

# Relative Influence of Self-Esteem and Norm-Consciousness on Prevalence of Youth Risk Behavior among Japanese High School Students

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The purpose of this study is to investigate the relative influences of norm-consciousness and self-esteem on the prevalence of risk behaviors among Japanese adolescents. We analyzed data from the 2001 Japan Youth Risk Behavior Survey (JYRBS), which was a nationwide survey conducted by Nozu et al. for 11,113 high school students. We focused on the following items of risk behavior from among 32 all items in JYRBS: “lack of vigorous physical activity,” “skipping breakfast,” “current cigarette use,” “current alcohol use,” “lifetime thinner use,” “ever had sexual intercourse,” “rarely or never wore seatbelts,” “in a physical fight,” and “seriously considered attempting suicide.” When the influences of each subdomain of norm-consciousness and self-esteem on the prevalence of risk behaviors among high school students were examined by multiple regression analysis, it was found that, in particular, the poor conditions of norm-consciousness in school and community and the low self-esteem in parents were strongly related to the risk behaviors. The results suggest that the improvements of norm-consciousness with self-esteem, which has been pointed out in recent years, are needed to prevent the risk behaviors among adolescents.

**Key words:** risk behaviors, self-esteem, norm-consciousness, adolescents, factors

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## 1. Introduction

It is an important task in the school health to prevent risk behaviors among adolescents, such as smoking, drinking, drug abuse, risky sexual behavior, lack of physical exercise and unhealthy dietary behavior. Recently, the research in which such behaviors are comprehensively treated as “Youth Risk Behavior” has attracted attention. Nozu et al. (2006) clarified the actual states of risk behaviors among Japanese high school students, and showed that the risk behaviors are mutually interrelated with each other. They also expect that common factors can exist behind the prevalence of risk behaviors.

In recent years, the research that focused on self-esteem as a factor associated with youth risk behaviors has been outstanding. Self-esteem is a positive or negative attitude toward a particular object, namely, the self (Rosenberg, 1965). One of the important aspects of self-esteem is that the person

thinks he is “good enough.” Many researchers in the world including Japan reported that the adolescents with low self-esteem tend to easily take risk behaviors including smoking, drinking, and drug abuse (Chikamori et al., 2005; Emery et al., 1993; Kawabata et al., 1998, 1999, 2001, 2005; Muramatsu et al., 2001; Ogawa et al., 2006; Park et al., 2006; Tomori et al., 2000; Ueda, 1996; Wild et al., 2004; Young et al., 1989). They also pointed out the importance of improving self-esteem to prevent risk behaviors. In a few recent reports, the relationships between self-esteem and each of risk behaviors, such as self-harm behaviors, sexual behaviors, physical activity, and dietary behaviors, are examined. However, these reports focus on only some risk behaviors to examine their relationship with self-esteem. It is pointed out that self-esteem is a common factor in the prevalence of many risk behaviors, and it is required to comprehensively examine risk behaviors and their relationship with self-esteem in the future.

On the other hand, it is considered that youth norm-consciousness is also a significant factor of the prevalence of risk behaviors. In particular, norm-consciousness is strongly related to the prevalence of illegal risk behaviors such as drug abuse and violation of traffic rules. Norm-consciousness is generally defined as an “attitude to carefully esteem and observe the norm” (Kishimoto et al., 1994). According to Mita (1966), it is interpreted as the consciousness to esteem and accommodate to the norm of individual value consciousness. Although it is expected that the low norm-consciousness among adolescents influence the prevalence of their risk behaviors, there are very few reports that demonstrated this expectation. Therefore, the prevention programs that give priority to the improvement of the norm-consciousness have hardly been proposed.

In this study, comprehensively focusing on youth risk behaviors, we aim to examine relative influences of self-esteem and norm-consciousness on the prevalence of each risk behavior. In this case, both factors are examined from the following four aspects, i.e., family members, teachers at school, people in community, and friends, because such people are close to students and considered to be important to prevent risk behaviors.

## 2. Method

### 2.1. Analysis data

The data of Japan Youth Risk Behavior Survey (JYRBS) conducted by Nozu et al. (2002) was used in the analysis. In JYRBS, data were collected from a survey with an anonymous and self-administered questionnaire. The survey was conducted on the basis of “manual for the survey”. Students were instructed to answer questions after receiving explanation on the purpose and contents of the survey and on the fact that the survey will cause no inconvenience to the school and respondents. And teachers were instructed not to walk around the room while answering and not to look at the students’ answer sheets. Analysis subjects were 11,113 (5,604 males and 5,509 females) tenth- to twelfth-grade students in 106 high schools in Japan.

