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*Cross-Cultural Comparison between US and  
China on Perception of Time, Creative Attitudes,  
and Adoption of Fashion Innovations*

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# *Purpose of the study*

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- Various relationships may exist between different levels of innovation adoption groups and creative attitudes or time perception.
- There is no research that has examined the relationships among these variables.
- To examine how earlier (vs later) adopters of innovation differ in time perception and creative attitudes, comparing Chinese and U.S. college students.

# *Adoption of innovations & time perception*

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- Time is central to many consumer behavior issues.
- Many products are time-bound, especially fashion products.
- Time perceptions are a blend of individually, socially, and culturally created traits that affect consumer behaviors.

# *Consumer variables affected by time*

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- Earlier (vs later) adopters of fashion:  
Spend more time seeking information about fashion (e.g, shopping trips, attend fashion shows, read more fashion advertising/magazines, watch more TV dealing with fashion styles)
- ⇒ *Earlier adopters are expected to differ from later adopters in time perception.*

# *Hypothesis 1*

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H1a-g: Earlier (vs. later) adopters of innovations will differ in time perceptions.

- (a) economic time
- (b) non-organized time
- (c) orientation toward the past
- (d) orientation toward the future
- (e) time anxiety
- (f) tenacity
- (g) preference for quick return
- (h) time submissiveness

# *Culture affects time perceptions*

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- Time-laden activities (e.g., fashion shopping) display cultural, situational and individual variability.
- According to *Theory of Cultural Dimensions* (Hofstede, 1980)
  - ⇒ China: 87 on long-term orientation indicating an ability to adapt traditions to changing conditions.
  - ⇒ US: 26 indicating a society whose members prefer to preserve time-honored customs and are suspicious of changes in society.
- ⇒ *Chinese participants are expected to differ from US participants in time perceptions.*

# *Hypothesis 2*

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H2 a-g: Chinese and U.S. participants will differ in time perceptions.

- (a) economic time
- (b) non-organized time
- (c) orientation toward the past
- (d) orientation toward the future
- (e) time anxiety
- (f) tenacity
- (g) preference for quick return

# *Creative attitudes and time of adoption*

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- Traits of creative people: achievement motivation, openness to new experiences, self-confidence, or impulsivity.
  - Earlier adopters of fashion display many attitudes related to creativity, e.g., greater need for variety, higher sensation seeking, less susceptible to boredom, and more innovative
- => *Earlier adopters are expected to differ from later adopters in creative attitudes.*



# *Hypothesis 3*

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H3 a-d: Earlier (vs. later) adopters of innovations will differ in creative attitudes

- (a) general creative attitudes
- (b) creative capacity
- (c) creative collaboration
- (d) creative risk-taking

# *Creative attitudes and culture*

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- Creativity is culturally bound--not just a mental process (Csikszentmihalyi, 1999)
- Compared to other cultures, US was high in self-acceptance, achievement motivation, openness to experience, nonconformity, self-confidence, impulsiveness
- US (vs Chinese) students were higher on divergent thinking --fluency, originality, elaboration, and titles.

*=> Chinese participants are expected to differ from US participants in creative attitudes.*

# *Hypothesis 4*

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H4 a-d: Chinese and U.S. participants will differ in creative attitudes

- (a) general creative attitudes
- (b) creative capacity
- (c) creative collaboration
- (d) creative risk-taking

