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# **WORKING PAPER**

Need for Closure, Gender and Social Self-Esteem of youngsters

Iris Vermeir<sup>1</sup> Maggie Geuens<sup>2</sup>

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<sup>&</sup>lt;sup>1</sup> Ghent University, Faculty of Economics and Applied Economics, Department of Marketing, Hoveniersberg 24, 9000 Gent, Belgium. Tel. 032 9 2643528. Fax. 0 32 9 264 42 79. E-mail: Iris.Vermeir@Ugent.be.

<sup>&</sup>lt;sup>2</sup> Ghent University, Faculty of Economics and Applied Economics and Vlerick Leuven Gent Management School, Department of Marketing, Hoveniersberg 24, 9000 Gent, Belgium. Tel. 032 9 2643521. E-mail: Maggie.Geuens@Ugent.be.

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#### Abstract

High and low Need for Closure youngsters were compared on values and self-images related to social self-esteem. In addition, gender differences were researched. Results show that NFCL and gender significantly influence social self-esteem values like eagerness for approval and tranquility, achievement pressure and orientation, individualism, independency and appearance mindedness. NFCL and gender also affect youngster's social esteem related self-images. In addition, interesting interaction effects were identified. Limitations and directions for future research are suggested.

Keywords: Need for Closure; Values; Self-Image, Gender, Social Self-Esteem.

#### Introduction

Recently, Need for Closure (NFCL) has been related to a wide variety of human behaviors from group behavior (e.g. Pierro, Mannetti, De Grada, Livi & Kruglanski, 2003) to consumer behavior (e.g. Vermeir, Van Kenhove & Hendrickx, 2002). NFCL reflects the desire for clear, definite, or unambiguous knowledge that will guide perception and action, as opposed to the undesirable alternative of ambiguity and confusion (Kruglanksi & Webster, 1996). A high NFCL is translated in little cognitive processing and the rejection of deviate views and opinions because high accessible structures (like pre-existing knowledge structures or stereotypes) afford immediate closure. Low NFCL leads to an enhanced cognitive processing of new, alternative information and competing, divergent views when closure is "in danger" of forming.

Some researchers acknowledged that NFCL is not only related to behavior but to more inherent individual beliefs. For example, research showed that NFCL influences traditionalism in beliefs about politics (Kossowska & Van Hiel, 2003) and ethics (Van Kenhove, Vermeir & Verniers, 2001). In sum, high NFCL individuals advocate conservative, non-deviant ideas and situations, while low NFCL individuals embrace unorthodox, non-conformist ideas and situations.

In the present research, we explore the relation between Need for Closure and values, a so far unexamined topic. Values are beliefs that specific modes of conduct or end-states of existences are preferred to other specific modes of conduct or end-states and as NFCL, values are inherent to an individual. Values may affect a wide spectrum of behaviour across many situations and are therefore of particular interest.

Recently, personality traits and personal values have been integrated conceptually (Olver & Mooradian, 2003). Individuals "react to their environments by evolving patterns of

thoughts, feelings and behaviors" -i.e. characteristic adaptations- "that are consistent with their personality traits" (McCrae & Costa, 1999, p. 145). McCrae and Costa (1999) suggest cataloging the characteristic adaptions or values that are associated with personality traits and explain how they reflect common basic tendencies. Several authors have already attempted to explain how these values relate to enduring individual tendencies and found, for example, relationships between the five-factor model and values (e.g. Olver & Mooradian, 2003; Dollinger, Leong & Ulicni, 1996).

In the present study, we explore the relationship between the individual tendency – NFCL- and some specific values. We especially selected those values that are connected to social self-esteem (e.g. esteem derived from approval of others)- a widespread, important pursuit of youngsters in modern society.

Each of us strives to enhance our self-esteem. Self-esteem is linked in important ways to how people approach their daily lives. Individuals with high self-esteem tend to be more happy, healthy, successful and productive, while those with low self-esteem are more prone to failure. Especially for youngsters, self-esteem is a critical aspect in the development: low self-esteem can negatively affect social and academic achievement.

Interpersonal perspectives of self-esteem are based on the notion that people's feelings about themselves are related to how they believe others evaluate them. In addition, the interpersonal perspective suggest that believing one possesses certain attributes (i.e. selfimage) predicts self-esteem only to the extent that the individual believes that other people regard those attributes as important or valuable (MacDonald, Saltzman & Leary, 2003). More specifically, MacDonald et al. (2003) found that individuals had high self-esteem if they viewed themselves positively in a particular domain (i.e. a positive self-image), only if

they believed that the domain had important ramifications for winning others' approval or avoiding others' disapproval.