We analyzed nine risk behaviors, norm-consciousness and self-esteem investigated in the JYRBS. Nine risk behaviors were selected from among a total of 32 items, which are categorized into

nine categories (physical activity, dietary behaviors, cigarette smoking, alcohol drinking, drug abuse, sexual behaviors, traffic-related behaviors, violence and carrying a weapon, and self-harm behaviors). Each category comprises 2-5 risk behaviors, and a typical risk behavior was selected from each category; for example, that with high prevalence and that showing many positive correlations with other risk behaviors in the above-mentioned nationwide survey. (Nozu et al., 2006). Specifically, the items selected were “lack of vigorous physical activity,” “skipping breakfast,” “current cigarette use,” (Smoked cigarettes on at least 1 day during the 30 days before the survey.) “current alcohol use,” (Had alcohol on at least 1 day during the 30 days before the survey.) “lifetime thinner use,” “ever had sexual intercourse,” “rarely or never wore seatbelts,” “in a physical fight,” and “seriously considered attempting suicide”(Kubo et al., 2007).

Self-esteem scale comprises a total of 15 items with five subdomains: “parents,” “teacher,” “people in community,” “peer,” and “general.” This scale was prepared because, for the prevalence of youth risk behavior, the recognition of an affirmative attitude of their important persons, such as guardians, teachers, and friends, to themselves has a significant meaning, and the reliability and validity were confirmed (Kubo et al., 2007). The subdomain of “general” grasps positive feelings to the self generally.

Norm-consciousness scale comprises a total of 12 items with four subdomains: “home,” “school,” “community,” and “peer”. This scale is prepared considering that norms are different among places and situations that the youth are closely related to in their daily lives, such as home, school, local community, and friends, and the reliability and validity of the scale are confirmed (Uehara et al., 2008).

### 2.2. Analytical method

Forced entry multiple regression analysis was carried out using four subdomains of norm-consciousness and five subdomains of self-esteem as independent variables and nine risk behaviors as dependent variables. In this case, the answers for each item of norm-consciousness and self-esteem that indicate a more expectable norm-consciousness and self-esteem were given higher scores (For instance, “Think very so,” = 5, “Do not think very so,” = 1 to the item “It is necessary to observe the national

laws.”). No point was given when risk behavior was observed, however otherwise 1 point was given. The significance level in statistics was assumed to be 5%. A statistical package SPSS 14.0J for Windows was used.

### 3. Results

For males, “current cigarette use,” “current alcohol use,” “ever had sexual intercourse,” “rarely or never wore seatbelts,” and “in a physical fight” showed the largest significant positive standardized partial regression coefficients with respect to the norm-consciousness in “school” (Table 1). “Lack of vigorous physical activity” and “skipping breakfast” showed the largest significant positive standardized partial regression coefficients with respect to the self-esteem in “parents,” “lifetime thinner use” showed that with respect to the norm-consciousness in “community,” and “seriously considered attempting suicide” showed that with respect to the self-esteem in “general.” The norm-consciousness in “community” showed significant positive standardized partial regression coefficients with all risk behaviors except for “lack of vigorous physical activity,” and the self-esteem in “parents” showed those with all except for “seriously considered attempting suicide.”

The result for females was almost similar to that for males. That is, “current cigarette use,” “current alcohol use,” “ever had sexual intercourse” and “rarely or

never wore seatbelts” showed the largest significant positive standardized partial regression coefficients with respect to the norm-consciousness in “school.” “Skipping breakfast” showed the largest significant positive standardized partial regression coefficients with respect to the self-esteem in “parents,” “lifetime thinner use” and “in a physical fight” showed those with respect to the norm-consciousness in “community,” and “seriously considered attempting suicide” showed that with respect to the self-esteem in “general.” The norm-consciousness in “community” showed significant positive partial correlations with all risk behaviors except for “lack of vigorous physical activity,” and the self-esteem in “parents” showed those with all except for “lack of vigorous physical activity” and “lifetime thinner use.”

For both males and females, “current cigarette use,” “current alcohol use” and “ever had sexual intercourse” showed significant negative standardized partial regression coefficients with respect to the norm-consciousness and self-esteem in “peer.”

### 4. Discussion

In this study, we focused on self-esteem and norm-consciousness and examined their relative influences on the prevalence of risk behaviors among adolescents considering the existence of common factors in the prevalence of risk behaviors.

First, we discuss the result that many risk behaviors

**Table 1** Standardized partial regression coefficients of self-esteem and norm-consciousness on prevalence of risk behaviors

		Risk behaviors <sup>a</sup>																	
		lack of vigorous physical activity		skipping breakfast		current cigarette use		current alcohol use		lifetime thinner use		ever had sexual intercourse		rarely or never wore seatbelts		in a physical fight		seriously considered attempting suicide	
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females		
Norm-consciousness <sup>b</sup>	「home」											.05	.08			.05			
	「school」			.05	.04	.19	.14	.20	.15			.19	.13	.09	.09	.12	.05		
	「community」			.05	.06	.14	.11	.07	.11	.12	.04	.08	.08	.06	.05	.04	.07	.07	.05
	「peer」					-.10	-.05	-.06	-.08			-.09	-.08	-.05		-.03			
Self-esteem <sup>c</sup>	「parents」	.06			.10	.10	.10	.09	.05	.04	.04	.05	.05	.07	.04	.04	.04		.05
	「teacher」					.05	.06					.06	.06					.04	
	「people in community」	.05	.07				-.05		-.04		-.04			.06	-.06				
	「peer」				-.04	-.07	-.13	-.05	-.09	-.10		-.08	-.09	-.05		-.03			
	「general」												-.05				.21	.21	
Adjusted R <sup>2</sup>		.01	.01	.03	.03	.11	.07	.06	.07	.01	.01	.06	.07	.05	.04	.03	.02	.07	.08

<sup>a</sup> risk behaviors score: No point was given when risk behavior was observed, however otherwise 1 point was given.

