

International Conference "Mediatized Worlds: Culture and Society in a Media Age"
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A Mixed Methods Approach to Questions Concerning the Mediatization of Musical Experience

Dr. Steffen Lepa

Audio Communication Group
Technische Universität Berlin

*Postdoctoral Research Fellow of Project 318 „Medien und Emotion“
(coordinated by Prof. Ungeheuer / Prof. Weinzierl / Dr. Maempel)
at Berlin Cluster of Excellence „Languages of Emotion“*

Research Framework

- **Institutional Context and Research Project:**

- Audio Communication Group @ TU Berlin
- LoE-Cluster of Excellence Project 318: „Medium and Emotion“:

“In which ways did/do the various forms of technological mediation transform the experience of emotions while listening to music?”

- “Until the development of the radio and the gramophone, people only heard music when they played it themselves or when they heard other people playing it.” (Clarke, 2007: 47)
- “The transition from artisanal to industrial production transforms not only the technology of distribution but also that which is distributed.” (Adorno 1927/1990: 48)
- **Meta-Theoretical Background:**
 - Medium Theory (McLuhan 1964, Meyrowitz 2008)
 - Affordance Theory (Hutchby 2001, Zilien 2008)
 - Mediatization Theory (Krotz 2001, Hjarvard 2008)
 - Newer Approaches to Media Dispositif Analysis (Zajc 1999, Bührmann & Schneider 2008)

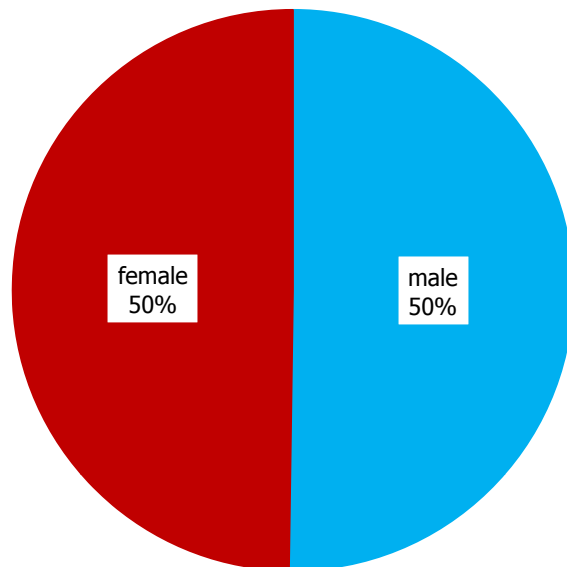
Research Questions and Methodological Approach

- Presented analysis was by-product of the recruitment process for main study
- **Exploratory Research Questions:**
 - Are their distinct usage patterns of technological appliances for listening to music
 - How are these patterns socially distributed (age, sex, education, etc..)?
 - What is the psychosocial / biographical meaning of these patterns?
 - Do certain patterns tend to evoke different affective experiences than others?
- **Methodological Approach:**
 - **Critical Realist Media Research** (Schröder et al. 2003, Lepa 2010)
 - Social constructivist informed, but naturalist ontology
 - Convergent validity by triangulation of complementary methodological perspectives
 - **Media Repertoire Analysis** (Hasebrink & Popp 2006)
 - Identify usage patterns on common level of abstraction (technology, provider, genre, ...)
 - Explain patterns by structural, positional and individual variables
 - Validation & deeper comprehension of regularities by interpretive methods

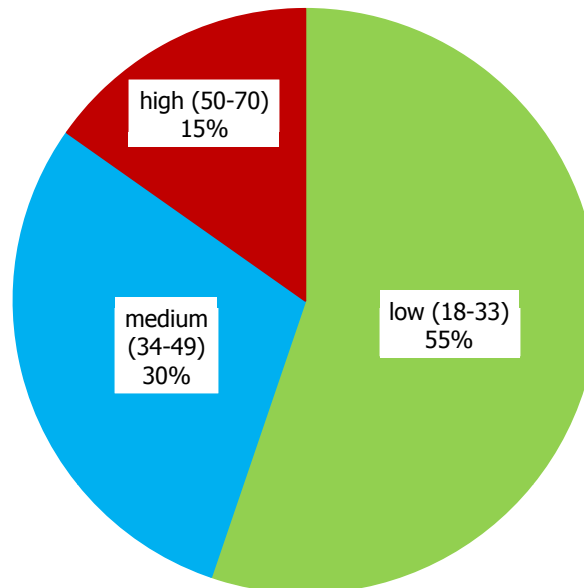
Research Design and Sample Statistics (n=440)

- **Initial Aim:** Identify potential informants/subjects with contrasting usage patterns of music media
- **Convenience Sampling:** Newsletters / announcements on social networks / snowball-emails
- **Online Survey 6-7'2010:** Sociodemogr., Use of Music, Listening Appliances, Musical Preferences
- **Typological Analysis of Recruitment Data:** No intent (or funds) to represent a specific population
- **Narrative Follow-up Interviews (~60 min.):** 18 selected informants to corroborate findings

