The Effect of Health Control Beliefs in Optometric Patient Care

CATHERINE KERR-NIERMANN, OD, MS, FAAO
UNIVERSITY OF MISSOURI – ST. LOUIS
COLLEGE OF OPTOMETRY
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Disclosures

No conflicts of interest to disclose

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Learning Objectives

- Understand the **association between health control beliefs and potential outcomes** in optometric patient care.
- **Identify patient health locus of control** in the context of a comprehensive eye care evaluation using a novel health communication tool.
- Provide strategies to optometrists to **improve communication with patients of differing health control beliefs** and backgrounds.

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Introduction

History: Locus of control (LOC) in psychology

- Individual personality trait that is molded by cultural beliefs, family, and shared experiences (Rotter, 1966)
- The concept of LOC is widely accepted in the social sciences

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Introduction

Health control beliefs are categorized in the social sciences as ***health locus of control*** **(HLOC)**

HLOC is the characterization of ***who*** **a person believes is most responsible for their own health outcomes**

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Introduction

Three broad categories of control beliefs:

1. Internal
2. External – powerful others
3. External – chance

Corresponds to statistically significant differences in **medical treatment adherence, health behaviors, satisfaction in medical visits, and overall health!**

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Prevalence of HLOC Studies in Medicine

Commonly studied in medicine to find patterns with treatment adherence
- 1600+ peer reviewed studies on PubMed

Health conditions studied extensively:
- Asthma (Ahmedani et al., 2013)
- Cancer (Andrykowski et al., 1994)
- Parkinson's disease (Rizza et al., 2017)
- Obesity (Neymotin et al., 2014)
- Diabetes (Zhu et al., 2013)

How can this translate to optometric care?

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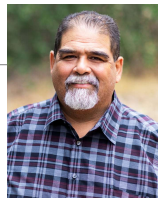
"I looked up IPL online and saw your office can do this. I think this will help me."

"I'm taking the eye drops because my doctor told me to, but I don't know what they are for."



"My brother went blind from glaucoma so I knew it was coming for me, too."

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Categorizing Health Locus of Control

Internal:
I am most in control of my health

External - Powerful Others:
Others (doctors, spouses, etc.) are most in control of my health

External - Chance:
Random chance, fate, or God dictates my health

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Internal Health Locus of Control

Belief that the individual person is most responsible for their own health outcomes

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Internal HLOC: Patterns

- Background often values **individualism** and **personal achievements** (Cheng et al., 2016)
- More likely to be **proactive in health decisions** such as taking prescribed medication, exercising, and eating healthy foods (Stadtlander et al., 2015)
- Statistically **better overall health outcomes** and quality of life (Rodriguez et al., 2023)

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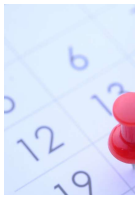
Internal HLOC: Patterns (continued)



- Strongly **adhere to treatment plans** from providers (Bragazzi, 2013)
- More likely to **self-medicate** and to use complementary and alternative medicine (CAM) (Tangkiatkumjai et al., 2020)
- Request **more detailed information** from their doctors (Butow et al., 1997) and from the internet (Fogel & Israel, 2009)
- Appreciate **shared decision making** with their healthcare providers in the exam room (Rodriguez et al., 2023)

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Translating to Optometric Patient Care

Internal HLOC:

- More likely to schedule and show to annual appointments
- Will come with ideas of their own for refractive correction, treatment, etc.
- May have tried supplements, OTC options on their own
- Open to new treatments
- More likely to return for follow-up appointments

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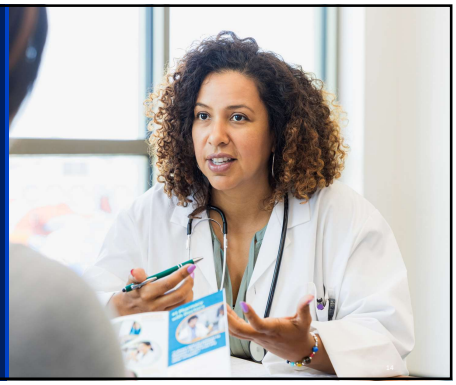
External Health Locus of Control: Powerful Others

Belief that others such as healthcare providers or family are most responsible for an individual's health outcomes.



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External Health Locus of Control: Chance

Belief that most health outcomes cannot be influenced by others and is predetermined, random, or destined by fate.

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External HLOC – Powerful Others and Chance: Patterns

- Communities often value **collectivism** (Perfetti, 2018) (Macadem & Clarke, 2010)
- Often identifies with low socio-economic status, commonly **not seeing direct results of effort** (Pedron et al., 2020) (Green & Murdock, 2013)
- Fatalistic beliefs are more common describing **chance or fate outweighs any other health influence** (Perfetti, 2018)
- Statistically associated with **poorer health outcomes** overall (Brinks et al., 2010)

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External HLOC – Powerful Others and Chance: Patterns (continued)

- **Lower adherence to treatment plans**, with increased skepticism in medicine overall (Chawak & Chittem, 2020)
- **Less likely to attend** primary care visits (Macaden & Clarke, 2010)
- **Preference for receiving less information** from their doctors if believing in fate or chance (Butow et al., 1997)

