

# **A Comparison of Response Patterns between Landline and Cell Phone RDD Surveys**

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# Outline

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- **Introduction**
- **Research Objective**
- **Data Collection**
- **Findings**
- **Conclusion and Implications**

# Introduction

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- **Nonresponse rates in telephone surveys have been increasing over time** (Groves et al. 2004)
  - A great number of telephone surveys have been conducted as means of public opinion polls
- **Telecommunication behaviors have been changed**
  - Cell phone-only households have greatly increased over time
  - Response behaviors and patterns may differ, depending on the sampling frame in telephone surveys
  - Needs a systematic investigation for response patterns between different frames

# Research Objective

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- **Investigates whether there are the differences in response patterns between landline and cell phone in Korea**
- **Helps find optimal call schedule to maximize the success rate in the RDD telephone survey**

# Data Collection

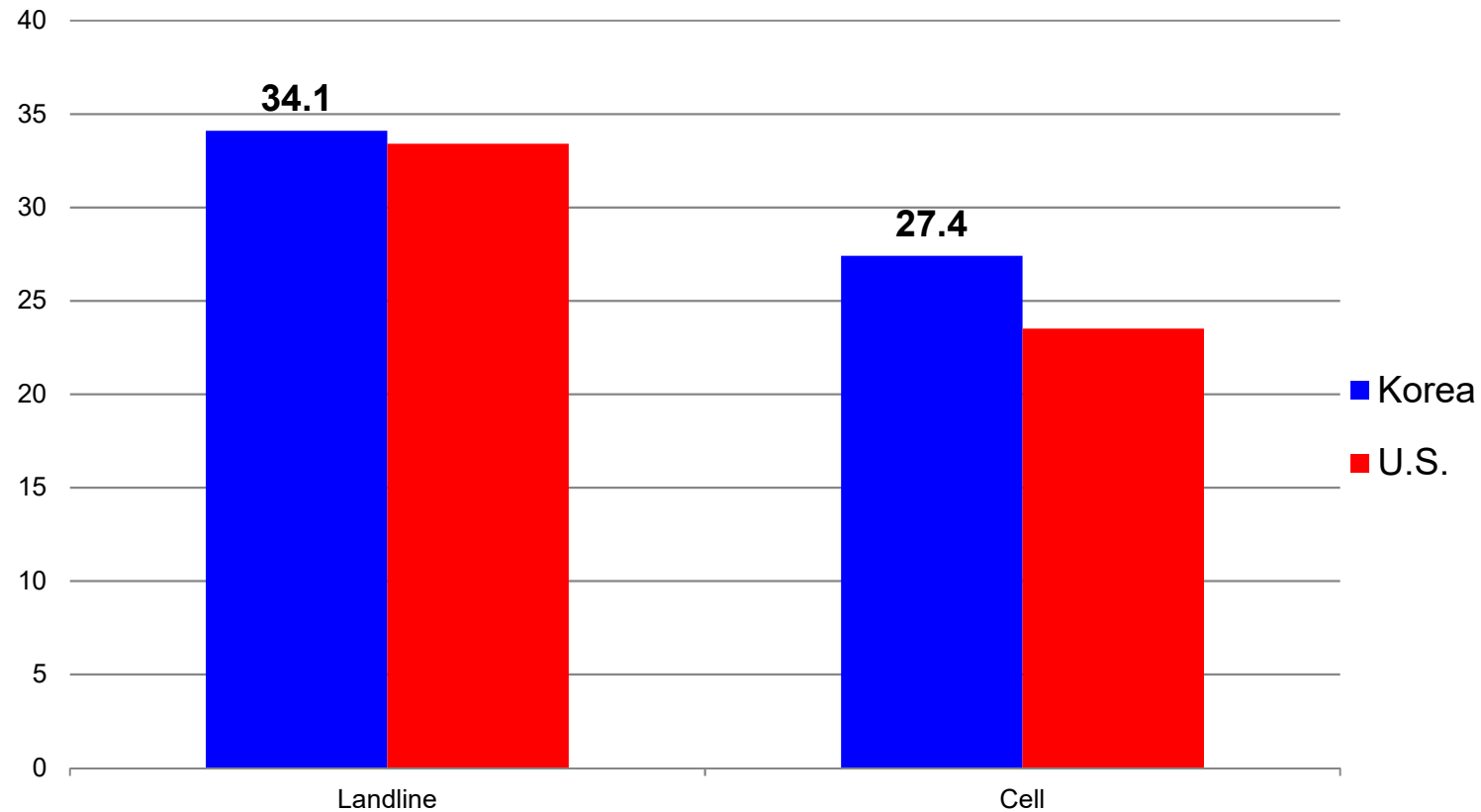
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- **Target population**
  - Adults with over 18 living in Korea
- **Sample design**
  - List-assisted RDD for a landslide sample
  - RDD based on 10,000 block for a cell phone
    - Note that unlike in the US, cell phone numbers do not area code in Korea
- **Sample size:** 1,508 (landline 899, cell 609)
- **Data collection period:** Nov. 1 to Dec. 27, 2010
- **Data collection mode:** CATI

