Group Decision Making is Impaired by Opinion Exchange When Members Like Each Other

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Overview

1. Effect of opinion exchange on group decision making (GDM)

2. Hypothesis: Interpersonal liking enhances the effect of other variables (e.g., opinion exchange) on GDM

3. Results of three own studies

4. Summary and theoretical implications

5. Practical implications
Group Decision Making (GDM) is Impaired by Opinion Exchange

- Groups often fail in decision-making tasks
  - when they have to integrate each member’s unshared information to identify best alternative (Brodbeck, Kerschreiter, Mojjzisch, & Schulz-Hardt, 2007; Stasser & Titus, 1985; Wittenbaum, Hollingshead, & Botero, 2004).

= in hidden-profile tasks

- One reason: Early opinion exchange on members’ decision preferences
  - reduced systematic information processing (Mojzisch & Schulz-Hardt, 2008)
  - reduced decision quality (Gigone & Hastie, 1993; Mojjzisch & Schulz-Hardt, 2008)
Hypothesis: Interpersonal Liking Enhances Effect of Preference Exchange on GDM

<table>
<thead>
<tr>
<th>Need for Similarity</th>
<th>Interpersonal Liking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation of ...</td>
<td></td>
</tr>
<tr>
<td>Cognitions</td>
<td>E.g., adapting own preferences</td>
</tr>
<tr>
<td>Actions</td>
<td>E.g., imitation</td>
</tr>
<tr>
<td>Similarity between Group Members</td>
<td>Enhancement of Prevalent Processes</td>
</tr>
</tbody>
</table>
Existing Evidence: Group Cohesion Enhances Effects of other Variables on GDM

- Directive Leadership
- Explicit Decision Procedures
- Goal Acceptance
- Group Cohesion
- Group Decision Quality
- Group Performance

Positive effect
Negative effect
Moderating effect

(metaanalysis of Mullen, Anthony, Salas, & Driskell, 1994)
(Podsakoff, MacKenzie, & Ahearne, 1997)
Hypothesis: Interpersonal Liking Enhances Effect of Preference Exchange on GDM

- Partner Expresses Preference → Focus on Preferences in Discussion Behavior and Cognitive Processing
- Partner is Likable → Systematic Information Processing
- Systematic Information Processing → Decision Quality

- positive effect
- negative effect
- moderating effect

Decision Quality
### Three Studies: Methods

<table>
<thead>
<tr>
<th>Study 1</th>
<th>Study 2</th>
<th>Study 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 groups of 3 familiar members</td>
<td>123 single individuals</td>
<td>77 single individuals</td>
</tr>
<tr>
<td>Real face-to-face interaction</td>
<td>Anticipated face-to-face interaction with a female partner</td>
<td></td>
</tr>
<tr>
<td>Hidden-profile task</td>
<td>Judgmental task</td>
<td></td>
</tr>
</tbody>
</table>

#### Interpersonal liking
- Measured before discussion
- Manipulated in “first experiment on person perception” by self presentation of “partner” on a video in likable or dislikable way

#### Preference exchange / Partner’s preference expression
- Observed in discussion
- Manipulated by „initial” audio statement of the “partner” (preference + information vs. only information)
Hypothesis: Interpersonal Liking Enhances Effect of Preference Exchange on GDM

Systematic Information Processing

Partner Expresses Preference

Focus on Preferences in Discussion Behavior and Cognitive Processing

Decision Quality

Partner is Likable

positive effect

negative effect

moderating effect

Study 1 (Real Interaction): Liking Enhances Effect of Preference Exchange on Decision Quality

Decision quality = Reversed rank position of correct alternative in group decision

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preference exchange</td>
<td># -0.83</td>
</tr>
<tr>
<td>Liking</td>
<td>* 2.14</td>
</tr>
<tr>
<td>Pref. exch. $\times$ liking</td>
<td># -1.02</td>
</tr>
</tbody>
</table>

Ordinal regression with z-standardized predictors

Means estimated by procedures of Aiken and West (1991)

# $p<.10$    * $p<.05$    ** $p<.01$
(hypotheses one-tailed)
Study 2 (Anticipated Interaction): Liking Enhances Effect of Preference Expression on Decision Quality

Decision quality = Reversed rank position of correct alternative in individual decision after unlimited time to listen to partner's statement

- Preference expression: -.16
- Liking: .14
- Pref. expr. x liking: * -.42

Ordinal regression with z-standardized predictors
Means estimated by procedures of Aiken and West (1991)

# p<.10    * p<.05    ** p<.01 (hypotheses one-tailed)
Hypothesis: Interpersonal Liking Enhances Effect of Preference Exchange on GDM

