



**RAZISKAVE  
& RAZPRAVE**  
**RESEARCH & DISCUSSION**

## RESEARCH and DISCUSSION

ISSN: 1855-4148

UDK: 3

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Vega Press

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### Publishing Information

Journal R&R is published in electronic form three times annually (February, June, October). Published by Faculty of Applied Social Studies in Nova Gorica and available free of charge at: <http://www.fuds.si/si/dejavnosti/zaloznistvo/?v=raziskave-in-razprave>.

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*Indexed and abstracted in: COBISS*

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## Attitudes to Risk and Roulette

Adi Schnytzer  
Sara Westreich<sup>1</sup>

### Abstract

We present an empirical framework for determining whether or not customers at the roulette wheel are risk averse or risk loving. Thus, we present a summary of the Aumann-Serrano (2007) risk index as generalized to allow for the presence of risk lovers by Schnytzer and Westreich (2010). We show that, for any gamble, whereas riskiness increases for gambles with positive expected return as the amount placed on a given gamble is increased, the opposite is the case for gambles with negative expected return. Since roulette involves binary gambles, we restrict our attention to such gambles exclusively and derive empirically testable hypotheses. In particular, we show that, all other things being equal, for gambles with a negative expected return, riskiness decreases as the size of the contingent payout increases. On the other hand, riskiness increases if the gamble has a positive expected return. We also prove that, for positive return gambles, riskiness increases, *ceteris paribus*, in the variance of the gamble while the reverse is true for gambles with negative expected returns. Finally, we apply these results to the specific gambles involved in American roulette and discuss how we might distinguish between casino visitors who are risk averse and those who are risk loving as well as those who may suffer from gambling addictions of one form or another.

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## Introduction

Who plays roulette in a casino? Since the expected return to playing is negative, the obvious answer would appear to be risk lovers. But this is not necessarily the case. Thus, a risk averse consumer may decide to set aside a given sum as a conceptual “entrance fee”, enter the casino (where there is no entrance fee) and play with his entrance money either until he loses it all or until he decides to leave with money left over or even a profit, whichever occurs first. It has even been suggested by Mobilia (1993)<sup>2</sup>, using a rational addiction framework, that such risk averse gamblers may even be addicted. Since Mobilia’s model does not involve any explicit considerations of risk, we do not deal with the addiction issue here. In this paper, we present an empirical framework for determining whether or not customers at the roulette wheel are risk averse or risk loving.

We proceed as follows. In section 1, we present a summary of the Aumann-Serrano risk index (Aumann and Serrano (2007), hereafter [AS]), as generalized to allow for the presence of risk lovers by Schnytzer and Westreich (2010) (hereafter [SW]). We show that, for any gamble, whereas riskiness increases for gambles with positive expected return as the amount placed on a given gamble is increased, the opposite is the case for gambles with negative expected return. Since roulette involves binary gambles, we restrict our attention to such gambles exclusively and derive empirically testable hypotheses in section 2. In particular, we show that, all other things being equal, for gambles with a negative

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<sup>2</sup> The model is based on Gary Becker and Kevin Murphy (1988). For other applications, see Chaloupka (1988, 1990a, 1990b) and Becker, Grossman, and Murphy (1990).

expected return, riskiness decreases as the size of the contingent payout increases. On the other hand, riskiness increases if the gamble has a positive expected return. We also prove that, for positive return gambles, riskiness increases, *ceteris paribus*, in the variance of the gamble while the reverse is true for gambles with negative expected returns. In section 3, we apply these results to the specific gambles involved in American roulette and discuss how we might distinguish between casino visitors who are risk averse and those who are risk loving as well as those who may suffer from gambling addictions of one form or another.

### The Generalized Aumann and Serrano Index of Riskiness

Following [AS] and [SW] we outline the notion of a *generalized index of inherent riskiness*, with no a priori assumptions about attitudes toward risk. A *utility function* is a strictly monotonic twice continuously differentiable function  $u$  defined over the entire line. We normalize  $u$  so that

$$u(0) = 0 \quad \text{and} \quad u'(0) = 1$$

If  $u$  is concave then an agent with a utility function  $u$  is risk averse, while if  $u$  is convex, then an agent with a utility function  $u$  is risk lover.

The following definition is due to Arrow (1965 and 1971) and Pratt (1964):

**Definition 1.1** *The coefficient of absolute risk of an agent  $i$  with utility function  $u_i$  and wealth  $w$  is given by:*

$$\rho_i(w) = \rho_i(w, u_i) = -u_i''(w)/u_i'(w)$$

Note  $u_i(x)$  is concave in a neighborhood of  $w$  if and only if  $\rho_i(w) > 0$ , while if it is convex if and only if  $\rho_i(w) < 0$ .

**Definition 1.2** Call  $i$  at least risk averse or no more risk loving than  $j$  (written  $i \succeq j$ ) if for all levels  $w_i$  and  $w_j$  of wealth,  $j$  accepts at  $w_j$  any gamble that  $i$  accepts at  $w_i$ . Call  $i$  more risk averse or less risk loving than  $j$  (written  $i \succ j$ ) if  $i \succeq j$  and  $j \not\succeq i$ .<sup>3</sup>

We have:

**Corollary 1.3** Given agents  $i$  and  $j$ , then

$$i \succeq j \iff r_i(w_i) \geq r_j(w_j)$$

for all  $w_i$  and  $w_j$ .

**Definition 1.4** An agent is said to have Constant Absolute Risk (CAR) utility function if his normalized utility function  $u(x)$  is given by

$$u_\alpha(x) = \begin{cases} \alpha^{-1}(1 - e^{-\alpha x}), & \alpha \neq 0 \\ x & \alpha = 0 \end{cases}$$

If  $\alpha > 0$  then the agent is risk-averse with a CARA utility function, while if  $\alpha < 0$  then the agent is risk-loving with a CARL - Constant Absolute

<sup>3</sup> Note that in [AS] the above is defined for risk averse agents only, and is denoted by " $i$  is at least as risk averse as  $j$ ".



Risk-Loving - utility function . If  $\alpha = 0$  then the agent is risk neutral. The notion of "CAR" is justified since for any  $\alpha$ , the coefficient of absolute risk  $\rho$  defined in Def.1.1, satisfies  $\rho(w) = \alpha$  for all  $w$ , that is, the Arrow-Pratt coefficient is a constant that does not depend on  $w$ .

**Proposition 1.5** *An agent  $i$  has CAR utility function if and only if for any gamble  $g$  and any two wealth levels,  $i$  either accepts  $g$  at both wealth levels, or rejects  $g$  at both wealth levels.*

The next theorem appears in [SW] extending the original idea of [AS]. It verifies the existence of the general index for the following class of gambles. A gamble  $g$  is *gameable* if it results in possible losses and possible gains. If  $g$  has a continuous distribution function, then it is gameable if it is bounded from above and below, that is, its distribution function is truncated.

**Theorem 1.6 [AS,SW]** *Let  $g$  be a gameable gamble and let  $\alpha$  be the unique nonzero root of the equation*

$$Ee^{-\alpha g} - 1 = 0$$

*Then for any wealth, a person with utility function  $u_\alpha$  is indifferent between taking and not taking  $g$ . In other words, the CAR utility function  $u_\alpha$  satisfies for all  $x$ ,*

$$Eu_\alpha(g + x) = u_\alpha(x).$$

*Moreover,  $\alpha$  is positive (negative) if and only if  $Eg$  is positive (resp. negative).*

**Definition 1.7** *Given a gamble  $g$ , denote the number  $\alpha$  obtained in Th.1.6 by the upper limit of taking  $g$ .*



The notation upper limit is justified by the following:

**Theorem 1.8** *Let  $\alpha$  be the upper limit of taking a gamble  $g$ . Then:*

1. *If  $Eg > 0$  then all CARL accept  $g$  and a CARA person with a utility function  $u_\beta$  accepts  $g$  if and only if*

$$0 < \beta < \alpha$$

2. *If  $Eg < 0$  then all CARA reject  $g$  and a CARL person with a utility function  $u_\beta$  accepts  $g$  if and only if*

$$\beta < \alpha < 0$$

3. *If  $E(g) = 0$  the all CARA people reject  $g$  while all CARL people accept  $g$ .*

We propose here the following general index of inherent riskiness. Given a gamble  $g$  and its upper limit  $\alpha$  define its index  $Q(g)$  by:

$$Q(g) = e^{-\alpha}$$

Theorem 1.8 and the fact that  $Q$  is a monotonic decreasing function of  $\alpha$ , imply that:

**Corollary 1.9** An increase in riskiness corresponds to a decrease in the set of constant risk-attitude agents that will accept the gamble.

**Caution:** The corollary above does not say that constant risk-attitude agents prefer less risky gambles. It says that they are more likely to accept them.

It is straightforward to check the following properties:

**Corollary 1.10** *The generalized index  $Q(g)$  given in (6) satisfies:*

1.  $Q(g) > 0$  for all  $g$ .
2. If  $Eg > 0$  then  $Q(g) < 1$  and if  $Eg < 0$  then  $Q(g) > 1$ .

When  $Eg = 0$  then  $Q(g) = 1$ .

3.  $Q(Ng) = Q(g)^{1/N}$ . In particular

$$Q(-g) = Q(g)^{-1}$$

**Remark 1.11** *Unlike the case of the [AS]- index, homogeneity of degree 1 does not hold. However, when  $E(g) > 0$  then it is replaced by (increasing) monotonicity. This follows since in this case  $Q(g) < 1$ , hence if  $t < 1$  then  $Q(tg) = (Q(g))^{1/t} < Q(g)$ , while if  $t > 1$  then  $(Q(g))^{1/t} > Q(g)$ . This is no longer true for gambles with negative positive return. If  $E(g) < 0$  then  $Q(g) > 1$  and  $Q$  is monotonically decreasing with respect to multiplication by  $t$ . This follows by the same argument as above, with the reverse inequalities.*

Put simply, the remark says that, for a risk averse person, the greater the stake the riskier the gamble, whereas for a risk lover the more money invested in a particular gamble, the less the risk! Following Cor. 1.9, consider the suggested index of riskiness as the opposite to the number of constant risk attitude gamblers who will accept it. Now, the intuition for the risk averse person is straight-forward: placing more money in situation of risk is undesirable since the marginal utility of money is falling and this kind of individual wants to sleep at night. So, as the amount at stake rises, the riskiness rises and there are fewer constant risk attitude risk averse gamblers who will accept it.

For the risk lover, on the other hand, the marginal utility of money is rising. Thus, the more money he stands to win, *ceteris paribus*, the better of he is. Besides which, the risk lover gets utility from the adrenalin rush that accompanies gambling. Accordingly, as the amount wagered on a given gamble increases, there will be more constant risk attitude risk loving gamblers who will accept it. In other words, the gamble is less risky.

## Binary Gambles

In this section we further turn to a discussion of specific properties of the index of inherent risk as it applies to binary gambles. For this case, we prove that our index is a monotonic function of  $\text{Var}(g)$ , which is increasing for gambles with  $Eg > 0$  and decreasing otherwise.

Let  $g$  be a gamble that results in a gain of  $M$  with probability  $p$  and a loss of  $L$  with probability  $q = 1 - p$ . We assume  $M$  and  $L$  are positive real numbers. Note that:

$$Eg = p(M + L) - L \quad \sigma^2(g) = p(1 - p)(M + L)^2$$

In order to generate the empirically testable hypotheses discussed in the next section, we summarize partial relations between expected utilities, expectations of gambles, chances to win and riskiness. We start with expected utilities of Constant Absolute Risk (CAR) utility functions. Consider  $Eu_a(g) = Eu_a(L, M, Eg)$  as a function of the independent variables  $L$ ,  $M$  and  $Eg$ .