# Findings

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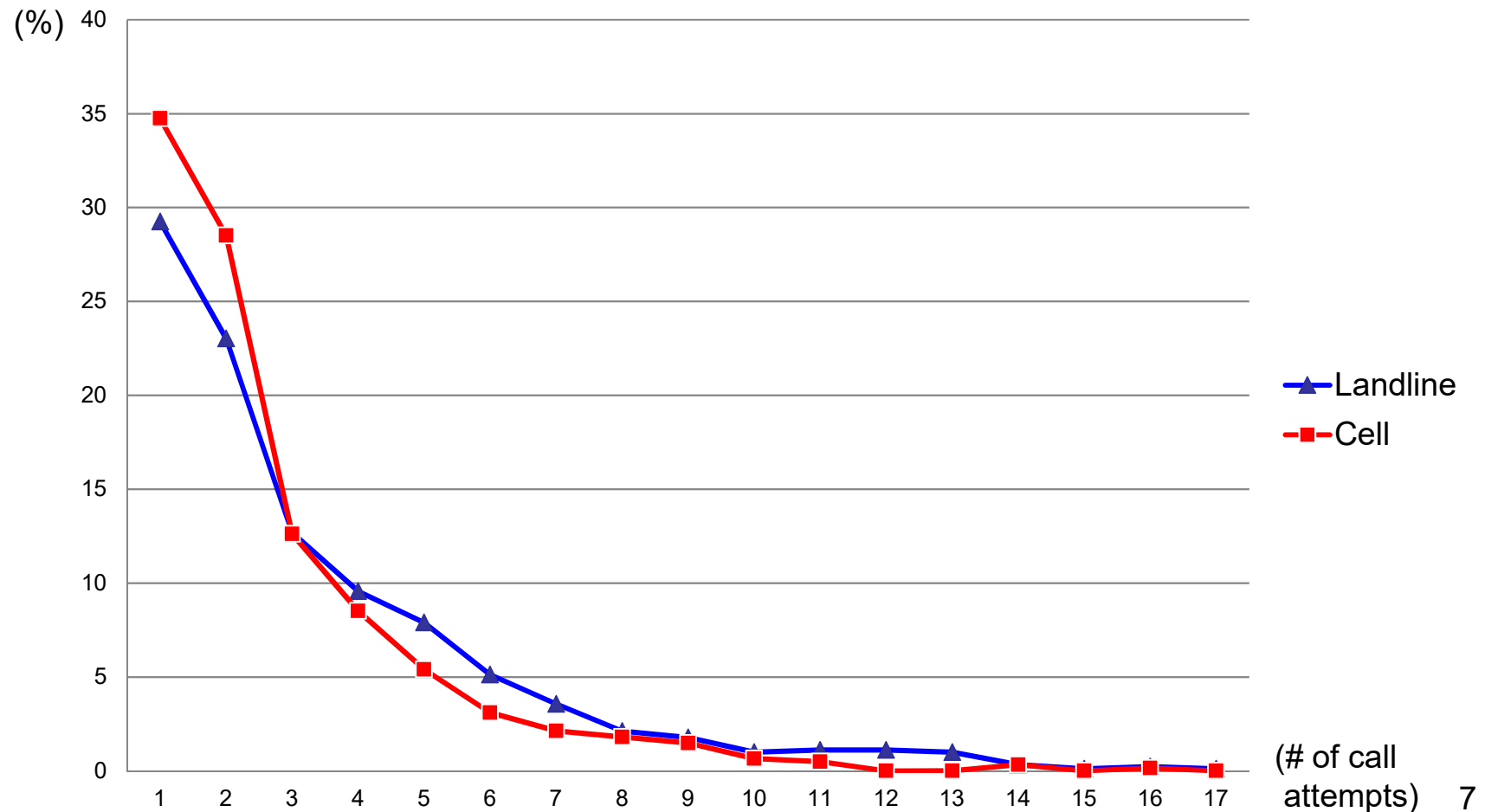
## ■ Response rate (RR1)



