Does Bad Company Corrupt Good Morals? Social Bonding and Academic Cheating among French and Chinese Teens

Elodie Gentina

SKEMA Business School,
Université de Lille, MERCUR Research Center
Avenue Will Brandt
59 777 Euralille, France
Tel: +33 3 20 21 59 62
Fax: +33 3 20 21 59 59
Email: elodie.gentina@skema.edu

Thomas Li-Ping Tang

Department of Management,
Jennings A. Jones College of Business
Middle Tennessee State University,
Murfreesboro, Tennessee 37132 USA
Tel: +1 615 898-2005,
Fax: +1 615 898-5308
E-mail: Thomas.Tang@mtsu.edu

Qinxuan Gu

Antai College of Economics and Management,
Shanghai Jiao Tong University
1954 Hua Shan Rd., Shanghai, 200030, China
Tel: +86 21 62932760
Fax: +86 21 6293 3262
Email: qxgu@sjtu.edu.cn

Does Bad Company Corrupt Good Morals? Social Bonding and Academic Cheating among French and Chinese Teens

A well-known common wisdom asserts that strong social bonds undermine delinquency. However, there is little empirical evidence to substantiate this assertion regarding adolescence academic cheating across cultures. In this study, we adopt social bonding theory and develop a theoretical model involving four social bonds (parental attachment, academic commitment, peer involvement, and moral values) and adolescence self-reported academic cheating behavior and cheating perception. Based on 913 adolescents (average age = 15.88) in France ($n = 429$) and China ($n = 484$), we show that parental attachment, academic commitment, and moral values curb academic cheating; counter-intuitively, peer involvement contributes to cheating. We test our theoretical model across culture and gender, separately, using multi-group analyses. For French teens, peer involvement encourages and moral values undermine cheating; for Chinese adolescents, all four social bonds contribute to cheating, similar to the whole sample. For girls, parental attachment deters, but peer involvement enhances cheating. For boys, parental attachment is the only social bond that does *not* affect cheating. We treat social integration (popularity) as a mediator of the relationship between peer involvement and cheating and ask: Considering popularity, who are likely to cheat? Our answers provide an interesting paradox: Popularity matters, yet popular French girls and unpopular Chinese boys are likely to cheat. Social sharing is a positive pro-social behavior in consumer behavior. We shed new lights on both the bright and dark sides of social bonds on cheating, demonstrate bad company corrupts good morals, differently, across culture and gender, and provide practical implications to social bonding, business ethics, and cheating.

Keywords: Social bond, Classroom cheating, Adolescent, Cross-cultural, France, China, Gender, Moderator, Mediator, Sharing, Social Integration, Dishonesty, Massacre

For the past two decades, it has become a common event in our lives when the news media reports corruption, scandals, and unethical behaviors performed by large corporations (e.g., Enron, WorldCom, and Tyco), politicians, athletes, executives, and individuals (e.g., Bernie Madoff) (Gino et al. 2013) as well as massacres in the US and around the world. Report to the Nations (2014) estimates that fraud and abuse cause an annual loss of $3.7 trillion globally. Thus, fraud, dishonesty, and cheating are very prevalent in our societies around the world (Ding et al. 2014).

Following the person-situation interactionist model (Treviño 1986), researchers have explored bad apples, bad cases, and bad barrels as sources of unethical decision making in organizations (Mazar et al. 2008; Kish-Gephart et al. 2010; Tang et al. 2008). Further, emotional cues and situational contexts play important roles in individuals' cheating and dishonesty across global economic pyramid (Chen et al. 2014; Pascual-Ezama et al. 2015; Tang et al. 2011). Despite the environmental contexts, some researchers argue that executives do not suddenly become delinquent, unethical, or corrupt, when they reach to the top of the organizational echelon. Arguably, they may have started at a much younger age with something small and trivial (e.g., academic cheating in schools). Inch by inch, some unethical individuals dig deeper and deeper into a hole of which they cannot get out (Tang and Chen 2008).

Interestingly, no significant changes exist in university students' deeply rooted personal values regarding making money and making ethical decisions, comparing these same values before and after a short ethics intervention—one chapter on business ethics and corporate social responsibility in a business class (Tang 2014). Since college students bring their personal values to universities, it may be too late to change these 23-year old juniors and seniors' personal values. Intuitively, it may be appropriate for researchers to explore *younger* individuals who are more open to the influences of others in the environmental contexts than college students—adolescents.

Adolescents (young teenagers) have undergone puberty, but have not reached full maturity. They are highly socialized, interacting with each other, nested within a large environmental context

(i.e., family, peer group, school, and country), and qualitatively different from individuals in other age groups, both in the value they attach to their peer groups and in their need to be socially involved with their peers through social consumption and activities (Gentina and Bonsu 2013). Teenagers (students) are highly motivated to fit in a school's social setting (Akerlof and Kranton 2002). Adolescents develop a strong need to belong and high desire for close interpersonal attachment (Baumeister and Leary 1995). Further, both peer pressure and conformity exert significant impacts on adolescents' social acceptance, gaining popularity, maintaining friendships, and self-esteem (Isaksen and Roper 2012). Recent research on emotional contagion via social networks suggests that emotions expressed by others influence our own emotions (Kramer et al. 2014). Via social networks, adolescents are highly active in sharing information and emotions. In this study, we explore adolescents' academic cheating through the lens of social bonding theory, testing, specifically, the notion "bad company corrupts good morals"[1].

Social bonding theory (SBT) suggests that deviant behavior is a result of the weakening or severing of one or more of the social bonds—attachment to conventional others, commitment to conventional goals and activities, involvement in conventional activities, and beliefs in conventional values (Hirschi 1969). Researchers in criminology (Andrew and Bonta 1998) and delinquency (Özbay and Özcan 2006) suggest strong social bonds will inhibit various forms of deviance, delinquency, and rule-breaking behaviors. To the best of our knowledge, only two published papers have explored social bonding theory or social bonds[2] in *Journal of Business Ethics* (Donleavy 2008; Sims 2002), as of October 1, 2015. Since very little research has applied social bonding theory to academic cheating across cultures, the contribution of this theory is not as ubiquitous as most researchers once thought.

---

[1] 1 Corinthians 15: 33.
[2] We used the terms social bonding theory and social bonds in our search, using Web of Science.

Cheating exists at different levels of education (Anderman and Murdock 2007) and frequently during adolescence (Anderman and Midgley 2004; Ding et al. 2014). About 85% of American adolescents engage in some types of academic dishonesty before graduating from high school (NBC News 2012). Studies of cheating tend to overlook adolescents' social bonds and the importance of social integration (popularity) (Kratzer and Lettl 2009; Lucifora and Tonello 2015), collect data in only one country (with some exceptions), and fail to detect cultural differences.

In this study, we adopt social bonding theory, develop a theoretical model of social bonds (parental attachment, academic commitment, peer involvement (social sharing), and moral values) and academic cheating behavior and cheating perception, collect data from adolescents in France and China, and make the following contributions to the literature. We expand the social bonding theory from the context of criminology and delinquency to a new context of academic cheating. We investigate powerful influences of adolescents' social environment, such as parents, academic values, peers, moral values, and the national cultures. We not only demonstrate the bright and dark sides of social bonds on academic cheating but also enrich our theoretical model by incorporating the notion of social integration (popularity) as a mediator of the relationship between peer involvement and academic cheating. From the perspective of social integration, popularity matters, yet popular French girls and unpopular Chinese boys engage in cheating—revealing a profound and novel paradox of cheating across culture and gender. Our discoveries demonstrate bad company corrupts good morals and offer interesting, original, and innovative theoretical, empirical, and practical contributions to cheating and business ethics.

Theory and Hypotheses

In the literature, researchers have examined various variables (Kish-Gephart et al. 2010) related to cheating, such as: demographic variables—age, gender, and grade (Crown and Spiller 1998; Elias 2009; Klein et al. 2007; Smith et al. 2004), personality variables—Machiavellianism, religiosity (Chen and Tang 2013; Bloodgood et al. 2008, 2010, Tang and Tang 2010), self-esteem

(Tang and Zuo 1997), moral judgment (Bernardi et al. 2004; West et al. 2004), love of money (Chen et al. 2014; Tang 2014; Tang and Chiu 2003; Tang and Liu 2012; Tang and Sutarso 2013), and achievement goals or motivations (Weiss et al. 1993). Others have studied social and environmental contexts—classroom climate and personality of teachers (Murdock et al. 2001), perceived prevalence of peers' cheating (Andrews et al. 2007), or moral support of the family (Park al. 2013). Most studies investigate individuals from one single country (Allmon et al. 2000), such as: Canada (Widelman 2009), China (Ma et al. 2013), Hungary (Orosz et al. 2013), Japan (Kobayashi and Fukushima 2012), South Korea (Park et al. 2013), UK (Kirland 2009), and the US (Gino and Wiltermuth 2014; Premeaux 2010), with some exceptions (Pascual-Ezama et al. 2015; Salter et al. 2001; Tang et al. 2011). In this study, we incorporate social bonding theory.

Social Bonding Theory

Social bonding theory, a major paradigm in criminology (Andrews and Bonta 1998), is an extension of Durkheim's (1897/1951, p. 209) notion: "The more weakened the groups to which the individual belongs, the less he depends on them, the more he consequently depends only on himself and recognizes no other rules of conduct than what are founded on his private interests" (cited in Hirschi 1969, p. 16). When an individual's social bond to conventional society is weak or broken, deviance or delinquency will result. When individuals are strongly *attached* to others (emotional closeness to family, peers, and school); *committed* to customary lines of action (rational calculation of the costs of law breaking for future goals); *engaged* in social activities (time spent in conventional activities with peers); and *believe* in the validity of the moral values of society (normative beliefs and ideas supporting the conventional orientation); they are less likely to engage in unethical acts.

A recent incident on October 1, 2015 in the US[3] was a case in point. A 26-year-old (male) gunman singled out Christians during his massacre, killed nine innocent people, and injured several more at the Umpqua Community College, in Roseburg, Oregon. He was obsessed with Satan, documented his devotion to darkness, and wrote in the manifesto: "I am going to die friendless". He had a lonely childhood, did not talk to anyone, and didn't like anyone, according to some sources. In his evil attempt to get others' attention and recognition, the shooter died on Thursday afternoon after exchanging gunfire with law enforcement officials.

Social Bonding Theory and Academic Cheating

Researchers empirically have tested Hirschi's (1969) social bonding theory on adolescence deviant behaviors: e.g., use of alcohol (Labouvie 1996), cigarette (Akers and Lee 1999; Labouvie 1996), and marijuana (Akers and Cochran 1985), or delinquency (LaGrange and White 1985). Others are rather equivocal concerning the theory's empirical status (Kempf 1993). Counter-intuitively, frequency of attending religious services and membership in religious organizations increase the probability of cheating (Vowell and Chen 2004). Among four social bonds, only attachment and belief components predict academic cheating, whereas commitment and involvement exhibit little significant influence on cheating (Michaels and Miethe 1989). Significant positive relationships between social bonds and cheating exist among Japanese females, but not among Japanese males (Kobayashi and Fukushima 2012). There is a dearth of empirical research on social bonds and academic cheating due to the lack of cross-disciplinary research by scholars in sociology and behavioral ethics. These inconclusive findings further highlight the need for exploring possible moderators and mediators. We will explore four social bonds—parental attachment, academic commitment, peer involvement, and moral values as related to academic cheating and investigate potential moderator and mediator, below.

---

[3] According to *People*, Accessed on October 2, 2015.
(http://www.people.com/article/oregon-shooting-gunman-had-obsession-satan?utm_source=zergnet.com&utm_medium=referral&utm_campaign=zergnet_715737&xid=partner_zergnet)

Parental attachment. The family, in general, and parents, in particular, are the primary sources of emotional support (Blos 1979) and the most significant socialization agents for adolescents (John 1999). In social psychology, parental support (nurturance, attachment, acceptance, and love) limits risky behaviors during adolescence—aggression, delinquency, and substance abuse (Bogenschneider et al. 1998; Vowell and Chen 2004). Intact families and good family relations decrease the chances of delinquent behavior among children (Shoemaker 2000). Others argue that parental support does not decrease deviant behaviors (Agnew 1993; Akers and Cochran 1985). Lacking similar evidence as it relates to adolescents, we anticipate a negative relationship between parental support and academic cheating among adolescents.

Academic commitment. People with strong commitments in their social lives (e.g., a good reputation or pursuing educational goals) are less likely to deviate from the norm. Dishonesty involves a cost-benefit analysis of self-interest—balancing "the consequences of getting caught and punished" against "the financial rewards of dishonesty"—a very risky prospect. Most honest people want to maintain their self-concept (Ariely 2008; Mazar et al. 2008) because dishonest financial gains do not justify the loss of freedom, dignity, integrity, and reputation in their lives (Gomez-Mejia et al. 2005). We measure commitment using academic self-efficacy (Schunk 1991). Students who feel confident about their academic abilities are more likely to perceive academic cheating as unethical (Elias 2009). Some honestly succeed in academic work, others achieve that by cheating.

Peer involvement. Involvement refers to the amount of time spent in social and conventional activities. Active participants have less time available for deviant conducts (Hirschi 1969). Sharing objects and resources with schoolmates is a common social practice which enables them to socialize, create social bonds, strengthen friendships, and share experience (Blake et al. 2015; Gentina 2014). We follow Hawdon's (1999) view and consider involvement in social activities through the practice of sharing objects with schoolmates.

First, in sociology literature, individuals involved in legitimate school and social activities do not have time engaging in delinquent acts (destroying property, stealing things, and shooting heroin) (Agnew 1993; Özbay and Özcan 2006), others show the exact opposite because such activities detract from the amount of time available for studying (Michaels and Miethe 1989). Results are mixed. The Aboriginal communities in Australia (Belk et al. 2000) illustrate the bright and dark sides of sharing. On the bright side, lavish sharing transcends home boundaries, emphasizing the well-being of the community. On the dark side, they are addicted to harmful consumption lifestyles, involving alcohol and compulsive gambling, and self-destructive practices, reflecting the sharing ethos and Aboriginal culture.

Second, researchers in consumer behavior view sharing as a positive, productive, and enjoyable social or leisure activity which contributes to enact group identity, foster self-esteem, and strengthen socialization (Belk 2009). "In the past you were what you owned. Now you are what you share" (Ledbeater 2009, p. 32). Choosing the option of sharing has a positive influence on both personal and others' well-being: e.g., "tightening bonds, enhancing social connection, building a sense of macro aggregate self, minimizing the repercussions on the environment and improving the collective well-being" (Belk and Llamas 2011, p. 33). Spending money on others promotes happiness (Dunn et al. 2008). Both sharing things and helping others enhance happiness and well-being. "Sharing by a giver can be judged as generous or stingy, altruistic or selfish, and fair or unfair, all according to cultural norms" (Belk 2007, p. 130).

We answer Belk's call and conceptualize sharing for personal objects (class notes, books, and electronics), rather than communal objects and places shared by all the members of the family or the community. Further, the physical propinquity is the strongest predictor of people who become friends (Festinger et al. 1950). We briefly propose our theory below.

First, following suggestions mentioned above (Festinger et al. 1950), adolescents develop their close friendships with peers who are physically close to them. They have close contacts with

classmates and friends at schools and, probably, after school too. Naturally, sharing with peers at school not only signals the act of generosity but also serves as an egoistic act due to its instrumental and self-oriented goals (Casciaro et al. 2014), maximizing their own interest (Tang et al. 2008). Second, those who share may help them develop more power to control their peers and become more popular than those who do not. Third, adolescents' peer involvement will spill-over to other activities in their lives. Fourth, consequences of this spill-over effect depend on the kind of company they keep. Fifth, bad is stronger than good (Baumeister et al. 2001).

It is easier to fall into a bad temptation than good (Tang and Sutarso 2013). Given a choice, most people are more likely to select a piece of chocolate (tasty food) than an apple (healthy food) (Baumeister et al. 2008). There is a Chinese saying: To obtain knowledge is like rowing a boat up the stream, if you do not make progress and row the boat up the stream, then, you regress and flow down the stream. It takes a lot of effort to resist the temptation, perform good deeds, and row the boat up the stream (a difficult and narrow path) than float the boat down the stream (an easy and broad path)[4]. One critical issue we may ask is this: What kind of company do adolescents keep— the one who provides positive and uplifting inspiration, or negative and bad influence?