**Proposition 2.1** Assume  $g$  results in a gain of  $M$  with probability  $p$  and a loss of  $L$  otherwise. Let  $u_\alpha(x) = \alpha^{-1}(1 - e^{-\alpha x})$ ,  $\alpha \neq 0$ , be a CAR utility function. Then:

$$\alpha > 0 \text{ implies } \frac{\mathbb{E}u_\alpha}{\mathbb{E}M} < 0 \text{ and } \alpha < 0 \text{ implies } \frac{\mathbb{E}u_\alpha}{\mathbb{E}M} > 0.$$

**Proof.** By (1) we have

$$p = \frac{Eg + L}{M + L}.$$

Hence

$$Eu_\alpha(g) = \alpha^{-1}(1 - pe^{-\alpha M} - (1-p)e^{\alpha L}) = \alpha^{-1}\left(1 - \frac{Eg + L}{M + L}(e^{-\alpha M} - e^{\alpha L}) - e^{\alpha L}\right)$$

A straightforward computation gives:

$$\frac{\mathbb{E}u_\alpha}{\mathbb{E}M} = \frac{e^{-\alpha M} \alpha^{-1} p}{L + M} (1 + \alpha(L + M) - e^{\alpha(L + M)})$$

We claim that  $f(\alpha) = 1 + \alpha(L + M) - e^{\alpha(L + M)}$  is negative for all  $\alpha \neq 0$ . Indeed,

$$f'(\alpha) = L + M - (L + M)e^{\alpha(L + M)} = (L + M)(1 - e^{\alpha(L + M)})$$

If  $\alpha > 0$  then  $f'(\alpha) < 0$  while if  $\alpha < 0$  then  $f'(\alpha) > 0$ .

Since  $f(0) = f'(0) = 0$ , our claim follows.

Since  $Eu_\alpha(g) = f(\alpha)$  multiplied by a positive value, the desired result follows. QED

We consider now how  $Q = Q(g)$  is related to the other variables . Following Th.1.6 we need to solve  $Ee^{-\alpha g} - 1 = 0$ . That is:

$$0 = pe^{-\alpha M} + qe^{\alpha L} - 1$$

The following is quite intuitive.

**Proposition 2.2** *Let  $g$  be a gamble that results in a gain  $M$  with probability  $p$  and a loss  $L$  otherwise. Consider  $Q(g)$  as a function of the independent variables  $L$ ,  $M$  and  $Eg$ . Then we have:*

*If  $Eg < 0$  then  $\frac{\partial Q(g)}{\partial M} < 0$  and if  $Eg > 0$  then  $\frac{\partial Q(g)}{\partial M} > 0$ . Finally, if  $Eg = 0$  then  $\frac{\partial Q(g)}{\partial M} = 0$ .*

**Proof.** Assume  $M_1 < M_2$ . Let  $g_1$  be the gamble resulting in  $M_1$  and  $g_2$  resulting in  $M_2$ . Let  $\alpha_1$  satisfies  $Eu_{\alpha_1}(g_1) = 0$ . By Th.1.8, if  $Eg < 0$  then  $\alpha_1 < 0$  and since  $M_1 < M_2$  it follows by Prop. 2.1 that  $Eu_{\alpha_1}(g_1) < Eu_{\alpha_1}(g_2)$ . Hence an agent with utility function  $u_{\alpha_1}$  accepts  $g_2$ . This implies by Th.1.8 that  $\alpha_1 < \alpha_2$ , where  $\alpha_2 < 0$  is the upper limit of taking  $g_2$ . Since  $Q = e^{-\alpha}$  we have  $Q(g_1) > Q(g_2)$  and we are done. When  $Eg > 0$  then by  $\alpha_1 > 0$ , and by Prop. 2.1,  $0 = Eu_{\alpha_1}(g_1) > Eu_{\alpha_1}(g_2)$ . Hence  $\alpha_1$  rejects  $g_2$  and thus  $\alpha_2 < \alpha_1$  and  $Q(g_1) < Q(g_2)$ . If  $Eg = 0$  then  $Q(g) = 1$  and the result follows. QED

For binary gambles, fixing  $Eg$  and increasing  $M$ , means increasing  $Vg = \text{Var}(g)$ . Thus Prop.2.2 implies that for a given  $Eg > 0$ ,  $\frac{\partial Q(g)}{\partial Vg} > 0$  and for a given  $Eg < 0$ ,  $\frac{\partial Q(g)}{\partial Vg} < 0$ .

Since  $\frac{\partial Eu_\alpha}{\partial Q} = \frac{\partial Eu_\alpha}{\partial M} \frac{\partial M}{\partial Q}$  we have by Proposition 2.1 and 2.2 that:

**Corollary 2.3** If  $Eg > 0$  then for a risk lover  $\frac{\partial Eu_\alpha}{\partial Q} > 0$ , and for a risk averse  $\frac{\partial Eu_\alpha}{\partial Q} < 0$ .

If  $Eg < 0$  then for a risk lover  $\frac{\partial Eu_\alpha}{\partial Q} < 0$ .

## Roulette

The casino game of roulette is probably the simplest practical example of the inherent risk index. In this case, every possible bet is a binary gamble where the return to a losing bet is always the outlay and both the probability of success and the concomitant payout are known. There is thus no uncertainty here, merely risk. Accordingly, roulette also provides the simplest case for a study of attitudes towards risk of casino gamblers. In the absence of data, we are restricted to proving some potentially interesting empirically testable hypotheses. We hope to be able to test these when/if data are forthcoming.

Table 1 provides complete details for the different kinds of bets available in the American version of the game<sup>4</sup>.

**Table 1: American Roulette**

Bet name	Winning spaces	Payout M	Odds $p=1/(odds+1)$	Expected value (on a \$1 bet) = $Eg$
0	0	35 to 1	37 to 1	−\$0.053
00	00	35 to 1	37 to 1	−\$0.053
Straight up	Any single number	35 to 1	37 to 1	−\$0.053
Row 00	0, 00	17 to 1	18 to 1	−\$0.053
Split	any two adjoining numbers vertical or horizontal	17 to 1	18 to 1	−\$0.053
Trio	0, 1, 2 or 00, 2, 3	11 to 1	11.667 to 1	−\$0.053
Street	any three numbers horizontal	11 to 1	11.667 to 1	−\$0.053
Corner	any four adjoining numbers in a block	8 to 1	8.5 to 1	−\$0.053
Six Line	any six numbers from two horizontal rows	5 to 1	5.33 to 1	−\$0.053
1st Column	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34	2 to 1	2.167 to 1	−\$0.053
2nd Column	2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35	2 to 1	2.167 to 1	−\$0.053
3rd Column	3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36	2 to 1	2.167 to 1	−\$0.053
1st Dozen	1 through 12	2 to 1	2.167 to 1	−\$0.053
2nd Dozen	13 through 24	2 to 1	2.167 to 1	−\$0.053
3rd Dozen	25 through 36	2 to 1	2.167 to 1	−\$0.053
Odd	1, 3, 5, ..., 35	1 to 1	1.111 to 1	−\$0.053
Even	2, 4, 6, ..., 36	1 to 1	1.111 to 1	−\$0.053
Red	1, 3, 5, 7, 9, 12, 14, 16, 18, 19, 21, 23, 25, 27, 30, 32, 34, 36	1 to 1	1.111 to 1	−\$0.053
Black	2, 4, 6, 8, 10, 11, 13, 15, 17, 20, 22, 24, 26, 28, 29, 31, 33, 35	1 to 1	1.111 to 1	−\$0.053
1 to 18	1, 2, 3, ..., 18	1 to 1	1.111 to 1	−\$0.053
19 to 36	19, 20, 21, ..., 36	1 to 1	1.111 to 1	−\$0.053
Five Number	0, 00, 1, 2, 3	6 to 1	6.6 to 1	−\$0.079

<sup>4</sup> In the European version, the setup of the wheel is slightly different.



The initial bet is returned in addition to the mentioned payout. Note also that 0 and 00 are neither odd nor even in this game.

The crucial questions are: what kinds of gamblers play roulette and can we determine their attitudes to risk based on the kinds of bets they place? Are they all risk-lovers? Or perhaps some of them are people who pay a certain amount of money for fun, this being the amount they are willing to lose when gambling and which they view as an “entrance fee” or some such and then bet as risk-averse gamblers so that any losing bets provide zero utility while winning bets provide positive utility?

Indeed, according to the rational addiction model of Mobilia (1993), as farfetched as it may seem when simple intuition is applied, there may even be risk averse gamblers who are addicted! Thus, a rational risk averse gambler who obtains utility from the act of gambling (as he might from smoking a cigarette) may be shown to be rationally addicted if the quantity of gambling demanded today is a function of gambling in the future. But this requires the very strange assumption that such a gambler obtains actual (as distinct from positive expected) utility from even losing gambles. Finally, it should be stressed that attitude towards risk nowhere comes into the Mobilia model. On the other hand, her utility function adopted permits a far wider interpretation than our own.

Be all of this as it may, it seems clear that in principle there may be both risk lovers and risk averse gamblers to be seen in a casino (and among them will be those who are addicted and those who are not)<sup>5</sup>. Now, since our utility functions are static, we can shed no light on addiction

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<sup>5</sup> We are unaware of any formal model explaining gambling addiction for risk lovers, but there seems no reason to rule out such a possibility a priori.

but we can generate some testable hypotheses regarding attitudes to risk.

The two different points of view yield different ways of calculating the index of riskiness. We can either assume that each gamble yields a possible loss of 1 and a possible gain of  $M$ . In this case only risk lovers bet. We will denote this gamble by  $g_1$  and calculate  $Q_1$  according to these assumptions.

To allow for risk averse players, let's assume that the gambler is ready to pay \$0.5 for the fun (his entrance fee). Let now  $g_2$  be the gamble where one can either lose 0.5\$ or win  $M+0.5$ . From table I, it follows that the expected return for  $g_2$  is:

$$E(g_2)=E(g_1+0.5)=0.447.$$

Let  $Q_2$  be the corresponding index of risk. Note that the two indexes are different, and by the previous section, one is a monotonic decreasing function of  $M$  and the other is increasing.

We suggest that data on bets can shed light on gambler type. If most gamblers are risk averse who willingly spend some money on gambling for fun, they will choose the smaller  $M$ . If they are "big" risk lovers they will choose the greater  $M$ , but if they are "small" risk lovers they can choose other gambles.

**Table 2: Two possible calculations for the Risk Index (Q)**

Bet name	Payout = M	Q <sub>1</sub> (g)	Q <sub>2</sub> (g)
0	35 to 1	1.003065	0.959765
00	35 to 1	1.003065	0.959765
Straight up	35 to 1	1.003065	0.959765
Row 00	17 to 1	1.006318	0.919738
Split	17 to 1	1.006318	0.919738
Trio	11 to 1	1.00978	0.880007
Street	11 to 1	1.00978	0.880007
Corner	8 to 1	1.013457	0.840812
Six Line	5 to 1	1.02138	0.805094
1st Column	2 to 1	1.05467	0.76214
2nd Column	2 to 1	1.05467	0.76214
3rd Column	2 to 1	1.05467	0.76214
1st Dozen	2 to 1	1.05467	0.76214
2nd Dozen	2 to 1	1.05467	0.76214
3rd Dozen	2 to 1	1.05467	0.76214
Odd	1 to 1	1.111	0.538585
Even	1 to 1	1.111	0.538585
Red	1 to 1	1.111	0.538585
Black	1 to 1	1.111	0.538585
1 to 18	1 to 1	1.111	0.538585
19 to 36	1 to 1	1.111	0.538585
Five Number	6 to 1	1.027295	0.33569

Comments:

1. We have by Prop. 2.2, that  $Eg < 0 \Rightarrow \frac{Q(g)}{M} < 0$ . This is demonstrated in the table in the column of  $Q_1$ . The case when  $Eg > 0$  is demonstrated in  $Q_2$ .

2. Based upon these observations, we would predict that if most players are “big” risk-lovers then more roulette players choose to play 35 to 1 gambles and fewest would choose even money gambles. Unfortunately, we have no data that would permit us to test this hypothesis formally, but we have been told that the following holds in casinos operated by HIT in Slovenia and elsewhere in Southern Europe.<sup>6</sup> First, less than 5 percent of all gamblers play 2 to 1 or even money gambles. Second, in most instances there are multiple bets on one spin of the wheel. Thus, most of the gamblers choose 17 to 1 or 35 to 1 gambles, but most of the customers will cover, with such bets, approximately 12 of the available numbers (out of 37) on one roulette spin. Finally, following winning bets, gamblers will proceed to cover more numbers in a subsequent bet. There is no observable trend following losing bets.

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<sup>6</sup> This information was provided by Igor Rus of HIT.