<sup>b</sup> norm-consciousness score: The answers for each item of norm-consciousness that indicate a more expectable norm-consciousness were given higher scores.

<sup>c</sup> self-esteem score: The answers for each item of self-esteem that indicate a more expectable self-esteem were given higher scores.

Adjusted R<sup>2</sup> was all significant. ( $p < .05$ )

The number is a significant standardized partial regression coefficients. ( $p < .05$ )

The largest significant positive standardized partial regression coefficients. ( $p < .05$ )

showing the strongest correlations with the low norm-consciousness in school were observed for all subdomains of the norm-consciousness and self-esteem. Concretely, the low norm-consciousness in school was most strongly related to the prevalence of “current cigarette use,” “current alcohol use,” “ever had sexual intercourse” and “rarely or never wore seatbelts” for both males and females, and “in a physical fight” for males. The results suggested that the observance of norms at school is particularly important to prevent of youth risk behaviors.

By the way, schools have stipulated rules for studies and group life, and also have rules that should be observed between students and teachers. However, the previous report suggested that the current state of the norm-consciousness among adolescents at school is not good (Uehara et al., 2007). Thus, it has been pointed out that the improvement of norm-consciousness is necessary; however, it is needless to say that we must avoid one-sidedly imposing rules and regulations on students. In addition, we should provide adolescents with ideal education and environment so that they can be conscious of the necessity of observing school rules, which will be an important point. However, concrete approaches including the preparation of guidance materials (Ministry of Education, Culture, Sports, Science and Technology and National Police Agency, 2006) are still insufficient although it has been strongly requested to foster students' norm-consciousness in a recent Central Education Council report (2008).

Second, we describe the relationships between the community norm-consciousness and the prevalence of risk behaviors. Regarding the relationship between norm-consciousness and risk behaviors, Ichimura et al. (2001) have previously reported the relationship between drug abuse and norm-consciousness in the investigation for junior and senior high school students; however, they discussed the norm-consciousness without setting any subordinate scale. The norm-consciousness in their study is considered to be general normative consciousness, is similar to the norm-consciousness in community in our study. In our study, for both males and females, the community norm-consciousness was related to the prevalence of all risk behaviors except for “lack of vigorous physical activity”, although these relationships were weaker than those for the school norm-consciousness. The community norm-consciousness most strongly influenced thinner abuse compared with the other

subdomains. Japan has severe legal restrictions on drug abuse, and the result is considered to be inevitable. However, interestingly, the relationships of norm-consciousness in community with not only such thinner abuse experience but also risk behaviors that are not legally restricted were observed. We will discuss the reasons of this result in the future.

On the other hand, from the result of self-esteem, it was shown that the low degree of self-esteem in parents increased the prevalence of current cigarette use, skipping breakfast, current alcohol use, sexual intercourse, non-wearing of seat belt, and violence for both male and female student. This result supported the results of previous studies in Japan and overseas. For instance, Kawabata et al. (1998, 1999, 2001, 2002, 2005) has reported that the low degree of self-esteem in family promotes the youth's smoking, drinking, drug abuse, and breakfast skipping. In addition, study of outside Japan reported the relationships between risk behaviors and self-esteem, and demonstrated that smoking, drinking, drug abuse, risky sexual behavior, and suicidal behavior are related to the self-esteem in family (Wild et al., 2004). Therefore, it is extremely important to improve the self-esteem in parents and family with the aim of comprehensively preventing youth risk behaviors.

Also, finally, we discuss the result of the prevalence of risk behaviors for both norm-consciousness and self-esteem in friends, which was different from that in other subdomains. That is, there was no tendency for high self-esteem and norm-consciousness in friends to reduce the prevalence of risk behaviors, although a positive correlation was observed between the prevalence of risk behavior and subdomains of home, school, and community, as mentioned above. In particular, for both male and female students, negative correlations between self-esteem and norm-consciousness in friends were observed regarding the prevalence of smoking, drinking, and sexual intercourse. Findings about self-esteem in friends were reported in some previous studies; however, no constant tendency was found. For example, Young et al. (1989) reported that youth smoking showed no relation with the self-esteem in peer. Moreover, Ogawa et al. (2006) indicated that both male and female students in junior and senior high schools with high self-esteem in peer and low self-esteem in family tend to smoke and drink easily. Therefore, the improvements of the norm-consciousness and self-esteem in peer might not necessarily lead to the



prevention of risk behaviors. The norm-consciousness and self-esteem in an inappropriate friendship may promote risk behaviors, such as smoking and drinking.

Therefore, it was suggested that the improvements of the norm-consciousness in school and community and the self-esteem in parents and home are important to prevent youth risk behaviors, and we should further emphasize this importance.

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