Following these arguments, if adolescents keep good company, they selectively pursue academic excellence and frown upon academic cheating. On the other hand, if they keep bad company, then, their high spirit of sharing may lead to academic cheating. Receiving and providing answers to others during examinations and completing class assignments may be considered as another form of normal, but unethical, activities that will benefit themselves and others. Some may want to offer help to others and become good Samaritan and generous neighbor (Tang et al. 2008), in the eye of cheaters. Interestingly, recent research suggests that people cheat more when others can benefit from their cheating and when the number of beneficiaries of wrongdoing increases. In

---

[4] Enter through the narrow gate. For wide is the gate and broad is the road that leads to destruction, and many enter through it. But small is the gate and narrow the road that leads to life, and only a few find it (Matthew 7: 13-14).

the context of *self-serving altruism*, they view cheating as morally acceptable and feel less guilty (Gino et al. 2013). Bad company corrupts good morals, exhibiting a high level of academic cheating.

Moral values. Belief refers to the degree to which individuals adhere to the values associated with behaviors that conform to the law (Hirschi 1969). Belief in legitimacy of the law is a strong constraint to deviant behaviors, specifically academic cheating, stronger than the other elements of social bonds (Kobayashi 2011; Kobayashi and Fukushima 2012). For that reason, we expect a negative relationship between adolescents' beliefs in the legitimacy of the law or normative system in a society and academic cheating. Taken together, we summarize our tentative hypothesis as follows.

Hypothesis 1: The relationships between the social bonds and self-reported academic cheating will be negative for parental attachment, academic commitment, and moral values; but positive for peer involvement.

Culture

French and Chinese adolescents provide an excellent Western/non-Western comparison because societal expectations and parental practices differ significantly between these two cultures (Wang 2004). We also list Hofstede's cultural dimensions, below, which are widely known in cross-cultural research and may help us explore possible cultural differences between France and China in our present research (Hofstede 1980; Hofstede and Bond 1988): Individualism/Collectivism (France: 71 vs. China: 20), Power Distance (68 vs. 80), Uncertainty Avoidance (86 vs. 30), and Masculinity/Femininity (43 vs. 66). Culture could potentially affect many work-related attitude and behavior, such as: organizational citizenship behavior, helping behavior, satisfaction, and dishonesty (Özbek et al. 2015; Tang et al. 2008; Tang et al. 2011). Culture could potentially affect academic cheating among adolescents. We posit: Culture is a moderator of the relationships between social bonds and academic cheating.

Parental attachment. Characterised by an independent self-construal (Kitamaya and Markus 1992), French citizens, with high individualism, view themselves as autonomous, with individual rights, abilities, and motives (Hofstede 1980). French parents, with lower power distance, are more likely to encourage assertiveness and autonomy (Gentina and Chandon 2013). In contrast, China, with high collectivism, is characterized by close interpersonal contacts and an interdependent self-concept. The collectivist orientation of Chinese societies is attributed to the influence of Confucianism, with its emphasis on respect for social harmony and protection of the interests of one's in-group (Shafer et al. 2007; Su et al. 2003; Whitcomb et al. 1998). Chinese parents, with high power distance, are more protective of their children, encourage them to respect authority and rules, and obey laws (Tang 1990; Yang and Laroche 2011). These cultural differences echo prior research regarding differences in parental socialization between individualistic and collectivist cultures. Because Chinese adolescents depend more on their parents than their French counterparts, parental support may be a stronger determinant of adolescent academic cheating behaviors in China than in France.

Academic commitment. There are cultural differences in the levels of self-efficacy beliefs of individuals (Oettingen and Zosuls 2006). Specifically, adolescents in individualistic cultures (France) have a significantly higher level of self-efficacy than those in collectivist cultures (China), despite the fact that the latter are more successful academically, in general, than the former (Oettingen and Zosuls 2006; Tang 1990; Tang and Baumeister 1984). Chinese managers' paternalistic style moral leadership enhances employee creativity (Gu et al. 2015). In the Chinese context, parental support enhances their children's academic achievement which helps them obtain high quality jobs, exhibiting the Pygmalion effect (Howard et al. 2015). An old Chinese proverb states: "Everything is unworthy except studying" (Khan 2012). For some, academic motivation is also driven by fear of failure, because children are under the pressure to please their parents by succeeding academically (Eaton and Dembo 1997). Fear of failure is the most common reason for

adolescents to cheat (Schab 1991). Chinese adolescents have higher academic self-efficacy and stronger desire to succeed and are less likely to cheat, compared to their French counterparts.

Peer involvement. The practices of sharing is much more intense in collectivistic cultures (China), which value social links (quanxi) and consideration of others, than in individualistic countries, which emphasize individual assertiveness (France) (Belk 2007). This positive view of interdependence is demonstrated through intense experiences of sharing rituals in China, as seen in high preference for group travels, beverage sharing (Gongfu tea ceremony), and others. Both the Chinese national culture and their religion stress sharing practices: Buddhism emphasizes "*dana*", or generous sharing; and Confucianism *"shi"*, or giving[5], as antidote to consumerism. The result is not only less materialism (Lemrová et al. 2014; Tang et al. 2014), but also more community. Sharing is viewed as a prescribed norm in China with the concept of "*zhanguang*" (meaning share the light) (Belk 2007). There is an expectation that a villager who smokes in a public place should bring enough cigarettes for everyone.

The notion of self is one of the most fundamental assumptions shared within a culture (Kitamaya et al. 1997), which may help us understand the other-oriented vs. self-centered nature of consumer behaviors (Tynan et al. 2010). In a collectivist culture, the sense of self is governed by the perspective of *"being part of cohesive whole, whether it be (that of) a family, clan, tribe, or nation"* (Belk 1984, p. 754). Sharing is other-oriented, an act of "generosity", and is regarded as positive, productive, and enjoyable leisure activity. In individualistic societies, the self is seen as independent. Sharing is seen as an "egoistic" act, turned toward individual themselves. We suggest that the existence of sharing depends on culture—a group-centered view vs. an individual-centered view of self.

---

[5] Shi (giving) can be linked up with different nouns, including giving goods (*shi shan*) and giving medicine (*shi-yi*), but much more often with giving teaching/education (*shi jiao*)

Moral values. Confucian dynamism is the cornerstone of traditional Chinese culture. Prior research reveals inconsistencies regarding the potential impact of Confucian dynamism on ethical beliefs. Some researchers posit that because Confucianism is associated with thrift and a sense of shame, high level of Confucianism dynamisms lead individuals to be very conscious of what constitutes improper and unethical behavior (Lu et al. 1999). Since "the Chinese have been described as showing an exceedingly relativistic sense of morality" (Hofstede 1980, p. 181), Chinese are more likely to place their interests of others before themselves and obey ethical rules (Hofstede 1980; Hofstede and Bond 1988).

Cultural values have been widely used in cross-cultural studies (Bond and Hofstede 1989; Hofstede 1980). Several recent studies did not corroborate Hofstede's results and argued that some aspects of Confucian dynamism, such as protecting face (*mianzi*) and reciprocation (Hwang 1987), have a negative impact on ethical beliefs and socially responsible business behaviors (Ang and Leong, 2000; Tynan et al. 2010; Woodbine 2004). Chinese societies place a relatively low value on the importance of ethics and moral values (Ang and Leong 2000). Due to globalization and recent changes, ethical decisions of Chinese people now reflect a mix of traditional Confucian values and emerging modern values, which contributes their less ethical and socially responsible behaviors (Shafer et al. 2007). Since Chinese parents endorse a mixture of traditional and modern values, and parents socialize their children who negotiate with these conflictual values, we suggest that Chinese adolescents with high belief in legitimacy of the law are less likely to cheat in school classes, compared to French adolescents.

Hypothesis 2: The negative relationships between the social bonds (parental attachment, academic commitment) and self-reported academic cheating will be stronger for Chinese adolescents than for French adolescents; whereas the negative relationship between moral values and self-reported academic cheating will be stronger for French adolescents than for

Chinese teens. Moreover, the positive relationship between peer involvement and academic cheating is stronger for French adolescents than for Chinese adolescents.

Gender

Social bonds. One of the Hofstede's cultural dimensions is related to Masculinity/Femininity. Starting from early childhood, socialization processes shape female and male's gender identity (Chodorow 1978) and differentially emphasize communal (affiliation and closeness) vs. agentic (status and power) goals (Bakan 1996). Communal goals refer to a feminine identity, with a focus on social relationships, interpersonal affiliation, and harmony with others. Agentic goals refer to a masculine identity and link to assertiveness, control, and self-assertion. Female identity is structured by themes of social belonging and attachment, whereas male identity reflects differentiation, separation, and autonomy (Chodorow 1978). Moreover, because a masculine orientation is associated with confidence, success, and achievement, males have higher academic efficacy beliefs than females (Schunk and Pajares 2002).

Finally, according to a theory of self-concept maintenance, most people want to make ethical decisions and maintain a positive self-image (Mazar et al. 2008). Females hold a stronger belief in the legitimacy of the social order and moral standards than males (Betz et al. 1989; Chen and Tang 2013; Ritter 2006; Tang and Chiu, 2003; Tang and Chen 2008; Tang and Sutarso 2013). Others suggest that self-worth on virtue predicted less cheating among male adults than among female adults. Thus, men, high on moral values, have seen the situation as a challenge to their morality and have tried to maintain their moral self-worth by avoiding cheating behaviors (Niiya et al. 2008). This result corroborated prior studies that cheating is perceived as a moral violation (Eisenberg 2004). These studies overlooked the segment of adolescents whose frequent cheating behaviors at school renders it particularly worthy of investigation (Murdock et al. 2014). We expect that female adolescents with high parental attachment and peer involvement are less likely to cheat

in schools, compared to male adolescents. Male adolescents with high academic commitment and high moral values are less likely to cheat in schools, compared to female adolescents.

Hypothesis 3: Parental attachment suppresses and peer involvement enhances cheating for females, whereas academic commitment and moral values curb cheating for males.

Social Integration as a Mediator.

Since sharing is related to academic cheating, we further modify our theoretical model by treating social integration as a mediator. We postulate that: (1) sharing leads to a higher level of social integration within the school network (Path 1) and (2) "popular" adolescents are more likely to engage in academic cheating (Path 2). Following the red sneakers effect, signals of nonconformity infer status and competence (Bellezza et al. 2014). In a social development process, when teens explore peer influence and assimilate into friendship networks, they seek specific locations in these networks where they can excel. These positions, in turn, can be characterized by their self-reported level of social integration within the peer group (Gentina et al. 2015). A high level of social integration, therefore, signifies a high level of interaction with schoolmates and reflects one's *popularity* within their school network (Gentina and Bonsu 2013).

Regarding the Path between Involvement (Sharing) and Social Integration, recent research in consumer behavior reveals that sharing with schoolmates enables adolescents to remove interpersonal distance, create bonds, strengthen friendships, and maintain their social position within the peer group (Gentina 2014). We posit: Adolescents engage in sharing practices with their school mates to maintain their central social position which provides them with many benefits— popularity, power, prominence, and influence (Malhotra and Gino 2011). We empirically test the positive relationship between sharing and the adolescent level of social integration within the school network.

For the Path between Social Integration and Academic Cheating, researchers have overwhelmingly focused on the impact of peer influence on individuals' ethical belief (O'Fallon

and Butterfield 2011, 2012), but overlooked the influence of consumers' social position within the network on ethical behavior. Recently, Gentina et al. (2015) and Lee (2013) demonstrate that socially accepted individuals (measured by high degree centrality) engage more in risky and unethical behaviors because they seek to enhance their positions and power within their social networks (the red sneakers effect) by being open to the influence of relevant others and by receiving a higher quantity of information (Gino et al. 2013). Power tends to corrupt, and absolute power corrupts absolutely (Lord Acton's letter to Bishop Mandell Creighton in 1887). To the best of our knowledge, no research has explored social integration and academic cheating. Taken together, we assert: Sharing leads to high level of social integration within the peer group, which, in turn, increases cheating.

> Hypothesis 4: Social integration mediates the relationship between peer involvement (sharing) and academic cheating.

> ***Culture and gender.*** As discussed earlier, due to differences in culture between France and China, we also expect to see culture as a moderator of our theoretical model with social interaction. Finally, we will investigate simultaneously both culture and gender as moderators and explore differences among French females, French males, Chinese females, and Chinese males, on an exploratory basis. We expect that the mediation effect of social interaction will be stronger for French teens than for Chinese Teens. Females are more likely to subject to the mediation effect of social interaction than males. Further, social bonds are related to academic cheating.

Methods

Participants

Following the protocol of Institutional Review Board (IRB) and obtaining the approval and support of school authorities, we collected data from 913 adolescents who were students at three urban public schools in France ($n = 429$) and four urban public schools in China ($n = 484$) because educational institutions are the primary locations where adolescents interact every day with their

peers (Gentina et al. 2015). Researchers distributed survey questionnaires to 14-18 year-old students in their classrooms. French participants were in northern France (gender: 58.3% female; age: 15.7), whereas Chinese adolescents (gender: 52.1% female; age = 14.9) were in eastern China. There were no significant differences in gender (χ^2 (1) = 2.710, p = .100) and age (t = 1.85, p = .103) across cultures, achieving sampling equivalence.

Measures

Researchers translated the original English survey questionnaires to French and Chinese, using the translation and back-translation procedures to ensure the idiomatic equivalence. We selected the 9-item parental support scale (Armsden and Greenberg 1987) using a 5-point Likert-type measure with *completely disagree* (1), *neutral* (3) and *completely agree* (5) as scale anchors. Here is one sample item: My parents put a lot of time and energy into helping me (see Appendix A for all items and constructs). We used 8–item academic self-efficacy scale (Chemers et al. 2001; Bandura 1997). The scale ranged from *definitely not true of me* (1) to *definitely true of me* (5).

To measure peer involvement in social activities, we asked adolescents whether they were involved in and how frequently they sharing objects with their peers in two steps. Step 1, we conducted semi-structured interviews with 10 French adolescents and asked them to answer the following question: What are the objects that you share with others at school? Based on the qualitative study, we listed 10 shared objects among adolescents[6]. Step 2, we conducted a survey of 150 French adolescents and asked them to indicate the frequency with which they share a list of objects with their classmates with a 5-point scale with *never* (1), *sometimes* (2), *often* (3), *very often* (4), and *always* (5) as scale anchors. Among the 10 shared objects, we selected the top three core objects with the highest means (> 3.5/5): sharing class notes, sharing electronics (chargers and

---

[6] The 10 most shared objects were "class notes", "electronics", "books", "chat sessions" (SKYPE, MSN), "music or game files", "a T-shirt", "a drink", "clothing accessories" (belt, scarf, hat, …), "a snack", and "sports equipment (racquets, balls)".

cables, USBs, calculators), and sharing books. Similarly, we also conducted individual interviews with five Chinese teenagers and identified three identical objects.

We employed the 5-item moral virtue dimension scale (Crocker et al. 2003) with *completely disagree* (1), *neutral* (3), and *completely agree* (5) as scale anchors. Further, we assessed social integration within their social networks with 3 items using a 5-point frequency scale with *not at all* (1), *neutral* (3) and *very much* (5) as scale anchors.

For academic cheating, we measured prior cheating behavior using the 12-item scale (Tom and Borin 1988) with the following instructions: Think of all the exams you have taken at school. How often have you participated in each of the activities during exams? Participants provided the frequency of engaging in each of the 12 cheating behaviors on a 5-point Likert type scale ranging from *never* (1) to *very often* (5). The 9-item, 5-point cheating perception scale (Allmon et al. 2000) (sample item: I believe cheating on an exam is ___) has scale anchors from *always acceptable* (1) to *always unacceptable* (5). We used different scale anchors to prevent concerns of common method variance (CMV) bias.