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## Towards the Patterns of Problem Gambling in Slovenia

*K vzorcem problematičnega igranja v Sloveniji*

**Matej Makarovič<sup>1</sup>**

### **Abstract**

The author analyses the results of the National Problem Gambling Prevalence Survey conducted by the School of Advanced Social Studies in 2008. The prevalence figures based on the SOGS questionnaire from the SASS national survey are not extreme when placed in a comparative perspective but still quite significant. The author then distinguishes between the higher relative risks related mostly to the casino games and the absolute risks related to the games played by the most significant portions of the population – the so called ‘classical games’. Single young men and immigrants are identified as the most vulnerable categories concerning the problem gambling in Slovenia. Finally, a theoretical model is developed to explain problem gambling patterns as a ‘social fact’ at the macro level combining the impacts of cultural patterns, governance, market situation, types and frequency of games played and money spend for particular games to the prevalence of problem gambling.

**Keywords:** gambling, problem gambling, pathological gambling, SOGS

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### **Povzetek**

*Avtor analizira rezultate Nacionalne raziskave prevalece problematičnega igranja, ki jo je izvedla Fakulteta za uporabne družbene študije leta 2008. Podatki o prevalenci na podlagi vprašalnika SOGS iz nacionalne raziskave FUDŠ ne kažejo na ekstremne vrednosti, ko jih postavimo v primerjalno perspektivo, a so vseeno znatni. Avtor nato razlikuje med višjimi relativnimi tveganji povezanimi predvsem z igrami v igralnicah, in absolutnimi tveganji povezanimi z igrami, ki jih igrajo največji deleži prebivalstva – s t.i. klasičnimi igrami. Samski mladi moški in imigranti so prepoznani kot najbolj kategorije, ki so najbolj dovzetne za razvoj problematičnega igranja. Nazadnje avtor razvija teoretični model, da bi pojasnil vzorce problematičnega igranja kot »družbeno dejstvo« na makro ravni, tako da kombinira učinke kulturnih vzorcev, politike, tržnih razmer ter tipov in pogostosti igranja iger in porabljenega denarja za posamezno igro na pogostost problematičnega igranja.*

**Ključne besede:** *igre na srečo, problematično igranje, patološko igranje, SOGS*

## **Towards the Patterns of Problem Gambling in Slovenia**

The central purpose of this paper is to analyze the results of the first Slovenian national Problem Gambling Prevalence Survey conducted in autumn 2008 by the School of Advanced Social Studies (FUDŠ/SASS) and discover some patterns of problem gambling in a comparative perspective. We are interested in the problem and pathological gambling prevalence as a social fact that can be identified at the societal level, not in the individual specifics of the particular problem and pathological gamblers. Moreover, in the final part of the paper there is also an attempt to establish a more generalized model of factors that influence the patterns of problem gambling at the macro level that might be applied not only to the Slovenian case but to the problem gambling patterns in general.

The 2008 problem gambling prevalence survey by SASS was the first of this kind in Slovenia. When one examines the statistics on the consumption for gambling in Slovenia it may seem strange why no prevalence survey had been done before. When compared to the other countries of the European Union, Slovenia occupies one of the highest ranks in terms of money spend for gambling. In 2004, 187 Euros per Slovenian inhabitant were spent for gambling. This figure places Slovenia to the fourth place among the EU countries – after Finland, Luxemburg and Sweden. If only spending for casinos and slot machines is taken into account, Slovenia ranks second in the EU, only after Luxemburg (Jaklič et al. 2007: 41). According to another statistics, spending on gambling in Slovenia is the highest in the EU when calculated as the percentage of household expenses (Insee in Valleur 2009: 76).

## **The illusion of ‘not-our-problem’: the concept of export oriented gambling**

Why then the previous lack of interest in gambling studies in Slovenia? The most obvious reason may lie in the fact that gambling has often been considered a Slovenian industry but not a Slovenian problem. In other words, casino and slot machines gambling began in Slovenia as an export oriented industry strongly related to tourism and it has remained to a significant extent to be considered as such. Generating revenues in Slovenia and exporting gambling problems to other countries, especially the neighboring Italy, might have seemed an easy option but the sustainability of this situation can be questioned.

It is clear that the enormous spending for casino and slot machines gambling in Slovenia is only to some extent the spending by Slovenian population. According to Jaklič et al. (2007:41 ff) only 80 Euros per person were spent for gambling in 2004 when only domestic spending is taken into account. This was in fact below the EU average of 114 Euros. However, when domestic spending for gambling is calculated in terms of countries' GDP, Slovenia (0.62%) was slightly above the EU average (0,50%) in 2004 (ibid. 43). Moreover, the trend after 2004 indicates significant increase in spending for gambling during the following years which was disproportionately higher than the one that could be extrapolated from the GDP growth (ibid. 44). Interest in gambling has clearly been increasing among the Slovenian population.

To understand the gambling patterns and gambling problems in Slovenia, one should distinguish between several types of games, typically available in Slovenia. Slovenian legislation differentiates between classical and special games. The classical include lottery, scratch cards, certain tombola games and sport betting. All casino gambling and slot

machines are considered as special games. Classical games, especially lottery, have a relatively long tradition in Slovenia. They are monopolized by two companies, namely the Lottery of Slovenia and the Sports Lottery based on the concession provided by the government while their profits are used for humanitarian purposes (UNPIS, 2010). These games are mostly played by the local Slovenian population, they are the most common games played among the Slovenians (Makarovič et al. 2008) and they are also considered as relatively harmless and unproblematic by the general public, especially when compared to casino gambling (Makarovič 2008).

Casino gambling, on the other hand, was traditionally much more distant from the local population. The first casino was opened in 1913, i.e. just before the World War I in the Slovenian coastal town of Portorož, at that time a part of the Austro-Hungarian Empire (Luin 2004). It was oriented towards the elite and its existence was much too brief to affect the local population in any way. It was followed by the decades of prohibition of casino gambling first in the Yugoslav monarchy and then in the communist Yugoslavia.

However, legal casino gambling reappeared during the communist times but as an activity only accessible for the foreign tourists, while strictly forbidden for the local population. Thus, in 1964 the first casino after half a century was opened in Slovenia, once again in Portorož and after that in Bled. It was again an elite activity, offered to the wealthy foreign tourists. During the 1980s Nova Gorica became the first tourist destination in Slovenia (and in Yugoslavia which Slovenia had been a part of) where casino gambling was not a supplementary but the central local attraction for western, mostly Italian, tourists (Luin 2004). Even after the democratization and liberalization of Slovenia in the beginning of the 1990s when casino gambling became accessible for the local population

as well, it remained an export oriented activity – firmly linked with tourism. Consequently, its impact on local population was mostly not considered even when gambling supply began to spread, especially with the rise of the gambling halls. Technically the gambling halls in Slovenia only differ from the casinos that they do not offer live table games but mostly slot machines and sometimes also electronic equivalents to the table games, such as electronic roulette. Formally, however, the difference is more significant: while casinos with live table games are owned by the state and municipalities, the gambling halls are privately owned. Moreover, gambling halls have gradually become more attractive for the local population than casinos and are thus less export oriented than the casinos.

The lack of consideration of the social costs of gambling among the local population has been clearly demonstrated by an expertise by Bole and Jere (2004) for the Ministry of Finance. The authors claimed that the distance between different gambling halls and casinos should be ‘at least 11 to 22 minutes of normal drive by car’ (Bole and Jere 2004: 3). Clearly, collecting revenues was the only aspect taken into account and the only aspect relevant for the Ministry of Finance at that time. In some areas, however, the density of casinos and gambling halls is even greater. If we use the criteria reported by an American study by Gerstein et al. (in Reith 2006: 46) who claimed that problem gambling rates double when gambling facilities are accessible within the 50 miles radius, Slovenia is more than fully ‘covered’ by the gambling supply. Almost its entire population is included even if only a half of this distance is applied (Macur et al. 2009: 271).

The social costs of gambling and the prevalence of problem gambling only became an issue in 2007 when the plans for the ‘Mega-Centre’ by Harrah’s Entertainment and the local company Hit were presented to the

public. Finally, at the end of 2008, we conducted the first prevalence survey on the national sample of 10.001 (Makarovič et al. 2008).

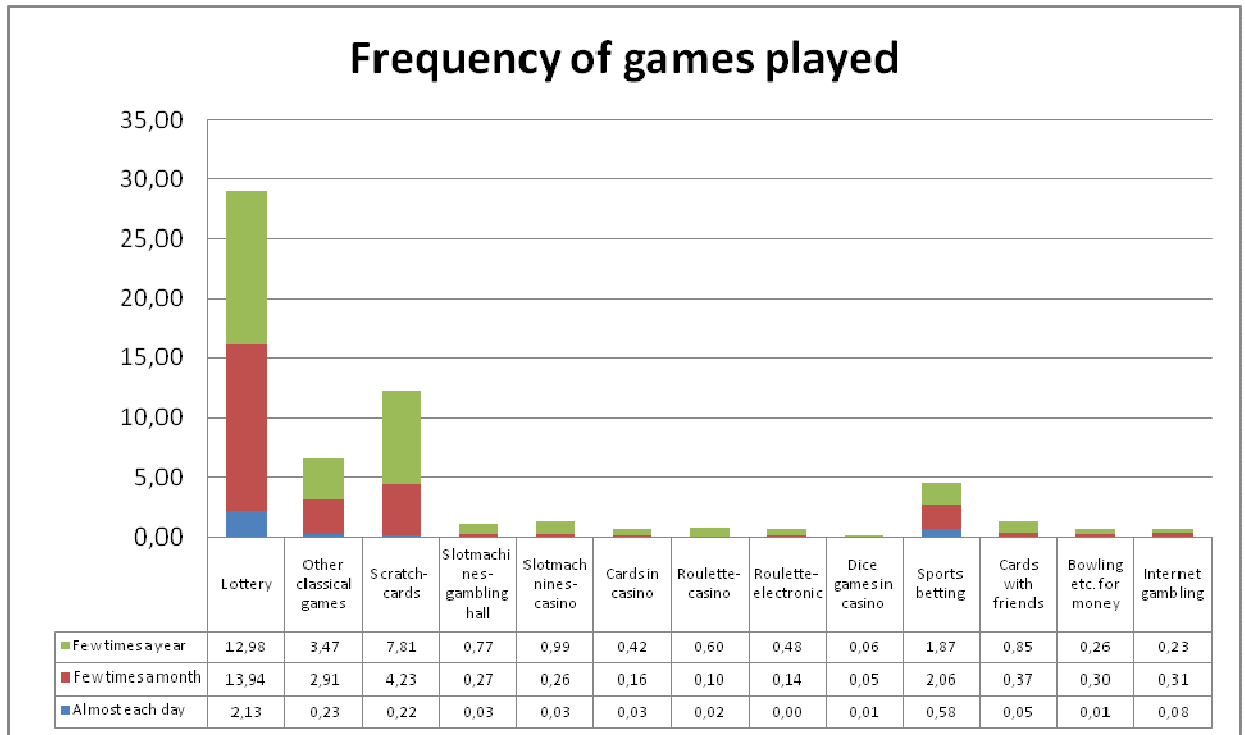
In this paper we deal with two major issues: first, what do the results tell us about the patterns of gambling within the Slovenian population; and second, how can one interpret these patterns in a wider context. Concerning the latter issue, it may be of particular interest whether gambling patterns are something deeply rooted in the national culture (or even civilization) or is it the availability of certain types of games in certain social contexts that generates gambling patterns? As we shall see, the Slovenian data from 2008 seem to indicate that combination of both may be the case.

## **Gambling patterns and problem gambling: relative and absolute risks**

The proportion of people who gamble in Slovenia is quite modest. 35.5 per cent of respondents have claimed to play at least one of the games included in the survey in the last year. Lottery, scratch cards, sports betting and other classical games are far the most common among Slovenians. The dominance of these types of games is in fact quite a typical European pattern. These games are followed by playing cards and other games for money (outside casinos) with friends and only then by slot machines in casinos and gambling halls. No other casino game was played last year by more than 1 per cent of the sample. The proportion of casino and slot machines gambling among the Slovenian population is thus quite low when compared to the other European countries with similar (or even much lower) gambling supply. This clearly confirms the thesis on the predominantly export oriented casino and slot-machines gambling in Slovenia (see Figure 1).