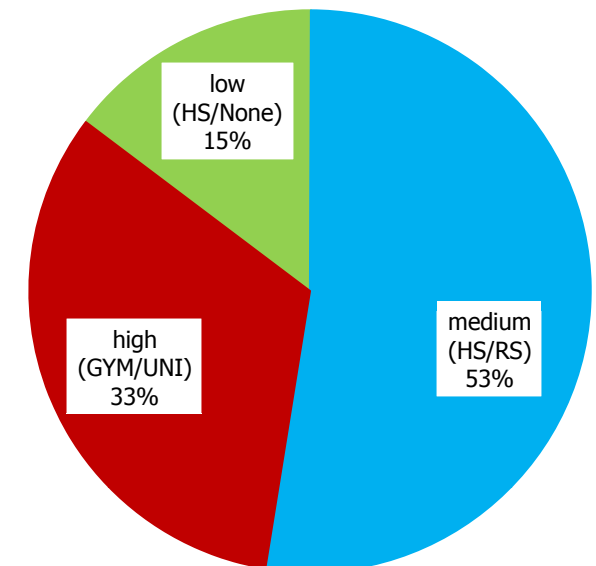
Sex



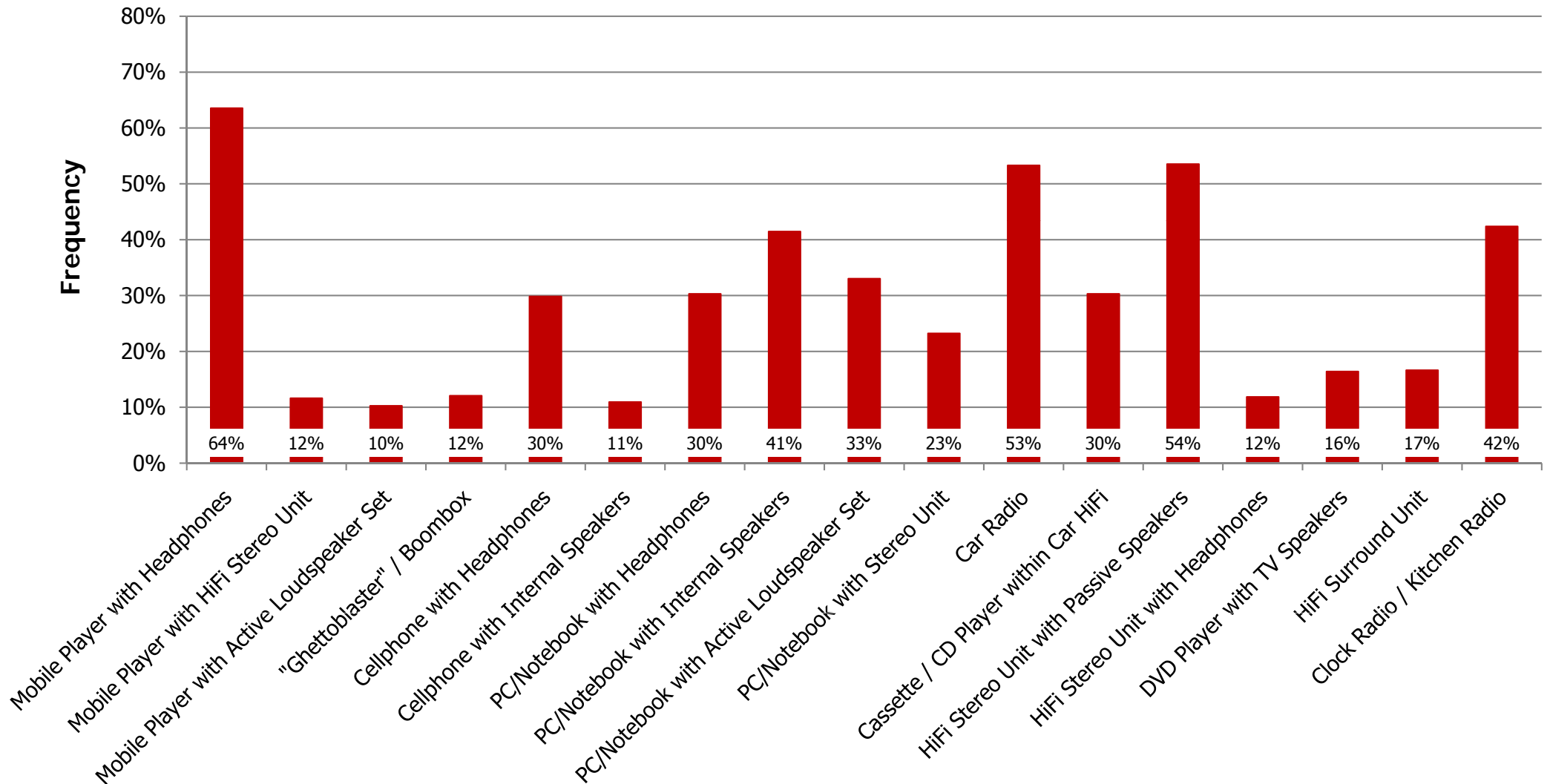
Age
(categorized)



Educational Background
(categorized Index)