In modern society, striving for approval seems to be reflected in the need for power, status or getting ahead (i.e. agency), more specifically in the adherence to competence, attractiveness and wealth. Especially the value 'competence' often reflects a socially motivated desire to obtain approval and other social benefits (MacDonald et al., 2003). In other words, nowadays, social approval often comes about by displaying competence, attractiveness and wealth. We argue that -especially for youngsters- social approval or the appreciation or recognition of an important group, is considered of paramount importance. Consequently, competence, attractiveness and wealth could be important values for adolescents.

Gender has been extensively associated with specific values (e.g. Prince-Gibson & Schwartz, 1998). In general, results of previous studies show that gender differences exist in value-related instrumental-agentic versus expressive-communal orientations (Struch, Schwartz & van der Kloot, 2002). Men are motivated by mastery strivings, are cued by internal standards of excellence and adhere more competitive values, while women are motivated by affiliative motives and social approval and prefer cooperation and communication. Josephs, Markus and Tafarodi (1992) found that men adhere more the values of independence and autonomy, while women define themselves somewhat more by their social connections.

In the present research we explore the relationship between NFCL, gender and social self-esteem values. Based on previous research, we argue that value differences could exist for high and low NFCL male and female youngsters. We concentrate on social self-esteem values because social approval is an important aspect in the life of youngsters. More

specifically, we investigate the values competence, attractiveness and wealth, because these values are important in modern society. In addition, we incorporate self-image in our study. Both individuals' self-images and their beliefs that this domain is important for approval (which is expressed in their values) determine self-esteem (MacDonald et al., 2003). If an individual holds particular values, believing one possesses the attributes that are associated with those values (i.e. self-image) is a necessary condition to bring about positive feelings or high self-esteem, the latter being an important predictor for a happy, healthy, successful and productive life.

#### Materials and Methods

#### Measures

We administered a self-report questionnaire to 1290 young adults .We developed a self-report measure of the social esteem values people adhere. More specifically, we selected those values from the Rokeach value survey (Rokeach, 1973) (e.g. independent, self-respect, social recognition, ambitious), the Schwartz survey (1992) (e.g. power, achievement) and the List of Values (Kahle, 1983) (e.g. self-respect, self-fulfillment, sense of accomplishment, being well respected) that are related to social-self esteem. We constructed statements that describe the different values (see table 1). For example, with regard to the value "independent" we constructed the statements 'I have my own opinion about everything' and 'others have little influence on me'. We asked our respondents to indicate their beliefs about the different statements on a 6-point scale ranging from completely disagree to completely agree.

In addition, the questionnaire contained 21 self-describing (5-point scale) characteristics related to social self-esteem (e.g. reliable, creative) to determine the youngsters' self-images (see table 1).

We performed principal component analyses to reduce the amount of variables to some common factors. The analysis resulted in 8 values (social, eager for appreciation, appearance minded, pressured to achieve, achievement oriented, individualistic, own opinion, relax) and 4 self-images (negative, solid, hard worker, modest) after excluding some interrupting variables (see table 1).

Concerning NFCL, a validated translation (Vermeir, 2003) of the original measure of individual differences in NFCL (Webster & Kruglanski, 1994) was used. The NFCL scale discriminates individuals with a different dispositional NFCL. The reliability of the scale is moderate ( $\alpha$ =.69). Following previous research, we categorized high and low NFCL respondents using median split (Chiu, Morris, Hong & Menon, 2000). Respondents categorized as high (M=4.34) and low (M= 3.29) NFCL significantly differ in their level of closure (F(1, 1289)=2087.89, p<.001).

#### Current Sample and Procedure

Data were collected using street interviews. 1290 Youngsters were at random addressed in a shopping mall or in a shopping street during two weeks. The questionnaire was self-administered and completely anonymous. The sample consists of 51.3% women. The age of the respondents ranged from 15 to 24 years, with a mean of 18.87 (SD=2.78). 45.8% of the working youngsters were blue-collar workers, 12.0 % were self employed and 34.6% engaged in clerical work. The education level of the student respondents was predominantly secondary education (65.8%) and college education (33.9). 90.5% of the respondents lives with their parents, while only 5.8% live alone and 3.7 % live with their

partner or friends. In general, youngsters find it very important that others appreciate them and that they achieve well; they prefer groups or friends instead of being alone; they feel some pressure to achieve well; they slightly consider life without pressure important and have their own opinions about certain issues. They are not so engaged in appearance, and consider themselves not individualistic. In addition, they consider themselves solid, slightly hard working, not modest and certainly not negative.