Results

Descriptive Statistics

Table 1 shows the mean, standard deviation, reliability, and correlations of all variables. Parental attachment, academic commitment, and moral values were negatively correlated with both cheating behavior and cheating perception. The relationships between peer involvement and both cheating behavior and cheating perception were positive. Results of a multivariate analysis of variance (MANOVA, $F(2, 910) = 416.54$, $p < .001$, Wilks' Lambda = .522) showed significant cultural differences: French students reported higher cheating scores than Chinese teens in cheating behavior (French = 2.77 vs. Chinese = 1.60, $F(1, 911) = 4.81$, $p < .05$) and cheating perception (3.25 vs. 1.69, $F(1, 911) = 28.24$, $p < .001$). Similarly, MANOVA results ($F(2, 903) = 3.43$, $p < .05$, Wilks' Lambda = .992) also revealed that males reported significantly more cheating than

females—cheating behavior (male = 2.22 vs. female = 2.09, $F(1, 904) = 3.43$, $p < .05$) and cheating perception (2.54 vs. 2.34, $F(1, 904) = 6.61$, $p < .001$).

Confirmatory Factor Analysis

We established a 49-item, 7-factor reflective measurement model of social bonds and cheating: parental attachment, academic commitment, peer involvement, moral values, cheating behavior, cheating perception, and social integration. Since results of our confirmatory factor analyses (CFA) were inadequate (Table 2, Models 1 (7-factor) and 2 (1-factor)), we simplified our model, selected 3 items for each sub-construct, established a parsimonious 21-item, 7-factor model (Appendix A) and found an excellent fit (Table 2, Model 3).

Since we adopted scales developed in the US and applied them to people in France and China, we verified configural (factor structure) and metric (factor loading) invariance of all the measurement scales. We used the following criteria for configural invariance (passing 5 out of 6 criteria): (1) Chi square and degrees of freedom ($\chi^2/df < 5$), (2) incremental fit index ($IFI > .90$), (3) Tucker–Lewis Index ($TLI > .90$), (4) comparative fit index ($CFI > .90$), (5) root mean square error of approximation ($RMSEA < .10$), and (6) Standardized RMR ($SRMR < .10$) (Vandenberg and Lance 2000). We obtain metric invariance when the differences between unconstrained and constrained multi-group analysis are not significant ($\Delta CFI/\Delta RMSEA < .01$, Cheung and Rensvold 2002).

First, we tested our theoretical model using confirmatory factor analysis (CFA) based on our whole sample (Table 2). We compared Model 2 (a 21-item, 1-factor model) with Model 3 (a 21-item, 7-factor model) of social bonds and cheating and found that Model 3 was significantly better than Model 2. Model 3 revealed good configural invariance. Second, we adopted the same theoretical model of social bonds and cheating, checked measurement invariance across culture (France vs. China) using a multi-group analysis, and presented the findings in Model 4. Third, we, then, set all the factor loadings to be the same across culture (Model 5) in a constrained multi-group

analysis. Fourth, since the differences between Models 4 and 5 did not reach significance ($\Delta CFI/\Delta RMSEA < .01$), we achieved metric invariance for all the scales across culture.

Common Method Variance

The common method variance (CMV) problem may have been overstated and reached the status of urban legend in the literature (Spector 2006). Since we had cross-sectional data collected at one time, we examined the CMV issue (Podsakoff et al. 2003). First, we adopted Harman's single-factor test and examined the unrotated factor solution involving all measures of interests in this study: 12-items, 4-factor social bonds, 3-item cheating behavior, 3-item cheating perception, and 3-item social integration in an exploratory factor analysis (EFA). The amount of variance explained by Factor 1 was 23.52%, which was significantly less than 50%, followed by six other factors: 14.67%, 10.11%, 9.38v, 7.81%, 5.93%, and 4.78%, respectively.

Second, a measurement model with the addition of a latent common method variance (CMV) factor must not significantly improve the fit over our measurement model without CMV. With a latent common method variance factor, the variance of the responses to a specific measure is partitioned into three components: (1) trait, (2) method, and (3) random error (Podsakoff et al. 2003, p. 891). We compared Models 6 and 7 (Table 2) and found that the differences were non-significant ($\Delta CFI = .02$; $\Delta RMSEA = .01$). We demonstrated measurement invariance across cultures and no concern for CMV in this research which allowed us to test our model below.

Theoretical Model of Social Bonds and Academic Cheating

We compared our reflective and formative theoretical model of social bonds and cheating. First, our reflective model (Table 2, Model 8, Figure 1) showed social bonds' four first-order factor loadings as follows: parental attachment (-.14), academic commitment (-.16), peer involvement (.25) and social values (-.16). We used bold-face arrows and results to show four significant paths. In addition, social bonds were related to self-reported academic cheating behavior (.96) and cheating perception (.87). The fit was adequate. Second, our formative model suggested a better fit

(Table 2, Model 9, Figure 2) than our reflective model ($\Delta\chi^2 = 34.84$; $\Delta df = 6$, $p < .005$). Parental

attachment (-.11), academic commitment (-.12), and moral values (-.13) curbed academic cheating,

but peer involvement (.25) enhanced cheating behavior (.97) and cheating perception (.86) (Figure

2), supporting Hypothesis 1. In addition, our Figure 2 reveals that the relationships among the four

components of social bonds did not exceed .80, suggesting no significant duplications or overlaps

in constructs. Further, parental attachment was moderately, yet significantly, related to academic

commitment (.17, double arrow) and moral values (.15). On the other hand, peer involvement was

not significantly related to the other three social bonds.

Across Cultures

We used multi-group analysis and tested our model across cultures (Table 2, Model 10).

For adolescents in France (Figure 3, $n = 429$), peer involvement (.24) enhanced cheating, whereas

moral values (-.43) reduced it (see bold-face arrows and results). For Chinese teenagers (Figure 4,

$n = 484$), moral values (-.18) reduced cheating, but peer involvement (.16) promoted it. The impacts

of parental attachment (-.06) and academic commitment (-.09) on reducing academic cheating were

much weaker for French teens than for Chinese adolescents (-.10 and -.12, respectively) (Figures

3 and 4). Moral values' (-.43) power to reduce academic cheating for French teens was much

stronger than that for Chinese teens (-.18). Finally, as expected, the positive relationship between

peer involvement and academic cheating was much stronger for French teens (.24) than for Chinese

teens (.16). Thus, culture is a moderator, supporting Hypothesis 2.

For our French sample, parental attachment was significantly related to academic

commitment (.28), but not related to moral values (.05). Academic commitment was associated

with moral values (.18). For the Chinese sample, parental attachment was significantly related to

moral values (.22), but unrelated to academic commitment (.08). The relationship between parental

attachment and moral values for the Chinese (.20) sample was stronger than that for the French

(.05) sample. These differences in values between France and China may reflect their values

practiced in their immediate contexts (e.g., families and schools) across cultures, respectively, regarding Individualism/Collectivism (France: 71; China: 20) and Power Distance (France: 68; China: 80) (Hofstede 1980).

Across Gender

Our analysis across gender, Model 11, offered additional insights. For females (Figure 5, *n* = 502), parental attachment (-.14) reduced cheating, whereas peer involvement (.24) enhanced it. For males (Figure 6, *n* = 411), academic commitment (-.16) and moral values (-.16) reduced cheating, but peer involvement (.26) promoted it. Interestingly, no difference in peer involvement between males (.26) and females (.24) existed. Taken together, gender was a moderator, supporting partially Hypothesis 3. The relationships between parental attachment and academic commitment were significant for both females (.18) and males (.17). For males, parental attachment was also related to moral values (.23).

Theoretical Model with Social Integration

Whole sample. Besides the direct effect (Peer Involvement → Cheating), we theorize an indirect path from peer involvement to social bonds through social integration (Peer Involvement → Social Integration → Cheating) (Table 2, Model 12). Peer involvement was positively related to adolescents' social integration within the school network (.14) that, in turn, was positively related to social bonds (.43) (Figure 7). In order to test for the mediating effects, we used Preacher et al. (2007) macro procedure, which is based on the calculation of the bias-corrected (BC) bootstrap[7] confidence interval available in Amos. If the 1,000 bootstrapped confidence interval does not (does) include 0, the indirect effect Path 1*Path 2[8] is significant (not significant) and mediation is established (not established) (Arbuckle and Wothke 1999).

---

[7] Several methods exist to construct a confidence interval based on the "bootstrap". The "Bias-Corrected Bootstrap" adjusts the bias in the distribution (MacKinnon et al. 2004).
[8] The indirect effect is obtained by multiplying the two direct paths: Path 1 * Path 2.

When simultaneously examined, both the direct and the indirect effects were significant. The indirect effect represented 30.09% of the total effect (Shrout and Bolger 2002). Thus, a partial mediation effect existed (Table 3, Model 1), supporting Hypothesis 4 (Table 2, Model 12, Fig. 7). We present the direct, indirect, and total effects for the whole sample and subsequent analyses in Table 3. All four major components (parental attachment (-.15), academic commitment (-.14), peer involvement (.15), and moral value (-.15)) defined the social bonds construct which, in turn, was related to cheating behavior (.86) and cheating perception (.98).

Culture. Following Preacher et al.'s (2007) macro procedure, we revealed the following findings: For French adolescents, when we investigated both the direct effect and the indirect effect, the indirect effect prevailed, while the direct effect did not. Social integration serves as a mediator for French adolescents (Table 3, Model 2.1). For Chinese adolescents, however, social integration was not a mediator (Table 3, Model 2.2). Results supported Hypothesis 5 (Table 2, Model 13, Fig. 8 and 9). Now, we turn to our Figures 8 and 9. Interestingly, the indirect path (Peer Involvement → Social Integration and Social Integration → Cheating) was significant and positive for the French sample (Figure 8), but negative for the Chinese sample (Figure 9), highlighting opposite mechanisms[9] across cultures.

Gender and culture. Using a multi-group analysis, we tested our theoretical model across both culture and gender and explored simultaneously the following four groups of teens: French females ($n = 250$), French males ($n = 179$), Chinese females ($n = 252$), and Chinese males ($n = 232$) (Table 2, Model 14). Interestingly, the mediation effect of social integration (Table 3, Models 3.1-3.4; Figures 10-13) was significantly positive for French females (Figure 10), but significantly negative for Chinese males (Figure 13), supporting Hypothesis 4. Our additional discoveries provide profound and detail insights regarding our theoretical model across culture and gender.

---

[9] On the surface, results of two positive paths ((+) * (+) = (+)) and two negative paths ((-) * (-) = (+)) are the same.

Among French adolescents, moral values deter academic cheating for both females and males. However, peer involvement promotes academic cheating *indirectly* through social integration for French females (with two positive paths), but *directly* for French males. Among Chinese teens, after the introduction of social integration, none of the social bonds contributes to academic cheating for females. For Chinese males, academic commitment and moral values undermine cheating, but peer involvement promotes cheating *indirectly* through social integration (with two negative path). Across all four groups of teens, only one path stands out. Interestingly, social integration defines social bonds, which leads to academic cheating—positively for both French females and males, but negatively for both Chinese females and males. Who are likely to cheat? Our interesting paradox reveals that the popular French females and the unpopular Chinese males tend to cheat.

French females develop their identity in other-oriented manner because they like to be socially integrated. However, it is more complex than it appears, at the first glance. When considering underlying social motivation to engage in sharing with peers, French females are encouraged to be proud of themselves and seek to reward themselves for their own achievements through peers' social acceptance, consistent with the individualistic culture. This need to belong socially increases cheating among French females. In contrast, Chinese males build their identity in other-oriented manner, but in a completely different way, consistent with the collectivist culture. Their motivation is *not* to maintain a strategic position within the peer group, which explains the negative relationship between peer involvement and social integration. Social integration decreases cheating among Chinese males. Therefore, both popular French females and unpopular Chinese males highlight the interaction of individualistic vs. collectivist culture and feminine vs. masculine gender, emphasizing that peer culture is a powerful and consistent predictor of social bonds and cheating.

Discussion

In this article, we develop a new theoretical model of social bonds (parental attachment, academic commitment, peer involvement, and moral values) and self-reported academic cheating (behavior and perception). We collect data from 913 adolescents and test our model based on the whole sample and also across culture and gender. Our findings offer the following theoretical, empirical, and practical contributions.

Theoretical Contributions

Our carefully selected components of social bonds and cheating outcomes achieve excellent fit between our reflective and formative measurement models and our data. Future researchers will have confidence in applying this short 12-item, 4-factor social bonds construct in other contexts. We offer the following theoretical contributions.

First, our findings shed new lights on both the bright and dark sides of social bonds and academic cheating. On the bright side, parental attachment, academic commitment, and social value reduce cheating behavior and perception. On the dark side, our counterintuitive and novel finding demonstrates that peer involvement contributes positively to academic cheating. Researchers in consumer behavior consider sharing as a positive pro-social behavior and an act of generosity (Belk and Llamas 2011). However, sharing with peers at school (an egoistic act) spillovers to academic cheating, demonstrating social sharing's dark side—bad company corrupts good morals. In the context of *self-serving altruism*, adolescents might consider cheating as morally acceptable (Gino et al. 2013).

Second, our results get more interesting when we explore the same theoretical model across cultures. Chinese teens don't cheat, when they experience high parental attachment and endorse academic commitment. French adolescents don't cheat due to their high moral values. French adolescents cheat more than Chinese. We illustrate that the positive relationship between peer involvement and academic cheating is stronger for French students than for Chinese teens. In

individualistic cultures, sharing is viewed as an "egoistic" act, turned toward individuals themselves. Thus, there are some revealing cultural differences regarding social bonds which affect academic cheating.

Third, gender identity theorists suggest that differential childhood socialization processes contribute to differences in value orientation, competence, and emotional dependence (Richins and Dawson 1992). Females socialize to hold themselves higher, socially, and depend on others (Chodorow 1978), while males socialize to become individualistic and confident about their academic abilities (Betz et al. 1989). High parental attachment constrains academic cheating among females, whereas high academic commitment and high moral values limit academic cheating among males. Gender is a moderator. Interestingly, female adolescents are more ethical than their male counterparts, supporting the literature (Betz et al. 1989; Chen et al. 2014; Chen and Tang 2013; Ritter 2006; Tang and Chen 2008; Tang and Sutarso 2013). Moreover, male adolescents who maintain moral self-worth and academic efficacy are less likely to cheat.

Fourth, we turn to our theoretical model with social interaction as a mediator. Our positive indirect path makes a significant theoretical contribution to the literature—sharing with peers (peer involvement) leads to higher social integration within the peer group, which, in turn, contributes to academic cheating. This indirect path is significant for the whole sample. Interestingly, it is significant for the French sample, but approached significance for the Chinese sample (using the bootstrap procedure). Thus, culture is a moderator.

Fifth, we turn to a multi-group analysis and focus on the theoretical model with the indirect path across both culture and gender (two moderators). The indirect effect was significant for French females (Figure 10) and Chinese males (Figure 13). Due to our *unique* finding of having (1) two positive paths for the French sample (Figure 8) and French females, specifically (Figure 10) and (2) two negative paths for the Chinese samples (Figure 9) and Chinese males, specifically (Figure 13), we discuss this interesting paradox and completely opposite mechanisms, below.

Sharing is much more intense among people in collectivistic cultures (China) than those in individualistic ones (France) (Belk 2009). Counterintuitively, French adolescents, with self-oriented motivations, seek to maintain a strategic dominant social position within the peer group and exerting popularity on others. French teens view sharing as egoistic rather than altruistic, and self-oriented rather than other-oriented behavior. French parents *encourage* adolescents to make independent decisions and take responsibilities for consequences (Yang and Laroche 2011). To achieve autonomy from their parents, French adolescents progressively distance themselves from their parents and increasingly rely on their peers. By sharing with their schoolmates, French teens establish their social networks and obtain social integration (Gentina 2014). Female teens have a much stronger desire for social interaction and affiliation needs than males. Negative social influence (Brown et al. 2005; Rose et al. 1992) helps us explain why popular French teens, popular girls, in particular, engage in cheating—bad company corrupts good morals. Results partially support the literature (Kobayashi and Fukushima 2012).

On the contrary, although Chinese adolescents in collectivist cultures are willing to sacrifice their personal goals to engage in close relationships with others, they are less likely to follow the opinions, advice, and behaviors of their peers of which their parents disapprove. Due to their loyalty to their parents, parental influences exist regardless of their physical presence (Yang and Laroche 2011). To maintain harmony with their parents, Chinese teens, even if they are socially integrated, are less likely to engage in cheating. Children's respect toward parents is a reciprocal act, or a gesture, to thank parents for raising them (Joy 2001).