\* U.S. findings are based on Brick et al.(2007) study

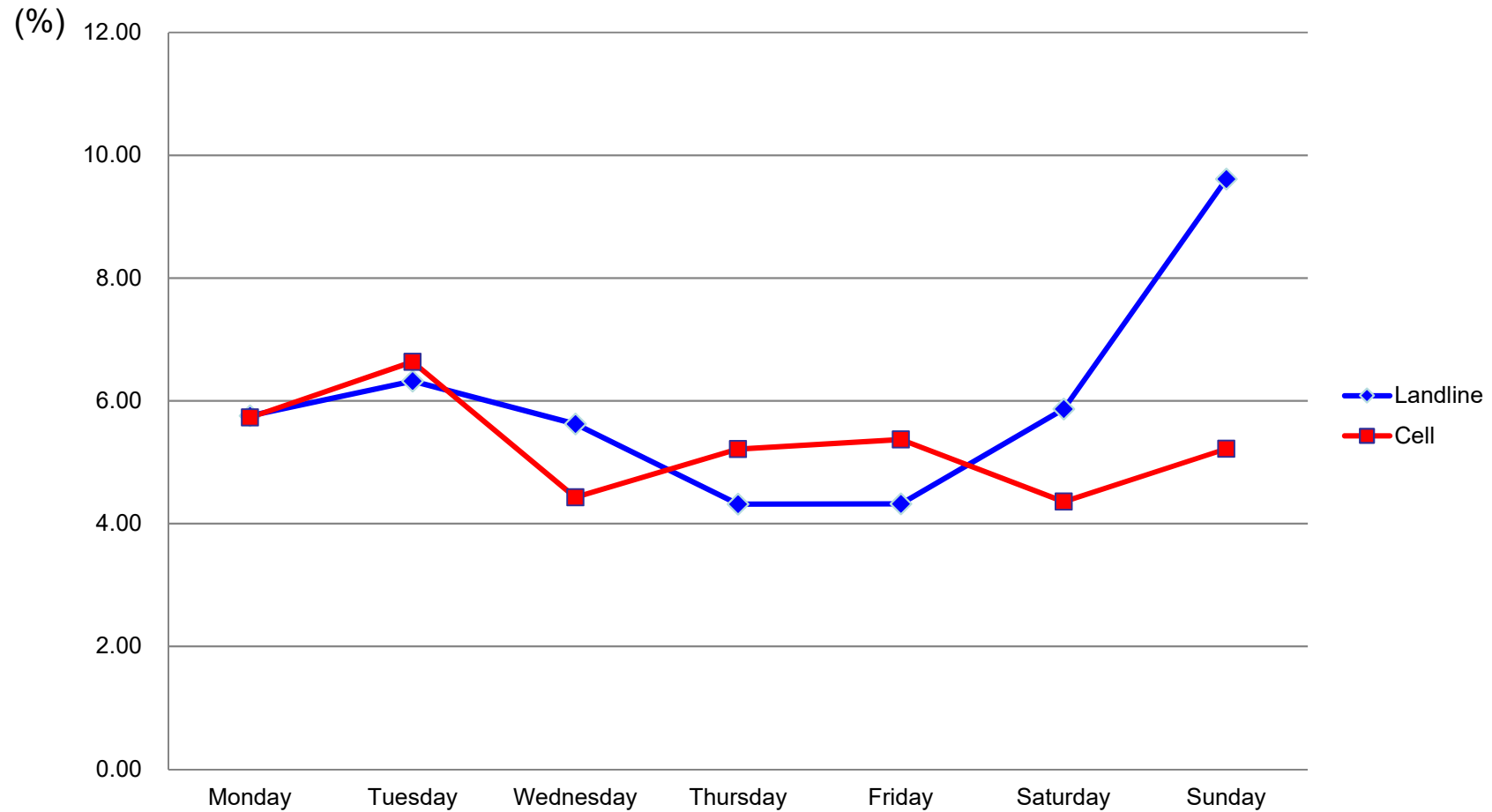
# Success rates by call attempts

- **Total attempts** (Landline: 15,279, Cell: 11,493)