#### Results and Discussion

Multivariate analysis of variance was performed with the values and self-images as dependent variables. Both NFCL (F(1, 1189)= 21.49, p<.001) and gender (F(1, 1189)= 14.06, p<.001) influenced values. In addition, a significant interaction effect was found (F(1, 1189)= 2.43, p<.001). Moreover, self-images were influenced by NFCL (F(1, 1189)= 22.82, p<.001) and gender (F(1, 1189)= 6.69, p<.001). No significant interaction effect was found for self-images (F(1, 1189)= 1.31, ns). Univariate analysis (see table 2) indicated that NFCL and gender significantly influenced eagerness for appreciation, appearance mindedness, feeling of achievement pressure, achievement orientation, individualism, own opinions and relaxations. In addition, NFCL influences social character. More specifically, high (versus low) NFCL youngsters find it more important to be appreciated, are more appearance minded, feel more pressure to achieve, are more achievement oriented and are more eager to relax. On the other hand, low (versus high) NFCL youngsters are more social, individualistic and have more own opinions. High (versus low) NFCL youngsters also consider themselves more hard working and modest.

Women (versus men) are more eager to be appreciated, are more social, appearanceminded, pressured to achieve and want to relax more. On the other hand, men (versus

women) are more achievement oriented, more individualistic and have more own opinions. In addition, men (versus women) consider themselves more negative and less solid. More importantly, some interesting interaction effects were uncovered. More specifically, social character, achievement orientation, and own opinions were significantly influenced by the interaction between NFCL and gender. Planned comparisons show that high NFCL men and women have an equal social mentality, while low NFCL men are more social then low NFCL women (F(1, 648) = 5.98, p<.05). Moreover, high NFCL men are more achievement oriented (F(1, 640)=14.42, p<.001) and have more own opinions (F(1, 640)=12.13, p<.001) than high NFCL women, while no differences exist for low NFCL men and women (achievement orientation, (F(1, 648)=1.29, ns); own opinions, (F(1, 648)=.89, ns)).

In sum, high NFCL coincides with higher social esteem values like appreciation and achievement. These results are in line with NFCL theory and previous research, that suggest that high NFCL individuals are more committed to conservative and non-deviant ideas and situations (e.g. Webster & Kruglanki, 1994), indicating that peer group consensus is highly valued. These inherent traditional ideas could be translated in an enhanced eagerness to be appreciated by their peers and in addition, a higher pressure to achieve. Consequently, they could attach great importance to appearance and comply with achievement-oriented values, which are considered of paramount importance in current society. It is then hardly surprising that high NFCL youngsters look upon themselves as hard-working, achieving individuals who are rather modest. In addition, living up to expectations of the peer group and the coinciding pressure, could make high NFCL youngsters more inclined to escape from this pressure by relaxing and keeping away from others.

On the other hand, low NFCL youngsters seem to comply less with social esteem values as they do more as they please, without pressure of others, and they put themselves

first (cfr. Pierro et al, 2003). On the other hand, they mix more with other people, which increases the possible encounter with opinion deviates, and could help them acquire power and leadership, two situations highly valued by low NFCL youngsters (Kruglanski, Webster & Klem, 1993).

Our results also confirm previous research on gender differences in values and selfimages. Women have higher social esteem values (e.g. eagerness for appreciation, appearance-minded, pressured to achieve), while men have more independent and competitive values (e.g. achievement oriented, individualistic, own opinions) (cfr. Josephs et al., 1992). In addition, the tendency for social approval could make women more open to engage in social interaction, while men could be more distressed with their competitive efforts and therefore experience more the need to relax.

The interaction effects indicate that previous results concerning values, gender and individual characteristics should be interpreted with caution. The adherence to certain values cannot always be generalized over particular groups (e.g. males/females; high/low NFCL). For example, although in general men are more achievement oriented than women, in case of low NFCL, no gender differences exist. It could be interesting to investigate other, possibly interacting, characteristics in future research. In addition, future research could incorporate more values (next to social esteem values) to get a broader picture of the relationship between NFCL and values. In this research, we only investigated social esteem values because these are particularly important in youngsters' living environment. We did combine several values questionnaires (Schwartz, Kahle, Rokeach) and constructed more specified statements to acquire more in-deep knowledge on the relation between different aspects of social self-esteem values and NFCL.