After the introduction of the one-child policy in 1979, Chinese parents have pampered their young children as *little emperors* with sufficient resources and materials. This policy has caused teens to become significantly less trusting and less trustworthy than their counterparts with siblings (Cameron et al. 2013). With a sense of *self-sufficiency* (Vohs et al. 2006) and contrary to "open sharing" (Gudeman 2001), Chinese teens are deeply connected to their own personal possessions,

avoid asking for help from others, are less willing to help others, keep a large distance between themselves and others, and do not want to share personal objects with others. Sharing personal objects at school is viewed rather *negatively*. Since Chinese parents favor their male offsprings (boys) over female ones (girls), our discussion applies to *male* little Chinese emperors, in particular. This negative image does not contribute to popularity. Those who do share may become outcasts of their peer groups. In fact, those individuals (Chinese males) with a low level of popularity (feeling lonely, isolated, or rejected) contribute to academic cheating. We, uniquely, demonstrate that cheating stems from a lack of meaningful social relationships with others and support the social bounding theory (Hirschi 1969; Murdock et al. 2001). In short, alienated individuals with social isolation become cheaters and engage in wrong doings.

In this study, we demonstrate the two different sides of the same coin for the effect of "bad company corrupts good morals" in France and China. This notion exists strongly and widely in France, but in a much narrower scope in China and to a small group of outcast members of the large group. Further, our results support the notions of *self-serving altruism* (Gino et al. 2013) and the red sneakers effect (Bellezza et al. 2014) for the French sample and French females, in particular, but *not* for the Chinese sample and Chinese males, in particular. Future researchers may test these notions across culture, empirically. We apply multiple lenses and provide a brand new and cross-disciplinary perspective by infusing social bonding theory—traditionally dominated by researchers in criminology (Andrew and Bonta 1998; Hirschi 1969) and delinquency (Özbay and Özcan 2006) into the domain of business ethics—traditionally dominated by scholars in psychology and behavioral ethics. Future researchers need to take a serious look at social bonds and unethical behaviors. Our theoretical model offers not only a new understanding of academic cheating in our field of business ethics but also the opportunity to explore further theory development and testing and improved practices.

Empirical Contributions

We cannot provide counterintuitive, interesting, and novel discoveries without collecting data from two good samples. We test our theoretical constructs using a large sample of 913 adolescents in France and China. Our EFA and CFA results demonstrate four different and separate constructs of social bonds with solid psychometric properties, illustrate rigorous measurement invariance evidence across culture and gender, and provide strong empirical support our theoretical model. We trust that these results enhance the generalizability of our findings and provide a firm foundation for future cross-cultural empirical studies in under-researched areas of the world.

Practical Contributions

Research illustrates that intact families and good family relations decrease the chances of delinquent behavior among children (Shoemaker 2000). Further, paternalistic and moral leadership enhance employee creativity among Chinese employees (Gu et al. 2015) and perceptions of authentic supervisor's personal integrity and character (ASPIRE) make a difference in reducing dishonesty (Tang and Liu 2012). Taken together, individuals with power and authority in various contexts (parents and managers) play an important role in shaping others people's intentions and behaviors. Furthermore, since parental attachment is also related to other two components of social bonds—academic commitment and moral values, we provide critical implications for administrators, educators, parents, students, business leaders, and even employers.

First, parents in families, educators in schools, and managers in business organizations play an important role in reducing dishonesty and enhance creativity and performance. Second, educators should include parental support to improve adolescents' academic self-efficacy and moral values, exemplify parents with strong moral values and eminent business leaders as role models in ethics education at schools, and count on them as active partners in education.

Third, beside announcing and enforcing zero tolerance for cheating and dishonesty at schools, it may be helpful to discuss the reasons behind these policies and highlight consequences

of dishonesty. Now many full-time MBA students are required to visit federal prisons and interview white-collar criminals who cooked the books (Kercheval 2004; Tang and Chen 2008). Having *first-hand* experiences of observing punishments of crime may create a solid, vivid, and long-lasting image which, in turn, may greatly reduce adolescents' temptation to engage in dishonesty (Howard et al. 2015). Following social learning theory and ethical leadership (Brown et al. 2005), people look to the social context to determine what is ethically right or wrong, obey authority figures, and do what is appropriate or rewarded. Various "cultural norms" pose different levels of risk and uncertainty for dishonesty (Kahneman 2011). Thus, we need to establish, *clearly*, an *ethical* cultural norm in schools, and fairly *early* in their lives. This may prevent them from digging deeper and deeper into a hole of which they cannot get out (Lawson 2004; Tang and Chen 2008).

Fourth, increasing opportunities for adolescents to get involved in meaningful activities produces a sense of achievement. Feeling competent at school is a critical element of reducing academic cheating. Empowering adolescents through activities provides challenges and accomplishments, enhancing positive self-esteem. Besides relying on academics in schools, we may focus on community-based programs, e.g., academic tutoring with parents or inviting business practitioners to ethics programs to intensify efforts in educating adolescents for their academic careers, communicate standards of conduct and code of ethics at professional level, and develop professional attitudes to reduce future cheating (Smith et al. 2004; Tang 2014).

Fifth, specifically, the moderating roles of culture and gender add a further refinement that merits managerial consideration. To target adolescents more effectively through communication, instructors must understand that motives to cheat at school differ across both culture and gender. Because male adolescents pay attention to academic commitment and to maintain moral values, educators must revamp codes of ethics in schools. Signing an honor code at the beginning of the academic year in front of the whole school's student body, reminding them of ethical values such

as recall of the Ten Commandments, and providing strong and strict enforcement of the honor code stop cheating[10] (Mazar et al. 2008; Tang 2012, 2014). Adolescents would be aware of the repercussions if they do not respect the rules and become more responsible for their actions.

Sixth, since some individuals without strong social bonds engage in dishonesty, administrators, educators, and managers must take extra care in treating people who get caught for cheating, stealing, and other unethical acts. Potentially, they deal with dangerous and delinquent criminals. Those who engage in cheating or unethical acts (a visible symptom on the surface) seek other individuals' attention and recognition in the society and have many deeply rooted disorders and mental problems. We must communicate carefully, exercise negotiation skills, stand in their shoes, understand their personal background, offer psychological help, and diffuse deadly situations carefully to avoid major disasters, massacre, and killing innocent people in the society.

Here is an example. A 35-year-old USAir ticket agent was caught for stealing $69 from flight cocktail receipts and was fired by his supervisor Raymond Thompson, a customer-service manager for the same airline. Noticed that his boss would be aboard the Pacific Southwest Airlines (PSA) Flight 1771 from Los Angeles to San Francisco, on December 7, 1987, David Burke purchased a one-way ticket for the flight, and slip through security bearing a Smith & Wesson .44 magnum revolver, using his unsurrendered USAir credentials. He shot five people to death, including the two pilots, before the plane crashed near Cayucos, California. FBI evidence included the gun with six empty casings and a threatening note written on an airsickness bag which read, "Hi Ray. I think it's sort of ironical that we end up like this. I asked for some leniency for my family. Remember? Well, I got none and you'll get none".[11] David Burke's "retaliation for the

---

[10] Some elite private universities and high schools practice these principles and create an honest student body.

[11] Flight attendant Debra Neil told the cockpit crew: "We have a problem". David Burke shot the flight attendant, announced "I'm the problem", and killed the pilots and the PSA's Chief Pilot in LA. David Burke had seven children by different women, but was never married. Some described him as a violent man. An episode of the Canadian TV series, *Mayday*, featured this incident, entitled: "I'm the problem". "Murder on board" was the title for the UK version of *Air Crash Investigation*.

loss of his job was responsible for the crash of Flight 1771, the death of Thompson, himself and 41 other passengers caught up in the act of revenge" (Lancaster and Tang 1989, p. 60).

Our discussion of the aforementioned case in point on October 1, 2015, the incident on December 7, 1987, and social bonding theory (Hirschi 1969) related to criminology and delinquency in this paper leads us to seriously consider: In order to prevent these tragedies from happening, practically, people in our society must carefully find the lost sheep—"go after the lost one until he finds it" and bring it home because "those who are well do not need a physician, but the sick do". Further, we must not only "love your neighbor" but also "love your enemies"[12].

Limitations

Although we collect data from participants' self-reported survey at one point in time in two selected countries (France and China), we illustrate that all of our scales achieve measurement invariance. The common method variance (CMV) is not a concern in our study. Obviously, attitudinal data serve as reasonable proxy for actual behaviors, future researcher may use experiments (Chen et al. 2014) and direct observation to analyze cheating behaviors and plagiarism (Ledwith and Risquez 2008). Scholars may examine other variables as determinants of academic cheating (Elias 2009).

Conclusion

We bridge the gap between constructs of social bonds (criminology and delinquency) and academic cheating (business ethics) and test a theoretical model using data from 913 adolescents in France and China. We demonstrate that parental attachment, academic commitment, and moral values reduce academic cheating, but peer involvement promotes it. Four social bonds contribute to our understanding of cheating, differently, across cultural and gender. Our exploration of social integration reveals new insights to our question: Who are likely to cheat in schools? Popularity

---

[12] The Parable of the Lost Sheep (Matthew 18: 10-14; Luke 15: 1-7). The Parable of the Lost Son (Luke 15: 11-31). For he makes his sun rise on the bad and the good and causes rain to fall on the just and the unjust (Matthew 4: 43-44). Jesus calls Matthew: Matthew 9: 12; Mark 2: 17.

matters, yet popular French girls and unpopular Chinese boys are likely to cheat, revealing different mechanisms for bad company corrupts good morals across countries and gender. Our novel discoveries shed new lights on both the bright and dark sides of social bonding on academic cheating and make significant theoretical, empirical, and practical contributions to the business ethics literature.

References

Agnew, R. (1993). Why do they do it? An examination of the intervening mechanisms between "social control" variables and delinquency. *Journal of Research in Crime and Delinquency*, *30*(3), 245-266.

Akerlof, G. A., & Kranton, R. E. (2002). Identity and schooling: Some lessons for the economics of education. *Journal of Economic Literature*, *40*(4), 1167-1201.

Akers, R. L., & Cochran, J. K. (1985). Adolescent marijuana use: A test of three theories of deviant behavior. *Deviant Behavior*, *6*(4), 323-346.

Akers, R. L., & Lee, G. (1999). Age, social learning, and social bonding in adolescent substance use. *Deviant Behavior, 20*(1), 1-25.

Allmon, D. E., Page, D., & Roberts, R. (2000). Determinants of perception of cheating: Ethical orientation, personality, and demographics. *Journal of Business Ethics*, *23*(4), 411–422.

Anderman, E. M., & Midgley, C. (2004). Changes in self-reported academic cheating across the transition from middle school to high school. *Contemporary Educational Psychology*, *29*(4), 499–517.

Anderman, E. M., & Murdock, T. B. (2007). *The psychology of academic cheating*, New York, NY: Academic Press.

Andrews, D. A., & Bonta, J. (1998). *The psychology of criminal conduct* (2nd ed.). Cincinnati, OH: Anderson.

Andrews, K., Smith, L., Henzi, D., & Demps, E. (2007). Faculty and student perceptions of academic integrity at U.S. and Canadian dental school. *Journal of Dental Education*, *71*(8), 1027-1039.

Ang, S., & Leong, S. (2000). Out of the mouths of babes: Business ethics and youths in Asia. *Journal of Business Ethics*, *28*(2), 129-144.

Arbuckle, J., & Wothke, W. (1999). *AMOS 4 user's reference guide*. Chicago: Smallwaters Corp.

Ariely, D. (2008). How honest people cheat. *Harvard Business Review*, *86*(2), 24.

Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: relationships to well-being in adolescence. *Journal of Youth and Adolescence*, *16*(5), 427-454.

Bakan, D. (1996). *The duality of human existence.* Chicago: Rand McNally.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New-York, NY: Freeman.

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*(4), 323-370.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497-529.

Baumeister, R. F., Sparks, E. A., Stillman, T. F., & Vohs, K. D. (2008). Free will in consumer behavior: Self-control, ego depletion, and choice. *Journal of Consumer Psychology*, *18*(1), 4-13.

Belk, R. W. (1984). Cultural and historical differences in concepts of self and their effects on attitudes toward having and giving. In T. C. Kinnear (ed.), *Advances in Consumer Research,* Vol. 11 (pp. 754-763). Provo, UT: Association for Consumer Research.

Belk, R.W. (2007). Why not share rather than own? *The ANNALS of the American Academy of Political and Social Science, 611*(1), 126-140.

Belk, R. W. (2009). Sharing. *Journal of Consumer Research*, *36*(5), 715-734.

Belk, R.W., Groves, R., & Ostergaard, P. (2000). Aboriginal consumer culture. *Research in*

Consumer Behavior, 9, 1–45.

Belk, R.W., & Llamas, L. (2011). The nature and effects of sharing in consumer behaviour. In D. G. Mick, S. Pettigrew, C. Pechmann, & J. L. Ozanne (eds.), *Transformative consumer research for personal and collective well-being: Reviews and frontiers,* London: Taylor and Francis.

Bellezza, S., Gino, F., & Keinan, A. (2014). The red sneakers effect: Inferring status and competence from signals of nonconformity. *Journal of Consumer Research, 41*(1), 35-54.

Bernardi, R. A., Metzger, R. L., Bruno, R. G. S., Hoogkamp, M. A. W., Reyes, L. E., & Barnaby, G. H. (2004). Examining the decision process of students' cheating behavior: An empirical study. *Journal of Business Ethics, 50*(4), 397-414.

Betz, M., O'Connell, L., & Shepard, J. M. (1989). Gender differences proclivity for unethical behavior. *Journal of Business Ethics, 8*(5), 321-324.

Blake, P. R., Piovesan, M., Montinari, N., Warneken, F., & Gino, F. (2015). Prosocial norms in the classroom: The role of self-regulation in following norms of giving. *Journal of Economic Behavior & Organization*, *115*, SI 18-29.

Bloodgood, J. M., Turnley, W. H., & Mudrack, P. E. (2008). The influence of ethics instruction, religiosity, and intelligence on cheating behavior. *Journal of Business Ethics*, *82*(3), 557-571.

Bloodgood, J. M., Turnley, W. H., & Mudrack, P. E. (2010). Ethics instruction and the perceived acceptability of cheating. *Journal of Business Ethics*, *95*(1), 23-37.

Blos, P. (1979). *The adolescent passage: developmental issues*. New York, NY: International Universities Press.

Bogenschneider, K., Wu, M. Y., Raffaelli, M., & Tsay, J. C. (1998). Parent influences on adolescent peer orientation and substance use: The interface of parenting practices and values. *Child Development, 69*(6), 1672-1688.

Bond, M., & Hofstede. G. (1989). The cash value of Confucian values. *Human System Management*, *8*, 195-200.

Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, *97*(2), 117-134.

Cameron, L., Erkal, N., Gangadharan, L., & Meng, X. (2013). Little emperors: Behavioral impacts of China's one-child policy. *Science*, *339*(6122), 953-957.

Casciaro, T., Gino, F., & Kouchaki, M. (2014). The contaminating effects of building instrumental ties: How networking can make us feel dirty. *Administrative Science Quarterly*, *59*(4), 705-735.

Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, *93*(1), 55- 64.

Chen, J. Q., Tang, T. L. P., & Tang, N. Y. (2014). Temptation, monetary intelligence (love of money), and environmental context on unethical intentions and cheating. *Journal of Business Ethics*, *123*(2), 197-219.

Chen, Y. J., & Tang, T. L. P. (2013). The bright and dark sides of religiosity among university students: Do gender, college major, and income matter? *Journal of Business Ethics*, *115*(3), 531-553.

Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling, 9*(2), 233-255.

Chodorow, N. J. (1978). *The reproduction of mothering.* Berkeley: University of California Press.

Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: Theory and measurement. *Journal of Personality and Social Psychology*, *85*(5), 894-908.

Crown, D. F., & Spiller, M. S. (1998). Learning from the literature on collegiate cheating: A review of empirical research. *Journal of Business Ethics, 17*(6), 683-700.

