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Personal choice: a blessing or a burden, or both?

A cross-cultural investigation on Need for Closure effects in two Western and two East-Asian societies.

Abstract

The present study investigates the role of dispositional need for closure (NFC) in how individuals within a particular culture perceive and appreciate choice. Data sets from the US (283 adults), Europe (263 adults and 427 students), China (218 adults and 309 students) and Singapore (258 students) were collected. The results showed that in Western cultures, people perceived choice in a linear way as either a burden or a blessing, whereas in Chinese culture, such opposition between perspectives did not appear, and individuals generally saw choice as both burden and blessing simultaneously. In Western cultures, high dispositional NFC was strongly associated with viewing choice-as-a-burden, whereas Chinese respondents with a high need for closure perceived choice as a blessing and a burden simultaneously. The Singaporean results were similar to the Western pattern. These findings are discussed in terms of the NFC literature and cultural differences in dialectic versus differentiation thinking styles.

Keywords : Choice; Cross-cultural; Dialectical thinking; Individual differences ; Need for closure

Introduction

Individual choice is highly valued in Western societies as inherently rewarding and *the* way to enhance individuals' feeling of freedom and happiness (Schwartz, 2000). However, various studies have cautioned that (excessive) choice can also be encumbering (e.g., Iyengar & Lepper, 2000) and lead to decreased subjective well-being (e.g., Schwartz, 2000). Indeed, according to Schwartz (2000, 2004), increased opportunities for choice often make everyday life more difficult and uncertain, and personal choice can therefore be experienced not only as a blessing, but also as a burden. The current study aims to better understand the factors that contribute to whether a person thinks about choice in terms of a burden, a blessing, or both.

The influence of individual differences

Past research has shown that a person's perspective on choice may depend strongly on individual traits (see e.g., Roets & Soetens, 2008; Schwartz, 2004). Potentially most relevant in this regard is a person's dispositional Need for (Cognitive) Closure (NFC), defined by Kruglanski and Webster (1996) as "the desire for a firm answer to a question..." (p.264), whereby any answer will do. It has been proposed that the lack of closure -characteristic of choice and decision-making situations- induces strong negative affect in individuals high in NFC (Kruglanski & Webster, 1996). Indeed, high NFC individuals have been shown to experience decision and choice situations as aversive, with increased physiological as well as self-reported distress (Roets & Van Hiel, 2008), and attempts to escape this discomfort (Roets, Van Hiel, Cornelis, & Soetens, 2008) during decision-making tasks. NFC is therefore assumed to be positively associated with an individual's *explicit* views that choice is a burden.

The influence of culture

Cross-cultural research has revealed substantial differences between Western versus non-Western societies in how people perceive, value, and think about choice (see e.g., Henrich, Heine & Norenzayan, 2010). These studies generally referred to cultural differences in terms of values (see Schwartz, 1999), but cultural differences in the way choice is perceived may also occur on a meta-cognitive level, as suggested by the seminal work of Peng and Nisbett (1999) who argued that cultures fundamentally differ in their general style of thinking (see also, Nisbett, Peng, Choi, & Norenzayan, 2001). In particular, the typical European-American thinking style is derived from Aristotelian formal logic, resulting in “a differentiation model that polarizes contradictory perspectives in an effort to determine which fact or position is correct” (p. 741). In contrast, Chinese culture has a longstanding tradition of dialectic thinking, characterized by the beliefs that all phenomena are interconnected and mutually dependent (see also, Spencer-Rodgers, Williams, & Peng, 2010). Specifically, the framework of dialecticism incorporates three core concepts: Change (the universe is dynamic and in constant flux), Contradiction (two ostensibly contradictory propositions may both be true simultaneously) and Holism (the part cannot be understood except in relation to the whole) (see Nisbett, et al., 2001; Peng & Nisbett, 1999, for a more extensive discussion). Various empirical studies have corroborated that East-Asians are more likely to accept the coexistence of contradictory beliefs (e.g., Spencer-Rodgers, et al., 2010), which also leads to more ambivalent response styles (Hamamura, Heine, & Paulhus, 2008; Spencer-Rodgers, Boucher, Mori, Wang, & Peng, 2009).

Hence, we hypothesize that such a perspective of positive and negative aspects as coexisting, rather than incompatible, also may result in a more ambivalent outlook on choice for East-Asians. In particular, the value of personal choice is not to be considered on a positive-

negative continuum (as in the Western differentiation model), but rather to be captured by two separate, or even positively related dimensions.