# *Culture & time of adoption*

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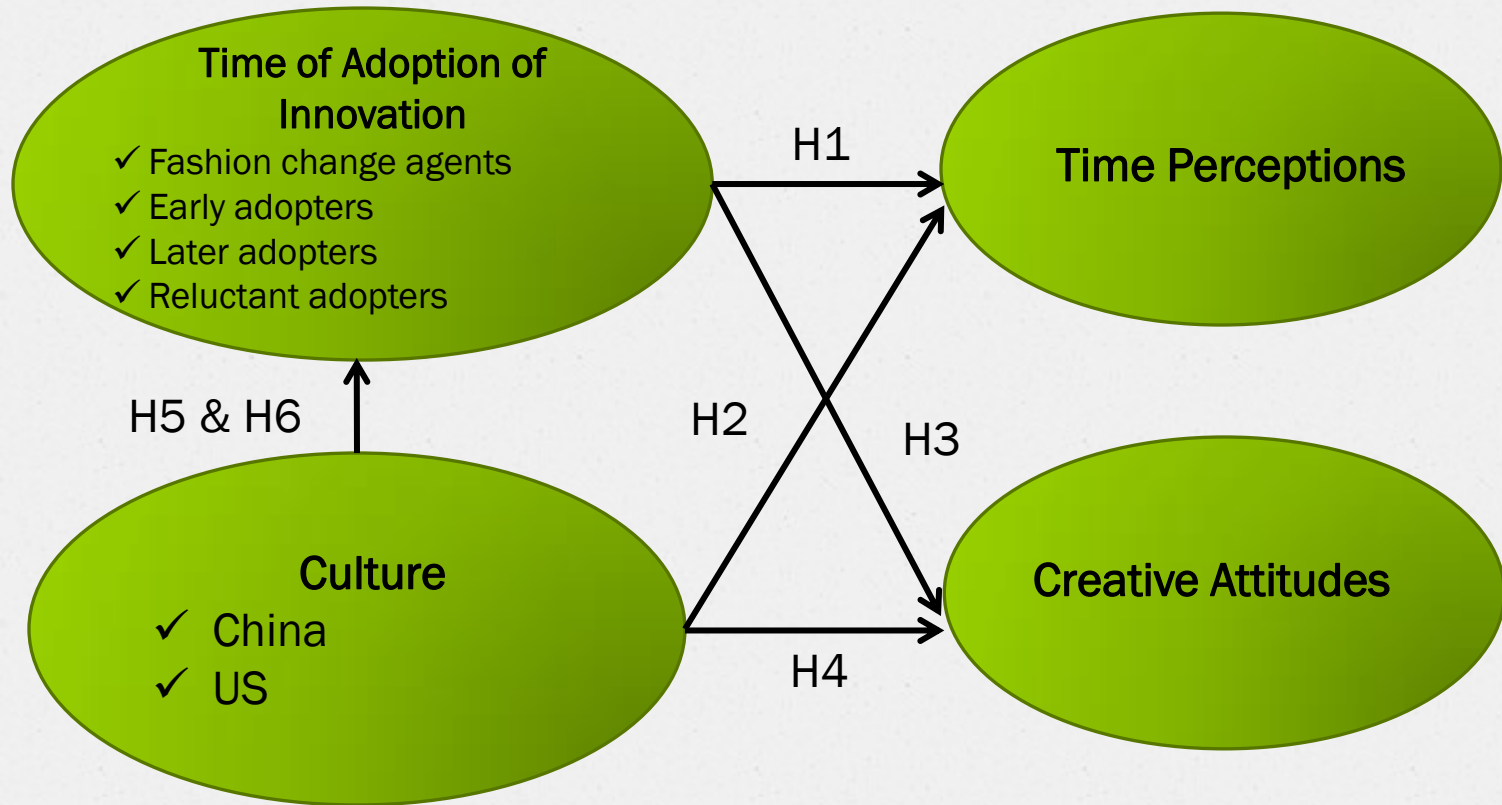
- China is collectivist while US is individualist
- In countries with collectivist values (e.g., China), a relatively smaller group of fashion consumers may be willing to purchase products early in the life cycle.
- Conversely, in countries with individualist values (e.g., U.S.), relatively more consumers may be willing to purchase products early in the life cycle

# *Hypotheses 5 & 6*

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- Lee and Workman (2013) found that a smaller percentage of fashion consumers were early adopters in Korea (a collectivist culture) than in the US (an individualist culture).
- H5: Chinese and U.S. participants will differ in time of adoption of innovations.
- H6: A smaller percentage of consumers will be early adopters in China than in the US.