Ding, X. P., Omrin, D. S., Evans, A. D., Fu, G., Chen, G., & Lee, K. (2014). Elementary school children's cheating behavior and its cognitive correlates. *Journal of Experimental Child Psychology*, *121(May)*, 85-95.

Donleavy, G. (2008). No man's land: Exploring the Space between Gilligan and Kohlberg. *Journal of Business Ethics*, *80*(4), 807-822.

Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008). Spending money on others promotes happiness. *Science*, *319*(5870), 1687-1788.

Durkheim, E. (1897/1951). *Suicide*. Trans. John A. Spaulding and George Simpson (New York: The Press Press).

Eaton, M. J., & Dembo, M. H. (1997). Differences in the motivation beliefs of Asian American and non-Asian students. *Journal of Educational Psychology*, *89*(3), 443-440.

Eisenberg, J. (2004). To cheat or not to cheat: Effects of moral perspective and situational variables on students' attitudes. *Journal of Moral Education, 33*(2), 163-178.

Elias, R. Z. (2009). The impact of anti-intellectualism attitudes and academic self-efficacy on business students' perceptions of cheating. *Journal of Business Ethics*, *86*(2), 199-209.

Festinger, L., Schachter, S., & Back, K. (1950). *Social pressures in informal groups: A study of a housing community*. Palo Alto, CA: Stanford University Press.

Gentina, E. (2014). Understanding the effects of adolescent girls' social positions within peer groups on exchange practices. *Journal of Consumer Behavior, 13*(1), 73-80.

Gentina, E., & Bonsu, S. (2013). Peer social network influences on teens' shopping behavior. *Journal of Retailing and Customer Services, 20*(1), 87-93.

Gentina, E., & Chandon, J. L. (2013). Adolescent shopping behaviour: Different assimilation and individuation needs in France and the United States. *Journal of Retailing and Consumer Services, 20*(6), 609-616

Gentina, E., Rose, G. M., & Vitell, S. (2015). Ethics during adolescence: A social networks perspective. *Journal of Business Ethics.* DOI:10.1007/s10551-015-2577-5.

Gino, F., Ayal, S., & Ariely, D. (2013). Self-serving altruism? The lure of unethical actions that benefit others. *Journal of Economic Behavior & Organization*, *93*(September), 285-292.

Gino, F., & Wiltermuth, S. S. (2014). Evil genius? How dishonesty can lead to greater creativity. *Psychological Science*, *25*(4), 973-981.

Gomez-Mejia, L., Wiseman, R. M., & Dykes, B. J. (2005). Agency problems in diverse contexts: A global perspective. *Journal of Management Studies*, *42*(7), 1507-1517.

Gu, Q. X., Tang, T. L. P., & Jiang, W. (2015). Does moral leadership enhance employee creativity? Employee identification with leader and leader-member exchange (LMX) in the Chinese context. *Journal of Business Ethics*, *126*(3), 513-529.

Gudeman, S. (2001). *The anthropology of economy: Community, market, and culture*. Malden, MA: Wiley-Blackwell.

Hawdon, J. (1999). Daily routines and crime: Using routine activities as measures of Hirschi's involvement. *Youth and Society*, *30*(4)*,* 395 -415.

Hirschi, T. (1969). *Causes of Delinquency*. Berkley, CA: University of California.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.

Hofstede, G., & Bond, M. H. (1988). The Confucius connection: From cultural roots to economic growth. *Organization Dynamics*, *16*(4), 5-21.

Howard, L. W., Tang, T. L. P., & Austin, M. J. (2015). Teaching critical thinking skills: Ability, motivation, intervention, and the Pygmalion effect. *Journal of Business Ethics*, *128*(1), 133-147.

Hwang, K. K. (1987). Face and favor: The Chinese power game. *American Journal of Sociology*, *92*(4), 944-974.

Isaken, K. J., & Roper, S. (2012). The commodification of self-esteem: Branding and British teenagers. *Psychology & Marketing*, *29*(4), 117-135.

John, D. R. (1999). Consumer socialization of children: A retrospective look at twenty-five years of research. *Journal of Consumer Research, 26*(3), 183-213.

Joy, A. (2001). Gift giving in Hong Kong and the continuum of social ties. *Journal of Consumer Research*, *28*(2), 239–256.

Kahneman, D. (2011). *Thinking: Fast and slow*. New York, NY: Farrar, Straus and Giroux.

Kempf, K. L. (1993). The empirical status of Hirschi's control theory. In F. Adler & W. S. Laufer (Eds.). *New directions in criminological theory: Advances in criminological theory* (Vol. 4, pp. 143–185). New Brunswick, NJ: Transaction

Kercheval, N. (2004, May 21). Full-time MBA students required to visit federal prisons and interview white-collar criminals. *The Daily Record*, Baltimore, MD, p. 1.

Khan, K. (2012, October 9). Kublai Khan: China's favourite barbarian. *BBC News.*

Kirland, K. D. (2009). *Academic Honesty: Is what students believe different from what they do?* (Order No. 3370997, Bowling Green State University). ProQuest Dissertations and Theses, 270-n/a. Retrieved from http://0-search.proquest.com.lib.hksyu.edu.hk/docview/304846031?accountid=169 64. (304846031).

Kish-Gephart, J. J., Harrison, D. A., & Treviño, L. K. (2010). Bad apples, bad cases, and bad barrels: Meta-analytic evidence about sources of unethical decisions at work. *Journal of Applied Psychology*, *95*(1), 1-31.

Kitayama, S., & Markus, H. R. (1992). *Construal of the self as cultural frame: Implications for internationalizing psychology*. Paper presented at the Symposium on Internationalization and Higher Education. University of Michigan, Ann Arbor.

Kitayama, S., Markus, H. R., Matsumoto, H., & Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology*, *72*(6), 1245-1268.

Klein, H. A., Levenburg, N. M., McKendall, M., & Mothersell, W. (2007). Cheating during the college years: How do business school students compare? *Journal of Business Ethics*, *72*(2), 197-206.

Kobayashi, E. (2011). Social bonds and academic cheating: An application of Hirschi's social control theory. *Studies of Language and Culture*, *15*, 159–81.

Kobayashi, E., & Fukushima, M. (*2012*). Gender, social bond, and academic cheating in Japan. *Sociological Inquiry*, *82*(2), 282-304.

Kramer, A. D. I., Guillory, J. E., & Hancock, J. T. (2014). Experimental evidence of massive-scale emotional contagion through social networks. *Proceedings of the National Academy of Sciences of the United States of America*, *111*(24), 8788-8790.

Kratzer, J., & Lettl, C. (2009). Distinctive roles of lead users and opinion leaders in the social

networks of schoolchildren. *Journal of Consumer Research, 36*(4), 646-659.

Labouvie, E. (1996). Maturing out of substance use: Selection and self-correction. *Journal of Drug Issues*, *26*(2), 457–476.

LaGrange, R. L., & White, H. R. (1985). Age differences in delinquency: A test of theory. *Criminology*, *23*(1), 19-45.

Lancaster, L. L., & Tang, T. L. P (1989). Outplacement offers safety net for displaced workers. *The Personal Administrator, 34*(4), 60-63.

Lawson, R. A. (2004). Is classroom cheating related to business students' propensity to cheat in the "real world"? *Journal of Business Ethics, 49*(2), 189-199.

Ledbeater, C. (2009). *We think*: *Mass innovation, not mass production*. London: Profile Books.

Ledwith, A., & Risquez*,* A. (2008)*.* Using anti-plagiarism software to promote academic honesty in the context of peer reviewed assignments. *Studies in Higher Education*, *33*(4), 371-384.

Lee, S. H. M. (2013). Ethics and expertise: A social networks perspective. *Journal of Business Ethics, 118*(3), 607–621.

Lemrová, S., Reiterová, E., Fatěnová, R., Lemr, K., & Tang, T. L. P. (2014). Money is power: Monetary intelligence—love of money and temptation of materialism among Czech university students. *Journal of Business Ethics, 125*(2), 329-348.

Lu, L. C., Rose, G. M., & Blodgett, J. C. (1999). The effects of cultural dimensions on ethical decision making in marketing: An exploratory study. *Journal of Business Ethics, 18*(1), 91-105.

Lucifora, C., & Tonello, M. (2015). Cheating and social interactions. Evidence from a randomized experiment in a national evaluation program. *Journal of Economic Behavior & Organization*, *115*(July), 45-66.

Ma, Y., McCabe D. L., & Liu, R. (2013). Students' academic cheating in Chinese universities: Prevalence, influencing factors, and proposed action. *Journal of Academic Ethics*, *11*(3), 169-184.

Malhotra, D., & Gino, F. (2011). The pursuit of power corrupts: How investing in outside options motivates opportunism in relationships. *Administrative Science Quarterly*, *56*(4), SI, 559-592.

Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, *45*(6), 633-644.

Michaels, J. W., & Miethe, T. D. (1989). Applying theories of deviance to academic cheating. *Social Science Quarterly*, *70*(4), 870–885.

Murdock, T. B., Hale, N. M., & Weber, M. J. (2001). Predictors of cheating among early adolescents: Academic and social motivations. *Contemporary Educational Psychology, 26*(1), 96–115

Murdock, T. B., Miller, A., & Kohlhardt, J. (2014). Effects of classroom context variables on high school students' judgments of the acceptability and likelihood of cheating. *Journal of Educational Psychology*, *96*(4), 765-777.

NBC News (2012, Aril 29). Why do kids cheat? Facts about cheating. http://insidedateline.nbcnews.com/_news/2012/04/29/11412162-why-do-kids-cheat-facts-about-cheating.

Niiya, Y., Ballantyne, R., North, M. S., & Crocker, J. (2008). Gender, contingencies of self-worth, and achievement goals as predictors of academic cheating in a controlled laboratory setting. *Basic and Applied Social Psychology, 30*(1), 76–83.

O'Fallon, M. J., & Butterfield, K. D. (2011). Moral differentiation: exploring boundaries of the "monkey see, monkey do" perspective. *Journal of Business Ethics, 102*(3), 379–399.

O'Fallon, M. J., & Butterfield, K. D. (2012). The influence of unethical peer behavior on observers' unethical behavior: A social cognitive perspective. *Journal of Business Ethics, 109*(2), 117-131.

Oettingen, G., & Zosuls, K. (2006). Culture and self-efficacy in adolescents. In F. P. Urdan (Ed.) *Self efficacy beliefs in adolescents.* Greenwich, Connecticut: Information Age Publishing.

Orosz, G., Farkas, D., & Roland-Lévy, C. (2013). Are competition and extrinsic motivation reliable predictors of academic cheating? *Frontiers Psychology, 4*, 87.

Özbay, O., & Özcan, Y. Z. (2006). A test of Hirschi's social bonding theory juvenile delinquency in the high schools of Ankara. *International Journal of Offender Therapy and Comparative Criminology*, *50*(6), 711-726.

Özbek, M. F., Yoldash, M. A., & Tang, T. L. P. (2015). Theory of justice, OCB, and individualism: Kyrgyz citizens. *Journal of Business Ethics*. DOI:10.1007/s10551-015-2553-0.

Park, E., Park, S., & Jang, I. (2013). Academic cheating among nursing students. *Nurse Education Today*, *33*(4), 346-352.

Pascual-Ezama, D., Fosgaard, T. R., Cardenas, J. C., Kujal, P., Veszteg, R., Gil-Gomez de Liano, B., … Branas-Garza, P. (2015). Context-dependent cheating: Experimental evidence from 16 countries. *Journal of Economic Behavior & Organization, 116*, 379-386.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879-903.

Preacher, K. J., Rucker, D. D, & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, *2*(1), 185-227.

Premeaux, S. (2010). Undergraduate student perception regarding Tier 1 versus Tier 2 AACSB accredited business schools. *Journal of Business Ethics, 62*(4), 407-418.

Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, *19*(3), 303-316.

Ritter, B. A. (2006). Can business ethics be trained? A study of the ethical decision-making process in business students. *Journal of Business Ethics*, *68*(2), 153–164.

Rose, R. A., Bearden, W. O., & Teel, J. E. (1992). An attributional analysis of resistance to group pressure regarding illicit drug and alcohol consumption. *Journal of Consumer Research*, *19*(1), 1-13.

Salter, S., Guffey, D. M., & McMillan, J. (2001). Truth, consequences and culture: A comparative examination of cheating and attitudes about cheating among U.S. and U.K. Students. *Journal of Business Ethics, 31*(1), 37-50.

Schab, F. (1991). Schooling without learning: Thirty years of cheating in high school. *Adolescence*, *26*(104), 839–847.

Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, *26*(3-4), 207-231.

Schunk, D. H., & Pajares, F. (2002). The development of academic self-efficacy. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 15- 31). San Diego: Academic Press.

Shafer, W., Fukukawa, K., & Lee, G. (2007). Values and the perceived importance of ethics and social responsibility: The U.S. versus China. *Journal of Business Ethics*, *70*(3), 265-84.

Shoemaker, D. J. (2000). *Theories of delinquency. An examination of explanation of delinquent behavior* (4th ed.). New York: Oxford University Press.

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendation. *Psychological Methods, 7*(4), 422-445.

Sims, R. L. (2002). Ethical rule breaking by employees: A test of social bonding theory. *Journal of Business Ethics*, *40*(2), 101-109.

Smith, K. J., J. A. Davy, & Easterling, D. S. (2004). An examination cheating and its antecedents among marketing and management majors. *Journal of Business Ethics*, *50*(1), 63-80.

Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, *9*(2), 221-232.

Su, C., Sirgy, J. M., & Littlefield, J. E. (2003). Is Guanxi orientation bad, ethically speaking? A study of Chinese enterprises. *Journal of Business Ethics*, *44*(4), 303-312.

Tang, S., & Zuo, J. (1997). Profile of college examination cheaters. *College Student Journal, 31*, 340–346.

Tang, T. L. P. (1990). Factors affecting intrinsic motivation among university students in Taiwan. *Journal of Social Psychology*, *130*(2), 219-230.

Tang, T. L. P. (2012). Detecting honest people's lies in handwriting: The power of the Ten Commandments and internalized ethical values. *Journal of Business Ethics, 106*(4), 389-400.

Tang, T. L. P. (2014). Theory of monetary intelligence: Money attitudes—religious values, making money, making ethical decisions, and making the grade. *Journal of Business Ethics*. DOI:10.1007/s10551-014-2411-5.

Tang, T. L. P., & Baumeister, R. F. (1984). Effects of personal values, perceived surveillance, and task labels on task preference: The ideology of turning play into work. *Journal of Applied Psychology, 69*(1), 99-105.

Tang, T. L. P., & Chen, Y. J. (2008). Intelligence vs. wisdom: The love of money, Machiavellianism, and unethical behavior across college major and gender. *Journal of Business Ethics*, *82*(1), 1-26.

Tang, T. L. P., & Chiu, R. K. (2003). Income, money ethic, pay satisfaction, commitment, and unethical behavior: Is the love of money the root of evil for Hong Kong managers? *Journal of Business Ethics*, *46*(1), 13-30.

Tang, T. L. P., & Liu, H. (2012). Love of money and unethical behavior intention: Does an authentic supervisor's personal integrity and character (ASPIRE) make a difference? *Journal of Business Ethics*, *107*(3), 295-312.

Tang, T. L. P., Luna-Arocas, R., Quintanilla Pardo, I., & Tang, T. L. N. (2014). Materialism and the bright and dark sides of the financial dream in Spain: The positive role of money attitudes—The Matthew Effect. *Applied Psychology: An International Review*, *63*(3), 480-508.

Tang, T. L. P., & Sutarso, T. (2013). Falling or not falling into temptation? Multiple faces of temptation, monetary intelligence, and unethical intentions across gender. *Journal of Business Ethics, 116*(3): 529–552.

Tang, T. L. P., Sutarso, T., Ansari, M. A., Lim, V. K. G., Teo, T. S. H., Arias-Galicai, F.,… Manganelli, A. M. (2011). The love of money is the root of all evil: Pay satisfaction and CPI as moderators. Paper presented at Academy of Management Annual Meeting, San Antonio, TX. In L. A. Toombs (Ed.), *Best paper proceedings of the*

2011 Academy of Management.

Tang, T. L. P., Sutarso, T., Davis, G. M. T., Dolinski, D., Ibrahim, A. H. S., & Wagner, S. L. (2008). To help or not to help? The Good Samaritan Effect and the love of money on helping behavior. *Journal of Business Ethics*, *82*(4), 865-887.

