



Arbeits- und Organisationspsychologie mit  
Schwerpunkt Interkulturelle Wirtschaftspsychologie

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# Measuring Intercultural Competence

Development of a German Short-Scale

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# Intercultural Competence is increasingly important



**...in business**

(e.g., Johnson, Lenartowicz, & Apud, 2006; Stehr, 2011)



**...in education**

(e.g., universities: Schumann, 2007; Cushner & Mahon, 2009)



**...in many parts of everyday life**

(e.g., Thomas, 2009)



## General Definition

Intercultural Competence includes “the ability to communicate effectively and appropriately in intercultural situations based on one’s intercultural knowledge, skills, and attitudes”

(Deardorff, 2006, pp. 247-248)





The benefit of a scale measuring intercultural competence is **twofold**:

(Matsumoto & Hwang, 2013)

Improving our knowledge of relevant aspects of the construct



**Clarification of the construct**

Providing a quick overview on someone's competence level



**Help for practitioners in designing effective training programs**

Aim of this study

Development of a comprehensive, but short scale of intercultural competence  
(including its central aspects: the cognitive dimension, the affective dimension and the behavioral dimension)



Aim: To build on existing scales measuring intercultural competencies

## Methods

### *Used scales*

- **Cognitive dimension**: Cultural Intelligence Scale (CQS, Ang et al., 2007)
- **Behavioral dimension**: Intercultural Effectiveness Scale (IES; Portalla & Chen, 2010)
- **Affective dimension**: Intercultural Sensitivity Scale (ISS; Chen & Starosta, 2000; in the German validated version of Fritz & Möllenberg, 1999)

### *Participants*

- German convenience sample (n = 125)