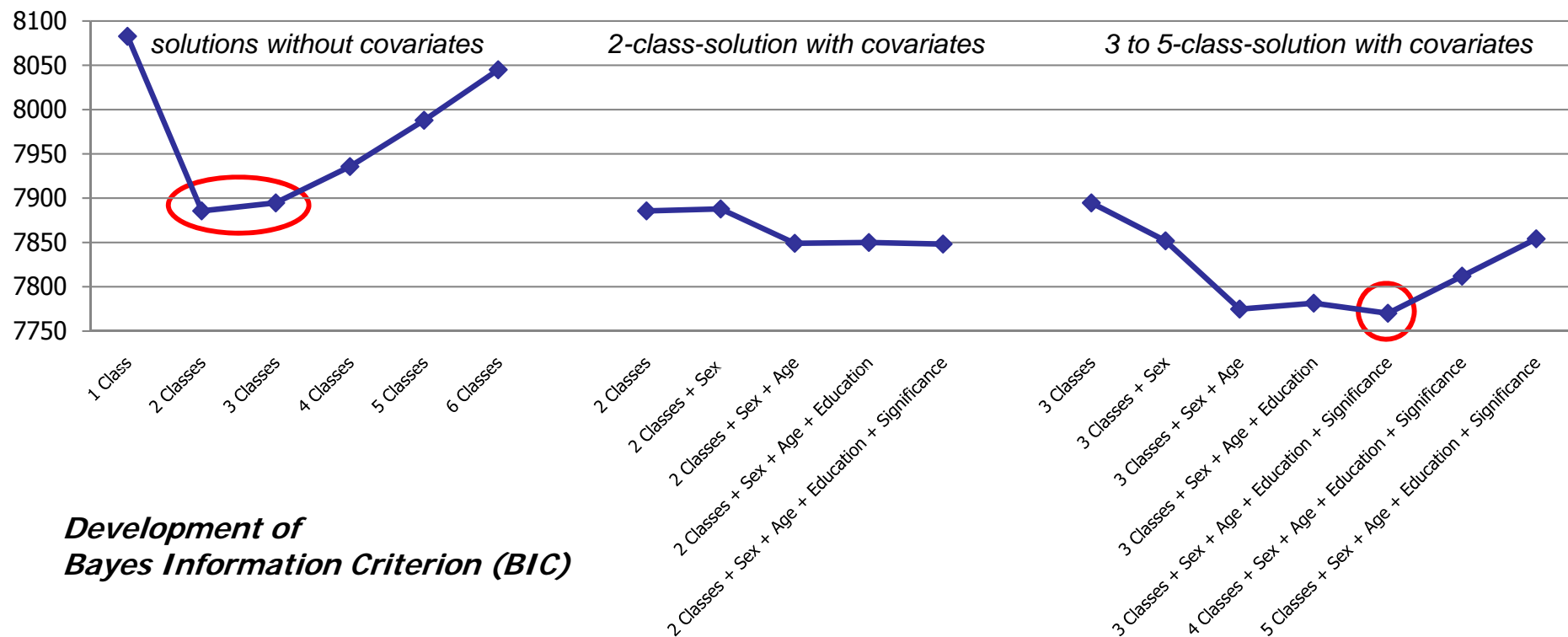


Music Listening Appliances used within last 12 months

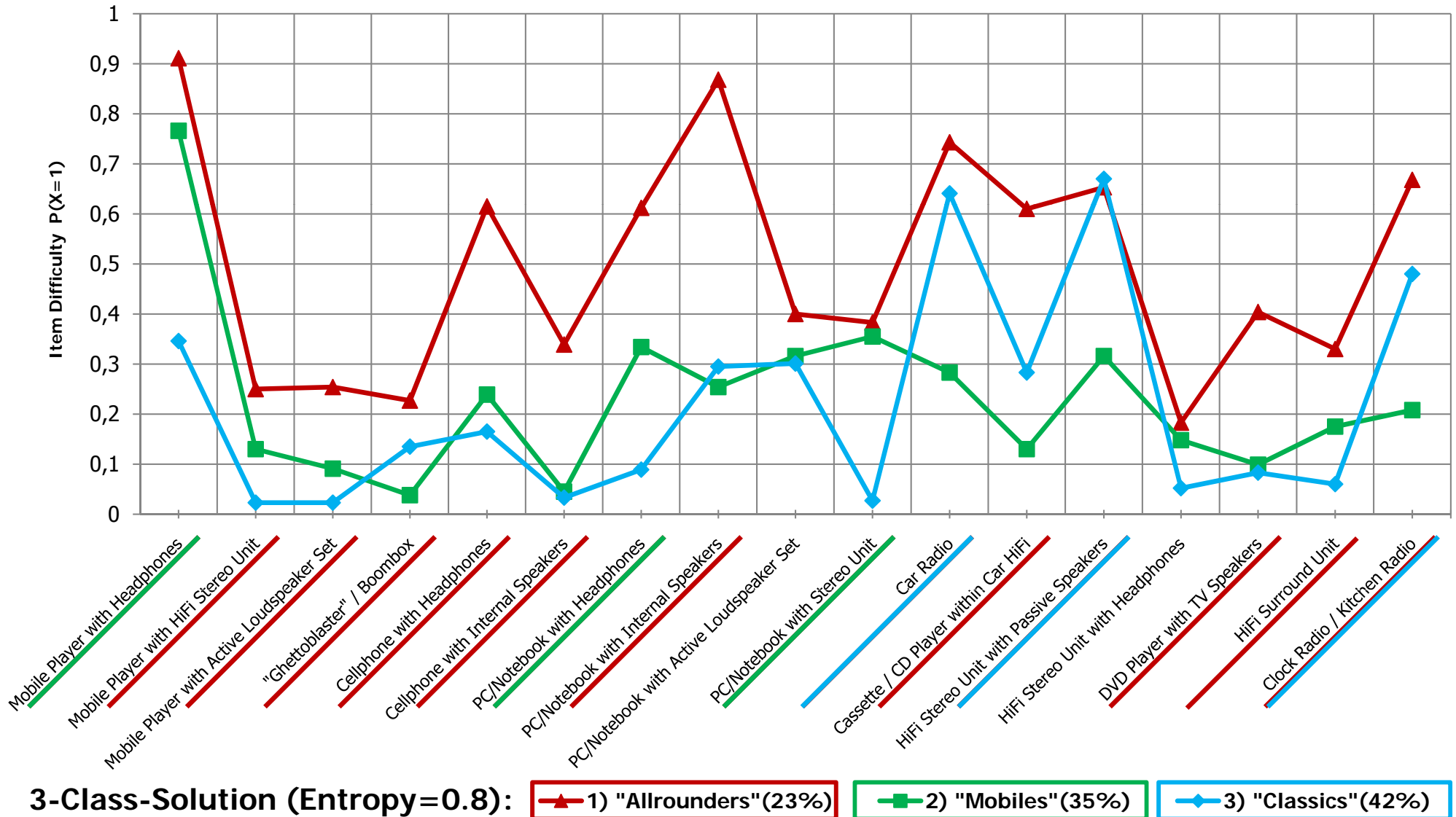


Identification of Latent Usage Patterns

- **Latent Class Analysis (LCA) with Covariates** (Finite Mixture Model, MLR-Estimation, $n=440$)
- **17 Binary Indicators** for music listening appliances “used/not used within last 12 months” (Criterion for Indicator Inclusion: Significance of Wald-statistic for at least 1 class threshold)
- **4 Covariates:** “Age”, “Sex”, “Educational Background”, “Significance of Music in Life” (Criterion for variable inclusion: Satorra-Bentler-adjusted LR-Test $p < 0.05$)
- Criterion for **Determining Number of Classes:** Lowest BIC-Value, VLMR-Test $p < 0.05$



Profiles of identified Latent Classes



3-Class-Solution (Entropy=0.8): ▲ 1) "Allrounders"(23%) ■ 2) "Mobiles"(35%) ◆ 3) "Classics"(42%)

Deeper Understanding of Identified Usage Patterns

1. Narrative-biographical interviews with typical class members

- 18 Informants with class membership probability coefficients $> 0,9$
- Approximately 60 minutes lasting, guided narrative-biographical interviews
- Identification of intersubjective similarities by help of Grounded Theory
- focus on technological devices and their psychosocial and affective meaning