Tang, T. L. P., & Tang, T. L. N. (2010). Finding the lost sheep: A panel study of business students' intrinsic religiosity, Machiavellianism, and unethical behavior intention in a public institution. *Ethics & Behavior*, *20*(5), 352-379.

Tom, G., & Borin, N. (1988). Cheating in academe. *Journal of Education for Business*, *63*(4), 153-157.

Treviño, L. K. (1986). Ethical decision-making in organizations: A person-situation interactionist model. *Academy of Management Review*, *11*(3), 601-617.

Tynan, C., McKechnie, S., & Chhuon, C. (2010). Co-creating value for luxury brands. *Journal of Business Research*, *63*(11), 1156-1163.

Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, *3*(1), 4-69.

Vohs, K. D., Mead, N. L., & Goode, M. (2006). The psychological consequences of money. *Science*, *314*(5802), 1154-1156.

Vowell, R., & Chen, J. (2004). Predicting academic misconduct: A comparative test of four sociological explanations. *Sociological Inquiry*, *74*(2), 226-249.

Wang, D. (2004). Family background factors and mathematics success: A comparison of Chinese and US students. *International Journal of Educational Research, 41(1),* 40-54.

Weiss, J., Gilbert, K., Giordano, P., & Davis, S. (1993). Academic dishonesty, Type A behavior and classroom orientation. *Bulletin of the Psychonomic Soc*iety, *31*(2), 101–102.

West, T., Ravenscroft, S. P., & Shrader, C. (2004). Cheating and moral judgment in the college classroom: A natural experiment. *Journal of Business Ethics, 54*(2), 173-183.

Whitcomb, L. L., Erdener, C. B., & Li, C. (1998). Business ethical values in China and the U.S. *Journal of Business Ethics*, *17*(8), 839–852.

Widelman, M. (2009). Caring or collusion? Academic dishonesty in a school of nursing. *Canadian Journal of Higher Education*, *41*(2), 28-43.

Woodbine, G. F. (2004). Moral choice and the declining influence of traditional value orientations within the financial sector of a rapidly developing region of the People's Republic of China. *Journal of Business Ethics*, *55*(1), 43-60.

Yang, Z. Y., & Laroche, M. (2011). Parental responsiveness and adolescent susceptibility to peer influence: A cross-cultural investigation. *Journal of Business Research*, *64*(9), SI: 979-987.

Appendix A: Items and Constructs of our Major Measures

1. Social Bonds*
Parental attachment
1. My parents put a lot of time and energy into helping me
2. My parents find time to talk to me
3. My parents spend a lot of time with me

Academic Commitment
4. I know how to study to perform well on tests.
5. I am a very good student
6. I usually do very well in school and at academic tasks.

Peer Involvement
7. I share class notes with my classmates
8. I share electronics" (chargers and cables, USBs, calculators) with my classmates
9. I share books with my classmates

Moral Values
10. Doing something I know is wrong makes me lose my self-respect
11. I couldn't respect myself if I didn't live up to a moral code
12. My self-esteem would suffer if I did something unethical

2. Academic Cheating
Cheating Behavior**
13. Looking at or copying from someone else's exam during a test
14. Allowed someone else to copy from your exam during a test
15. Gave answers to someone during an exam

Cheating Perception***
16. I believe cheating on an exam is _____
17. I believe not reporting a classmate for cheating on an exam is _____
18. I believe copying a published article and turning it in as my term paper is _____

3. Social Integration*
19. I feel socially accepted by peers in my school class
20. I feel popular in my school class
21. I do not feel excluded from others

Note. All items were measured using a 5-point scale with different scale anchors.
*Scale anchors ranging from *strongly disagree* (1) to *strongly agree* (5).
**Scale anchors ranging from *never* to *very often*.
***Scale anchors ranging from *always acceptable* to *always unacceptable*.

Table 1: Mean, standard deviation, correlations, and reliability of major variables

	Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1	Age	15.88	1.42									
2	Gender (% male)	.44	.95	-.05								
3	Parental attachment	3.81	1.06	-.10*	.01							
4	Academic commitment	3.28	.95	-.11**	-.08*	.16**						
5	Peer involvement	2.86	.88	-.07*	-.07*	.11**	.02					
6	Moral values	3.50	.92	.03	-.13**	.12**	.08*	.05				
7	Social integration	3.75	.67	.44**	-.04	.21**	.05	.00	.12**			
8	Cheating perceptions	2.42	1.13	.48**	.08*	-.09*	-.14**	-.06*	-.10**	.29**		
9	Cheating Behaviors	2.15	1.07	.39**	.06	-.12*	-.11**	-.02	-.12**	.21**	.83**	
	Reliability					.69	.88	.70	.87	.79	.91	.91

Note. Gender: Male = 1, Female = 0.
p < .05 **p* < .01

Table 2: Main results of theoretical model

Social Bond and Cheating – Measurement Model	χ^2	df	p	χ^2/df	CFI	IFI	TLI	RMSEA	SRMR	Models	$\Delta\chi^2$	Δdf	ΔCFI	$\Delta RMSEA$
1. Reflective 7-factor (49-item)	20,689.20	630	.00	32.84	.40	.42	.31	.18	.33	1vs 3	20,083.55*	461	.54	.13
2. Reflective 1-factor (21-item)	5,202.71	189	.00	27.52	.46	.46	.40	.17	.19					
3. Reflective 7-factor (21-item)	605.65	169	.00	3.58	.95	.95	.94	.05	.05	2 vs 3	4,597.06*	20	.48	.12
4. Reflective across culture (21-item, 7-factor)	759.09	338	.00	2.24	.94	.94	.93	.03	.05	4 vs 5	82.96*	14	.00	.00
5. Reflective across culture (21-item, 7-factor) + constraint (metric invariance)	842.05	352	.00	2.39	.94	.94	.92	.03	.05					
Common Method Variance (CMV)														
6. Social Bond + Cheating + Social Integration (21-item, 7-factor)	605.65	169	.00	3.58	.95	.95	.94	.05	.05	7 vs 8	252.43*	20	.02	.01
7. Social Bond + Cheating + Social Integration (21-item, 7-factor) + CMV	353.22	149	.00	2.37	.97	.97	.96	.04						
Social Bond and 2 Cheating Outcomes (Behavior and Perception)														
8. Reflective model	229.48	73	.00	3.14	.97	.97	.96	.04	.07	3 vs 4	34.84*	6	.00	.00
9. Formative model	196.64	67	.00	2.90	.97	.97	.96	.04	.04					
Formative Model Social Bond and Cheating–Multi Group														
10. Across culture	247.25	134	.00	1.84	.98	.98	.97	.03	.04					
11. Across gender	285.61	134	.00	2.11	.97	.97	.96	.03	.04					
Formative Model with Social Integration as a Mediator														
12. Formative model + social integration	349.19	107	.00	3.26	.96	.96	.94	.05	.05					
Formative Model Social Bond and Cheating with Social Integration (Mediator) – Multi Group														
13. Across culture	450.21	214	.00	2.09	.96	.96	.95	.03	.05					
14. Across culture*gender	676.27	429	.00	1.57	.96	.96	.95	.02	.06					

Table 3: Main results of theoretical model

	Path	*p*	*Bootstrapped Confidence Interval*	*Mediation*
1. Whole Sample				Partial Mediation Effect
Direct effect: Peer Involvement → Cheating	.15	< .01	[.05; .27]	
Total effect: Peer Involvement → Cheating	.50	< .01	[.25; .83]	
Indirect effect: Peer Involvement → Social Integration → Cheating	.13	< .05	[.02; .26]	
2. Across Culture				
2.1. France				Indirect only Mediation effect
Direct effect: Peer Involvement → Cheating	.18	= .09	[-.03; .39]	
Total effect: Peer Involvement → Cheating	.31	= .07	[-.01; .69]	
Indirect effect: Peer Involvement → Social Integration → Cheating	.05	< .05	[.01; .16]	
2.2. China				Direct only No Mediation
Direct effect: Peer Involvement → Cheating	.12	< .05	[.02; .24]	
Total effect: Peer Involvement → Cheating	.41	< .01	[.09; .79]	
Indirect effect: Peer Involvement → Social Integration → Cheating	.10	= .07	[-.01; .34]	
3. Across Culture*Gender				
3.1. French females				Indirect only Mediation effect
Direct effect: Peer Involvement → Cheating	.11	= .58	[-.23; .40]	
Total effect: Peer Involvement → Cheating	.15	= .55	[-.22; .42]	
Indirect effect: Peer Involvement → Social Integration → Cheating	.08	< .05	[.01; .16]	
3.2. French males				Direct only No Mediation
Direct effect: Peer Involvement → Cheating	.30	< .05	[.04; .60]	
Total effect: Peer Involvement → Cheating	.55	< .05	[.03; .60]	
Indirect effect: Peer Involvement → Social Integration → Cheating	.00	.92	[-.19; .22]	
3.3. Chinese females				No effect
Direct effect: Peer Involvement → Cheating	.12	.17	[-.04; .28]	
Total effect: Peer Involvement → Cheating	.15	.17	[-.04; .34]	
Indirect effect: Peer Involvement → Social Integration → Cheating	.06	.51	[-.09; .38]	
3.4. Chinese males				No effect
Direct effect: Peer Involvement → Cheating	.11	.17	[-.04; .33]	
Total effect: Peer Involvement → Cheating	.15	.06	[-.01; .35]	
Indirect effect: Peer Involvement → Social Integration → Cheating	.09	.16	[-.01; .53]	

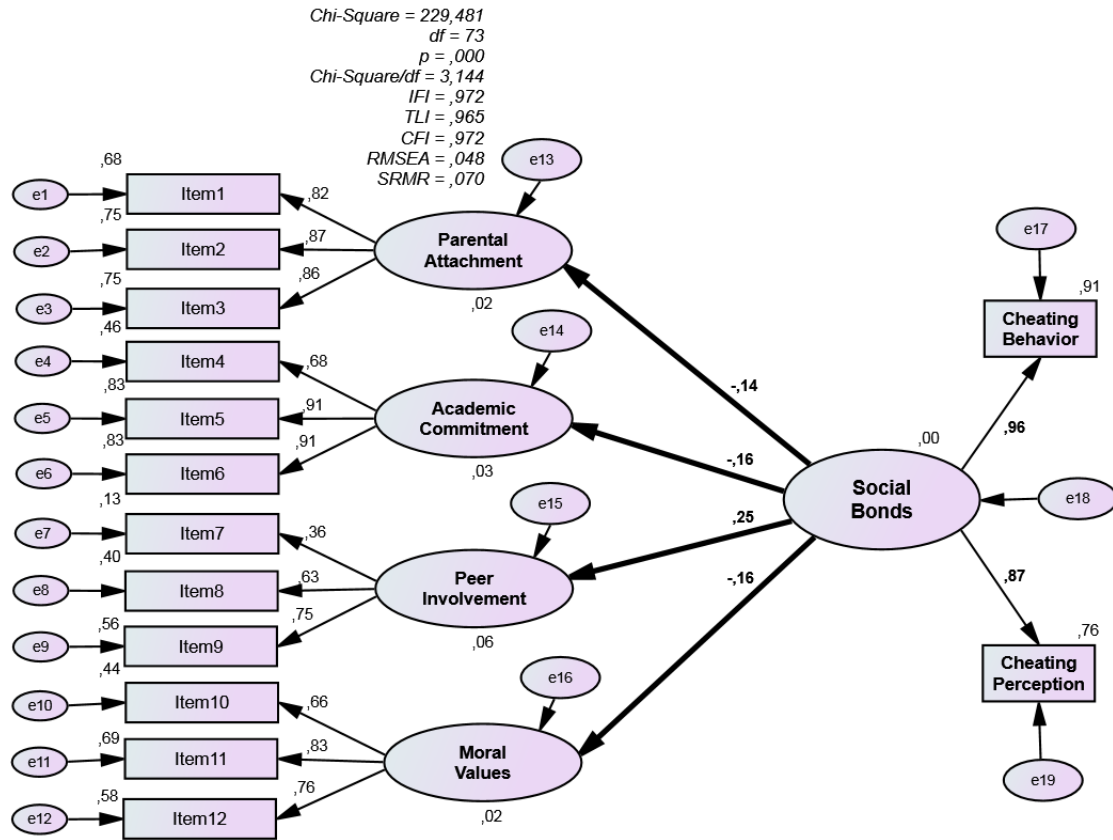**Figure 1: A Reflective Theoretical Model of Social Bonds and Cheating**

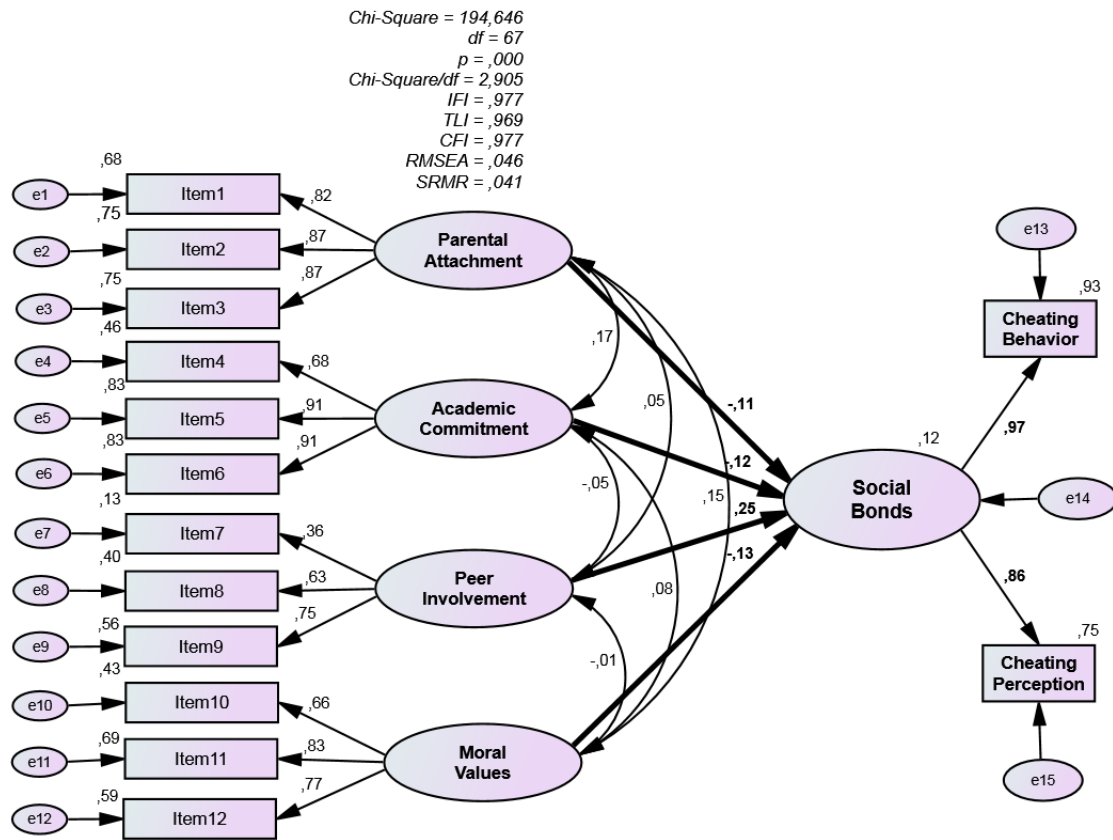## Figure 2 : A Formative Theoretical Model of Social Bonds and Cheating

Chi-Square = 194,646
df = 67
p = ,000
Chi-Square/df = 2,905
IFI = ,977
TLI = ,969
CFI = ,977
RMSEA = ,046
SRMR = ,041