The interaction results are particularly interesting when we keep in mind that the level of NFCL an individual possesses, can also depend on the situation (Kruglanski & Webster, 1996). Some situations trigger a low (or high) NFCL, which in turn possibly influences the values that are adhered in that situation. For example, in a situation where the fear of invalidity is increased (e.g. high accountability; accuracy instructions), men and women would not differ in achievement orientation. Or in other words, men should become less occupied with achievement and career if they are informed that they are accountable for their actions or instructed that accuracy is very important. Furthermore, these results suggest that in low NFCL conditions, women as well as men have their own opinions about some issues, but in high NFCL conditions (e.g. time pressure, fatigue), women give up their own opinions and are possibly more inclined to conform to the public (i.e. peer group) opinion. Future research can establish this situational dependency of values.

Interestingly, men have a more negative self-image, while women see themselves as responsible and reliable individuals. The latter result could imply that women have a higher general self-esteem. If women think they are solid, an attribute that is generally valuable for youngsters, they should display a higher self-esteem (MacDonald et al., 2003). We did not incorporate a general measure of self-esteem in our study, future research could determine if women have indeed more self-esteem than men.

In sum, the present research indicates that youngsters' values and self-images concerning social self-esteem differ according to their level of NFCL and their gender. In addition, we argue that values and self-images cannot be generalized over gender groups because interaction effects exist between gender and NFCL. With this research, we added to the studies that underscore the communalities between values and individual characteristics.

In addition, we added to the knowledge of the beliefs and motives of high and low NFCL individuals.

#### References

- Chiu, C.Y., Morris, M.W., Hong, Y.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(2)*, 247-259.
- Dollinger, S.J., Leong, F.T.L., & Ulicni, S.K. (1996). On traits and values: With special reference to openness to experience. *Journal of Research in Personality*, *30(1)*, 23-41.
- Ford, T.E. & Kruglanksi, A.W. (1995). Effects of epistemic motivations on the use of accessible constructs in social judgment. *Personality and Social Psychology Bulletin, 21(9),* 950-962.
- Josephs, R.A., Markus, H.R. & Tafarodi, R.W. (1992). Gender and self-esteem. *Journal of Personality and Social Psychology*, *63(3)*, 391-402.
- Kahle, L. (1983). Social values and social change: Adaptation to life in America. New York:Praeger.
- Kossowska, M. & Van Hiel, A. (2003). The relationship between need for closure and conservative beliefs in western and eastern Europe. *Political Psychology, 24(3),* 501-518.
- Kruglanski, A.W., & Webster, D.M. (1996). Motivated closing of the mind: "seizing" and "freezing". *Psychological Review*, 103, 263-283.
- Kruglanski, A.W., Webster, D.M., & Klem, A. (1993). Motivated resistance and openness to persuasion in the presence or absence of prior information. *Journal of Personality and Social Psychology*, 65, 861-876.
- MacDonald, G., Saltzman, J.L., & Leary, M.R. (2003). Social approval and trait self-esteem. Journal of Research in Personality, 37(1), 23-40.

- McCrae R.R. & Costa, P.T.Jr. (1999). A five-factor model of personality. In L.A. Pervin & O.P. John (eds.). *Handbook of Personality: theory and research* (2nd ed.) (p. 139-153). New York: Guilford Press.
- Olver, J.M., & Mooradian, T.A. (2003). Personality tratis and personal values: A conceptual and empirical integration. *Personality and Individual Differences*, *35(1)*, 109-125.
- Pierro, A., Mannetti, L., De Grada, E., Livi, S., & Kruglanski, A.W. (2003). Autocracy bias in informal groups under need for closure. Personality and Social Psychology Bulletin, 29(3), 405-417.
- Prince-Gibson, E. & Schwartz, S.H. (1998). Value priorities and gender. Social Psychology Quarterly, 61(1), 49-67.
- Rokeach, M. (1973). The nature of human values. New York: Free Press.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology, 25,* 1–62.
- Struch, N., Schwartz, S.H., & van der Kloot (2002). Meanings of Basic Values for Women and Men: A Cross-Cultural Analysis. *Personality and Social Psychology Bulletin*, 28(1), 16-28.
- Van Kenhove, P, Vermeir, I., & Verniers, S. (2001). An empirical investigation of the relationships between ethical beliefs, ethical ideologies, political preference and Need for Closure. *Journal of Business Ethics*, 32 (4), 347-361.
- Vermeir, I. (2003). The influence of Need for Closure on Consumer Behaviour. Doctoral Dissertation. Ghent University.
- Vermeir, I., Van Kenhove, P., & Hendrickx, H. (2002). The influence of Need for Closure on consumers' choice behaviour. *Journal of Economic Psychology*, 23(6), 703-727.
- Webster, D. & Kruglanski, A. W. (1994). Individual differences in Need for Cognitive Closure. Journal of Personality and Social Psychology, 67(6), 1049-1062.