The interaction between culture and NFC

Interestingly, research has also shown that individuals with high NFC more strongly rely on the salient beliefs in their culture (Chiu, Morris, Hong, & Menon, 2000). Hence, if dialectism is the salient thinking style in Chinese culture, high NFC may magnify the ambivalent perspective on choice in Chinese people, but not in Western cultures where the differentiation model is most salient.

The present research

The present research aimed to investigate the role of dispositional NFC in the individual's perspective on choice, moderated by culture. Drawing on the documented cultural differences in thinking styles on a meta-cognitive level, we first assessed cultural differences in the relationship between the burden and the blessing perspectives at the individual level. Next, we investigated how culture may qualify the relationship between NFC and the individual's perspective on choice.

Data were collected in two societies assumed to rely on the differentiation thinking style: the US and Western-Europe, and one society central in the literature on the dialectical thinking style: China. In addition, we collected data in Singapore, where especially the younger generation is considered to be bi-cultural (Quek, Ho & So, 2012).

Method

Participants

Data were collected from a total of 1758 respondents. The first data set ($N=764$) consisted of adult respondents from the US ($n=283$, excluding respondents from Asian descent, 91.2% Caucasian, 69.3% women), the Central part of Western Europe ($n=263$, 78% Dutch-speaking Belgian and 22% Dutch respondents, 99.6% Caucasian, 65.0% women) and mainland China ($n=218$, 94% Chinese, 61.5% women). Mean age was 42.49 ($SD=12.66$), 34.05 ($SD=16.27$), and 32.55 ($SD=8.86$) years, respectively. European and Chinese respondents were respectively recruited by research students from a Belgian and a mainland Chinese university, who contacted their own and their parents' extended social network. US respondents were recruited from a west-coast US university's pool of registered online participants. Most participants had received higher education (69.6%, 89.9%, and 84.5%, for Europe, China and the US, respectively). Regarding income, in Europe, China and the US respectively, 23.3%, 12.8% and 9.5% reported a "substantially less than average" income, 15.2%, 33.5%, and 20.1% a "less than average" income, 40.5%, 50.9%, and 45.9% an "average" income, 14.8%, 2.8%, and 20.1% a "more than average" income, and 6.2%, 0.0%, and 3.5% a "substantially higher than average" income.

The second data set ($N=994$) consisted of students from Belgium ($n=427$), mainland China ($n=309$), and Singapore ($n=258$, 77.8% Chinese), who were invited by e-mail to voluntarily complete the questionnaire. Mean Age was 20.13 ($SD=3.14$), 18.45 ($SD=.99$), and 21.84 ($SD=2.24$) years, including 86.2%, 60.8%, and 59.4% women, respectively.

Respondents completed the questionnaire anonymously on a secure university website. Chinese respondents also had the option of a pen and paper format.

Measures

All items were rated on 6-point Likert scales ranging from 1 (completely disagree) to 6 (completely agree). The English-Dutch translation and backtranslation¹ were done by the first and second author, respectively. The English-Chinese translation and backtranslation were done by the last author and an independent translator, respectively. All translators were bilingual or native speakers with high proficiency in English. Singaporean respondents completed the English version (given that English is the language of instruction in Singapore).

Choice-as-a-burden and *Choice-as-a-blessing*. To measure the individual's perspective on personal choice, five statements reflecting choice-as-a-blessing and five statements reflecting choice-as-a-burden (see Appendix) were used after initial validation in a pilot study ($n=282$ Belgian undergraduate students). Reliability for both scales ranged from acceptable to good, considering the limited number of items. For the adult data set: $M=3.49$ ($SD=1.15$), $\alpha=.84$, for the 5-statement choice-as-a-burden scale, and $M=3.21$ ($SD=.82$), $\alpha=.70$, for the 5-statement choice-as-a-blessing scale. For the student data set: $M=3.59$ ($SD=.89$), $\alpha=.76$, for the 5-statement burden scale, and $M=2.93$ ($SD=.70$), $\alpha=.58$, for the 5-statement blessing scale.

Need for closure: Participants completed the 15-item Revised NFC scale (Roets & Van Hiel, 2011). $M=4.01$ ($SD=.77$), $\alpha=.87$, in the adult data set, and $M=3.82$ ($SD=.66$), $\alpha=.82$, in the student data set.

Results

For all analyses, the conventional significance level of $p < .05$ was used.

Preliminary analyses

Principal Component Analyses (PCA) on the 10 choice statements in the subsamples overall revealed two Oblimin-rotated components². Given that the PCA generally confirmed the

distinction between the choice-as-a-burden and the choice-as-a-blessing items, scale scores were used in the subsequent analyses.