Figure 3 : Theoretical Model of Social Bonds and Cheating - France
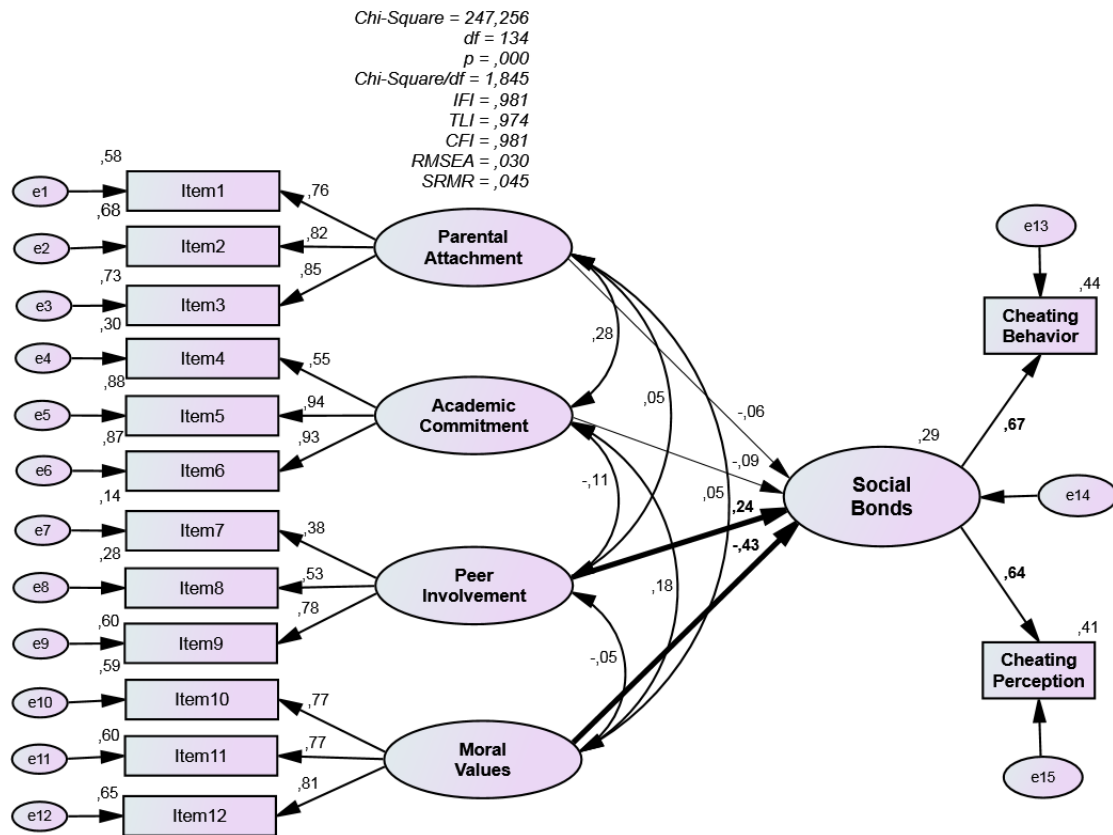
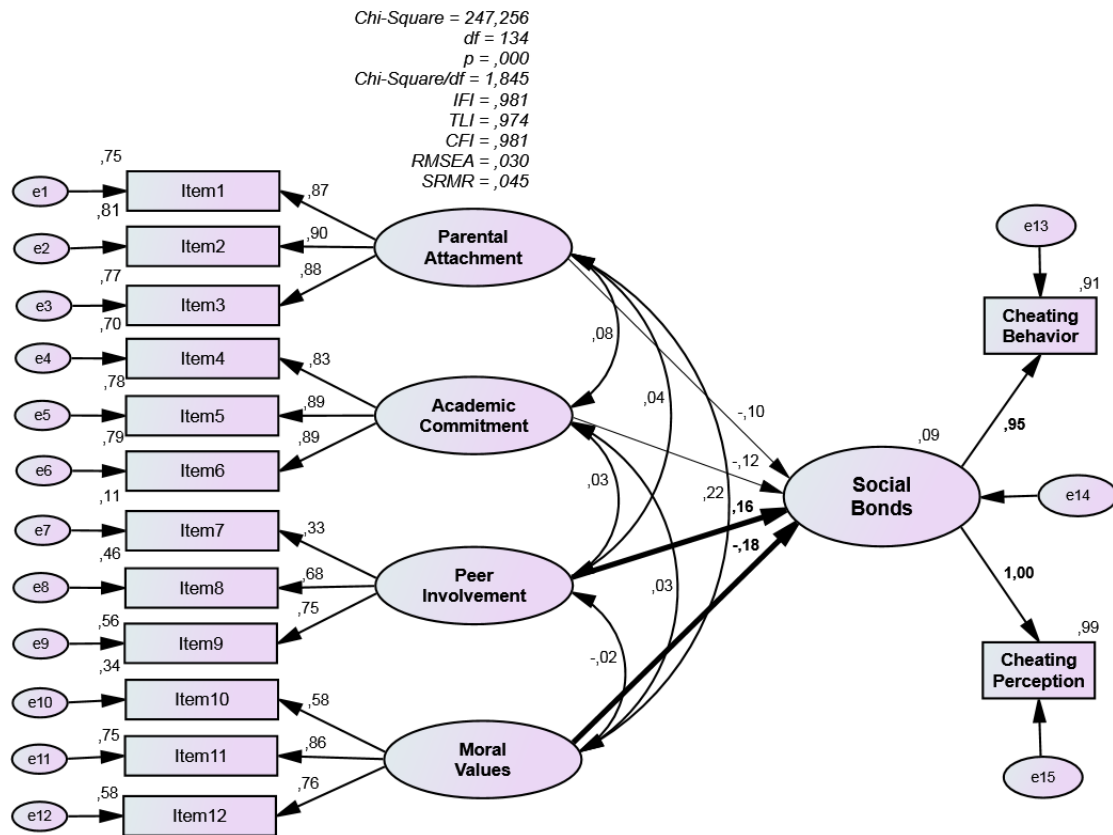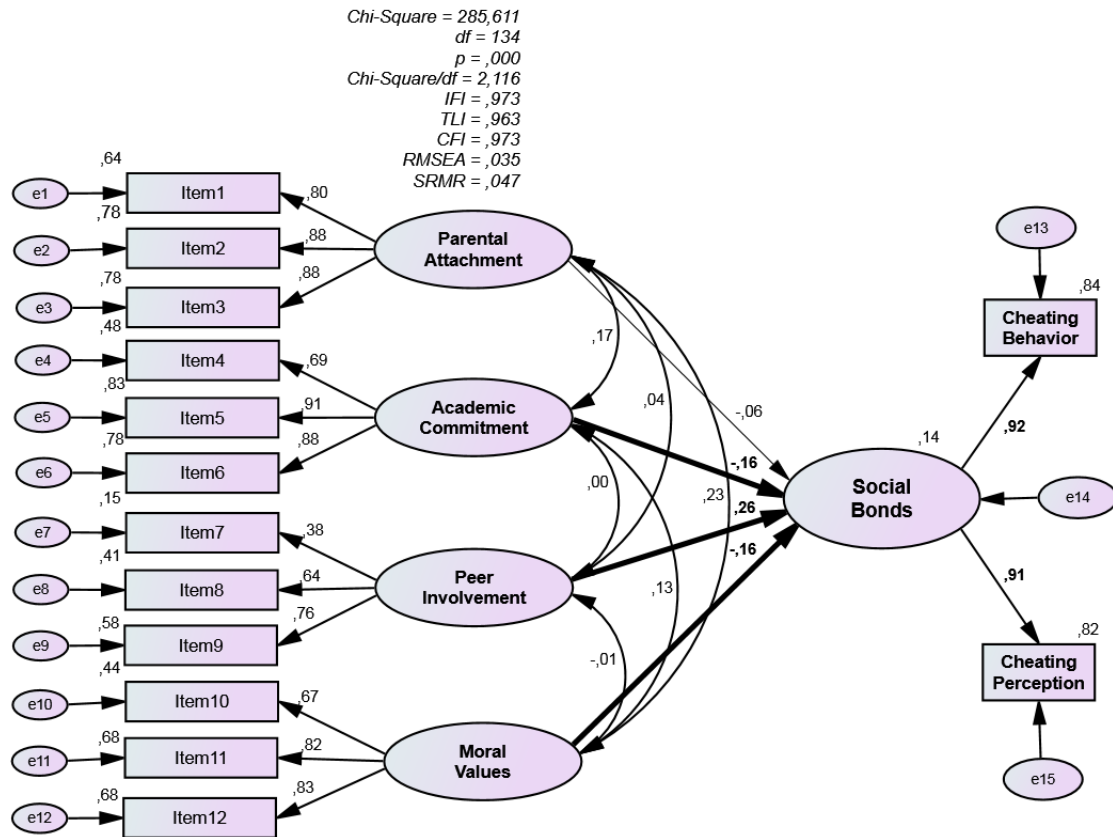**Figure 4 : Theoretical Model of Social Bonds and Cheating – China**

Chi-Square = 247,256
df = 134
p = ,000
Chi-Square/df = 1,845
IFI = ,981
TLI = ,974
CFI = ,981
RMSEA = ,030
SRMR = ,045

Figure 5 : Theoretical Model of Social Bonds and Cheating – Female
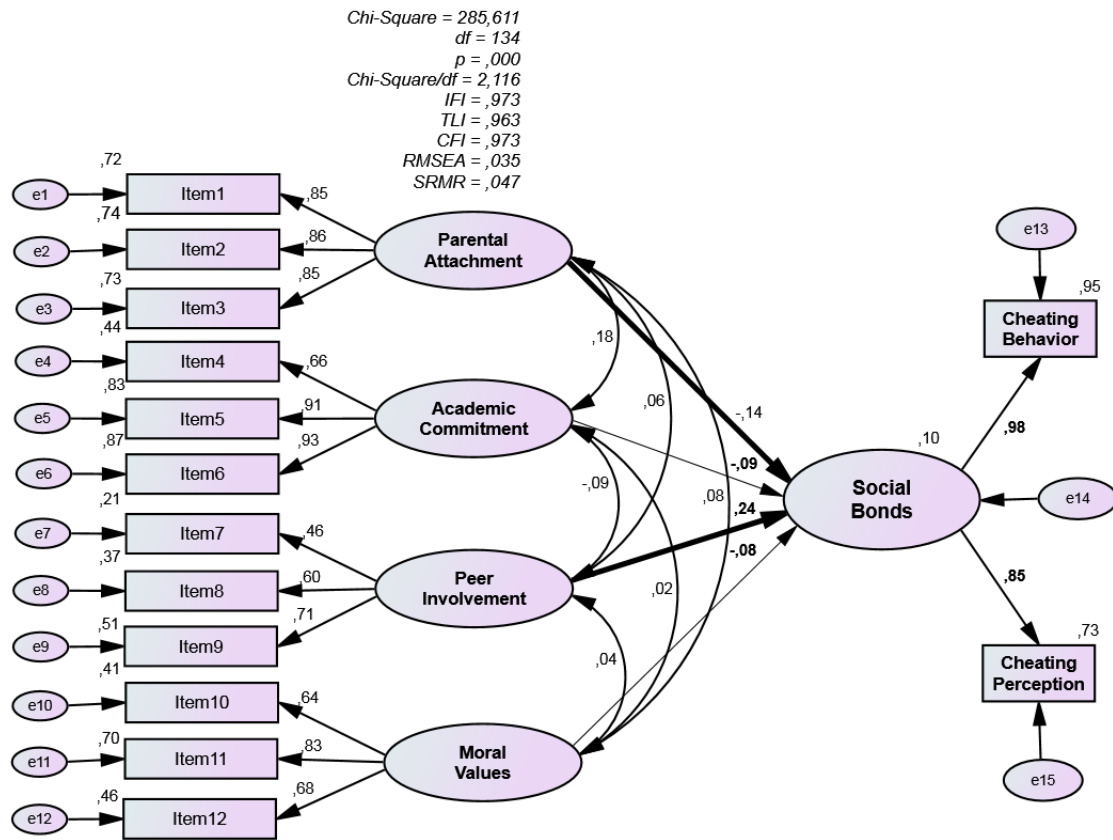
Figure 6 : Theoretical Model of Social Bonds and Cheating – Male