# Landline vs. Cell in Korea

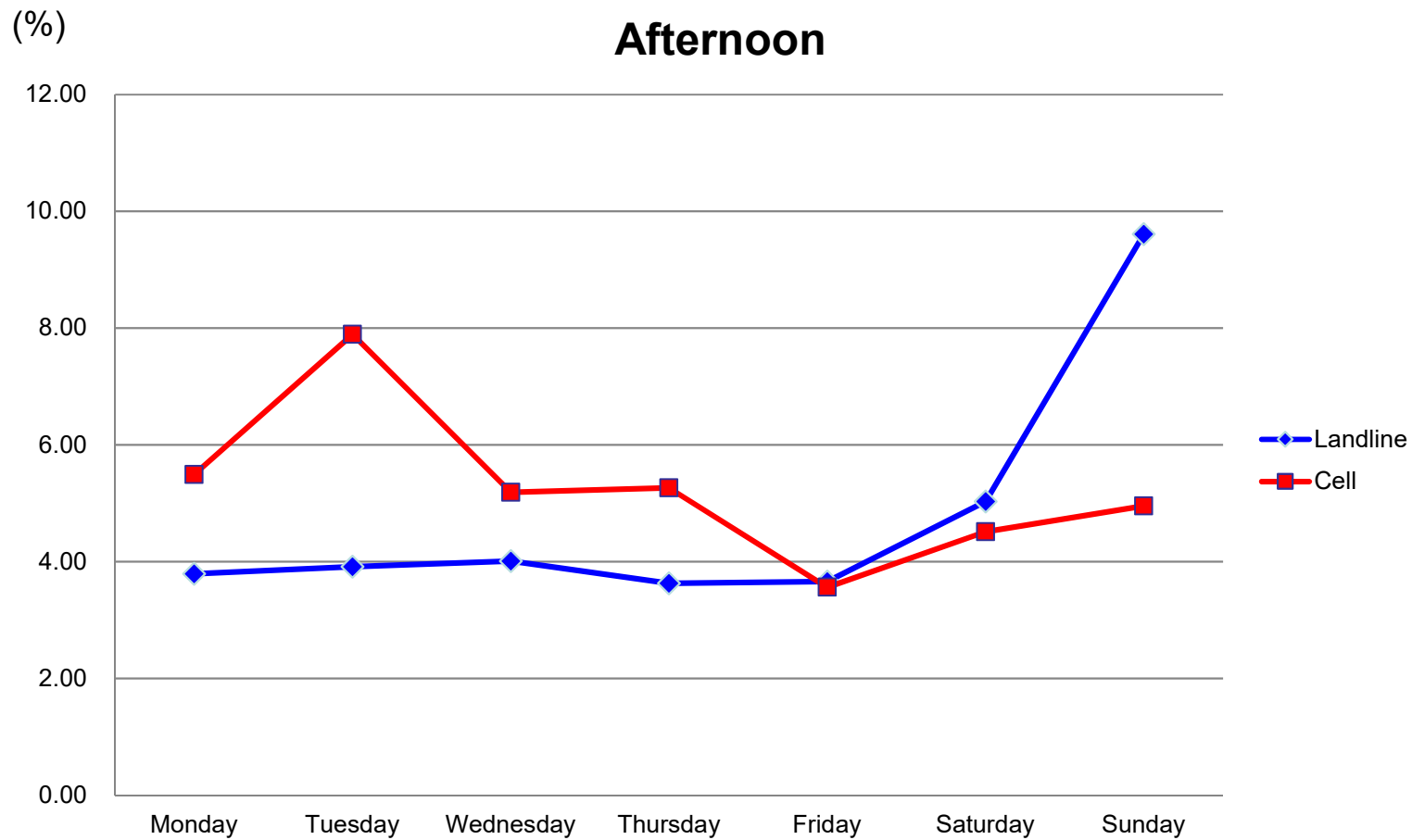
## ■ Success rates by day of week





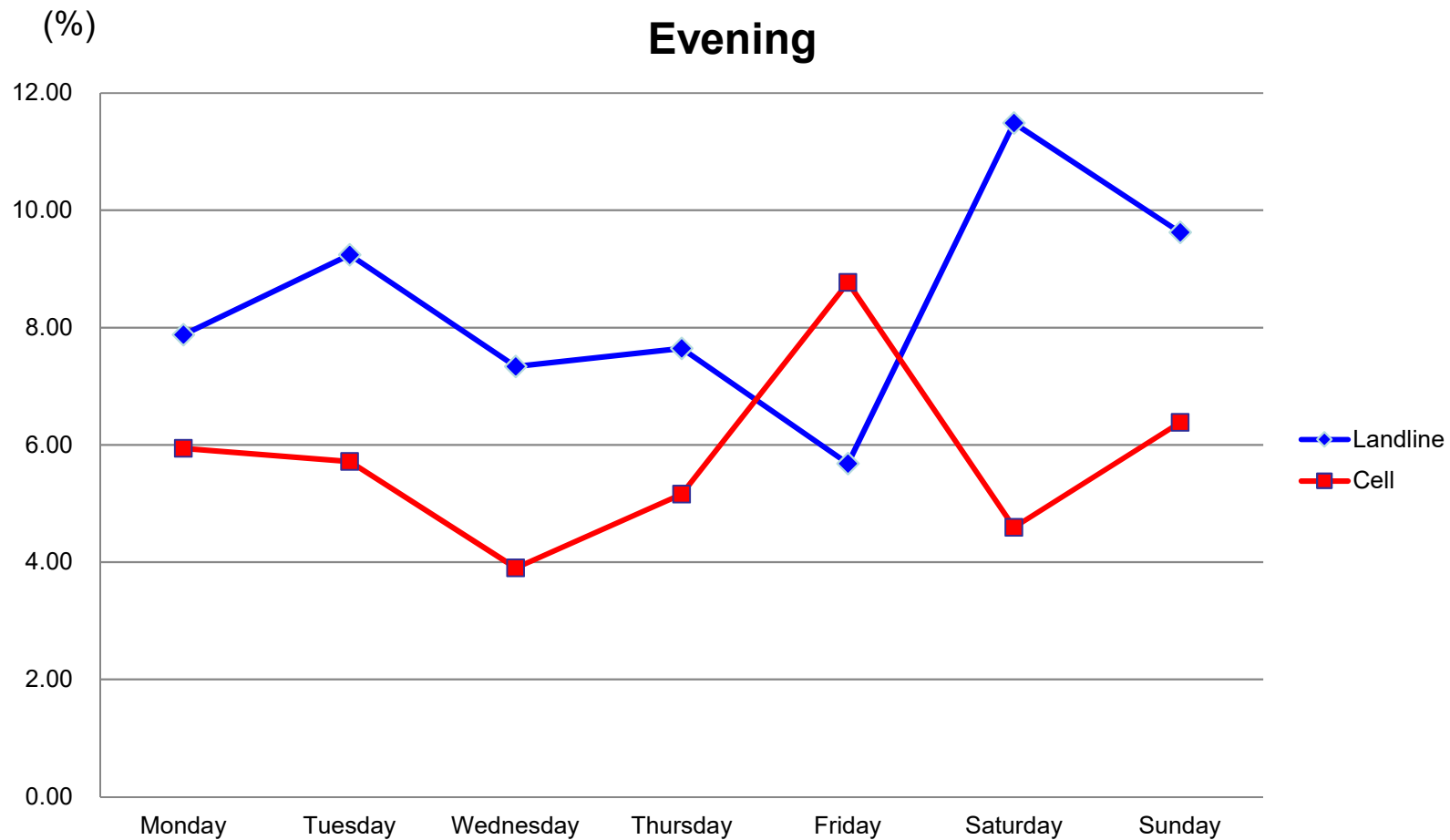
# Landline vs. Cell in Korea

## ■ Success rates by day of week (Time 12:00 – 18:00)



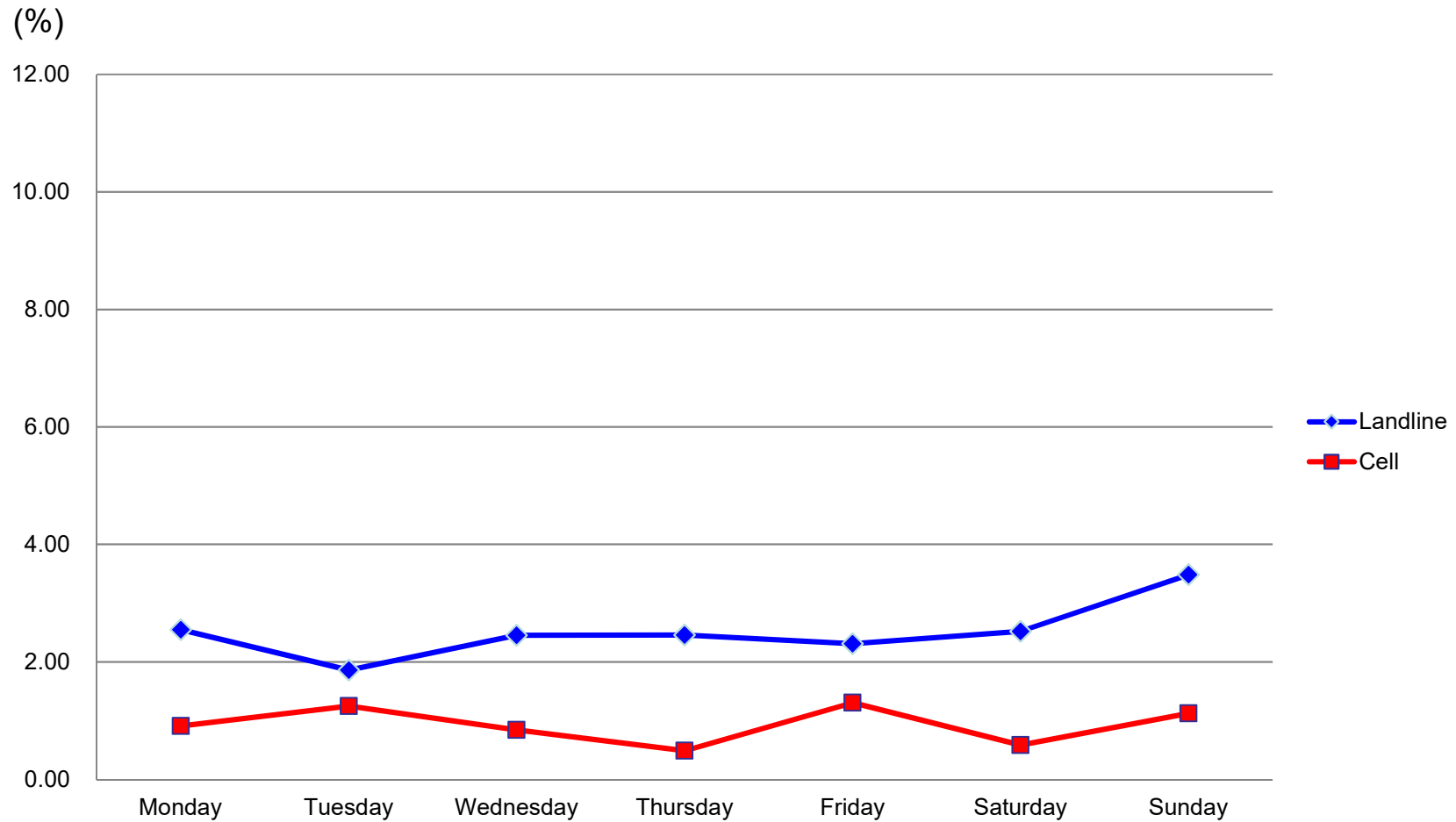
# Landline vs. Cell in Korea

## ■ Success rates by day of