Figure 1: Games played and their frequency during the last year by the Slovenian population



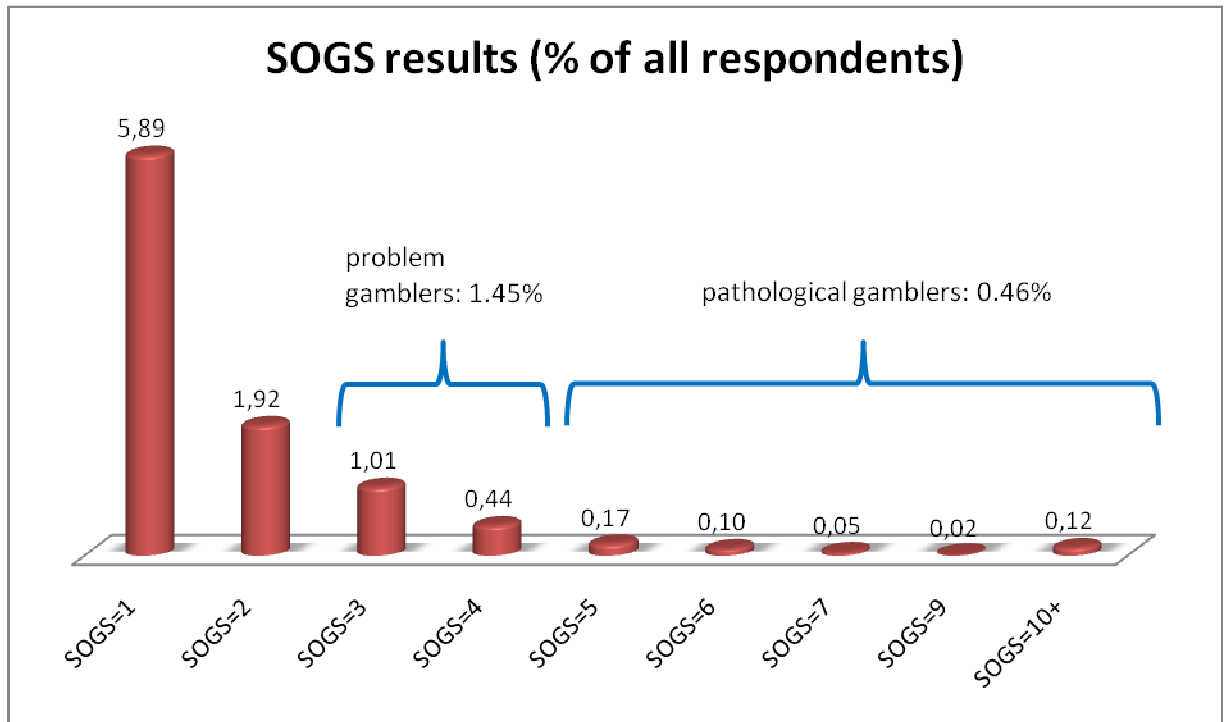
Source: Makarovič et al. 2008.

It does not imply, however, that Slovenian population is problem free as far as gambling problems are concerned. Our survey included the South Oaks Gambling Screen questionnaire in order to determine the prevalence of gambling problems within the population. We discovered significant risks of problem gambling (SOGS scores of three and four) among 1.45 per cent of our respondents. Another 0.46 per cent have even more serious problems (SOGS scores of more than four) that are usually described as pathological gambling (see Figure 2).

The figures of problem and pathological gambling for Slovenia are thus far from extreme when compared to other countries. They are, for instance, somewhat higher than those in Germany, comparable to

Northern Italy, Switzerland, Denmark and Norway; while significantly lower than those in Spain, the Netherlands, Sweden, not even to mention Estonia or some non-European countries such as the United States, Australia or New Zealand (see: Meyer et al., eds. 2009; Reith 2006 etc.). The Slovenian problem and pathological gambling, however, are still quite significant when compared to the proportion of population that actually plays the games. This may be interpreted as a result of comparatively poorly developed responsible gambling policies in Slovenia. If gambling as such is about to increase during the following years and decades as it has been predicted from the previous trends (see e.g. Jaklič et al. 2007) and problem gambling is about to increase proportionally one certainly has good reasons to worry. This leads us once again to the question whether gambling is determined more by some relatively stable cultural patterns or simply by what is available. If the latter is the case we can expect a serious increase of both gambling and gambling problems in Slovenia in the near future.

Figure 2: The results of SOGS test in the Slovenian representative national sample, 2008



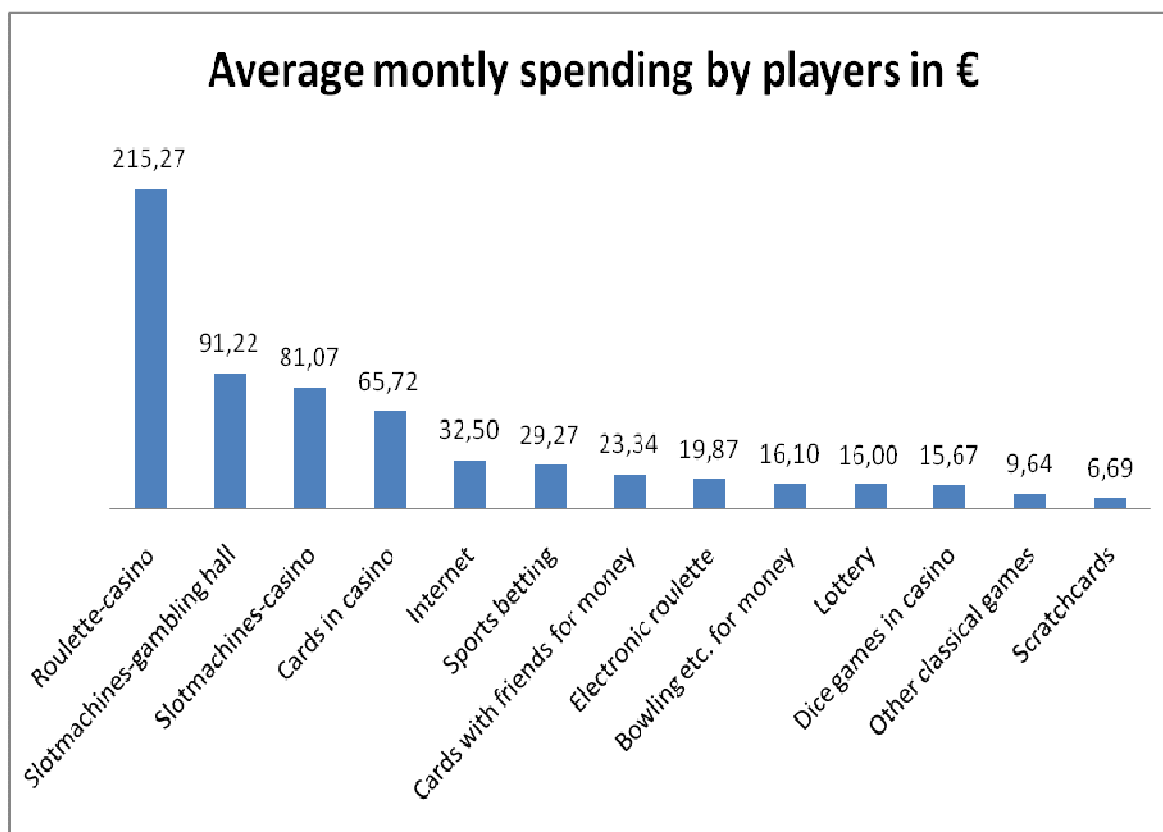
Source: Makarovič et al. 2008.

Another question is which games cause most of the problems. Here we can observe an interesting contrast. While classical games of lottery and scratch cards are played by most of the people, casino and slot-machines games lead people to spend more money on them per month (see Figure 3).

The distinction between the relative risks of problem gambling caused by casino games and the absolute risks of problem gambling caused by classical games is even more interesting. In relative terms, live casino games and internet games are far more risky than lottery or scratch cards, since greater proportions of those playing these games are pathological gamblers. In absolute terms, however, the situation is

somewhat reversed. Since lottery, scratch cards and sports betting are far more popular than the other games, the highest proportion of pathological gamblers consists of the players of these games. Playing classical games may thus be enough to generate significant amounts of problem and pathological gambling. 61.7 per cent of pathological gamblers have not played casino, slot-machines and internet games at all – classical games such as lottery, scratch cards and sports betting were quite enough in their cases to generate severe gambling problems.

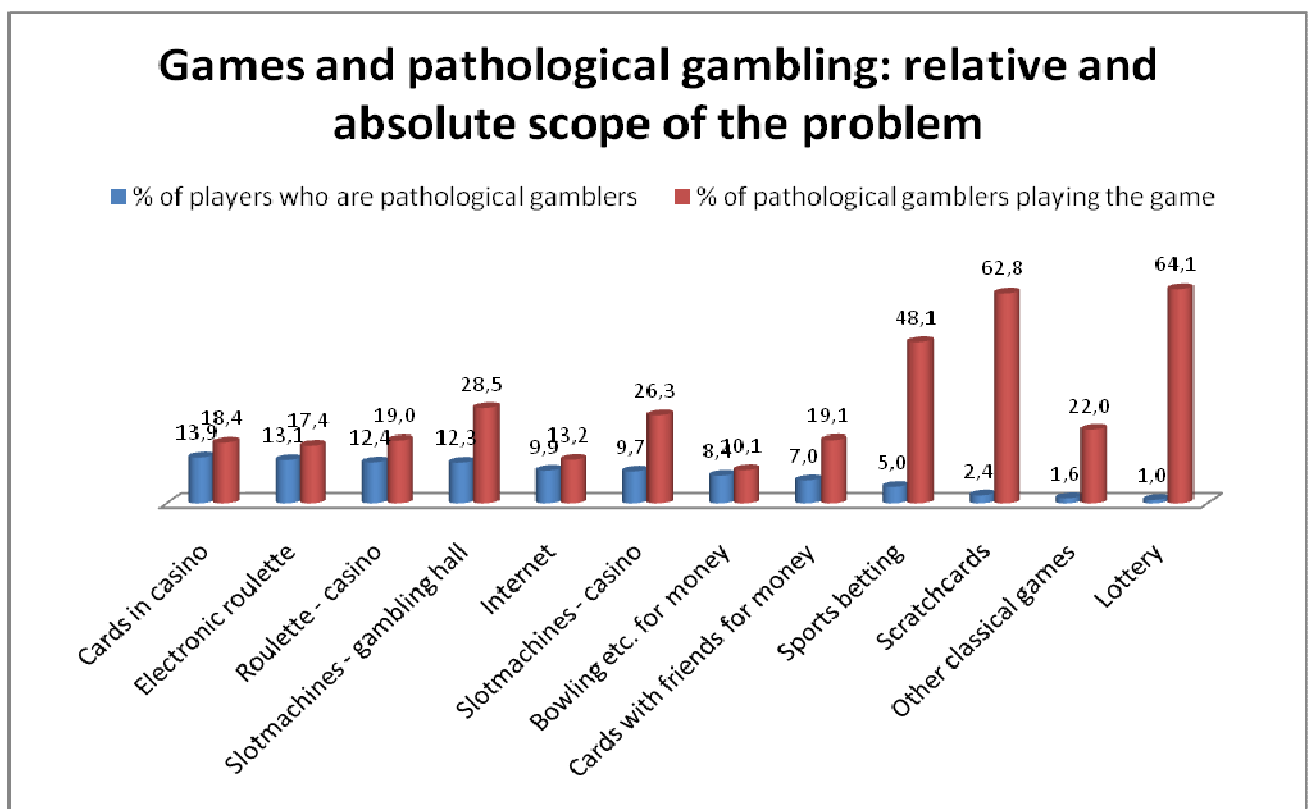
Figure 3: Average monthly spending by players for particular games in Euros (estimated by the respondents)



Source: Makarovič et al. 2008.

Particular attention should also be devoted to the risks related to the slot machines. These games seem to be quite problematic in both absolute and relative terms. More than a quarter of pathological gamblers has played slot machines games during the last year and 12.5 per cent of slot machine players in gambling halls and 9.7 per cent slot machine players in the casinos reported serious gambling problems (pathological gambling) according to SOGS (Figure 4). Concerning the particular risks related to the slot machines gambling, Slovenia is quite comparable with most of the other countries.

