

Skill Building for Effective Use of Multidimensional Measurements

DISCUSSION GUIDE

PREPARED BY JANETTE KLEIN, MLS, PHD CANDIDATE & KAREN HARKER, MLS, MPH

Introduction

The following slides provide opportunities for interpretation of ratios and case scenarios that you and/or those within your group or department can use to engage in ongoing dialogue on the application of ratios at your respective institutions.

We hope these materials help you continue to develop the skills to unveil the mystery of multidimensional measures and bring to light the value and benefit of including ratios in the decision-making process.

Wishing you satisfaction and success as you begin to write your own story using ratios,

Janette and Karen

Subject Specific Ratios

- ▶ (HF) = % of Holdings / % of Enrollment
- ▶ (UF) = % of Circulation / % of Holdings
- ▶ (RBH) = % of ILL Borrowing / % of Holdings

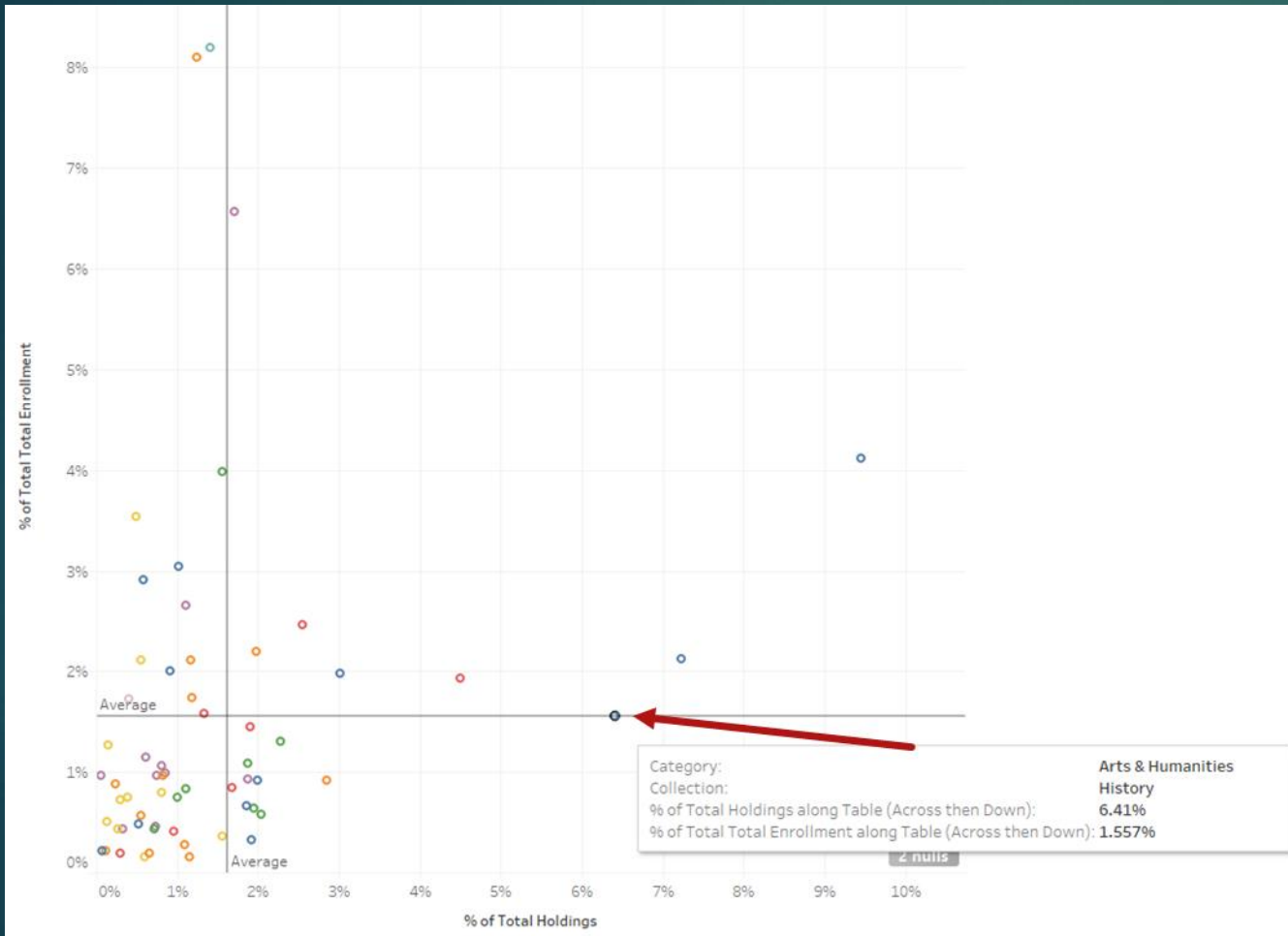
Interpretation of Ratios

- ▶ The following seven slides contain materials that will allow you the opportunity to interpret ratios using the following multidimensional measurements:
 - ▶ Holdings factor
 - ▶ Use factor
 - ▶ Ratio of borrowing to holdings
- ▶ This is a great opportunity for you to work either individually or with a small group to see how the ratios can be interpreted in a variety of ways and how those interpretations might inform the processes in place at your institution.

**Remember – there are no wrong answers to the ratio conclusions and remedies, merely differing interpretations as to the recommendations!*

Holdings Factor

5



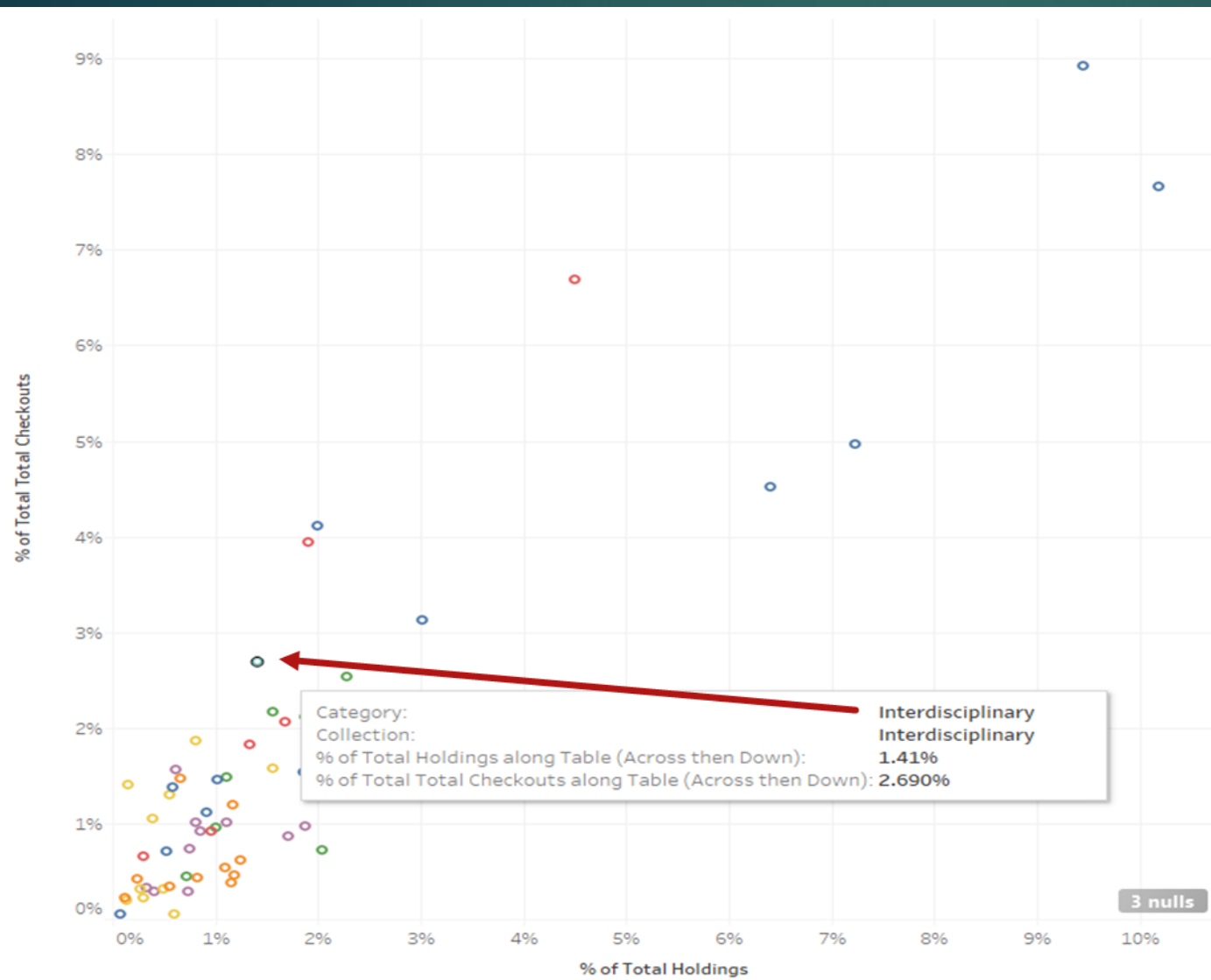
Holdings Factor (HF) =
% of Holdings / % of Enrollment