week (Time 18:00 – 21:00)



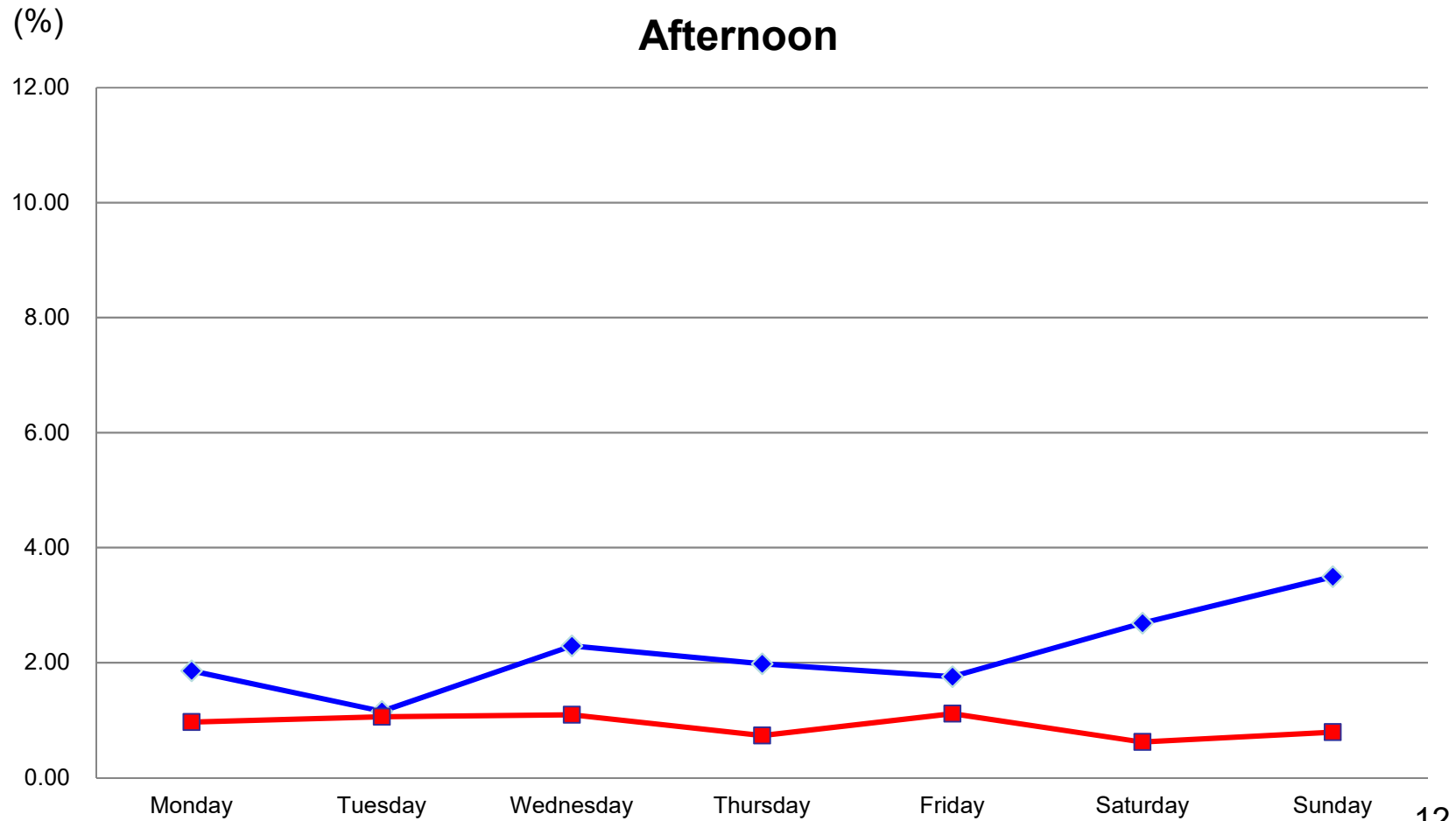
# Landline vs. Cell in Korea

## ■ Refusal rates by day of week



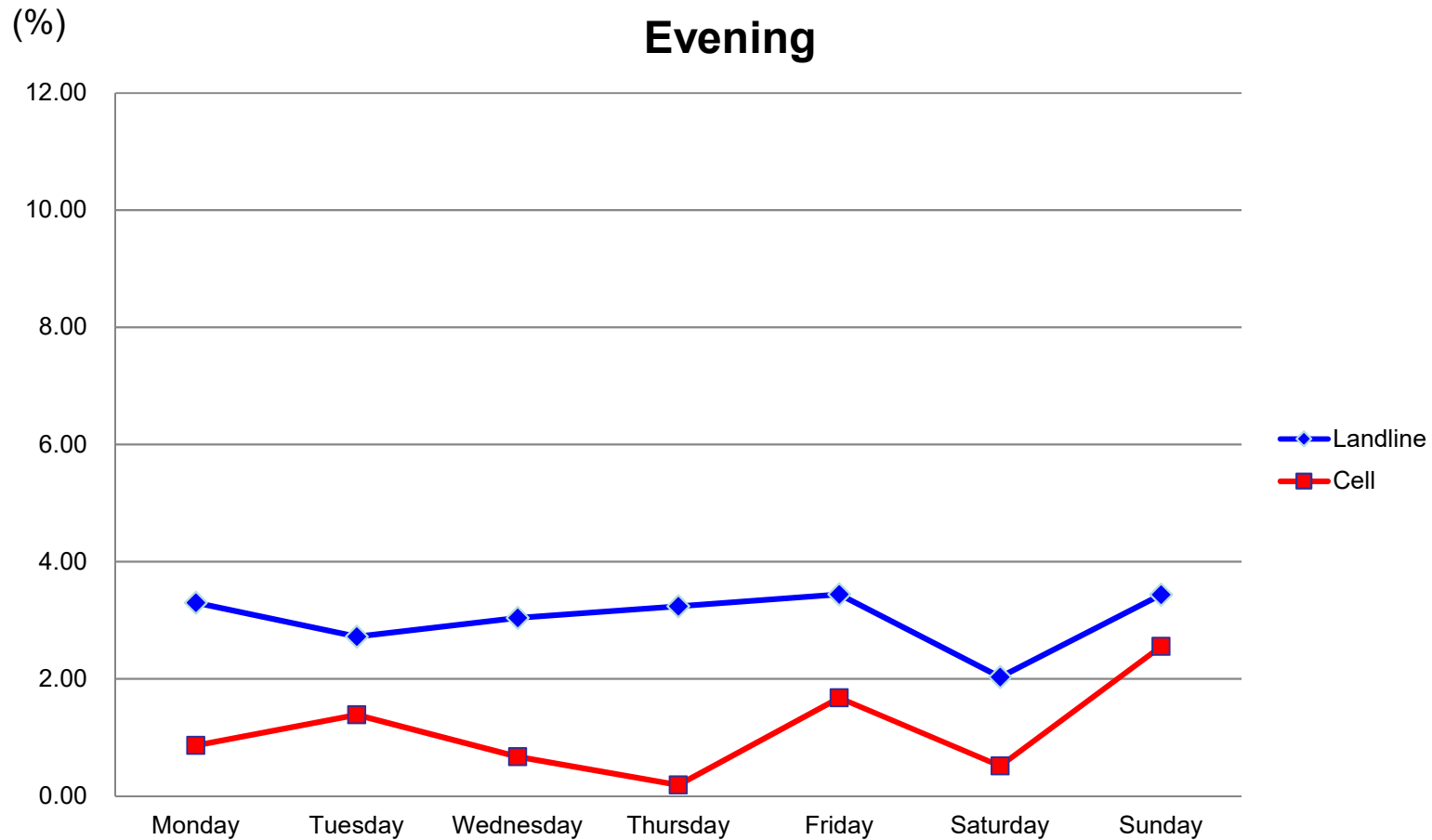
# Landline vs. Cell in Korea

## ■ Refusal rates by day of week (Time 12:00 – 18:00)



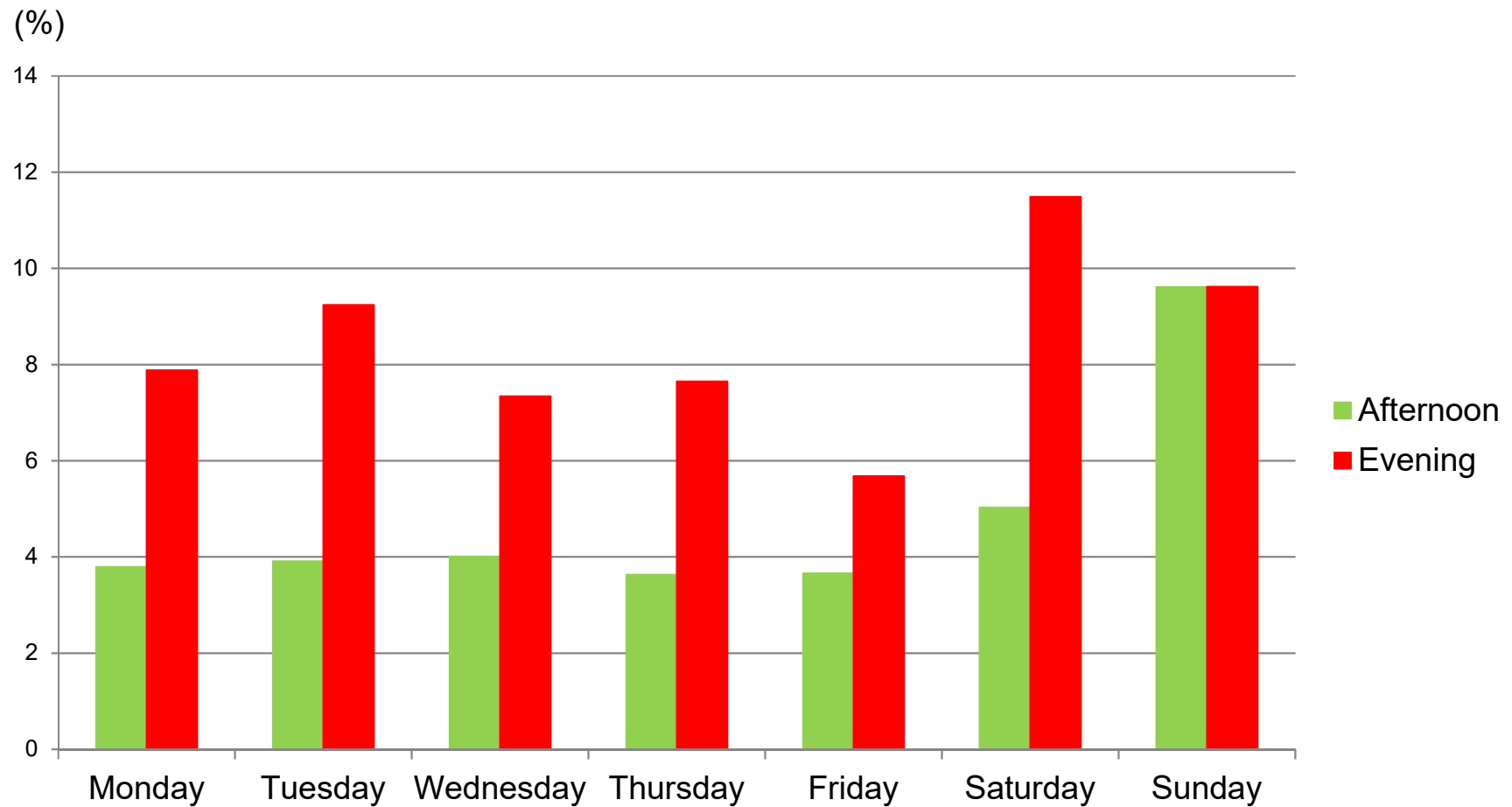