Figure 4: Relative and absolute problems of different types of games



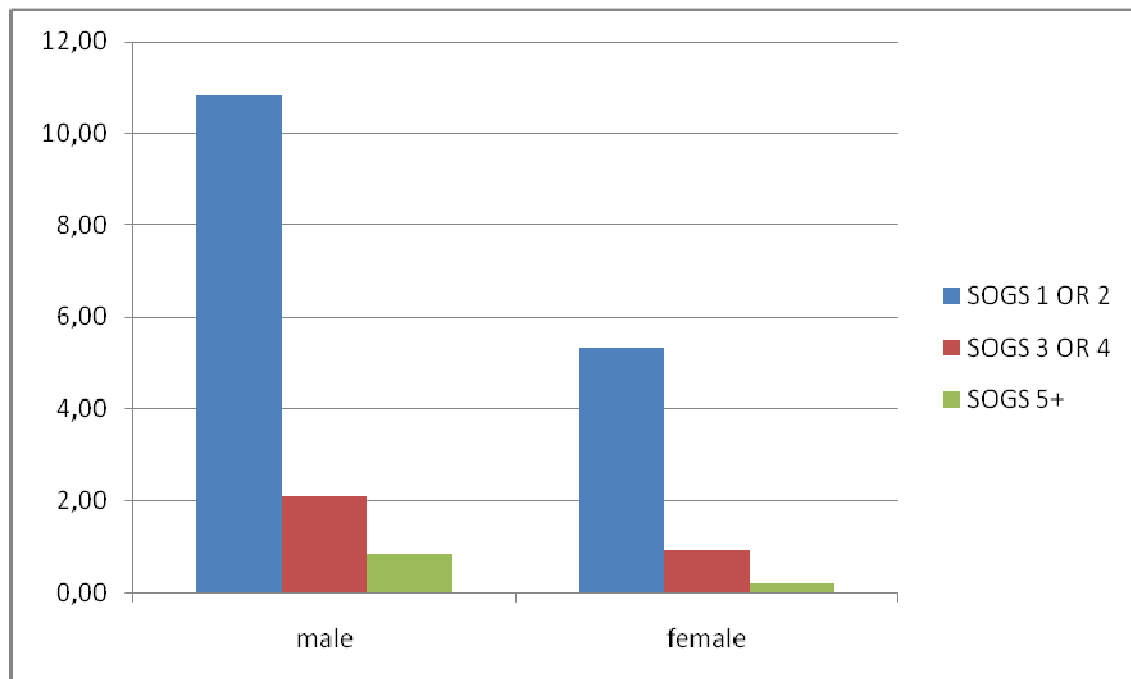
Source: Makarovič et al. 2008.

## **The vulnerable categories: men, youth, single, immigrants**

Beside the risks related to different games, one should also identify the groups most vulnerable to problem and pathological gambling. The amount of gambling problems within the Slovenian population is clearly influenced by gender, age and marital status.

There are significantly more pathological gamblers among men than among women: 0.82 versus 0.18 per cent. By this we do not claim that problem gambling among women is irrelevant or even that gambling is a male issue (as criticized for instance by Mark and Lesieur 1992) but simply stress a clear difference in gambling patterns of Slovenian women and men (see Figure 5). The former play with smaller frequency, both classical, casino games and slot machines, spend less money and have less gambling problems than the latter. In this respect, Slovenia is similar to most of the other countries. Similar disproportions regarding gambling are reported in the United States (Volberg 2003) and Europe, for example, from Belgium (Druine 2009: 6), Estonia (Laansoo and Niit 2009), Great Britain (Griffiths 2009: 109), and The Netherlands (Goudriaan et al. 2009: 194-195).

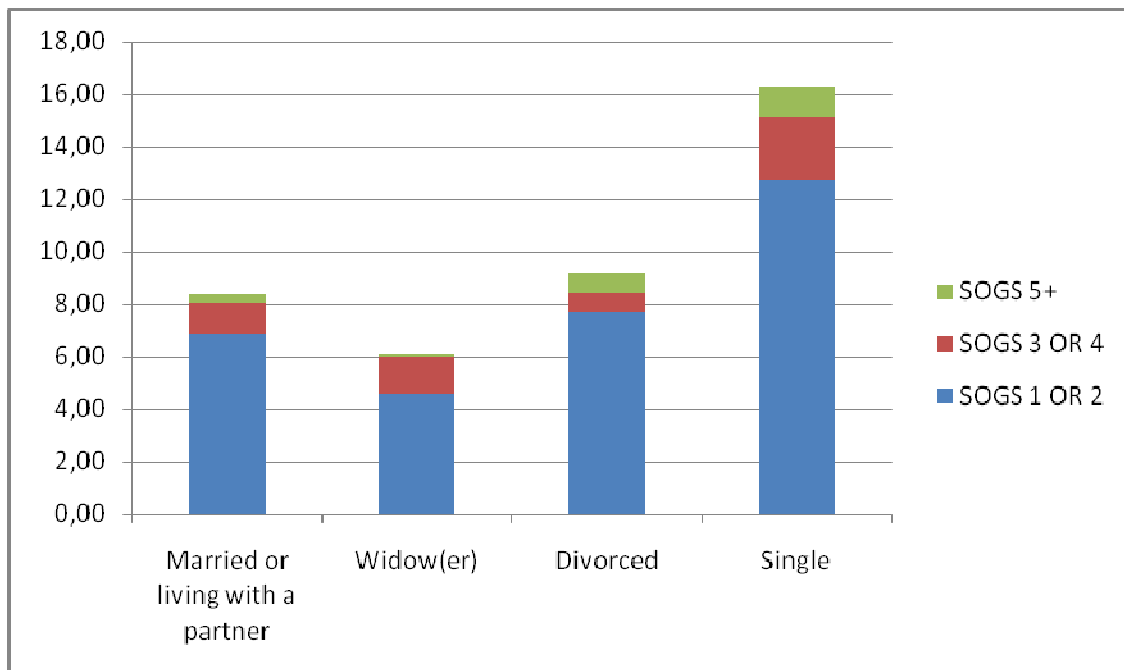
Figure 5: Gender and gambling problems



Source: Makarovič et al. 2008.

It is questionable, however, if this gender difference will sustain in the long run. Both women emancipation and the growth of gambling industry may cause these differences less significant in the long run. The trends in the United States seem to demonstrate the rise of problem gambling among women from the 1980s to the 1990s and the recent years. Volberg (2003) and other authors thus report about the 'feminization of gambling' in the United States and elsewhere.

Figure 6: Marital status and gambling problems



Source: Makarovič et al. 2008.

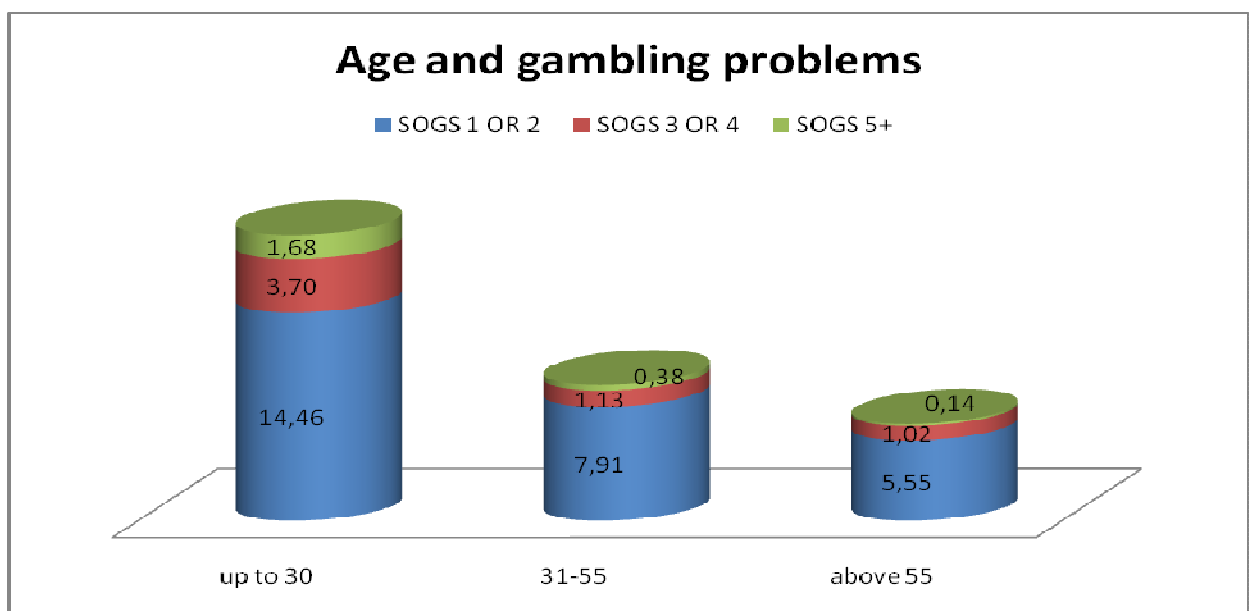
Another predictable feature is related to the marital status. Married people and other people who live with a partner are almost 3.5 times less likely to be pathological gamblers than those who are single and were never married (see Figure 6). Similar patterns can be found in most other European countries, such as Belgium, Great Britain and The Netherlands (Druine 2009; Goudriaan et al. 2009; Griffiths 2009) and is also confirmed by some other studies (e.g. McCready 2008). The classical sociological explanation could be already found in Emile Durkheim's classical discussions on integration of people in the community and the regulation of their lives (Durkheim 1992). The more integrated in the community and the more regulated one's life is, smaller the probability of he or she becoming a problem or pathological gambler. Nevertheless, this rule is also not fully universal and there are some exceptions, for



instance in Spain, where no significant differences are reported between married and single people concerning gambling (Becoña 2009: 288).

The variable that most clearly correlates with gambling problems is age. Respondents of up to 30 years old are 12 times more likely to be pathological gamblers (SOGS score higher than 4) than the respondents older than 55 (see Figure 7). Age also influences the games people play. While the older people tend to play lottery and other classical games more often than the younger, the situation is reversed in scratch cards, sports betting, slot machines, internet and other games, which are significantly more often played by younger than 30. It may be argued that the games that are the most risky for the development of the gambling problems are also those that are the most often played by the younger generations.

Figure 7: Age and problem gambling



Source: Makarovič et al. 2008.

In this respect Slovenian patterns of problem gambling correspond to many other European countries, such as Belgium, Estonia, Finland, Great Britain, The Netherlands, Spain etc. (Druine 2009; Laansoo and Niit 2009; Jaakkola 2009; Griffiths 2009; Goudriaan et al. 2009; Becoña 2009).

It is an important issue how to interpret the impact of age on gambling, since at least two opposite explanations are available: is problem gambling among young people caused by the specific characteristics of the youth in modern societies or is it a sign of the future behavior patterns that will characterize the other age groups as well during the next decades? If the latter is the case the gambling problems would become much more widespread in Slovenia in the future unless more efficient preventive measures are adopted. While no longitudinal data are available for Slovenia, we can find certain limited evidence from some other countries.

The evidence from Sweden, for instance, seems to indicate that patterns of gambling of the youth are relatively unstable and may thus be subject to change (Jonsson and Rönnerberg 2009: 306-307). This may indicate the connection of gambling problems with some typical problems experienced by the youth and young adults while looking for the suitable way to be integrated within the society. In this respect problem gambling of the youth is quite directly comparable with the problems of drug abuse which is also quite clearly though not exclusively related to certain age groups.

On the other hand, the data from Spain demonstrate that the gambling problems eventually seem to become more equally distributed among the age groups (Becoña 2009: 288). The data from Canada, for example, show no significant differences between young and middle age group concerning the scope of pathological gambling (Statistics Canada

2002/2009). Of course, the combination of both answers can also be the case: problem gambling may be related to specific problems of the youth but it may also be a pattern that tends to spread to the future population.

Our research has also indicated the relation of gambling problems with ethnicity and religion. Gambling problems thus seem to be more widespread among those of Bosniak, 'Muslim' (in ethnical sense referring to an ethnic group from Bosnia and Herzegovina), Serb and Montenegrin ethnic origin and those of Orthodox and Muslim religion than among ethnic Slovenians of Roman-Catholic religion and non-believers. Nevertheless, one should be quite cautious in interpreting this correlation. It is very likely that it does not have much to do with their particular ethnic and/or religious cultural background. There is no clear evidence about the connection between Orthodox Christianity and problem gambling and the Islamic religious doctrine opposes gambling even more strictly than the Christian doctrines.