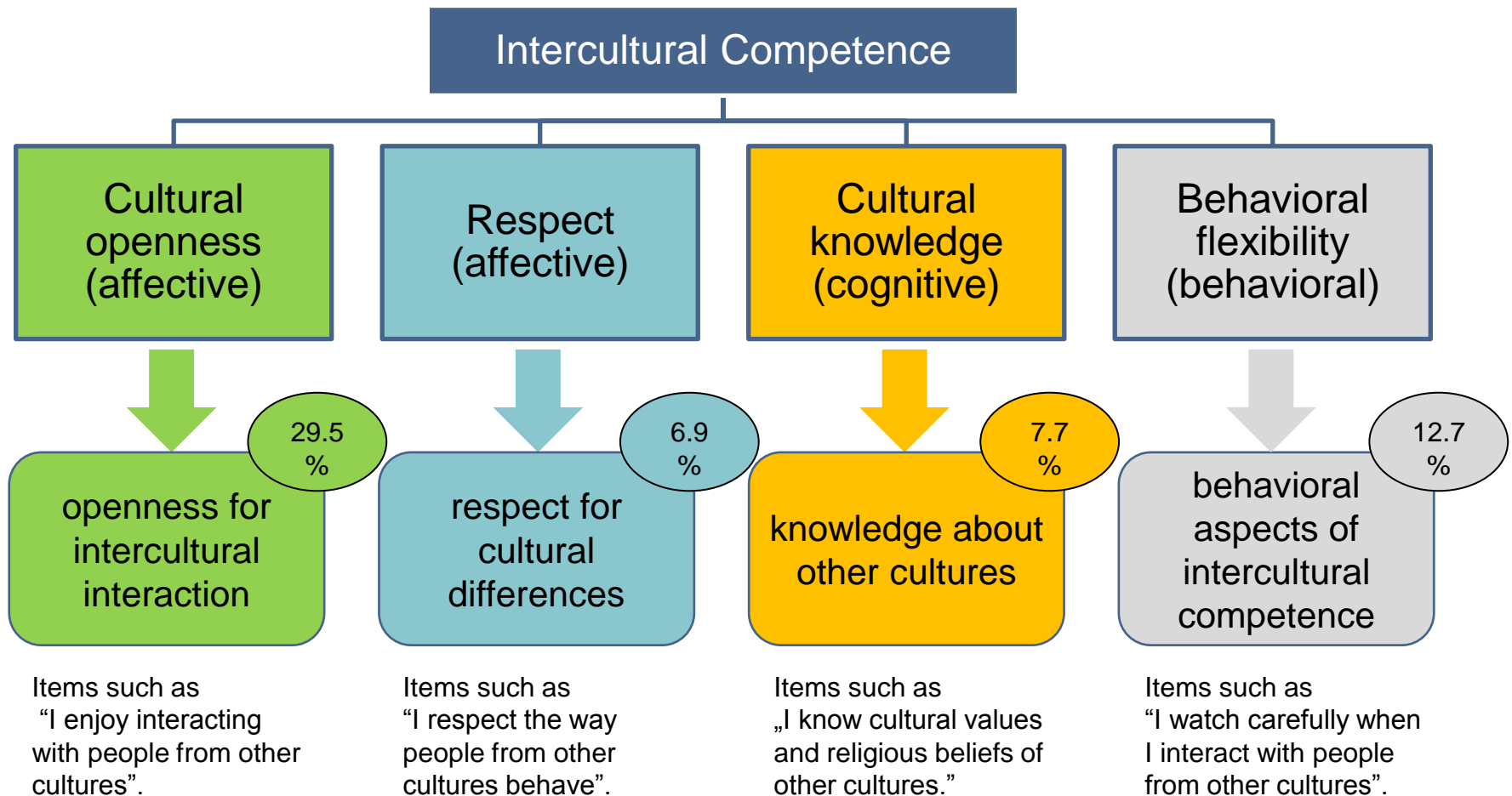
### *Design*

- Online survey
- 4-point response scale (“strongly disagree” to “strongly agree”)

### *Analysis*

- Principle axes factor analysis with an oblique rotation (PROMAX)
- Confirmatory factor analysis via AMOS

# Study 1 – Results: four-factor structure



Significant correlations

**International experience,  
 $r = .142^*$**

**Intercultural training,  
 $r = .193^*$**

**Intercultural training,  
 $r = .247^{**}$**



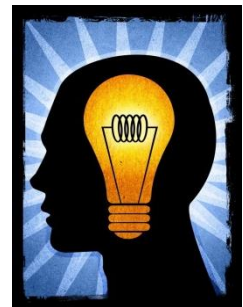


## Self-reflexivity

- ability to reflect on what an individual knows or does not know about one's culture and its implications (Auernheimer, 2002)
- ability to reflect on the influence of culture in intercultural communication or in conflict situations (Rohr, 2002)

Implication

In order to broaden the perspective on intercultural competence, we included items measuring intercultural self-reflexivity.





## Intercultural openness

- openness in the sense of self-disclosure is associated with intercultural self-reflexivity and plays an important role in intercultural trainings (Gudykunst & Hammer, 1983)

Implication

We reframed the items assessing intercultural openness so that they captured both passive and active aspects of openness.





Aim: To refine the resulting measurement instrument

## Methods

### *Additional items and scales*

- Items capturing cultural **self-reflexivity**
- Items capturing an **active component of cultural openness**
- Control scale for **social desirability**: revised 7-item version (Fischer & Fick, 1993; Strahan & Gerbase, 1972) of the Marlowe&-Crowne Social Desirability Scale (M-C SDS; Crowne & Marlowe, 1960)

### *Participants*

- German convenience sample (n = 240)

### *Design*

- Online survey
- 5-point response scale (“strongly disagree” to “strongly agree”)