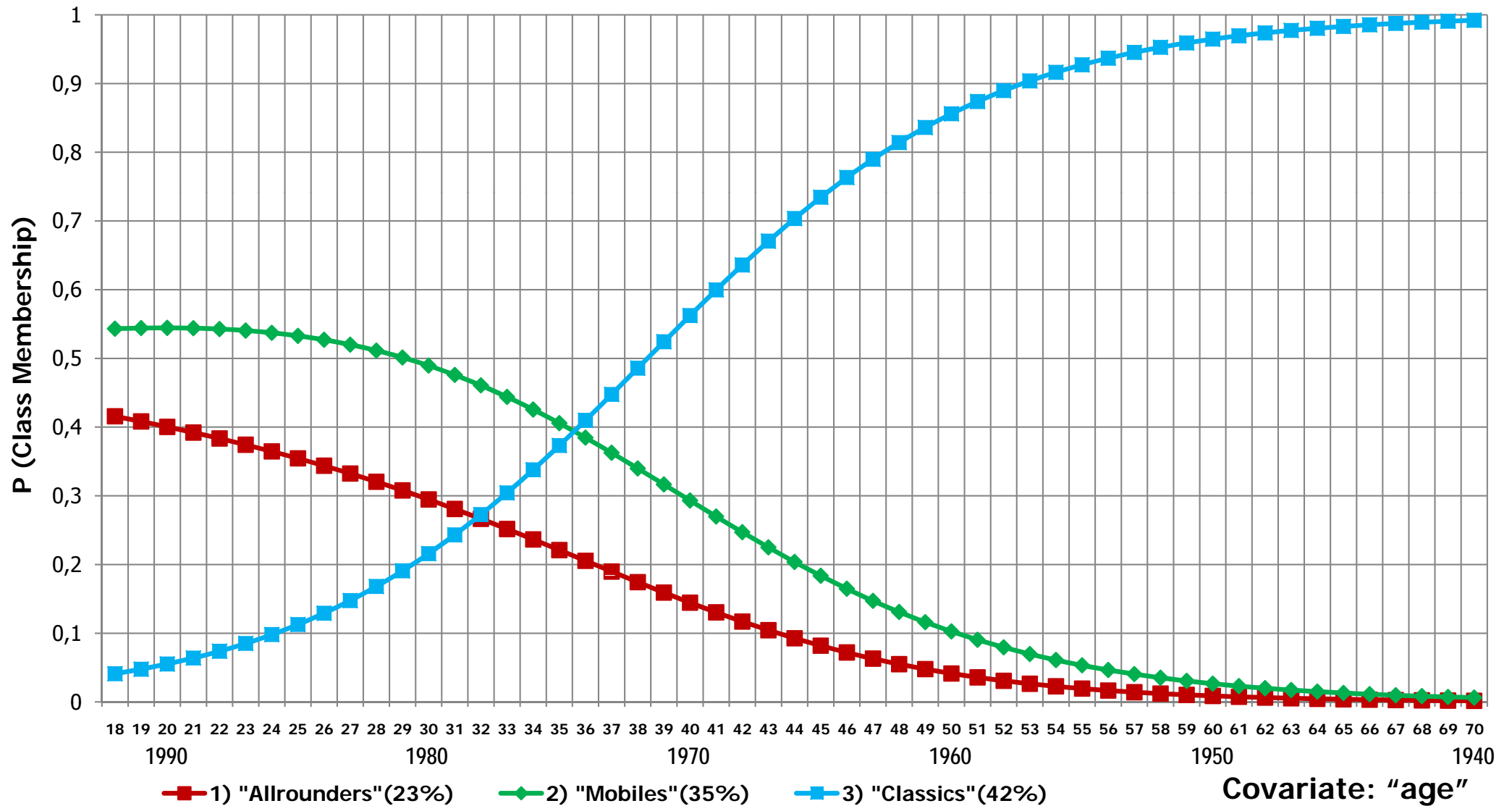
2. Retrodiction of class membership by help of the logistic regression part of the model

- Nagelkerke's $R^2=0.6$ (sex, age, education, significance of music)
- Low multicollinearity (tolerance for all covariates > 0.9 / condition indices < 20)
- All covariates (S-B-adjusted LR-Test $p<0.05$) influence on class membership prob.
- All except „Educational Backgr.“ discriminate (Wald-Test $p<0.05$) between classes

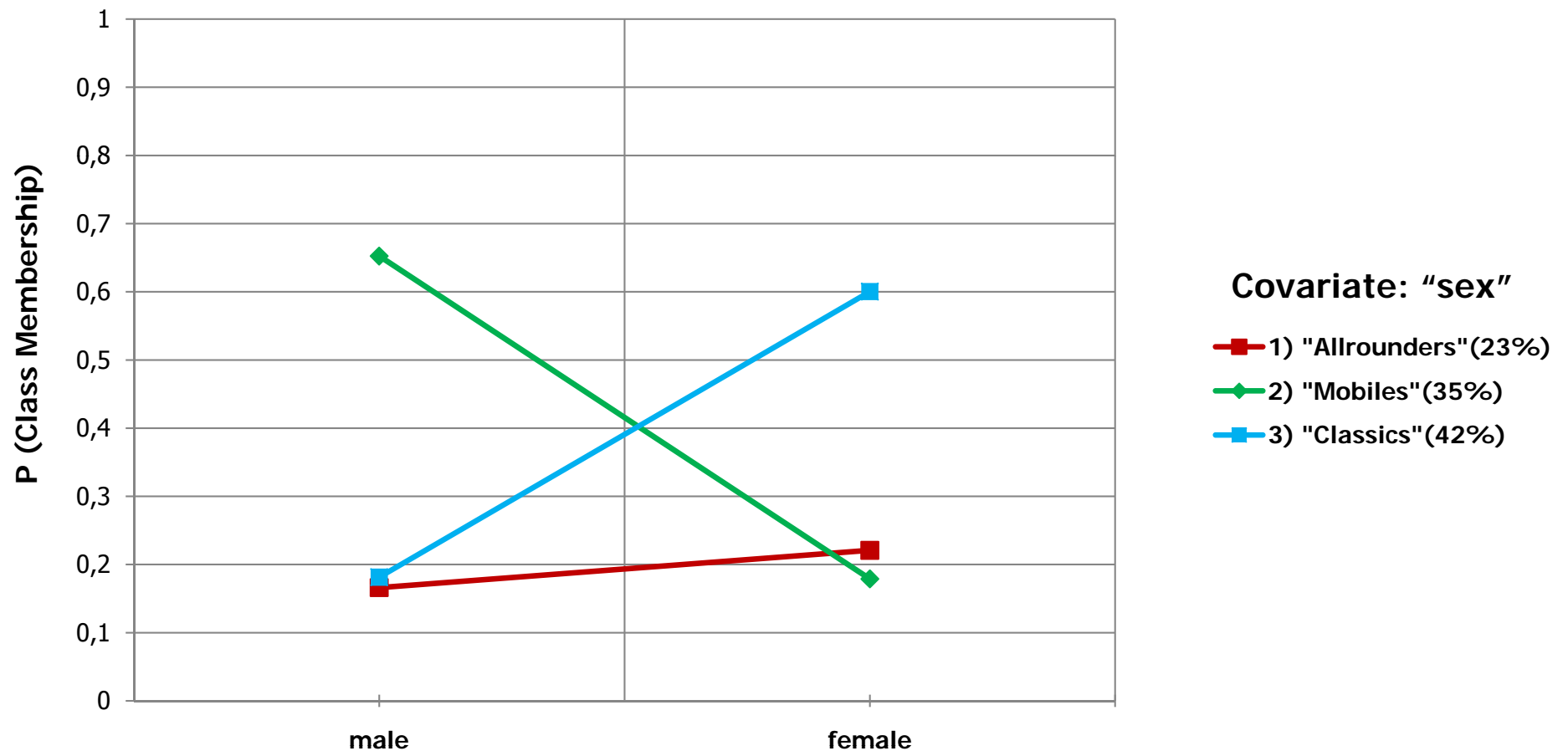
The “Classic” Pattern: *(HiFi stereo unit, car radio and kitchen/clock radio)*