Interrelations between Choice-as-a-burden and Choice-as-a-blessing statements (Table 1)

To test whether the association between choice-as-burden and choice-as-a-blessing significantly differs across cultures, regression analyses were conducted for both data sets, with the choice-as-a-burden scale, dummy-coded cultures (China being the reference culture [0], other cultures [1]), and their interaction as independent variables and the choice-as-a-blessing scale as dependent variable.

Adult data. The regression model explained 25% of the variance in choice-as-a-blessing scores; $F(5,777) = 52.66, p < .001$. Table 1 shows that, in addition to the main effects, strong interaction effects were found, indicating a different association between the concepts in China compared to Europe and the US. Indeed, in the Western societies, *negative* associations of $\beta = -.30$, and $\beta = -.33$, both $p < .001$, between choice-as-burden and choice-as-blessing emerged. In contrast, in China, a significant, *positive* association was obtained: $\beta = .28, p < .001$.

Student data. The regression model explained 22% of the variance in choice-as-a-blessing scores, $F(5,967) = 54.15, p < .001$. Similar to the adult data, main effects and strong interaction effects were found. Again, a *negative* association in Europe, $\beta = -.34, p < .001$, and interestingly, also in Singapore, $\beta = -.30, p < .001$, was found. In contrast, the association was significantly *positive* $\beta = .18, p = .001$ in China, in line with the findings for the Chinese adults.

Relationships with NFC and interaction with culture (Table 2)

To test the associations between NFC and the perspectives on choice, and whether these differ across cultures, regression analyses were conducted for the blessing scale (Figure 1) and

the burden scale (Figure 2) separately, with NFC, culture, and their interaction as independent variables.

Adult data. For choice-as-a-burden, the regression model explained 37% of the variance; $F(5,775) = 89.86, p < .001$, with main effects of NFC and culture. No interaction effects were found; high NFC was significantly associated with a perspective of choice-as-a-burden across cultures ($\beta = .48$, and $\beta = .39, \beta = .47$, all $p < .001$ for the US, Europe, and China, respectively).

For choice-as-a-blessing, the regression model explained 19% of the variance; $F(5,775) = 36.63, p < .001$, with main effects of NFC and culture. Most importantly however, significant interaction effects were found. Indeed, in the US and Europe, NFC was not associated with a perspective of choice-as-a-blessing (both $\beta = .01, ns$). In China, however, high NFC was significantly and positively associated with a perspective on choice-as-a-blessing ($\beta = .28, p < .001$).

Student data. For choice-as-a-burden, the regression model explained 23% of the variance; $F(5,947) = 57.97, p < .001$, with main effects of NFC and culture, and modest interaction effects (Table 2). High NFC was significantly associated with the perspective of choice-as-a-burden in Europe ($\beta = .30$) and in Singapore ($\beta = .32$), and the effect was similar, but somewhat stronger in China ($\beta = .48$), all $p < .001$.

For choice-as-a-blessing, the model explained 16% of the variance; $F(5,947) = 34.63, p < .001$. Main effects for NFC and culture, as well as a significant interaction effect for China-Singapore, but not for China-Europe, were found. NFC showed no association with a perspective of choice-as-a-blessing in Singapore ($\beta = .01, ns$) and a relatively weak negative relation in Europe ($\beta = -.11, p < .05$). In China, however, a significant and positive relationship was found ($\beta = .15, p = .01$), similar to the results in Chinese adults.

Discussion

The present study is the first to demonstrate that NFC plays a substantial role in how people explicitly perceive and appreciate choice, as suggested by NFC theory (Kruglanski & Webster, 1996) and indirect evidence (Roets & Van Hiel, 2008), as well as how this relationship is moderated by culture. As expected from the NFC theoretical framework, high NFC individuals from all cultures explicitly perceived choice more as a burden than low-NFC individuals. However, culture clearly moderated the relationship between NFC and the perspective of choice as a blessing. In particular, in addition to the endorsement of the choice-as-a-burden perspective, only in China did high-NFC respondents simultaneously also appreciate choice as a blessing, more than did their low-NFC counterparts. Most relevant to these findings is that high NFC individuals have been shown to strongly rely on the salient beliefs in their culture (Chiu, et al., 2000), which, according to Peng and Nisbett (1999), substantially differ across cultures: In the West, “a differentiation model that polarizes contradictory perspectives” (p. 741) is the salient perspective, whereas a dialectic acceptance of apparently contradictory attitudes is characteristic of the Chinese culture. This difference was indeed supported by our finding that the choice-as-a-burden and choice-as-a-blessing perspectives were related negatively in the West, but positively in China. Moreover, we advance that the Chinese pattern of NFC effects may be further understood in terms of the dialectism’s fundamental Principle of Change (Bian Yiu Lu), the perspective that reality is a process that is not static but dynamic (see, Peng & Nisbett, 1999): Whereas high NFC individuals in the West seem focused on the momentary lack of closure that comes with choice, their Chinese counterparts may consider choice not only as a

momentary aversive *state*, but also as the *process* toward achieving the desired closure (i.e., the opportunity to achieve the desired state).