# Research Model



# *Procedure*

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- Data were collected in large lecture classes from US and Chinese university students.
- The questionnaire contained demographic items and measures of
  - ✓ Time perception
  - ✓ Creative attitudes
  - ✓ Fashion innovativeness and opinion leadership

# *Scales*

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- **Time Perception Scale**  
(Usunier & Valette-Florence, 2007)
- **Creative Attitudes Scale** (Serrat ,2009)
- **Fashion Innovativeness and Opinion Leadership** (Hirschman & Adcock, 1978)



# *Data Analysis*

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- Descriptive statistics
  - ✓ Culture: 209 US; 193 Chinese university students
  - ✓ Age:  $M = 21.13$  (17-32)
  - ✓ Gender: male = 215; female = 185
- Cronbach's alpha reliability: acceptable ranging from .60 to .90.
- MANOVA/ANOVA
- Pearson's Chi-square

# MANOVA

## *Time-of-adoption & time perceptions*

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- MANOVA was conducted with time-of-adoption groups and culture as *independent variables*; 7 sub-dimensions of time perception as *dependent variables*
- Significant effects for time-of-adoption groups [ $F(8, 387) = 4.39, p < .000$ ] and
- culture [ $F(8, 385) = 20.79, p < .000$ ] on the dependent variables

# *ANOVA*

## *Time-of-adoption & time perceptions*

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- Significant effects for time-of-adoption group on 3 of 7 time variables: economic time, future orientation, and time anxiety.
- Earlier adopters scored higher on economic time and future time orientation, but later adopters scored higher on time anxiety.
- **H1a, d, and e were supported**

# *ANOVA*

## *Time-of-adoption & culture*

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- Significant effects for culture on 5 of 7 time variables: economic time, non-organized time, past orientation, future orientation, and time anxiety
- US participants scored higher on economic time and future orientation.
- Chinese participants higher on non-organized time, past orientation, and time anxiety.
- **H 2a, b, c, d, and e were supported.**

# MANOVA

## *Time-of-adoption & creative attitudes*

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- MANOVA was conducted with time-of-adoption groups and culture as *independent variables*; four creative attitudes as *dependent variables*
- Significant effects for time-of-adoption group [ $F(4, 391) = 4.32, p < .002$ ] and
- for culture [ $F(4, 389) = 6.15, p < .000$ ] on the dependent variables

# *ANOVA*

## *Time-of-adoption & creative attitudes*

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- Significant effects for time-of-adoption group on all four creative attitude variables.
- Earlier adopters higher on general creativity, creative capacity, creative collaboration, and creative risk-taking than later adopters.
- **H3 a-d were supported.**

# *ANOVA*

## *Culture & creative attitudes*

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- Significant effects for culture on creative capacity and creative collaboration.
- US participants scored lower than Chinese on creative capacity and creative collaboration.
- **Hypothesis 4 b and c were supported.**

# *ANOVA*

## *Time-of-adoption & culture*

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- ANOVA revealed no significant effect for culture [F(1, 399) = 1.14,  $p < .286$ ] on time-of-adoption:
- **H5 was not supported.**



## *Chi-square test*

### *Time-of-adoption & culture*

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- Chi-square test was not significant (df = 3; Pearson Chi-Square = 1.033;  $p < .793$ ).
  - ✓ consumer change agents US (19.7%); Chinese (16.1%)
  - ✓ early adopters US (32.7%); Chinese (35.8%)
  - ✓ late adopters US (28.8%) Chinese (29.5%)
  - ✓ reluctant adopters US (18.8%); Chinese (18.7%).
- **H6 was not supported.**

# *Discussion*

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- Differences were found in time perception and creative attitudes among earlier (vs later) adopters of innovation and between Chinese and US students.
  - Based on the results, cultural values seem to be a definitive force among Chinese students in terms of time perception and creative attitudes.
- ⇒ A better understanding of consumers in a variety of cultures is called for if international corporations or marketers want to succeed.

# *Implications*

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➤ ***From academic perspective,***

⇒ Adds a new perspective to the literature about relationships among time of adoption, time perception, creative attitudes, and cultural values

➤ ***From a practitioner perspective***

⇒ Provides information for fashion marketers or retailers that will help them understand earlier adopters' consumption behavior.

⇒ Help international marketers to adapt their new brand marketing strategies for different cultures.

# *Further study*

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- Extend to other cultures
- Extend to other industry contexts
  - ✓ Mobile phone
  - ✓ Automotive
- Extend to adult population
- Use other measures of creativity or time-of-adoption
- Add other variables, e.g., attitudes toward technology



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