History Holdings of 6.41% = 4.109
Total Enrollment of 1.56%

- Estimation is 6:1.5 about 4:1 or about 4
- The facts: low enrollment, high holdings, ratio of more than 1
- What conclusions can be drawn from this data?
- Potential remedies for this imbalance?

Use Factor

6



Use Factor (UF) =
% of Circulation / % of Holdings

Interdisciplinary Circulation of 2.69%
Interdisciplinary Holding of 1.41% = 1.91

- The facts: higher circulation than holdings, ratio of almost 2
- What conclusions can be drawn from this data?

Use Factor

7



Use Factor (UF) =
% of Circulation / % of Holdings

$$\frac{\text{Music Circulation of } 8.93\%}{\text{Music Holding of } 9.45\%} = .945$$

- The facts: equitable circulation to holdings, ratio of just under 1
- What conclusions can be drawn from this data?

Ratio of Borrowings to Holdings

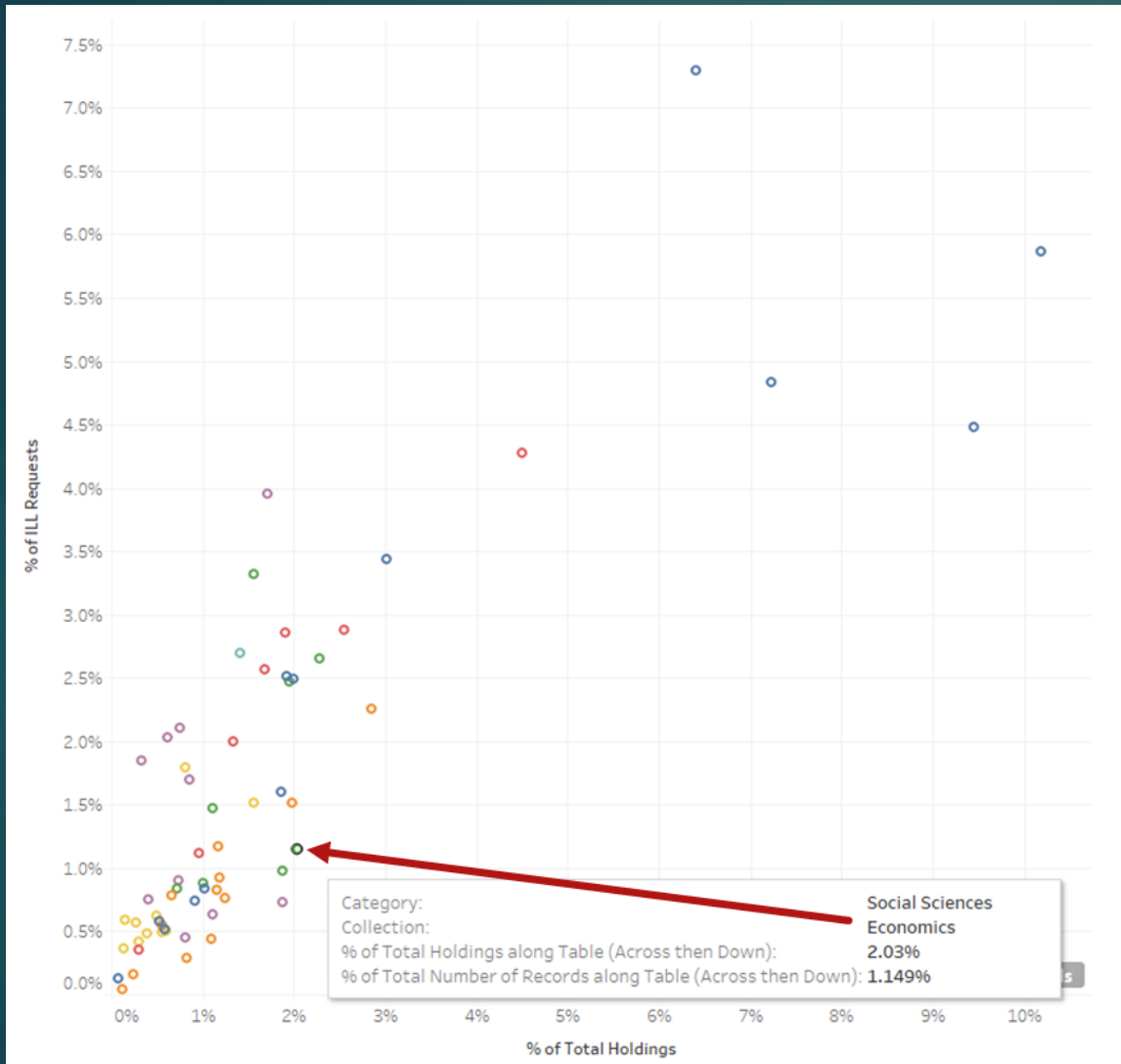


**Ratio of Borrowings to Holdings (RBH) =
% of ILL Borrowing / % of Holdings**

Interdisciplinary Borrowings of 2.69% = 1.91
Interdisciplinary Holdings of 1.41%

- The facts: higher ILL borrowing, low holdings, ratio of >1
- What conclusions can be drawn from this data?

Ratio of Borrowings to Holdings



**Ratio of Borrowings to Holdings (RBH) =
% of ILL Borrowing / % of Holdings**

Economics Borrowings of 1.15%
Economics Holdings of 2.03% = 0.567

- The facts: low ILL borrowing, high holdings, ratio of <1
- What conclusions can be drawn from this data?

Ratio of Borrowings to Holdings

10



**Ratio of Borrowings to Holdings (RBH) =
% of ILL Borrowing / % of Holdings**

$$\frac{\text{History Borrowings of } 7.30\%}{\text{History Holdings of } 6.41\%} = 1.139$$

- The facts: high ILL borrowing, high holdings, ratio of >1
- What conclusions can be drawn from this data?

Application of Ratios: Scenarios & Case Studies

- ▶ The following three case studies were designed to offer you the opportunity to apply the skills and knowledge gleaned throughout the course of this presentation. The scenarios were not derived from occurrences at any one institution but more importantly, they reflect the possibility of a reality that could occur.