In contrast to the Chinese pattern, the relationship between NFC and choice-as-a-blessing in Western respondents was either absent, or only weakly negative. We propose that this finding may be the result from two counteracting tendencies in Western high-NFC individuals, canceling each other out. On the one hand, NFC is strongly associated with the perspective of choice-as-a-burden, which in the Western differentiation model should promote a negative relation between NFC and choice-as-a-blessing. On the other hand, however, stronger conformity to the cultural norms found in high NFC-individuals (see Chiu et al. 2000) should lead high-NFC individuals to endorse the Western dominant societal value that choice is inherently positive (Schwartz, 2000).

Interestingly, the pattern of results with Singaporean students largely resembled the Western pattern, rather than the Chinese one. However, although ethnic Chinese make up 75% of its population (and our sample), Singapore is fundamentally different from Chinese society and considered bi-cultural due to its colonial history, emphasis on multi-culturalism, and use of English as the language of instruction throughout the education system (see Quek, et al., 2012). According to Ross, Xun and Wilson (2002) the use of a particular language may “prime” particular mindsets. Such priming, both through administering the questionnaire in English, and more generally, through the use of English in Singaporean schools and universities may have led to incidental and chronic accessibility of a more western (i.e., differentiation) mindset in Singaporean students. These findings suggest that thinking styles are rooted in the cultural context rather than in ethnicity, and caution against generalizing claims based on findings from China to (South)East-Asia as a whole.

Limitations and directions for future research

The present study used the correlation between conceptually opposite concepts as an indicator of dialectism, similar to previous studies that have used the correlation or absolute differences between true- and false-keyed items (see e.g., Hamamura et al. 2008). Nevertheless, the development of more direct measures of general (e.g., not self-esteem specific) dialectical thinking in future research may help to further substantiate the present findings.

Also, alternative explanations for the present findings might be feasible and deserving of future research. Yet importantly, supplementary analyses³ showed that the NFC results were not merely due to more extreme responses on both scales by high NFC individuals in China. Finally, seeking to delineate the dominant thinking style in different East-Asian societies to gain further insight in the influence of thinking styles on people's perspective on choice, and its possible consequences (e.g., well-being, see Schwartz, 2004), may be a promising direction.

References

- Chiu, C., Morris, M.W., Hong, Y., & Menon, T. (2000). Motivated cultural cognition: The impact of implicit cultural theories on dispositional attribution varies as a function of need for closure. *Journal of Personality and Social Psychology*, 78, 247-259.
- Hamamura, T., Heine, S.J., & Paulhus, D.L. (2008). Cultural differences in response styles: The role of dialectical thinking. *Personality and Individual Differences*, 44, 932-942.
- Henrich, J., Heine, S. J., Norenzayan, A. (2010). The weirdest people in the world ? *Behavioral and Brain Sciences*, 33, 61-135.
- Iyengar, S. S., & Lepper, M. (2000). When choice is demotivating: Can one desire too much of a good thing? *Journal of Personality and Social Psychology*, 79, 995-1006.
- Kruglanski, A.W., & Webster, D.M. (1996). Motivated closing of the mind: “Seizing” and “Freezing”. *Psychological Review*, 103, 263-283.
- Nisbett, R. E., Peng, K., Choi, I., & Norenzayan, A. (2001). Culture and systems of thought: Holistic versus Analytic Cognition. *Psychological Review*, 108, 291-310.
- Peng, K., & Nisbett, R. E. (1999) Culture, dialectics and reasoning about contradiction. *American Psychologist*, 54, 741-754.
- Roets, A., & Van Hiel, A. (2008). Why some hate to dilly-dally and others do not: The arousal-invoking capacity of decision-making for low- and high-scoring need for closure individuals. *Social Cognition*, 26, 333-346.
- Roets, A. & Van Hiel, A. (2011). Item selection and validation of a brief, 15-item version of the need for closure scale. *Personality and Individual Differences*, 50, 90-94.