- Partner Expresses Preference
- Focus on Preferences in Discussion Behavior and Cognitive Processing
- Systematic Information Processing
- Decision Quality

- Partner is Likable
- positive effect
- negative effect
- moderating effect

Study 1 (Real Interaction): Liking Enhances Effect of Preference Exchange on Systematic Information Processing

**Systematic information processing** = z(information introduced into discussion) + z(individual recall of new information after discussion)

**Graph**

- **Predictor** | **β**
  - Preference exchange | **-0.44**
  - Liking | 0.15
  - Pref. exch. x liking | * -0.35

Multiple regression with z-standardized predictors

Means estimated by procedures of Aiken and West (1991)

# p<.10 * p<.05 ** p<.01 (hypotheses one-tailed)
**Study 2 (Anticipated Interaction): Liking Enhances Effect of Preference Expression on Systematic Info Processing**

**Systematic information processing** = Factor score (time for final decision, words on note paper, evaluative signs on note paper)

![Graph showing the relationship between Systematic Info Processing and Liking](chart)

<table>
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<tr>
<th>Predictor</th>
<th>β</th>
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<tbody>
<tr>
<td>Preference expression</td>
<td><strong>-.26</strong></td>
</tr>
<tr>
<td>Liking</td>
<td>.01</td>
</tr>
<tr>
<td>Preference expr. x liking</td>
<td>*-.19</td>
</tr>
</tbody>
</table>

Ordinal regression with z-standardized predictors
Means estimated by procedures of Aiken and West (1991)

# p<.10  * p<.05  ** p<.01 (hypotheses one-tailed)
Hypothesis: Interpersonal Liking Enhances Effect of Preference Exchange on GDM

Partner Expresses Preference → Focus on Preferences in Discussion Behavior and Cognitive Processing → Decision Quality

- Partner is Likable
- Systematic Information Processing

positive effect
dashed: negative effect

moderating effect
**Study 2 (Anticipated Interaction): Liking Enhances Effect of Pref. Expression on Preference-consistent Evaluation**

**Pref.-cons. info evaluation** = Evaluation of consistent info – evaluation of inconsistent info (credibility and relevance, subset of 12 pieces of info)

![Graph](image)

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>$\eta^2$</th>
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<tbody>
<tr>
<td>Preference expression</td>
<td>.00</td>
</tr>
<tr>
<td>Liking</td>
<td>.00</td>
</tr>
<tr>
<td>Pref. expr. x liking</td>
<td><strong>.06</strong></td>
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</tbody>
</table>

ANCOVA with z-standardized dependent variable

Estimated marginal means

# $p<.10$  * $p<.05$  ** $p<.01$

(hypotheses tested one-tailed by contrasts)
Hypothesis: Interpersonal Liking Enhances Effect of Preference Exchange on GDM

Partner Expresses Preference → Partner is Likable → Focus on Preferences in Discussion Behavior and Cognitive Processing → Systematic Information Processing → Decision Quality

- positive effect
- negative effect
- moderating effect
Study 3 (Anticipated Interaction): Liking Produces Imitation of Discussion Behavior

Expression of preferences vs. arguments = \( z[\text{Preference expr. x intensity}] - z[\text{z(different arguments expr.) + z(time to expr. arguments)}] \)

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<th>Source of variance</th>
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<tbody>
<tr>
<td>Preference expression</td>
<td>.01</td>
</tr>
<tr>
<td>Liking</td>
<td>.04</td>
</tr>
<tr>
<td>Pref. expr. x liking</td>
<td>** .14</td>
</tr>
</tbody>
</table>

ANCOVA with z-standardized dependent variable
Estimated marginal means
# \( p<.10 \)  * \( p<.05 \)  ** \( p<.01 \)
(hypotheses tested one-tailed by contrasts)
Summary and Theoretical Implications

- Detrimental effect of preference exchange and promotional effect of information exchange on decision quality only when interpersonal liking is high (study 1 & 2)
- Possible reason: Liking ⇔ Striving for similarity
  - Imitation of discussion behavior (study 3)
  - Imitation of cognitive processing
    - More systematic information processing when partner has presented only information (study 1 & 2)
    - More preference-consistent information evaluation when partner has presented her preference (study 2)
Practical Implications

Enhance **interpersonal liking** in decision-making teams, e.g., by funny teambuilding games
Practical Implications

• YES: Enhance *interpersonal liking* in decision-making teams

• BUT: only when other conditions of high decision quality are secured

• e.g., by a facilitator who structures decision process in a way that *information exchange* precedes *preference exchange*
Thank you very much for your attention!

Questions ...?

Comments ...?