- **Biographical development of device preferences:**
 - Early experiences with Radio / Music Box / HiFi stereo unit of parents
 - Own device not until late youth / early adulthood
- **Affective affordances of music:**
 - Music as affective-bodily resource during other primary activities
 - Music as accompanying affective-symbolic resource
- **Rejection of mobile and headphone listening practices**
- **Smaller content repertoire**
- **Lesser overall significance of music**

Retrodiction of Pattern Membership Probabilities



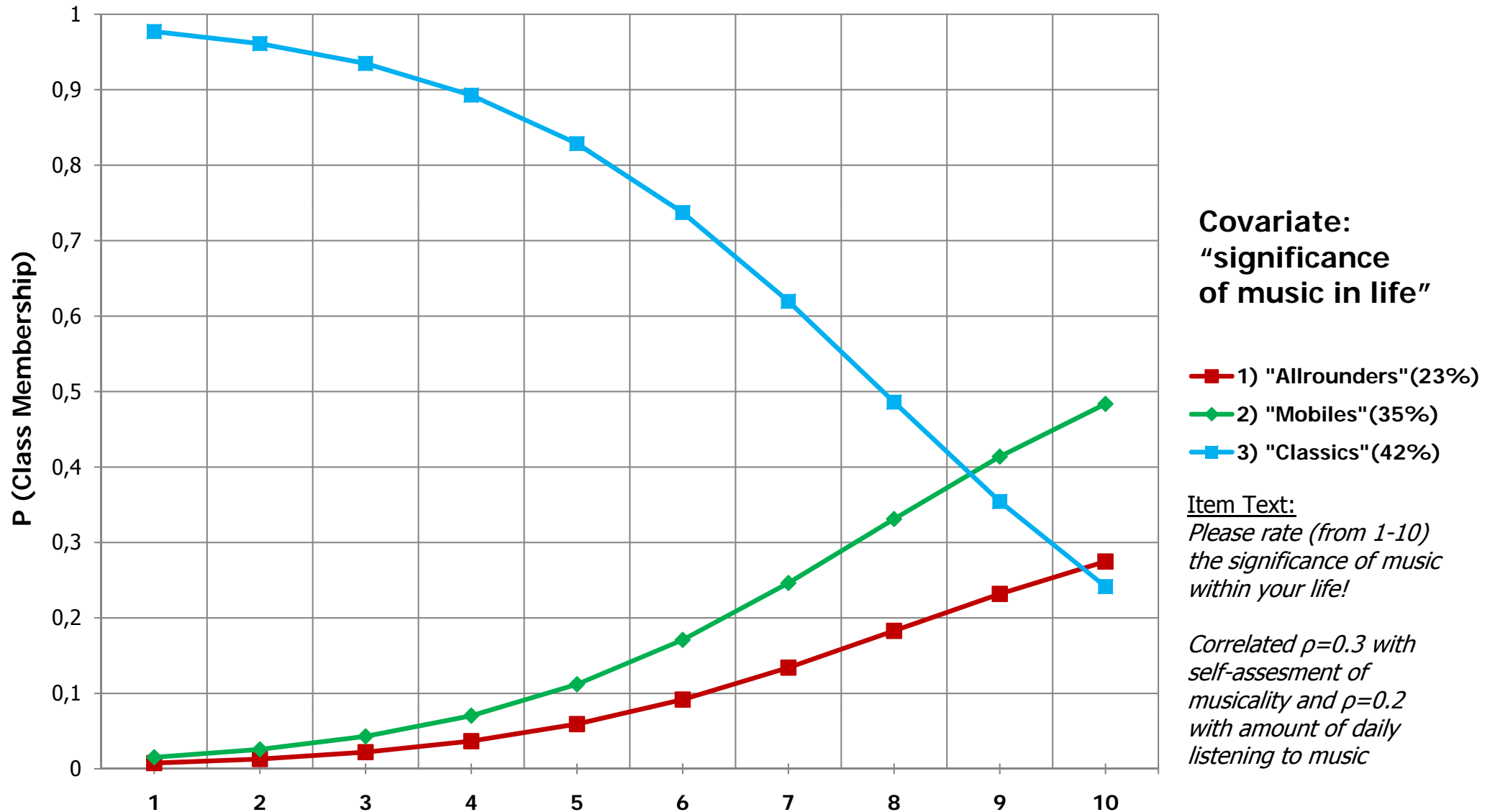
Retrodiction of Pattern Membership Probabilities