- Roets, A., Van Hiel, A., Cornelis, I., & Soetens, B. (2008). Determinants of performance and invested effort. A need for closure by cognitive capacity interaction analysis. *Personality and Social Psychology Bulletin*, 34, 779-792.
- Ross, M., Xun, W. Q. E., & Wilson, A. E. (2002). Language and the bicultural self. *Personality and Social Psychology Bulletin*, 28, 1040–1050
- Schwartz, B. (2000). Self-determination: the tyranny of freedom. *American Psychologist*, 55, 79-88.
- Schwartz, B. (2004). *The paradox of choice*. New York: Ecco.
- Schwartz, S. H. (1999). A theory of cultural values and some implications for work. *Applied Psychology: An International Review*, 48, 23-47.
- Quek, K. S., Ho, K. K., & Soh, K. C. (2012). Implicit theories of creativity: a comparison of student-teachers in Hong Kong and Singapore. *Compare: A Journal of Comparative and International Education*, 38, 71-86.
- Spencer-Rodgers, J., Boucher, H. C., Mori, S., Wang, L., & Peng, K. (2009). The dialectical self-concept: Contradiction, change, and holism in East Asian cultures. *Personality and Social Psychology Bulletin*, 35, 29-44.
- Spencer-Rodgers, J., Williams, M. J., & Peng, K. (2010). Cultural differences in expectations of change and tolerance for contradiction: A decade of empirical research. *Personality and Social Psychology Review*, 14, 296-312.

Table 1.

Full Regression model standardized Beta-values with choice-as-a-burden, culture, and their interaction as predictors of choice-as-a-blessing

	Adult	Student
Burden	-.33*** (-.34***)	-.17**
Chi-Eur	-.15** (-.15**)	-.17**
Chi-US	-.49*** (-.44***)	
Chi-Sing		-.39***
Burden x Chi-Eur	.36*** (.35***)	.32***
Burden x Chi-US	.39*** (.41***)	
Burden x Chi-Sing		.27***

Note: Beta-values when controlling for demographics (age, gender, education, and income) between parentheses.

*** $p < .001$, ** $p < .01$, * $p < .05$

Table 2.

Full Regression model standardized Beta-values with NFC, culture, and their interaction as predictors of choice-as-a-burden and choice-as-a-blessing

	Choice-as-a-burden		Choice-as-a-blessing	
	Adult	Student	Adult	Student
NFC	.40*** (.41***)	.47***	.28*** (.28***)	.13*
Chi-Eur	-.27*** (-.26***)	-.20***	.09* (.08*)	.14***
Chi-US	-.40*** (-.43***)		.49*** (.43***)	
Chi-Sing		-.35***		.44***
NFC x Chi-Eur	-.03 (-.03)	-.11**	-.16** (-.17**)	-.15**
NFC x Chi-US	.03 (.02)		-.17** (-.18**)	
NFC x Chi-Sing		-.12*		-.07

Note: Beta-values when controlling for demographics between parentheses.

*** $p < .001$, ** $p < .01$, * $p < .05$

Figure captions

Figure 1. Relation between NFC and choice-as-a-burden across subsamples

Figure 2. Relation between NFC and choice-as-a-blessing across subsamples

Figure 1

Figure 2

Appendix:

Choice-as-a-burden and Choice-as-a-blessing statements

Choice-as-a-burden	Component 1 loadings
In our society, there are simply too many choices and decisions we have to make	.84, .65, .80, .74, .02, .77
I wish I had to make less choices and decisions in my life.	.85, .76, .85, .84, .76, .80
There is such a thing as “too much freedom of choice”.	.71, .61, .75, .72, .27, .54
My life would be easier if I didn’t have to make so many choices and decisions.	.83, .77, .85, .82, .83, .81
“Choosing means losing”	.68, .50, .43, .43, .58, .31
Choice-as-blessing	Component 2 loadings
Every choice or decision is an opportunity	.70, .23, .54, .54, .65, .67
The more alternatives there are to choose from, the better.	.72, .77, .71, .70, .01, .63
Freedom means being able to make decisions in any circumstance and without limitations	.75, .48, .72, .61, .16, .63
It is most important that society allows us to make our own decisions.	.79, .46, .68, .76, .68, .72
I like making decisions and choices	.72, .68, .60, .51, .34, .64

Two-factor solution factor loadings for the US adults, Chinese adults, and European adults

(upper line), and European students, Chinese students, and Singaporean students (lower line), respectively.

Footnotes

¹Full item-translation and backtranslation are available upon request with the authors.

²The two components together explained between 42.04% and 58.72 % of the variance.

Component loadings are presented in Appendix. Only for the Chinese students, the two-component structure was less clear, and a three-component structure fitted the data better.

However, this three-component solution could not be meaningfully interpreted and generally reflected personal statements (including *I* or *my*) loading on a separate component.

³Available upon request with the authors