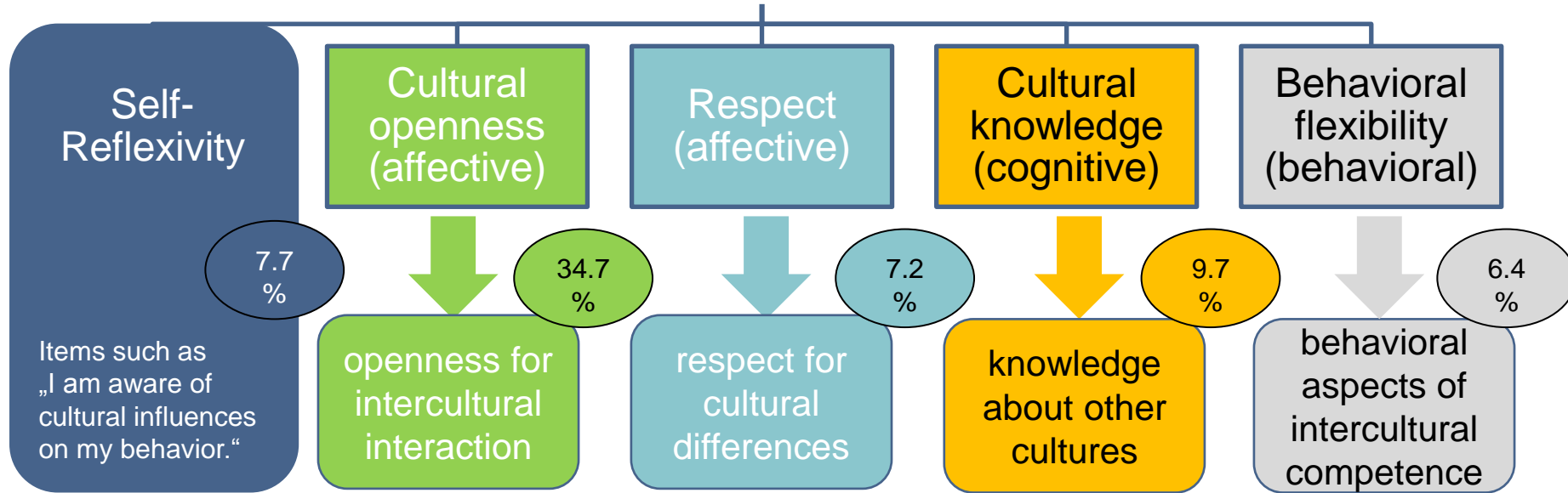
### *Analysis*

- Principle axes factor analysis with an oblique rotation (PROMAX)
- Confirmatory factor analysis via AMOS

# Study 2 – Results: five-factor structure



## Intercultural Competence



### Significant correlations

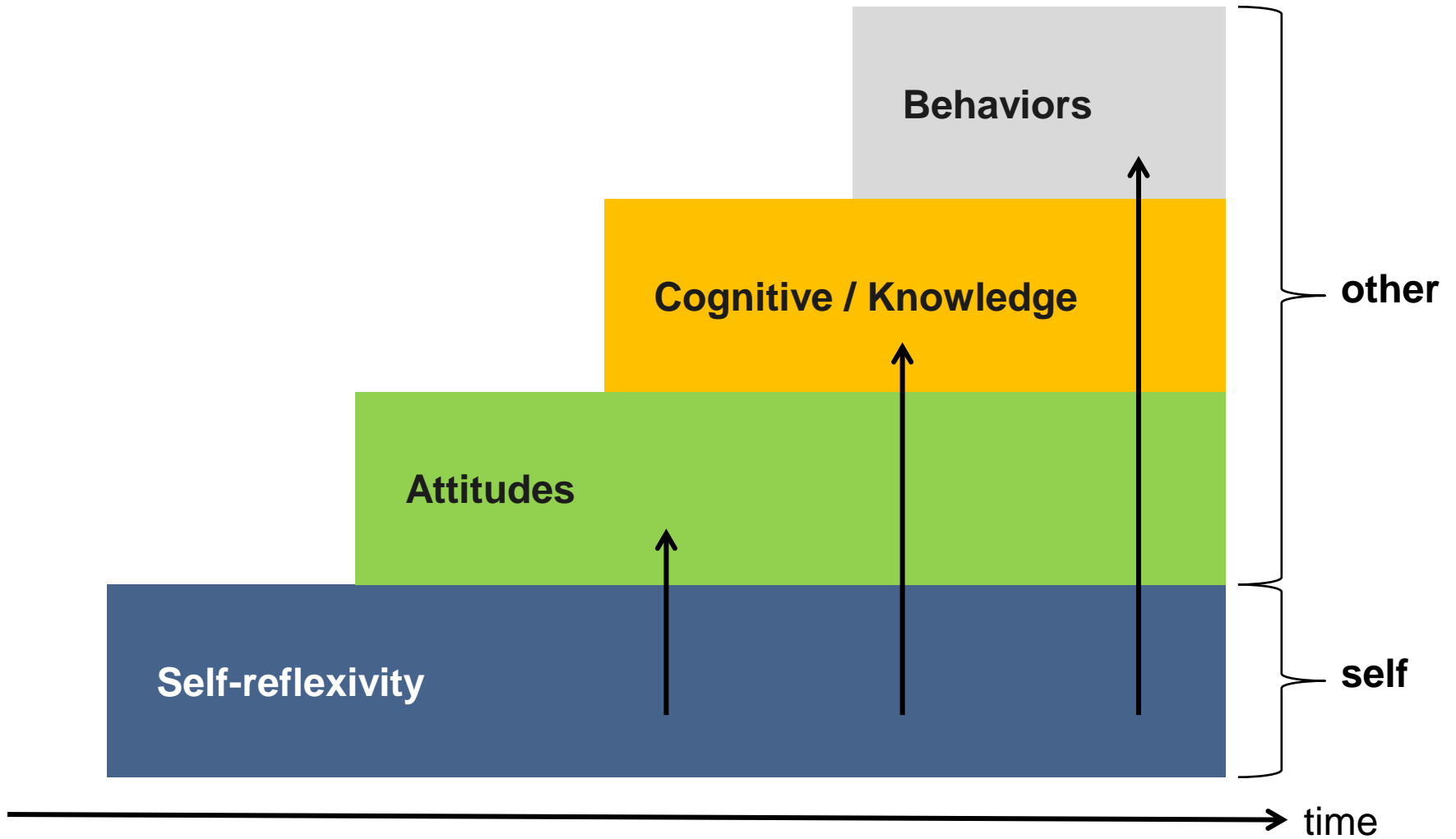
**contact:**  
 $r = .137^{**}$   
**training:**  
 $r = .137^*$   
**social desirability:**  
 $r = .160^*$