Figure 7: A Theoretical Model with Social Integration as a Mediator
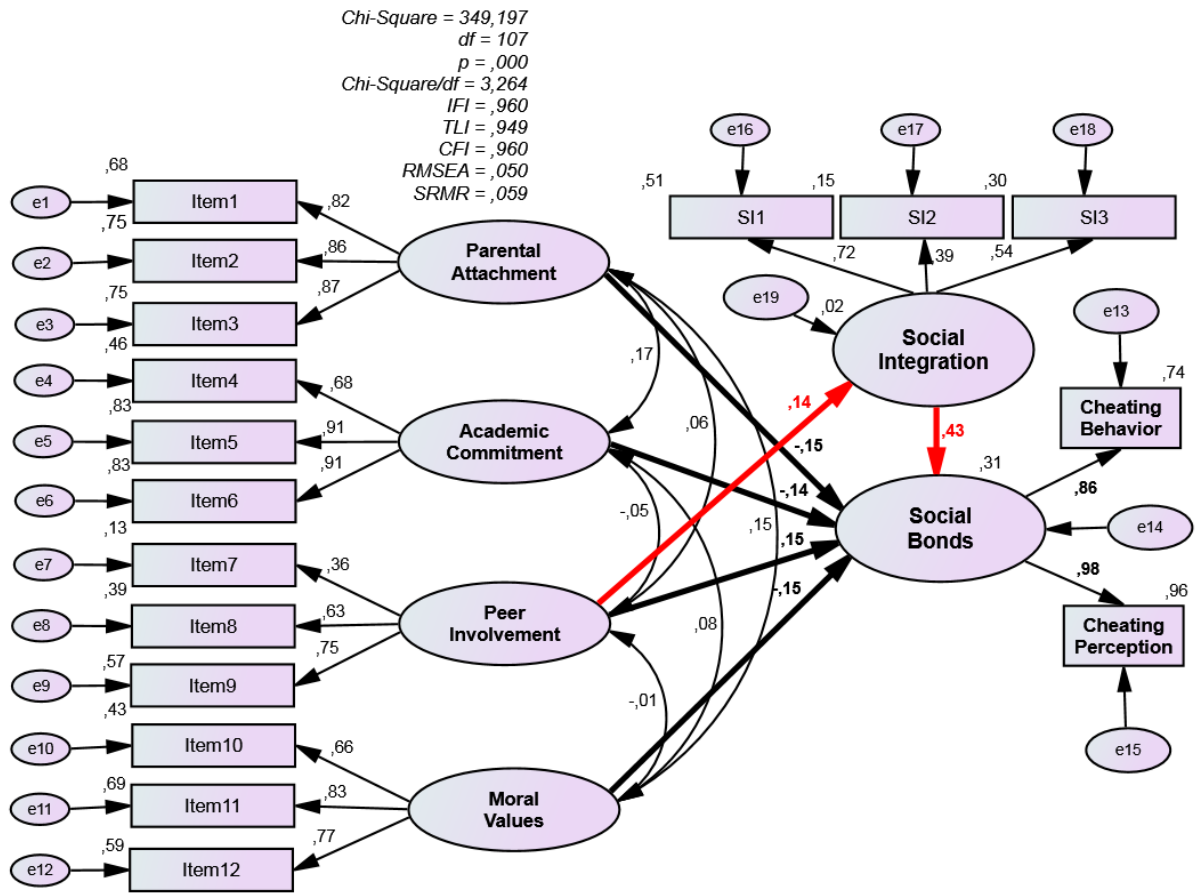
Figure 8 : A Theoretical Model with Social Integration - France
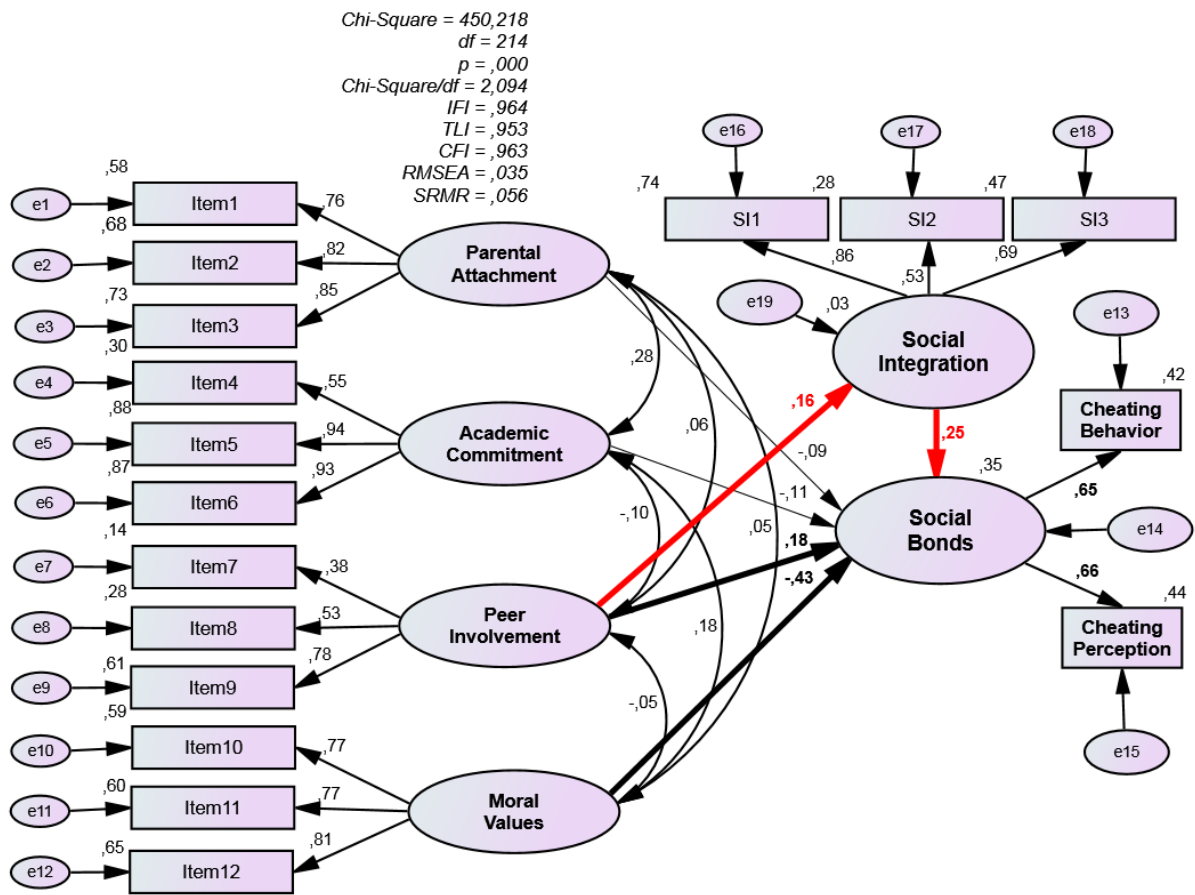
Figure 9 : A Theoretical Model with Social Integration - China
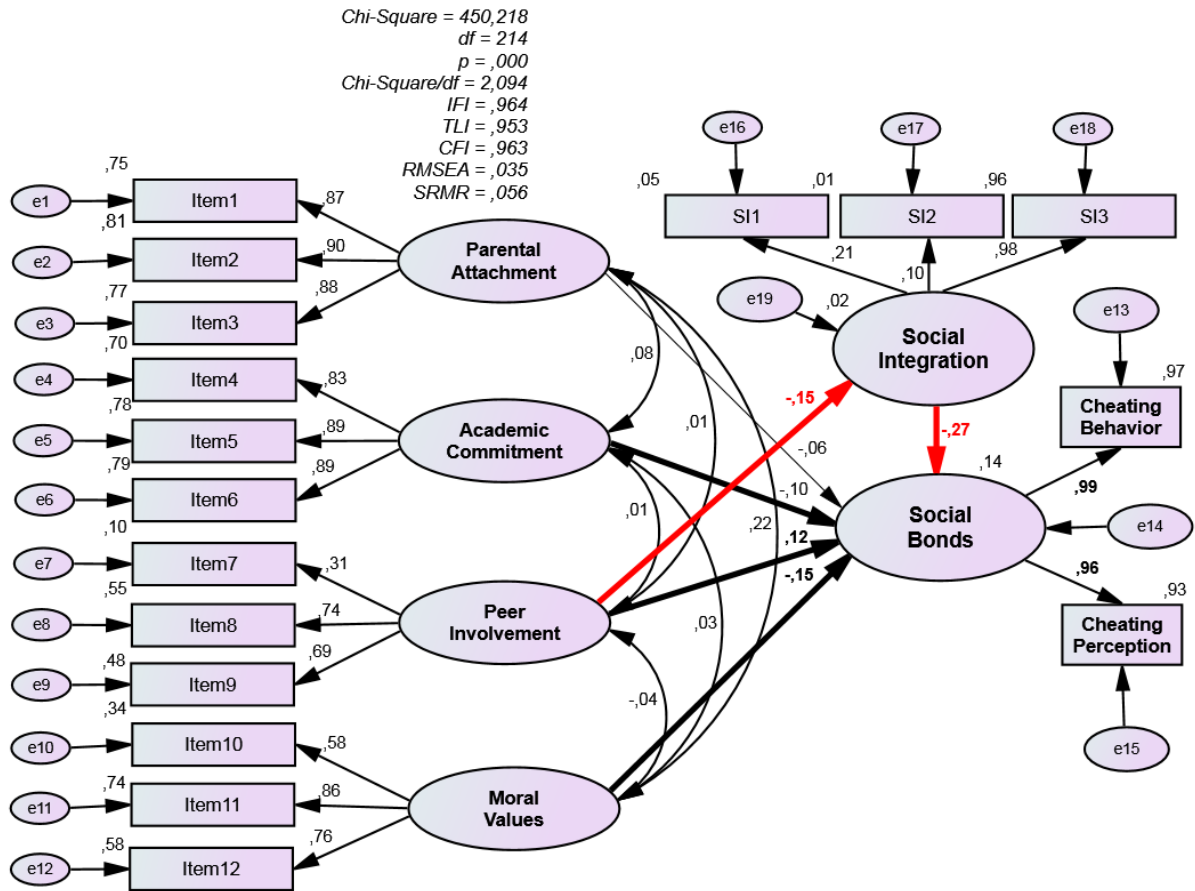
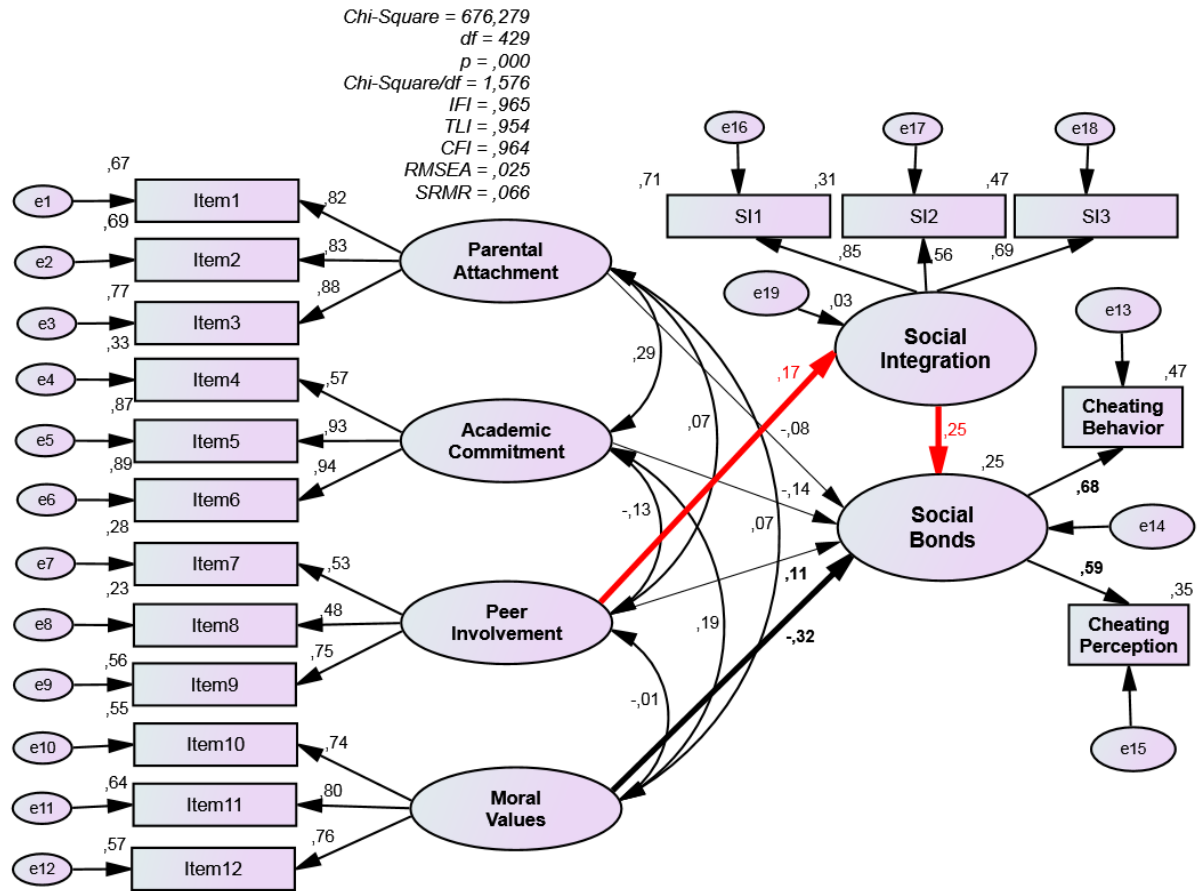**Figure 10 : A Theoretical Model with Social Integration – French Female**

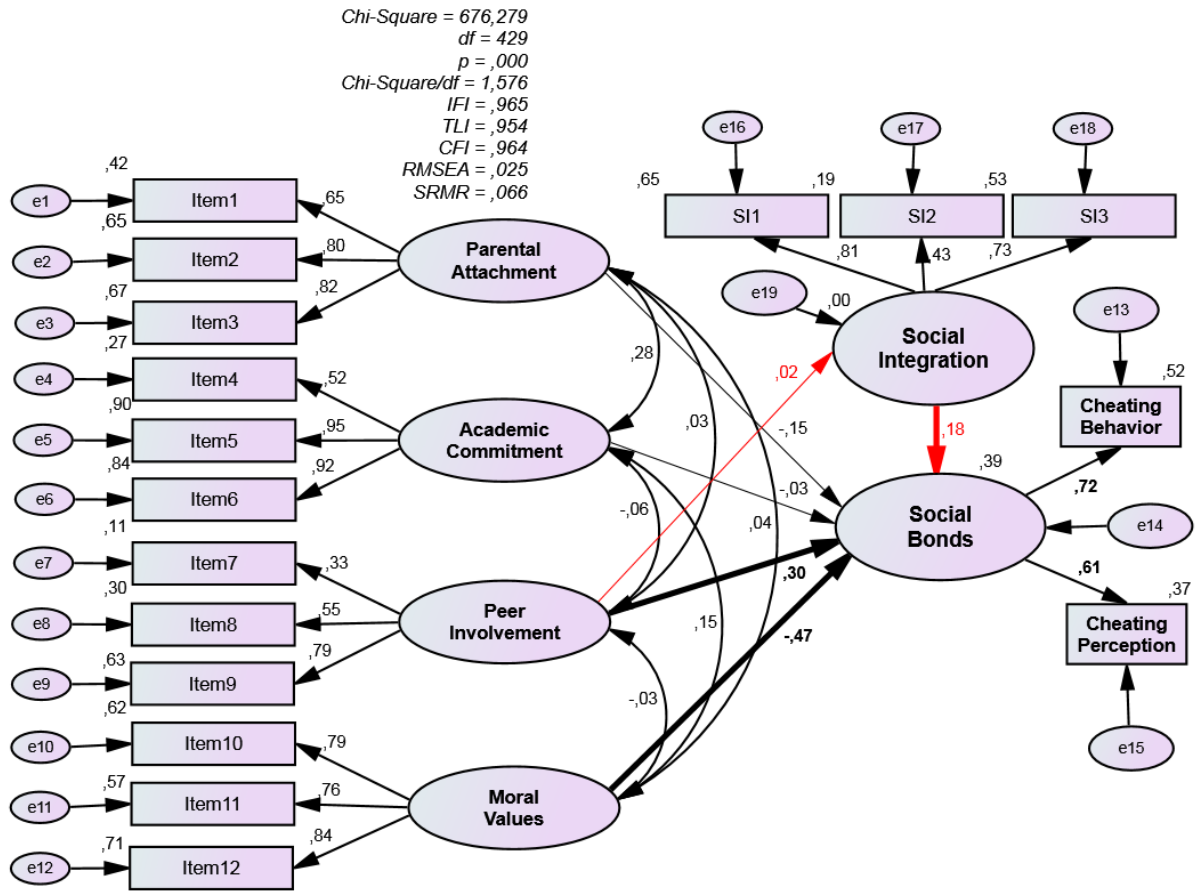**Figure 11 : A Theoretical Model with Social Integration – French Male**

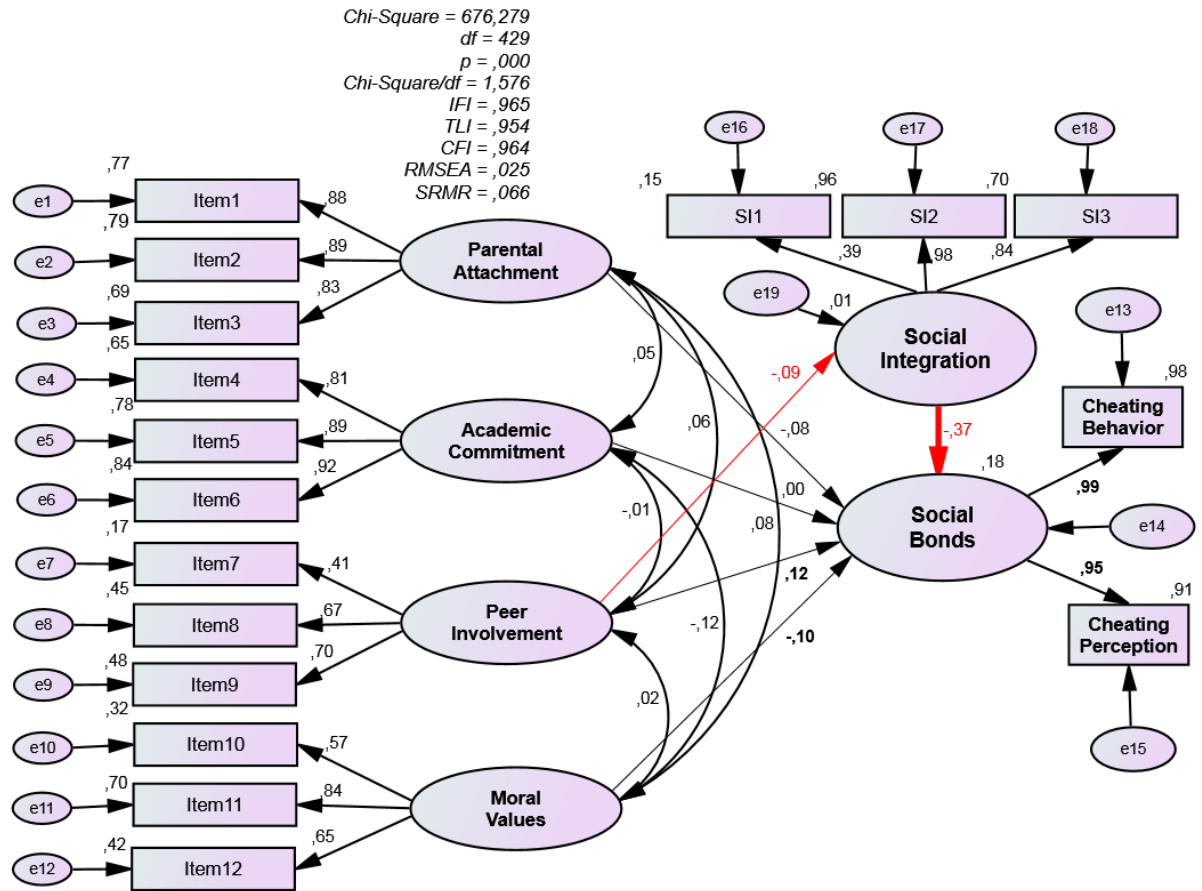**Figure 12 : A Theoretical Model with Social Integration – Chinese Female**

Figure 13 : A Theoretical Model with Social Integration – Chinese Male