The actual causes mostly cannot be found in ethnic and religious origins as such but in the fact that these people also constitute the most typical immigrant population in Slovenia, which mostly originates from the former Yugoslav republics. The situation of the immigrants, the lack of integration within the host society and the uncertainties they face may contribute to gambling problems. The evidence from other European countries seems to confirm this claim if one, for instance, considers the findings from Great Britain and The Netherlands (Griffiths 2009: 117; Goudriaan et al. 2009: 194-195).

It is not only interesting where one can find the relationship between certain characteristic and problem gambling but also where such relationships cannot be found in the Slovenian case. Research in several

countries links gambling problems with the population categories of lower education, lower social status and lower income. In Great Britain, Italy and Spain gambling problems are more typical for lower income groups (Griffiths 2009: 109; Croce et al. 2009: 154-155; Becoña 2009: 288); in The Netherlands (Goudriaan et al. 2009: 194-195) and Spain they are more typical for the groups of lower education. Beckert and Lutter (2008) demonstrate the same in the case of the German lottery.

Such correlations are not the case in Slovenia. Relatively higher prevalence of pathological gambling can be found at middle educational levels (secondary education) and there is no correlation between income and gambling problems. It should be noted that another interesting case of relationship between income and gambling problems can be found in Europe. This is the case of Estonia, where income correlates positively with gambling problems (Laansoo and Niit 2009).

Hypothetically, the difference between Estonia and most other countries, which can also be relevant for the Slovenian case, may be explained as an example of stratified diffusion. The concept of stratified diffusion implies that new patterns of behavior usually start at the higher levels of the social stratification structure and then diffuse from the higher social classes to the lower social classes.<sup>1</sup> If this is the case for casino gambling it may also be the case for problem gambling that may accompany it. Problem gambling in countries with a well developed tradition of casino gambling may be more typical for the lower social classes, while in the countries with the lack of such tradition the situation may be just the opposite. Slovenia may be somewhere in the middle with the situation when problem gambling is relatively equally

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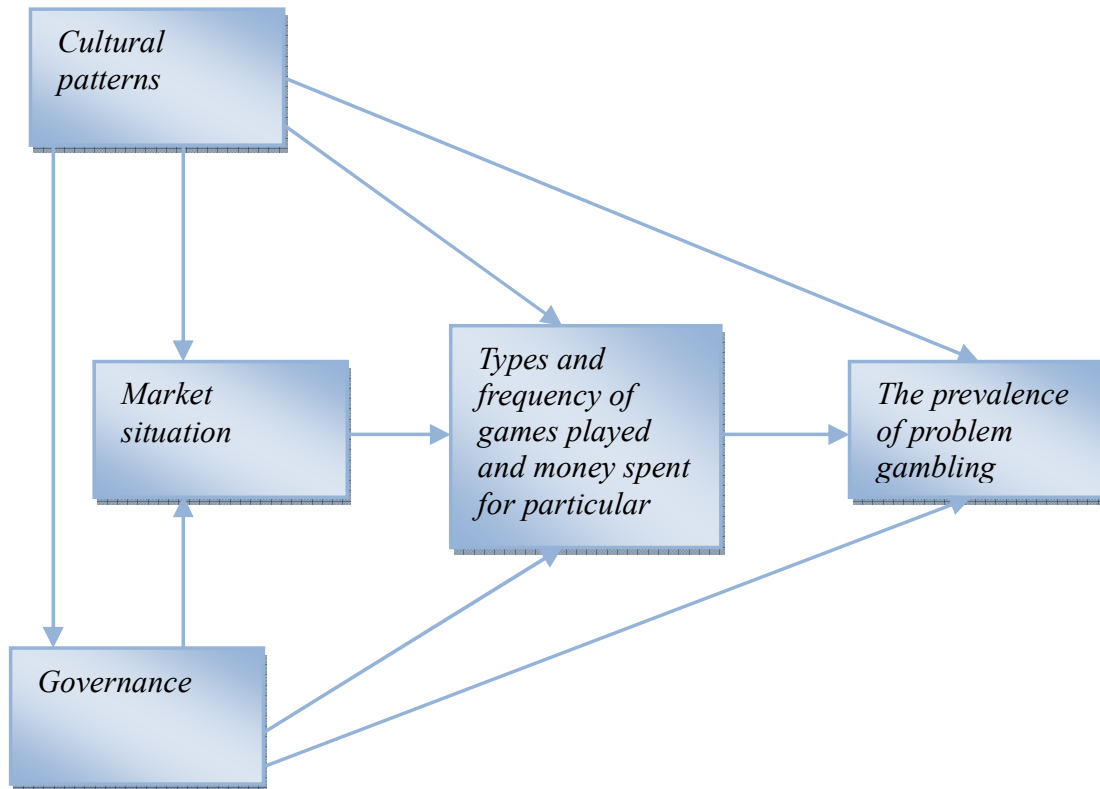
<sup>1</sup> The concept of stratified diffusion can be applied to a variety of practices such as smoking, gender roles within the family (Willmott and Young 1960), various aspects of fashion (Levitt and Dubner 2006) etc.

distributed among the social strata. Clearly, such claims can only be formulated as hypotheses that still require further research to be tested in a reliable and valid way. If the hypotheses on stratified diffusion are true for the case of gambling, one may expect further growth of gambling problems among the lower classes in Slovenia.

### **Discussion: the societal factors of gambling problem prevalence**

What can one expect about the further change in the scope of problem gambling in Slovenia? The lack of longitudinal data does not allow predictions. One may, however, specify the major factor influencing the gambling patterns and problem gambling in Slovenia. While the individual risk of problem gambling depends on a complex set of individual psychological factors, the scope of problem gambling within a given society can be considered a clearly sociological issue – a social fact in a sense implied by Emile Durkheim (1982). The difference in the prevalence of problem gambling between any two given societies is not an individual psychological but a social issue. It depends on the social factors that can be analyzed at the macro level. These factors and the major relationships between them are specified in Figure 8.

Figure 8: Social factors of the problem gambling prevalence (macro-level – society as the unit of analysis)



Cultural patterns of a given society are considered as an independent variable, while the problem gambling prevalence is the dependent variable. The rest of the variables can be either independent of intervening variables. While the quantity of problem/pathological gamblers is available, the other elements in the causal model can only be described, though we do not exclude the possibility that they may also be operationalized as quantitative indexes during the subsequent research.

It may be argued that the cultural patterns concerning gambling differ from one society to another. Historically, one may distinguish between 'gambling' and 'non-gambling' peoples and nations, as well as related to

relate gambling to some properties of culture, such as religion (Binde 2005; 2007). Within contemporary Europe, one can observe significant differences that cannot be simply attributed to the differences in the supply of games, regulation and legal framework. Despite the wide availability, Slovenians on average gamble significantly less than the Finns (see: Jaakkola 2009) despite the comparable or even greater availability of gambling in Slovenia. It would thus be incorrect to understand gambling patterns and gambling problems simply as a result of particular policies and the market situation. Slovenian cultural patterns do not seem to be highly oriented towards heavy gambling and towards generating gambling problems. However, it would be premature to conclude from this assumption that problem gambling cannot increase in the future. Although culture is normally relatively stable, it can also be subject to change.

Governance can be considered the second major factor influencing gambling patterns and problems. It includes not only regulation and normative framework shaped by certain policies but also the formation of these policies that may be formulated by the political actors and influenced by a variety of interest groups. Governance is significantly more dynamic factor than the cultural patterns. With the major exception of the failed project of the 'Mega-centre' by Harrah's and Hit gambling issues have not drawn significant attention by the public as a major political issue. Gambling is politically tolerated or even actively supported because of pragmatic reasons as an activity generating tax revenues and other financial benefits but a clear governance strategy is missing. Despite the declared export orientation of gambling extensive growth of smaller private companies opening gambling halls that are increasingly oriented towards the domestic market has been allowed. The policies are also not very consistent since they are quite restrictive in granting government permissions to organize classical games and live

casino games (required to be owned by the state and the municipalities) while quite permissive in relation to the gambling halls based on slot machines that can be privately owned. Preventive measures against problem gambling are still quite underdeveloped (Macur et al. 2008).

Both cultural patterns and governance have impact on the market situation but the latter also has the logic of its own. The economic crisis may make the incomes less self-evident which may increase competition. In Slovenia, responsible gambling practices and social responsibilities depends too much on the decisions of the companies themselves. In the situation of crisis and lower consumers' demand advertising can become even more aggressive and there may be less space for responsible gambling practices. While general spending on gambling may decrease the prevalence of gambling and gambling problems of the most vulnerable groups may become even more significant. A 'Slovenian Pulse' survey from November 2009 in fact demonstrates the increase of gambling during the first year of the economic recession (Makarovič et al. 2009).

This clearly implies that further focus is required to the sphere of governance. Slovenia now needs a complete set of responsible gambling measures; otherwise it may be assumed that the situation concerning problem gambling within the Slovenian population may worsen significantly during the following years.



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# College Students' Green Culture: Reflecting on the Ideal Types of Environmental Awareness and Behavior Practices.

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## Abstract

Drawing on the cultural theory of environment, this study provides holistic insights in the college students' green culture including environmental awareness, environmental behavior and lifestyle, environmental knowledge, and environmental information. Using data from a random sample survey of the Colorado State University students (n=378), our research addresses an anomaly in the literature. Despite numerous studies on the same population (e.g., Scott & Willits, 1994; Unipan & Oskamp, 1997), this study does not observe much distance between the level of environmental concern and the level of actual proenvironmental behavior among students. Factor analysis shows that four highly interpretable types of green culture are present: "Pure Environmentalist Type", "Proactive Type", "Declare Type" and "Non-Environmentalist Type".

**Keywords:** environmentally responsible behavior; environmental lifestyle; environmental attitudes; environmental information; environmental decision-making; environmental responsibility.

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## **Introduction**

In the scientific discourse of environmental quality improvement a lot of effort is put on the technological advancement, for instances, in production processes. However, this narrow focus might generate very one-sided results, as achievements based on efficiency alone often result in a limited effect where a gain in efficiency is overcompensated by a population growth as well as the consumption volumes' increase (Vlek et al., 2007).

In this line of argument, it is important to focus environmental research on the issues of promoting cultural and behavior changes through studying the green culture of the population. Furthermore, taking into account that students are the future decision makers, it is essential to understand what they think about the environment, where they learn about it, and how they act towards it. Thus, by analyzing different domains of students' green culture we can have a valuable insights to the directions we are headed.

Analyzing green culture from the cultural theory perspective includes examining socially shared beliefs and values, norms, and attitudes, people's interactions with technology, and the products of this interaction. A literature review demonstrated that different parts of green culture have been research topics for several decades in the USA. Among the pioneers of green culture analysis in the USA are Dunlap, 1993; Stern, 1995; Plumwood, 2002; Hoff, 1998; Nie, 1998, etc. These researchers are noticed by studying various parts of green culture, incorporating various levels of social analysis.

Despite a long-standing concern with nature, environmental sociology has been slow to incorporate culture as a guiding concept in

understanding environmental attitudes-behavior-knowledge relationship. This research will try to address this limitation by analyzing different forms and models of green culture of the Colorado State University (CSU) students from the cultural standpoint.

In this arena of study, this article will contribute to the scientific discourse of environmental attitudes-behavior-knowledge relationship and cultural theory in connection to environmental discourse. From the practical point of view, the results of the project would be useful in the daily activities of the environmental organizations and academic world and can be incorporated in building an efficient environmental policy of students' communities.

The article is organized as follows. First, a literature review details previous work on the main components of the green culture. A number of hypotheses are developed. Next, the study's methodology is outlined and the results of the research are presented. The paper concludes with a discussion of the findings.

## **Theoretical background and research hypotheses**

### ***Green culture: conceptualization and structure***

Drawing on the cultural theory of environment, green culture understands as a multifaceted construct consisting of two conceptual components: the "green" and "culture" components (Dunlap, 2002). The environmental component represents the substantive content of green culture that related to the environmental issues (e.g., recycling, global warming, etc). The culture components represent "beliefs and perceptions, values and norms, customs and behaviors of a group or society" (Altman, 1980:7).