**contact:**  
 $r = .229^{**}$   
**training:**  
 $r = .150^{**}$   
**stay abroad:**  
 $r = .193^{**}$   
**length of stay:**  
 $r = .214^{**}$

**social desirability:**  
 $r = .260^{**}$

**contact:**  
 $r = .233^{**}$   
**training:**  
 $r = .149^{**}$   
**stay abroad:**  
 $r = .175^{**}$   
**length of stay:**  
 $r = .188^{**}$

**contact:**  
 $r = .223^{**}$   
**training:**  
 $r = .145^*$   
**stay abroad:**  
 $r = .119^*$   
**length of stay:**  
 $r = .181^{**}$



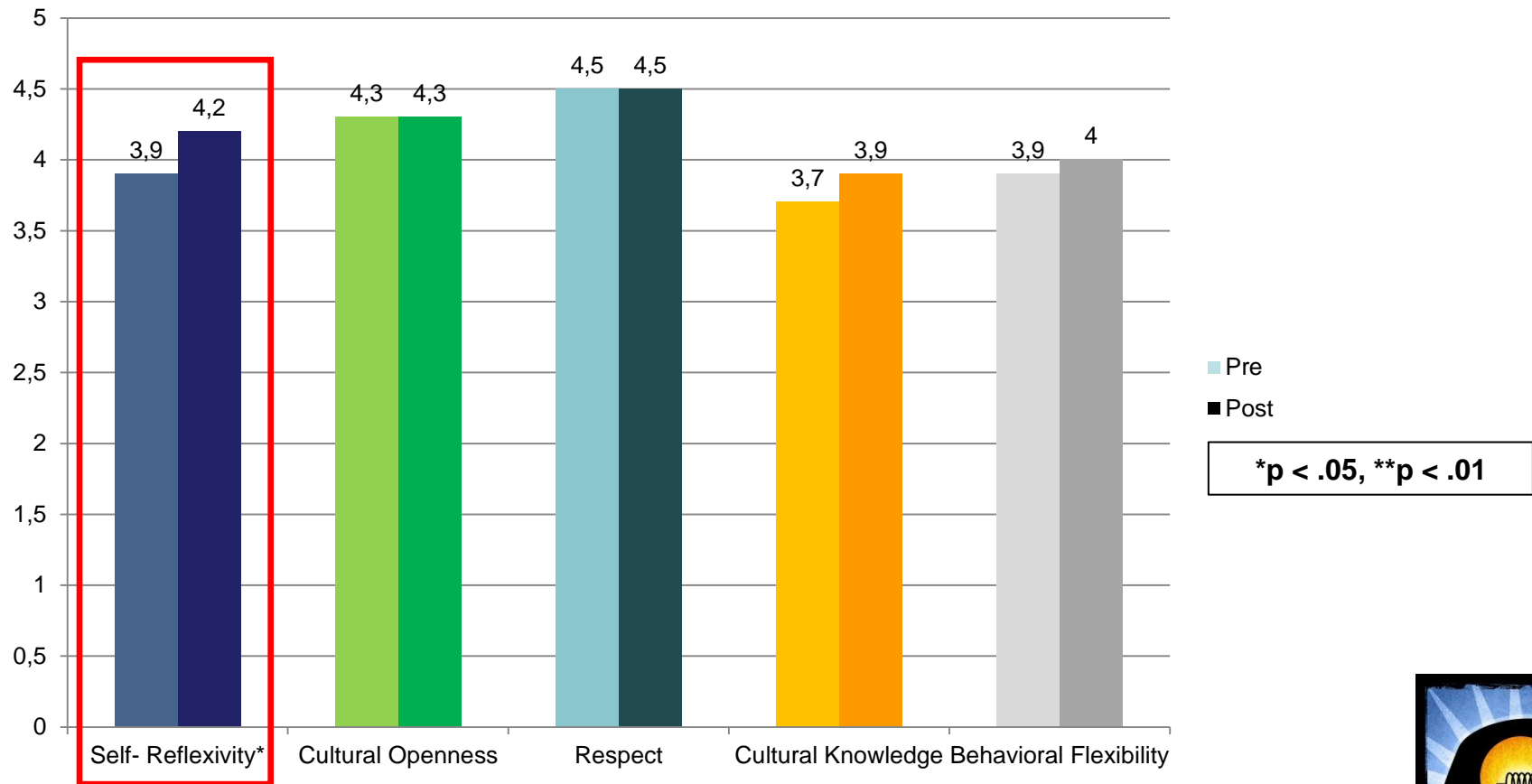


- Investigation on participants of the Intercultural Mentoring program at University of Osnabrück (imos) in year 2014/15
  - Program to welcome and guide international students in the first period of their stay
  - Participants:
    - *Mentors: local students, who get culturally trained*
    - *Mentees: degree-seeking students from abroad*
  - Established since 2009 with 203 mentees supported by 139 mentors over these 6 years

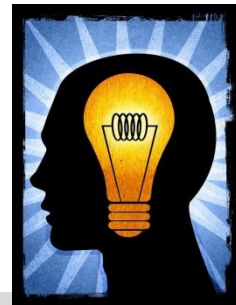


Interkulturelles Mentoring Universität Osnabrück

# Application of the created scale (2)



Self-evaluation on facets of intercultural competence, measured by the created scale. Means before (pre, N=50) and after (post, N=53) participation (mentors and mentees).. 5-point scale ranging from 1= strongly disagree to 5= strongly agree.



Cultural self-reflexivity as first & most important step towards intercultural learning (Auernheimer, 2002)



This study presents a **reliable measure** for the assessment of intercultural competence.



The new scale comprises **self-reflexivity, affective, cognitive and behavioral facets** of intercultural competence.



From a practical perspective, the resulting scale can be used for the **sensitization for intercultural subjects**.

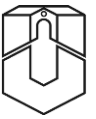


This scale can also be applied in the context of **intercultural training evaluations**.