The "Mobile"-Pattern: *(Mobile player, PC/notebook with headphones or stereo unit)*

- **Biographical development of device preferences:**
 - Early possessors of own cassette recorders / mobile players
 - Rejection of 'holiness' of family appliance
 - Members of cassette / CD burning / filesharing community
- **Affective affordances of music:**
 - Music as affective-bodily resource and ("indispensable") primary activity
 - Music as accompanying affective-symbolic resource (similar to "Classics")
- **Functional divide of technology use:**
 - Headphones preferred for solipsistic listening
 - Speakers used when listening with others

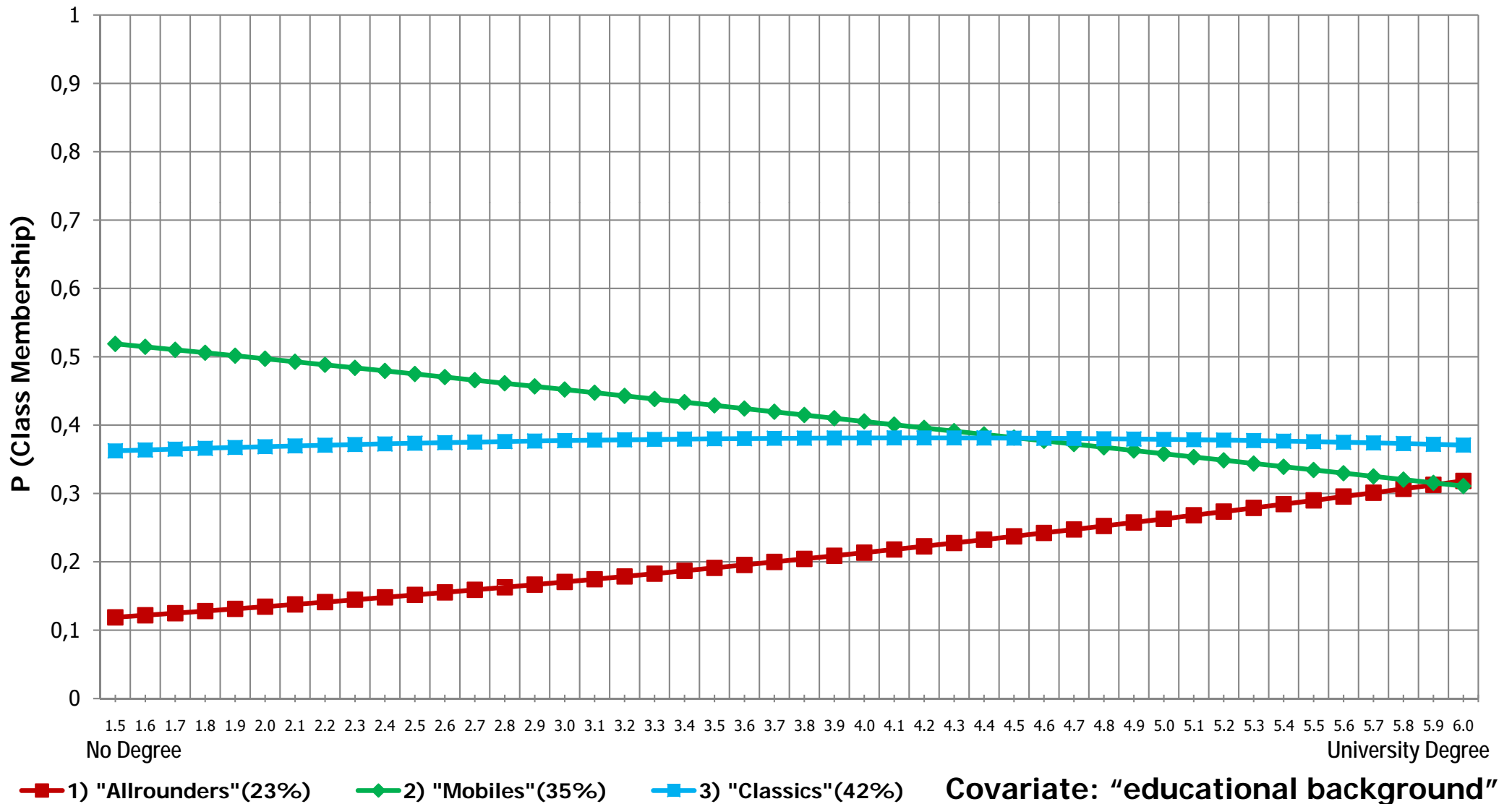
Retrodiction of Pattern Membership Probabilities