- ▶ As previously stated – these are meant to encourage dialogue and conversation between colleagues and departments. There are no right or wrong answers, merely interpretations to be made from the data.

Case 1: How Strong is the Interdisciplinary Collection?

Case 1 Scenario: You have been asked to assess the strength of the Interdisciplinary collection at your institution. Thankfully, you have at your fingertips the following data: Use Factor, Holdings Factor, and the Ratio of Borrowings to Holdings. Determine up to three conclusions that can be inferred from the following dataset.

Case 1: Interdisciplinary dataset

- ▶ HF: $1.41 / 8.20 = .172$
- ▶ UF: $2.69 / 1.41 = 1.91$
- ▶ RBH: $2.69 / 1.41 = 1.91$

Case 1 Interdisciplinary Collection Conclusions:

- 1.
- 2.
- 3.

Case 2: Is the Finance collection underutilized?

Case 2 Scenario: Recent budget meetings have prompted the library director to ask you, the assessment librarian, to collect and present evidence as to the level of use for the materials that support the programs in the Finance department. In this scenario, you are working with the Use Factor, Holdings Factor, and the Ratio of Borrowings to Holdings. Using this data, please indicate why or why not you perceive the Finance materials to be effectively utilized.

Case 2: Finance

- HF: $.82 / .96 = .85$
- UF: $.43 / .82 = .52$
- RBH: $.29 / .82 = .35$

Case 2 Finance Collection Conclusions:

- 1.
- 2.
- 3.

Case 3: Spending Spree

Case 3 Scenario: Recently, the College of Business at your institution received a generous donation. As part of the process to determine the distribution of these funds, you have been asked by the library director to assess the collection-based need of the Economics department.

Using the following data, Use Factor, Holdings Factor, and the Ratio of Borrowings to Holdings, determine what, if any, need(s) exist within the Economics subject collection. Indicate up to three conclusions that can be inferred from this data and how these conclusions can inform your recommendations to the library director.

Case 3: Economics

- HF: $2.03 / .58 = 3.50$
- UF: $.72 / 2.03 = .35$
- RBH: $1.15 / 2.03 = .57$

Case 3 Economics Collection Conclusions:

- 1.
- 2.
- 3.