**Outlook:** Future studies could evaluate how one's subjective perception correlates with perceived intercultural behavior by an interaction partner.





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**Thank you for your attention!**



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## Arbeits- und Organisationspsychologie mit Schwerpunkt Interkulturelle Wirtschaftspsychologie

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- Self-Reflexivity:
  - I have the competence to identify my own culturally affected behavior.
  - I'm aware of my own cultural imprinting.
  - I can easily put my worldview into words.
  - It is easy for me to describe what defines my culture.
  - In general, I actively deal with my own culture.



- Cultural Openness:
  - I find it is easy to talk with people from different cultures.
  - I am not afraid to express myself when interacting with people from different cultures.
  - I find it easy to get along with people from different cultures.
  - I like to answer questions of people from other cultures.
  - I feel comfortable, opening up to people from other cultures.
  - I feel comfortable, if people from other cultures open up to me.
  - I like it if others explain their traditions to me.
  - I like to participate in other traditions.
  - I don't avoid meeting people from other cultures.
  - I like to get into contact with people from other cultures.
  - In general I'm open when getting into contact with people from other cultures.



- Respect:
  - I respect the way, people from other cultures behave, even if I don't support that behavior.
  - I respect the values of people from other cultures, even if they are not consistent with my own values.
  - I acknowledge the opinion of people from other cultures, even if it is not equal with mine.
  - During our conversation, I normally show respect towards my intercultural partner.
  - In general, it is easy for me to show respect towards other cultures.



