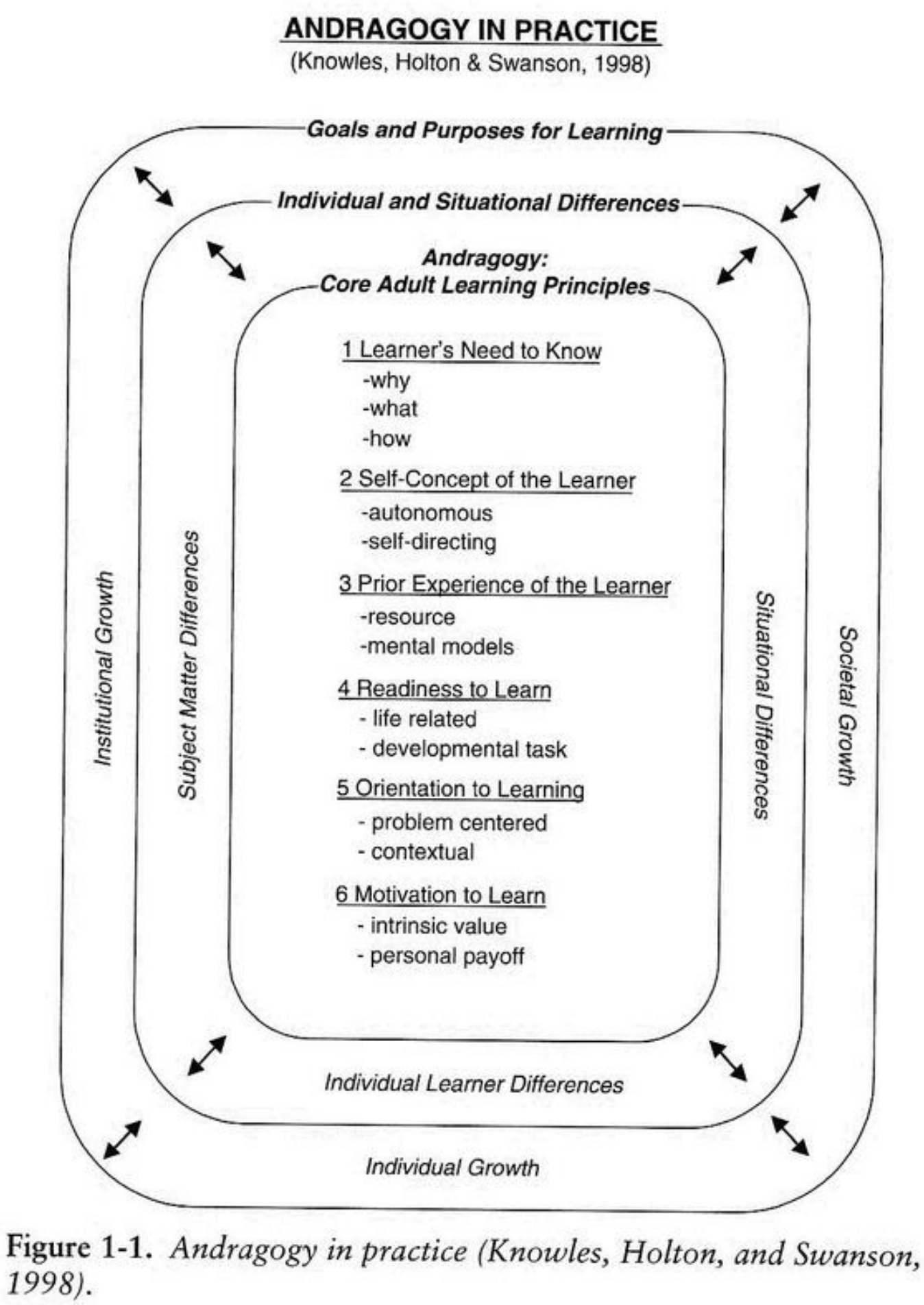
Theory Description

Figure 1-1. Andragogy in practice (Knowles, Holton, and Swanson, 1998).

SWOT Analysis

Strenths
- Project that meets a real need
- Theoretical framework/structure
- Human ressources
- Organizational ressources

Weaknesses
- Time factors
- Application of the model and equity

Opportunities
- Public and government concerns
- Images shown by the media
- Organizational: new mega-hospital
- A model that can be exported

Threats
- Opposition of players involved
- Another competitive model
- Rapid evolution of technology
- Reform in residents assessment method (CBD)

Theory Application

Steps	Strategies
1. **Planning**	• Welcome Email and half-day meeting
2. **Climate**	• **Physical environment:** desing of teaching rooms, availability of medical ressources, bright and cheerfull atmosphere • **Psychological environment**: sharing, collaboration, comfort
3. **Planning**	• Monday planning meeting • Self-assessment of goals achievement
4. **Diagnosis of needs**	• Individual reflections about a clinical vignette • Sharing in group
5. **Objectives**	• **Learning Contract**: writing goals based on Bloom's taxonomy
6. **Learning plan**	• Identifying resources using a handout and choosing the most effective strategies for each objective • Promoting proactivity, collaboration and variety
7. **Learning activities**	• Geriatricians' commitment and mid-rotation meeting • Community of practice using a technology tool (e.g. Slack)
8. **Evaluation**	• **Reactions**: group discussion and online survey • **Learning**: clinical case like the Royal College oral examination • **Behaviors**: short survey 2-3 months after the geriatric rotation • **Results**: case-control study and evaluation on the quality of care

Summary

- Rotating residents present a variety of needs.
- A specific and structured curriculum is essential to ensure geriatric training and to improve overall care for elderly.
- Knowle's adult learning theory helps to propose a geriatric rotation centered on adult learners.

References

1. Statistique Canada, 2016
2. Niccoli et al., *Current Biology,* 2012
3. Laditka et al., *Health Care Services Quarterly*, 2002
4. Drickamer et al., *JGIM, 2006*
5. Knowles et al., *The Adult Learner. the Definitive Classic in Adult Education and HumanResource Development, 2005*
6. Henschke et al*., Andragogical Curriculum for Equipping Successful Facilitators of Andragogy in Numerous Contexts*, 2014