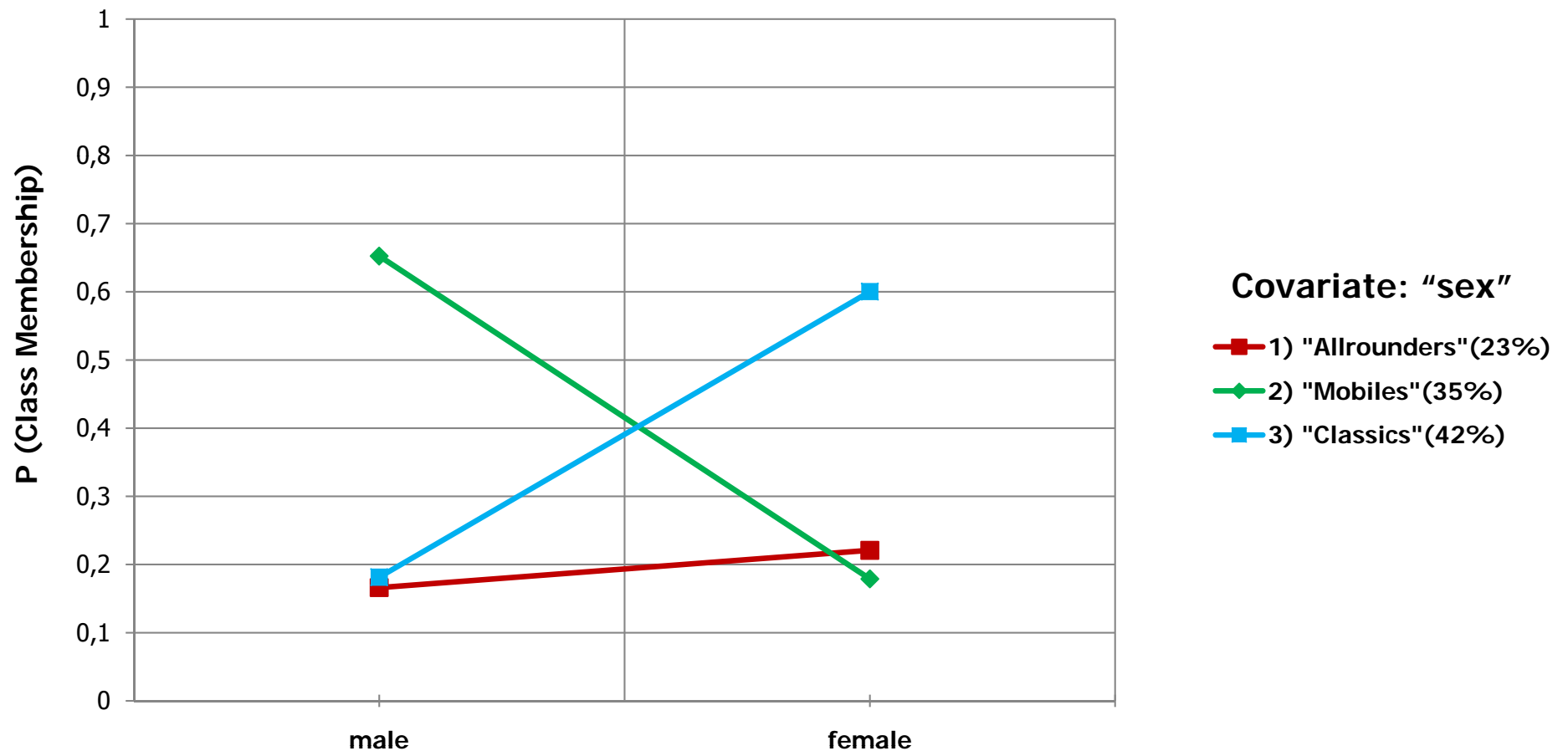
The “Allrounder”-Pattern: *(all, esp. cellphone/notebook spk./ DVD+TV)*

- **Biographical development of device preferences:**
 - Early experiences with HiFi stereo unit of parents (but no sanctuary)
 - Early possessors of own cassette recorders / mobile players / PC
 - Diverse heterogenous experiences
- **Affective affordances of music:**
 - As described by “Mobiles” and “Classics”
 - emphasis on feeling a “musical” identity
- **Stressing the different qualities of different appliances:**
 - Audio quality
 - Bodily experience
 - Mobility of devices / Shareability of content
 - Sociality
 - Surplus of AV media
 - Nostalgic Memories

Retrodiction of Pattern Membership Probabilities



Retrodiction of Pattern Membership Probabilities



Conclusions

- Approach enables **“thick” descriptions and deeper understanding of macro-level media repertoire clusters**
- **Mediation perspective:**
 - Headphone listening technologies seem to afford different emotional qualities than speaker-based listening technologies. But why?
 - Narrative Media Dispositif Analysis (Lepa & Geimer in press, Lepa in press)
 - „Blind“ experimental laboratory study (conducted at present)
- **Mediatization perspective:**
 - While “Classics” resisted technological change as long as possible, “Mobiles” quickly embraced new technological developments
 - Change in moral economy of the family (Silverstone 2006: 238)?
 - “Allrounder“-pattern still somewhat mysterious



Thank you for your patience!