- Cultural knowledge:
  - I acquire knowledge about the history, politics and the structures of the society of another culture.
  - I engage in the literature, art and music of other cultures.
  - I catch up on the cultural values and religious beliefs of other cultures.
  - I read up on rules for expressing nonverbal behaviors in other cultures.
  - In general I try to acquire a good knowledge about the culture I interact with.





- Behavioral Flexibility:
  - I have the ability to adapt to varying intercultural communication and learning styles.
  - I change my nonverbal behavior (e.g., accent, tone) when a cross-cultural situation requires it.
  - I use pause and silence differently to suit different cross-cultural situations.
  - I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.
  - I have the ability to adjust my behavior as I interact with people from a culture even if it is another culture.
  - In general I have the ability to act effectively and appropriately in an intercultural situation.



- Selbst-Reflexivität
  - Ich besitze die Fähigkeit mein eigenes kulturell geleitetes Verhalten zu erkennen.
  - Ich bin mir meiner eigenen kulturellen Prägung bewusst.
  - Ich kann meine eigene Weltanschauung gut in Worte fassen.
  - Es fällt mir leicht zu beschreiben, was meine Kultur ausmacht.
  - Insgesamt setze ich mich mit meiner eigenen Kultur auseinander.



### ■ Kulturelle Offenheit

- Es fällt mir leicht, in einem fremden Kontext zuzuhören und zu beobachten.
- Ich habe keine Angst mich auszudrücken, wenn ich mit Menschen aus anderen Kulturen umgehe.
- Ich fühle mich entspannt, wenn ich mit Menschen aus anderen Kulturen umgehe.
- Ich antworte gern auf Fragen von Menschen aus anderen Kulturen.
- Ich fühle mich wohl dabei, mich gegenüber Menschen aus anderen Kulturen zu öffnen.
- Ich fühle mich wohl dabei, wenn sich Menschen aus andern Kulturen mir gegenüber öffnen.
- Ich lasse mir fremde Bräuche gerne erklären.
- Ich nehme gerne an fremden Bräuchen teil.
- Ich gehe Begegnungen mit Menschen aus anderen Kulturen nicht aus dem Weg.
- Ich suche gern Kontakt zu Menschen aus anderen Kulturen.
- Ich bin allgemein offen im Kontakt mit Menschen aus anderen Kulturen.



### ■ Respekt

- Ich respektiere die Art, wie sich Menschen aus anderen Kulturen verhalten, selbst wenn ich dieses Verhalten nicht gutheiße.
- Ich respektiere die Werte von Menschen aus anderen Kulturen, auch wenn sie nicht meinen eigenen Werten entsprechen.
- Ich erkenne die Meinung von Menschen aus anderen Kulturen an, selbst wenn diese nicht meiner persönlichen Meinung entsprechen.
- Ich zeige meinem kulturell unterschiedlichen Gegenüber normalerweise Respekt während unserer Interaktion.
- Insgesamt fällt es mir leicht, anderen Kulturen gegenüber Respekt zu zeigen.



### ■ Interkulturelles Wissen

- Ich eigne mir Wissen an über die Geschichte, die Politik und die Gesellschaftsstrukturen einer anderen Kultur.
- Ich beschäftige mich mit der Literatur, Kunst und Musik anderer Kulturen.
- Ich setze mich mit kulturellen Werten und dem religiösen Glauben anderer Kulturen auseinander.
- Ich informiere mich über die Regeln, um nonverbale Verhaltensweisen in anderen Kulturen auszudrücken.
- Insgesamt eigne ich mir Wissen über die Kulturen an, mit denen ich interagiere.



- Interkulturelle Verhaltensflexibilität
  - Ich besitze die Fähigkeit mich an sich verändernde interkulturelle Kommunikations- und Lernstile anzupassen.
  - Ich verändere mein nonverbales Verhalten (z.B. Gesichtsausdruck, Gestik), wenn eine interkulturelle Situation es erfordert.
  - Ich verwende Pausen und Schweigen unterschiedlich, um es verschiedenen interkulturellen Situationen anzupassen.
  - Ich verändere mein verbales Verhalten (z.B. Akzent, Tonlage), wenn eine interkulturelle Interaktion es erfordert.
  - Ich besitze die Fähigkeit mein Verhalten an den kulturellen Kontext anzupassen, selbst wenn dieses Verhalten für mich ungewöhnlich erscheint.
  - Insgesamt besitze ich die Fähigkeit mich effektiv und angemessen in einer interkulturellen Situation zu verhalten.