# Landline vs. Cell in Korea

## ■ Refusal rates by day of week (Time 18:00 – 21:00)



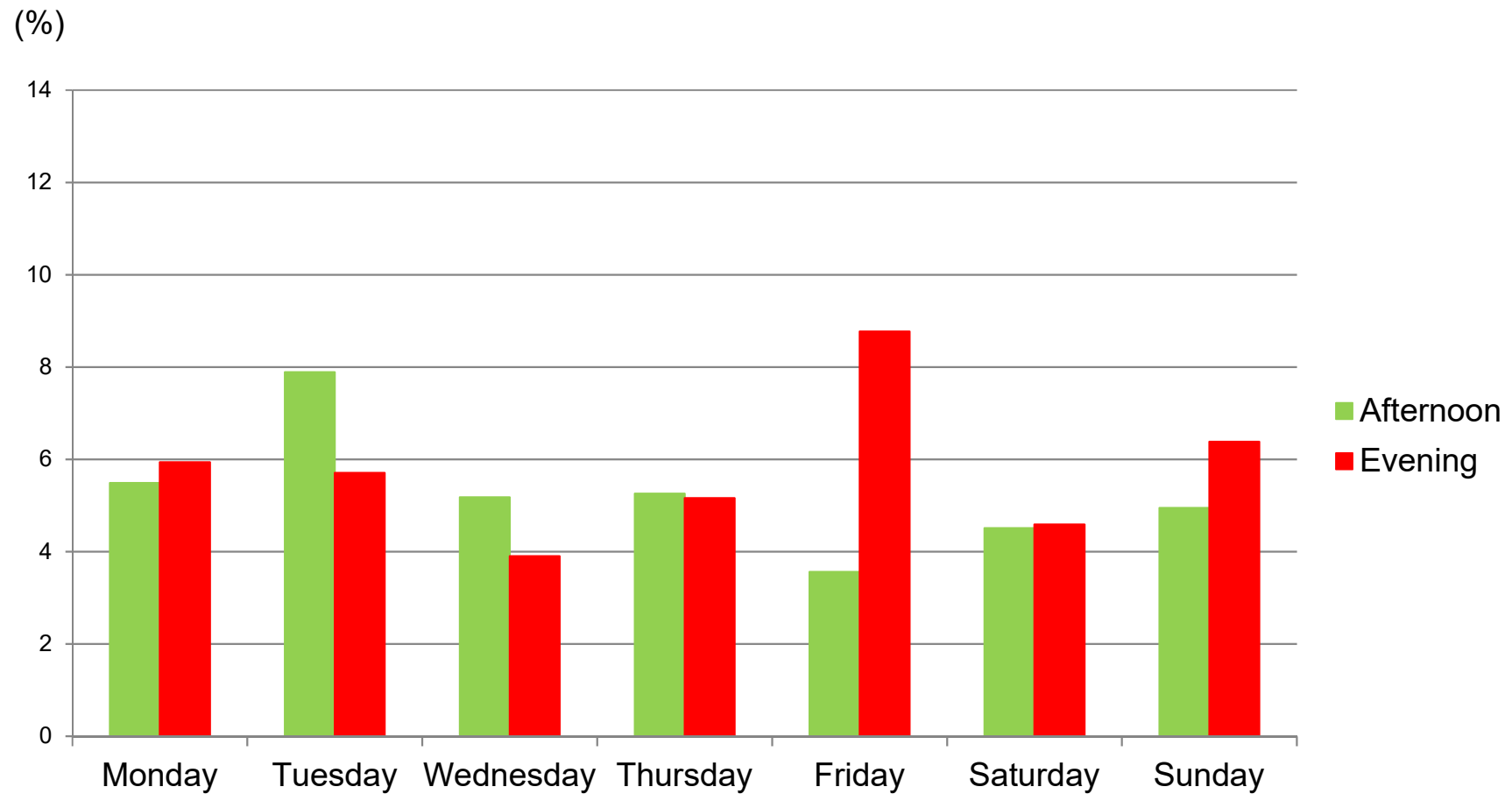
# Success rates in the afternoon and evening : Landline

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# Success rates in the afternoon and evening : Cell phone

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# Conclusion and Implications

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- Response patterns between landline and cell frames vary depending on days and times
- The findings suggest that call schedule strategies need to be made in ways that maximize the success rate in telephone surveys
- Here's our suggestion for call scheduling:

	Afternoon	Evening
Monday	Cell, Landline	Cell, Landline
Tuesday	Cell	Landline
Wednesday	Cell, Landline	Landline
Thursday	Cell, Landline	Cell, Landline
Friday	Cell, Landline	Cell, Landline
Saturday	Cell, Landline	Landline
Sunday	Landline	Landline



**Thank You!**

**Any comments or questions?**

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