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Translating to Optometric Patient Care

External HLOC: Powerful Others

- Arrives at appointment because another person told them to (spouse, family member, doctor, etc.)
- Consults family member in exam room for most/many decisions
- May accept a treatment idea in the exam room but might not continue with treatment at home
- May have accepted if a provider told them there is "nothing that can be done" to fix their problem

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Translating to Optometric Patient Care

External HLOC: Chance

- Might not schedule or attend appointments
- Little or no motivation for new treatment methods
- May not want to discuss resources
- May not schedule for recommended referrals

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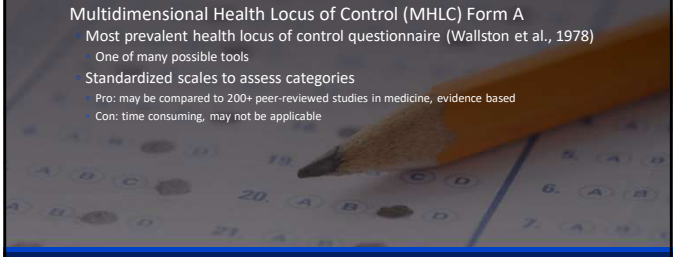
Formal Identification of HLOC

Multidimensional Health Locus of Control (MHLC) Form A

- Most prevalent health locus of control questionnaire (Wallston et al., 1978)
  - One of many possible tools
- Standardized scales to assess categories
  - Pro: may be compared to 200+ peer-reviewed studies in medicine, evidence based
  - Con: time consuming, may not be applicable



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Multidimensional Health Locus of Control (MHLC)

Example Items:

"If I take care of myself, I can avoid illness."

"My family has a lot to do with my becoming sick or staying healthy."

"If it's meant to be, I will stay healthy."

"My good health is largely a matter of good fortune."

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Identifying Health Locus of Control in Providers

Providers must also understand their own health control beliefs to appropriately compare their patients' perspectives

- Healthcare providers largely associate with internal control beliefs (Porter et al., 2018)
  - In a 2023 study, n = 384, 93% of optometry student interns score highest for internal category of the MHLC questionnaire (n.d., Kerr-Niermann)
  - Providers with internal HLOC may assume patients should be autonomous with their health decisions (Rodriguez et al., 2023)

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Examples for provider identification:

Internal

- "It's not our fault. The patient would not have lost vision if she took better care of herself."

External – Powerful Others

- "I went to school for eight years to be able to tell you what is best"

External – Chance

- "It just wasn't meant to be"

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Why identify HLOC at all?

Communication between a patient and a provider is **less effective** if control beliefs are **dissimilar** (Rodriguez et al., 2023)

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Customized Communication

Identify → Empathize → Strategize

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Strategies to Improve Communication

- Awareness of providers' own locus of control can help **tailor communication skills**
- Ask patients about their **individual needs**
  - Patients themselves can understand their individual needs as well
- Approach what the patient is **comfortable** with in the exam room
- Ask **preference for patient decisions** with treatment methods (Butow et al., 1997)

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Communication Tool: Example 1

Provider – Patient	HLOC Comparison	Provider HLOC Description	Patient HLOC Description
Internal – Internal	Match	Provider believes in personal responsibility toward their own health	Patient feels they are in control and responsible for their own health outcomes
Patient HLOC Characteristics	**Common Traps**	**Step 1 – Validation**	**Step 2 – Change**
Strong adherence to prescribed treatments, trust in provider, prefers detailed explanations, high overall satisfaction if involved in care plan	Patient and provider could cling to treatment methods that are not helpful for the sake of feeling in control	Validate patient's preference for involvement in care, encourage patient to share in decision making	Allow patient to be involved in care plan, give space for patient to ask questions and gain information

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Communication Tool: Example 2

Provider – Patient	HLOC Comparison	Provider HLOC Description	Patient HLOC Description
Internal – External/Chance	Large Discrepancy	Provider believes in personal responsibility toward their own health	Patient feels changes in health are expected, health disorders occur by chance or by fate
Patient HLOC Characteristics	**Common Traps**	**Step 1 – Validation**	**Step 2 – Change**
Poor adherence to prescribed treatments, lower quality of life, may feel helpless	Provider may become discouraged if patient does not take responsibly toward treatment	Validate patient's frustrations of not feeling in control of their health	Discuss treatment of symptoms or improvement in quality of life rather than curative claims

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Communication Tool: Example 3

Provider – Patient	HLOC Comparison	Provider HLOC Description	Patient HLOC Description
External/Powerful Others – Internal	Large Discrepancy	Provider may relate to paternalistic behavior of doctors, family, or God having ultimate responsibility	Patient feels they are in control and responsible for their own health outcomes
Patient HLOC Characteristics	**Common Traps**	**Step 1 – Validation**	**Step 2 – Change**
Strong adherence to prescribed treatments, trust in provider, prefers detailed explanations, high overall satisfaction if involved in care plan	May feel pt is "difficult" for wanting involvement, asking many questions	Validate patient's preference for involvement in care, encourage patient to share in decision making	Allow patient to be involved in care plan, give space for patient to ask questions and gain information

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