In opting for a cultural theory, it is important to distinguish number of approaches in the environmental-culture discourse placing emphasis on certain cultural properties. Among them are technological (Abdullaev, 1990), informational (Dubrovina, 1990), axiological (Baharov, 2000), action-oriented (Asafova, 2000; Kochergina, 1998) etc. Looking at the green culture as a complex socio-cultural phenomenon, we find it conceptually fruitful to employ a combination of axiological and action-oriented approaches.

Axiological approach analyzes green culture as a set of attitudes, values and norms toward the environment. Under this approach, sociologists analyze the manufacture and communication of environmental norms, beliefs and values. The action-oriented approach stresses on the action as a core in the human-nature relationship. While axiological approach can be a methodological ground for studying the environmental attitudes, the values and norms of green culture, an action-oriented approach can be incorporated in this project to analyze environmental behavior practices and environmental lifestyle.

***Green culture dimensions: environmental awareness – knowledge - behavior***

The study of environmental awareness is one of the most fruitful areas in the social and behavioral sciences (Axelrod, 1994). It involves studying environmental attitudes, environmental values and environmental beliefs.

Studying environmental awareness is challenging for the following reasons: (1) the problems tend to be more global and less visible, making public awareness dependent on media and opinion leaders than on the firsthand experience; and (2) the causes, effects and solutions of the environmental problems are highly connected with complex social processes (Dunlap, 2002). Moreover, more than just increased in



numbers, people's environmentalism nowadays goes deeper incorporating core values and beliefs structure and affect behavior patterns (Kempton et al, 1995).

Environmental knowledge presents a cognitive dimension of environmental awareness that influences how individuals encounter and resolve environmental problems.

This research would concentrate on the study of students' factual knowledge in connection to the students' self-reflection of how educated they feel about the environmental issues. Thus, I hypothesize that:

*H1: Students perceive themselves to be more environmentally educated than their factual knowledge about the environment suggests.*

The hypothesis was built on the findings that people do not have enough understanding about the nature of the environmental problems. The US national survey showed that people do not really understand the reasons behind some major environmental issues such climate change or global warming (Sairinen, 2008). Moreover, social desirability can also be a reason for higher scores in self-perceived knowledge about the environment.

Environmental attitudes and values reflect on the environmental behavior. Numerous theoretical frameworks (Clayton & Brook, 2009; Kollmuss & Agyeman, 2002, etc) state the gap between the environmental awareness and displaying environmentally responsible behaviors. Thus, the following is hypothesized:

*H2: Students state to be more environmental aware than their level of environmentally friendly behavior suggests.*

Many researchers have tried to explain what causes this gap. People's willingness to be involved in the environmentally friendly practices is mediated by a lot of external and internal factors such as situational circumstances, individual differences, normative factors, physical setting in which people carry out specific environmental actions, etc (James, 2001). For example, people may not use public transportation because of undeveloped bus infrastructure in the place where they live; because they feel sick in public transport; because of a fear to get in an accident or because of other contextual conditions. For these reasons although people can be environmentally concerned and have an intention to act, they still might not perform environmentally sound behavior due to the lack of time, lack of infrastructure and cultural or community support, inconvenience, or living in a context that ignores environmental issues and many other factors.

## **Methodology**

### ***Scales construction***

Different types of quantitative scales have been produced to study CSU students' environmental attitudes, beliefs, values, behavior practices and different points of view concerning the environment. In that sense, if quantitative scales fail to capture the richness of the social phenomenon, they are easy to evaluate, have good reliability and validity and make the results comparative with other findings on the subject (DeVellis, 1991; Morales, 2000; Morales, Urosa & Blanco, 2003, etc). While some scales were incorporated from previous studies (Kim, Laroche & Lee, 1989, etc), others were created specifically for the research project in hand.

The survey instrument comprised 57 closed and open-ended questions on students' opinions on various subjects related to green culture.

Conceptually, they were grouped into four parts according to their thematic content:

Part 1. *Environmental Attitudes*. Environmental attitudes represent hypothetical mental states, thus, no single verbal statement generates a particularly good measure of them. In my research, environmental attitudes are measured by Likert-type items using a 5-point response scale ('extremely concerned' to 'not at all concerned' and an option 'I do not know') designed to measure CSU students' sensitivity toward the quality of the environment overall and their perspectives on certain environmental issues. Students indicated the degree of their concern on various environmental problems: (1) air pollution, (2) drinking water pollution, (3) water pollution (seas, rivers, lakes and underground sources), (4) destruction of wilderness, (5) global warming/climate change, (6) noise pollution, (7) acid rain, (8) agricultural pollution, (9) growing waste/not enough recycling, (10) urban problems, (11) people consumption habits, (11) overpopulation, (12) water scarcity. Such items are considered typical for scales of this type (e.g. Kaiser et al., 2003; Schultz & Zelezny, 1999). I also distinguish personal concern and perceived seriousness of environmental problems among four geographical levels: local, regional, national, and global (Dunlap & Xiao, 2007). In addition, in a format of open-ended questions respondents were asked to name the three most serious environmental problems that the nation, Colorado and Fort Collins face. This scale was primarily integrated for the purpose of comparing the results of the public agenda as presented in the survey with media agenda studied by the content analysis of the local, regional and national US press. Moreover, on a 10-point response scale students measure the extent the economic, environmental and social factors influence their quality of life. Finally, students were asked their opinion on the role of the USA in protecting the world environment compared to other countries.

Part 2. *Environmental behavior* section studies students' engagement in various environmentally friendly acts like recycling, driving less/ driving more fuel efficient cars, using less electricity, buying organic food, using energy saving light bulbs, conservation of water, etc. With the aim of adapting the questionnaire to the theoretical model proposed and analyzing the personal, behavioral, and contextual causal factors that affect people's behavior towards the environment, students are asked to name the main reason behind their engagement in these environmentally responsible behaviors. Furthermore, students are asked to think about their shopping and living habits over the last 3 years and choose whether they make major changes, minor changes or no changes to help protect the environment.

Part 3. *Environmental knowledge* scales were designed to assess factual knowledge of different environmental issues. These items addressed environmental issues of pollution, and fundamental ecological ideas. The answers given by the respondents were intended to create an eco-literacy score, indicating how much a respondent knew about environmental issues. In addition, students are asked to rate the quality of environmental educational activities carried out in the area where they live and their self-perception of how educated they feel about the environmental issues.

Part 4. *Environmental information*. The final section of the questionnaire includes seven items measuring the environmental information sources. First of all, 5-point response scale is designed to measure CSU students' self-perception of how informed they feel about environmental issues. Students are asked to assess whether they are interested in the information about the environmental issues. Subjects are also asked to evaluate the main sources of receiving information about the environment such as the educational institutions, media, environmental

organizations, friends and family and the degree of trust in them. Furthermore, the willingness to find environmental information by the students is also measured in the present research.

In addition, students are asked to indicate three main problems (out of 12 items) they believe to be the most important facing the nation. Here we study the salience or the amount of attention given to environmental issues among other problems. Environmental quality is salient to an individual when it is on their mind and not just something that they think about when asked for an opinion.

### ***Sampling Procedures and Data Collection***

The empirical study involved the administration of a self-completion questionnaire to CSU students, Fort Collins. Data were collected from the middle of September to the middle of October 2009. The researcher approached the classroom, introduced her and the study, and administered the survey to groups of students who completed them in the classroom. Students responded voluntarily and were not compensated for their participation. The total number of respondents was 378. The sample was representative of the actual number of CSU students with regard to gender, college year and college affiliation.

## **Findings**

### ***Environmental attitudes***

First I study the salience of the environmental issues by asking students to rank the societal issues they are mostly concerned about. The issues students believe to be the most important are environment (52.5%), economic crisis (43.4%), unemployment (33%), poor healthcare

system/high cost of healthcare (33%), poor education system/hard access to education (27.8%), inflation/high cost of living/taxes (20.8%), losing “moral compass” (11.7%), situation in Iraq/War (11.4%), crime/violence (9.9%), immigration/illegal aliens (9.9%), terrorism (9.6%), drugs/alcoholism (7%).

A National US polls suggest that while environment is a priority issue but not a top tier concern (Gallup Poll, 1996; Bloomberg Poll, 2009). Thus, this study does not reinforce the main pattern found in the previous research that emphasizes the fragility of nature in the face of economic development.

A high priority of environment over other issues especially of the economic nature can be explained by the characteristic of the sample. According to the literature, youth are more environmentally concerned than older people because they are more likely to express postmaterialistic values that are positively correlated with environmental quality issues; they are less integrated into the job market and, thus less exposed to the material values of economic growth (Eero Olli et al, 2001).

The importance of the environment for the students emphasizes the respondents’ reflection on the direct question about the importance of the quality of the environment, not regarding other social issues. Findings demonstrate that there is high number of respondents (95.3%) stating that the quality of the environment is important for them as expected.

Data reflects a pattern that environmental issues are more essential for the happiest students according their self-perception. This is to be expected because it is found that the self-perception of happiness is

positively correlated with postmaterialistic values that promote environmentally friendly values and practices (Inglehart, 1990).

College students perceive environmental situation to be more serious in the world (90.2%) and in the USA (88.1%) than in the state (57.2%) and city (45.1%) there they live. These findings are positively reflected with the existing data on the subject (Holl et al, 1999). According to the studies, while people from the developing countries are more focused on the local environmental problems, respondents from industrialized countries are more anxious about the global environmental situation. Moreover, the findings presented in this study might reflect the objective situation of Fort Collins to be a place with less environmental risks than other regions. Therefore, the majority of CSU students feel themselves protected from the environmental risks (cumulative percentage is 62.4%).

Results suggest that respondents perceived a variety of threats to the environment including health-related and resource problems and problems of environmental aesthetics. Destruction of wilderness and forests (9.4%), air pollution (9.3%), people's consumption habits (8.9%), water pollution (8.8%), growing waste/not enough recycling (8.7%), urban problems (8.2%), etc. topped the list while less visible threats, such as global warming (7.3%), acid rain (5.1%) and the depletion of the ozone are of somewhat less concern to the public.

### ***Environmental knowledge***

In general, students positively evaluate the quality of the environmental education in the area where they live (83.9%). These findings are positively correlated with students' self-perception of how educated they feel themselves toward the environment. On a 1 to 10 scale, where 1 means "I do not have any knowledge", 10 mean "I am very educated in

the environmental issues", students' overall score is 6.78.

In order to compare students' self-reflection on their environmental educational level with their factual knowledge, I created the factual knowledge index based on the number of correct answers out of 3 possible questions. Findings highlighted that students' actual environmental knowledge demonstrated to be pretty high. In my sample, 44.1% of students answered all three questions correctly, 47.2% answered two questions out of three correctly, 6.4% respondents answered only one question out of three questions correctly and only 2.3% have no correct answers. The students' actual knowledge overall score is 2.33. In this study, students' subjective and objective knowledge is positively and significantly correlated, thus H1 is not supported.

### ***Environmental behavior and lifestyle***

Turning to behavioral dimension, the research explored respondents' reports of undertaking the pro-environmental practices. Findings show that there are high numbers of students who are involved in the environmental responsible activities such as cutting down energy consumption (83.6%), separation waste for recycle (74.2%), cutting down water consumption (68.7%), using the car less (59.8%), etc. Less than 3% of CSU students did not conduct any environmental activities for the past year.