### Table 1. Factor Loadings of Values and Self-Images

Specific Values	Loading	Common factor	Mean	<b>SD</b> .824	
I like to be in a group <sup>a</sup>	.753	Social character	4.578		
I prefer staying at home above going out(-) <sup>a</sup>	.713				
I like to be alone(-) <sup>a</sup>	.658				
Friends are very important to me <sup>a</sup>	.625				
I easily make contacts <sup>a</sup>	.567				
I find it important that others appreciate me <sup>b</sup>	.877	Eager for appreciation	4.984	.680	
I find it important that my surroundings respect me <sup>b</sup>	.843				
I enjoy to gain recognition for what I do <sup>b</sup>	.659				
I always dress after the latest fashion <sup>a</sup>	.831	Appearance minded	3.588	1.062	
I attach great importance to appearance <sup>a</sup>	.817				
Appearance is at least as important as the inner self <sup>a</sup>	.566				
I am subjected to pressure to achieve <sup>a</sup>	.799	Pressured to achieve	3.935	.753	
Most youngsters are pressured <sup>a</sup>	.737				
I possibly cannot live up to the expectations of my	.693				
environment <sup>a</sup>					
It is important to achieve well <sup>c</sup>	.610	Achievement oriented	4.416	.709	
I am proud of myself <sup>d</sup>	.607				
I have a bright future <sup>d</sup>	.591				
Making a career is important <sup>c</sup>	.499				
Everyone should primiraly think of themselves <sup>a</sup>	.723	Individualistic	3.164	.976	
Money and power are important <sup>a</sup>	.723				

Others have few influence on me <sup>e</sup>	.773	Own opinion	3.967	.967
I have my own opinion about everything <sup>e</sup>	.765			
Life without pressure is important <sup>a</sup>	.790	Relax	4.066	1.025
I relax as much as possible <sup>a</sup>	.760			
Self-Images	Loading	Common Factor	Mean	
Selfish	.659	Negative	2.315	.629
Unsatisfied	.620			
Stuborn	.593			
Aggressive	.568			
Spineless	.535			
Responsible	.740	Solid	4.134	.508
Independent	.686			
Reliable	.653			
Tolerant	.550			
Perfectionist	.749	Hard worker	3.431	.658
Diligent	.665			
Perseverant	.540			
Materialistic	.487			
Modest	.825	Modest	3.130	.985
Timid	.809			

(-) reverse scored

Original value: <sup>a</sup> power (competence, appearance & wealth), <sup>b</sup> social recognition, being wellrespected, sense of accomplishment, <sup>c</sup> ambitious, achievement, self-fulfillment, <sup>d</sup> self-respect, <sup>e</sup> independent

	NFCL			Gender			NFCL X Gender
Values	Low	High	F-Value	Women	Men	F-Value	F-Value
Social character	4.68	4.46	22.58***	4.58	4.56	1.24	5.07*
Eager for appreciation	4.90	5.01	20.13***	5.05	4.92	8.78***	.88
Appearance minded	3.46	3.70	12.96***	3.69	3.46	12.03***	.20
Pressured to achieve	3.76	3.93	56.57***	4.05	3.80	26.47***	1.02
Achievement oriented	4.35	4.48	14.59***	4.36	4.48	11.58***	3.02*
Individualistic	3.23	3.11	2.89*	3.03	3.32	24.82***	.88
Own opinion	4.10	3.85	19.10***	3.91	4.04	3.35*	9.90***
Relax	3.90	4.25	41.17***	4.04	4.11	3.90*	.84
Self-Images	Low	High	F-Value	Women	Men	F-Value	NFCL X
	NFCL	NFCL					Gender
Negative	2.31	2.31	.34	2.27	2.36	7.94***	.64
Solid	4.13	4.13	.63	4.19	4.06	2.39***	1.85
Hard worker	3.32	3.55	41.01***	4.43	4.44	1.34	.37
Modest	2.95	3.34	44.24***	3.14	3.12	.17	1.55

### Table 2. ANOVA Statistics of Values and Self-Images

\*\*\* p<.001, \*\* p<.01, \* p<.05, (\*), p<.1



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