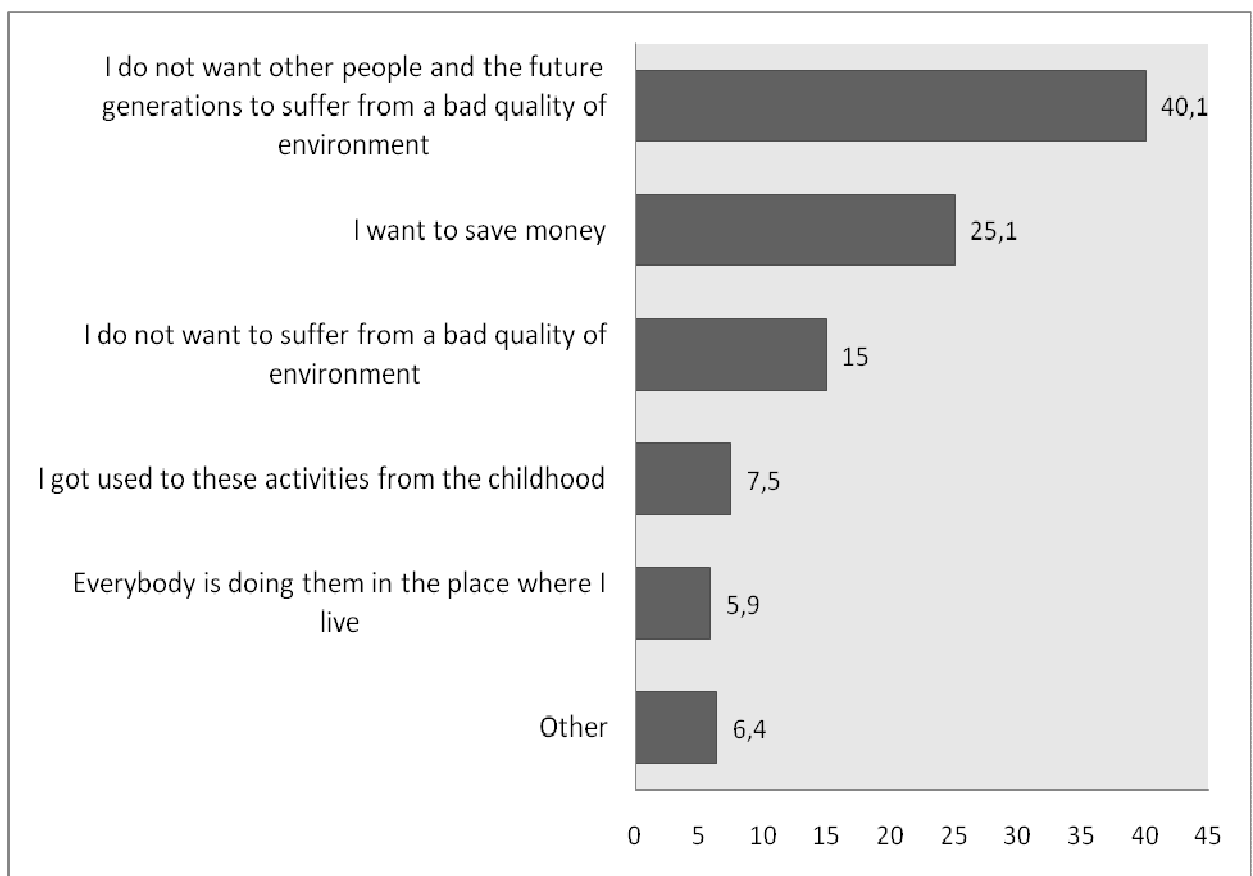
To indicate the average number of environmentally friendly activities that students conducted over the last year and for the purpose of checking our H2, an index of environmentally responsible behavior was created. Data shows that on average over the last one year students performed five different types of environmentally responsible behaviors out of nine possible options. Thus, the findings contradict the distance between level of environmental concern and the level of actual proenvironmental behavior found in many environmental studies (G.



Cornelissen et al, 2006; Jurin, 2000, etc); H2 is not supported.

My research is guided by a cultural theory, thus, I incorporated cultural variables aiming at studying CSU students' environmental behavior models. Some of the contextual variables were created ad hoc based on the previous research on the subject while others were identified post hoc.

Figure 1. "What was the main reason why you were engaged in the environmental activities?", %



Students were asked "What was the main reason why you were engaged in the environmental activities?" Figure 1 shows that students' environmental behavior practices are mainly driven by social-altruistic values ("I do not want other people and the future generation to suffer

from a bad quality of environment”, “the planet, not just humans depends on our help”), monetary incentives and costs (“I want to save money”), self-egoistic values (“I do not want to suffer from a bad quality of environment”), habitual practices (“I got used to these activities from the childhood”), community expectations (“everybody is doing them in the place where I live”), infrastructural support (“it's very available”), social-psychological factors (“they make me feel good”, “it's the right thing to do”, “had a good experience with these activities in the past”) and exercising political will (“things I could actually participate in”).

### ***Green culture models***

Factor analysis is used in this study to identify and group students into segments of different types of green culture based on their similar attitudinal and behavior profiles. Thus, students were asked to agree or disagree with 13 statements related to environmental behavior and environmental awareness. The statements are presented in Figure 2. The factor analysis literature (eg. Fabrigar et al., 1999.) advises including three to five latent variables (statements) for each hypothesized construct. Thus, statements 1, 2, 3, 9 and 13 represent environmental awareness group while statements 4, 5, 6, 7, 8, 10, 11 and 12 constitute environmental behavior group.

Figure 2. “How much do you agree or disagree with each of the following statements?” On a 1 to 5 scale, where 5 means you are “strongly agree”, 1 means you are “strongly disagree” and 0 means “it is not available where I live”

	Diagree	Agree
1. I am concerned about the environmental quality in the area where I live	0	1 2 3 4 5
2. I don't feel myself protected from environmental risks	0	1 2 3 4 5
3. Poor environment can be a cause of health problems	0	1 2 3 4 5
4. I avoid unnecessary consumption of water (for example not leaving water running when washing the dishes or taking a shower, etc.)	0	1 2 3 4 5
5. I avoid unnecessary consumption of energy (for example turning down air conditioning or heating, not leaving appliances on stand-by, buying energy saving light bulbs, buying energy efficient appliances, etc.)	0	1 2 3 4 5
6. I save cans, bottles or newspapers for recycling	0	1 2 3 4 5
7. I chose an environmentally friendly way of travelling	0	1 2 3 4 5
8. I try to buy environmentally friendly products marked with an environmental label	0	1 2 3 4 5
9. I would give part of my income if I were certain that the money would be used to prevent environmental pollution	0	1 2 3 4 5
10. I take part in the environmentally friendly activities	0	1 2 3 4 5
11. I am a member of an environmental club/organization	0	1 2 3 4 5
12. I read nature or environmental magazines	0	1 2 3 4 5
13. I would vote for a candidate who support environmental issues	0	1 2 3 4 5

The aim of the analysis was to develop reliable set of scales using factor loadings. Items with loading higher than 0.4 after varimax rotation were included in factors' construction (Tabachnick and Fidell, 2001). Factor analysis of items resulted in two factors as expected (Figure 3). The first factor consisted of items referring to a concern about the environmental quality, environmental risks awareness, poor environment as a cause of health problems, students' intention to donate the money for the sake of the environment, students' intention to vote for the candidate who supports environmental issues. Thus, I named this factor “environmental

awareness” scale. The second factor of environmental behavior consisted of the remaining 6 items of the section, accounting for environmental friendly behavior.

Figure 3. Factor analysis, Factor loading matrix after varimax rotation.

Variables	Factor 1 “Environmental awareness”	Factor 2 “Environmental behavior”
I am concerned about the environmental quality in the area where I live	.756	
I don't feel myself protected from environmental risks	.546	
Poor environment can be a cause of health problems	.655	
I would give part of my income if I were certain that the money would be used to prevent environmental pollution	.647	
I would vote for the candidate who support environmental issues	.753	
I avoid unnecessary consumption of water		.813
I avoid unnecessary consumption of energy		.789
I save cans, bottles or newspapers for recycling		.737
I choose an environmentally friendly way of travelling		.633
I try to buy environmentally friendly products marked with an environmental label		.441
I take part in the environmentally friendly activities		.512
<b>Cumulative percentage</b>		<b>49.008</b>

Internal consistency of two factors was also estimated by using Cronbach’s alpha. Standardized Cronbach’s alpha for the remaining factors is 0.785 indicating an acceptable level of reliability. Factor analysis allows grouping the respondents into 4 clusters on the basis of their answers to attitude-behavior latent variables that is equivalent of different models of green culture.

Cluster 1 (n 124) was labeled “*Pure Environmentalist Type*”. The representatives of this group have both high scores in the environmental

behavior and in the environmental awareness dimensions. This group has a higher percentage of men, respondents who belong to lower class, 'whites', students in their senior year, those students who are single and have no children, students who are employed and affiliate themselves with Christianity. The differences are significant in terms of gender ( $p < 0.01$ ).

Cluster 2 (n 43) was labeled "*Proactive Type*". The representatives of this category have high level of environmental behavior and low level of environmental awareness. This group has a an even percentage of men and women and a higher representation of those who belong to upper class, 'non-whites', students in their Ph.D. program, those students who are separated and have two children, students who are unemployed and affiliate themselves with Islam. There are no significant differences among groups are found.

Cluster 3 (n 57) was labeled "*Declare Type*". The representatives of this group have high level of environmental awareness and low level of environmental behavior. This group has a higher percentage of female, respondents who belong to upper middle class, even percentage of 'whites' and "non-whites", students in their freshmen year, those students who are in relationship, students who are unemployed and affiliate themselves with Christianity. The differences are significant in terms of the religion affiliation ( $p < 0.05$ ).

Cluster 4 (n 135) was labeled "*Non-Environmentalism Type*". The representatives of this group have both low scores in the environmental behavior and in the environmental awareness dimensions. This group has a higher percentage of female, respondents who belong to lower class, 'whites', students in the Master program, those students who have two children, students who are employed and affiliate themselves with

religions different from Christianity and Islam. The differences are significant in terms of religion affiliation ( $p < 0.01$ ).

Research demonstrates that the main drivers for engaging in environmentally friendly activities for Proactive Type and Declare Type are community expectations (“everybody is doing them in the place where I live”), for the Pure Environmentalist Type are financial and monetary incentive (“I want to save money”) and for the Non-Environmentalist Type are habit (“I got used to these activities from the childhood”).

### ***Environmental information***

Study reflects that 76.2% of students are interested in the information about the environmental issues while 23.5% are not interested. Out of the percentage of students who are interested in the environmental information, 78.5% of respondents have tried to find the information on the interested environmental issues.

Most students (83%) claimed that internet is their major source of environmental information, although teachers at school or university (46.1%) and television (43.8%) are also important sources. The results are positively correlated with the studies on the subject (Hess, 2007; Johnson et al, 2000). The findings suggest that it is important to work with the media to disseminate more detailed information and improve the quality of information presented about the environment. Teachers (49%), followed by reports of environmental protection organization (37.5%) and internet (36%) are seen as the most reliable sources of information with businesses (2.1%) seen as the least. The data reflects on the fact that some major and powerful institutions could not be trusted to provide accurate information. Thus, only 12.4% of respondents stated that their trust in the government was to provide them with such correct information is strong and only 2% of respondents reported a strong sense of trust in business and industry.

In general, students feel themselves very informed about the environmental issues. Thus, on the 1 to 5 scale, where 1 means "you are not informed at all", 5 means "you are very well informed" and 0 means "I do not know", their score is 3.3. The majority of students, as expected, feel that there is about the right amount of information in the place where they live while 30.4% of respondents feel there is not enough environmental information.

### **Conclusion and discussion**

The paper provides insights, in a form of a case-study, on the main forms of the college students' green culture. The findings suggest that in the presentation of the green culture CSU students took a major step forward.

The respondents tend to favor environment over economy stating the environment to be the most important issue out of other societal problems; the quality of the environment is important for 95.3% of the students. Research illustrates that students are most worried about the destruction of wilderness and forests (9.4%), air pollution (9.3%), people's consumption habits (8.9%), water pollution (8.8%), growing waste/not enough recycling (8.7%), urban problems (8.2%), etc.

Data projects that students' subjective and objective knowledge towards the environmental issues is positively correlated and stays on a high level. Respondents positively evaluate the quality of environmental education in the area where they live.

Students' level of environmentally responsible behavior is stated higher

than average; over the last year they performed 5 different types of environmentally sound behaviors out of 9 possible options; only 3% of CSU students did not conduct any environmental activities. Students were mostly involved in such practices as cutting down energy consumption (83.6%), separation waste for recycle (74.2%), cutting down water consumption (68.7%), using the car less (59.8%), etc. In this study, the main driver for such behaviors is social-altruistic values.

Factor analysis led to four well-defined and highly interpretable segments of the sample: "Pure Environmentalist Type", "Proactive Type", "Declare Type" and "Non-Environmentalist Type". Examining a number of sociodemographics and answers to other questions by cluster confirms their distinctiveness in terms of different environmental behaviors and awareness models.

The CSU students are very well-informed about environmental issues; 76.2% of students are interested in the information about environmental issues; 78.5% of respondents have tried to find the information on the interested environmental issues; 59.9% of students feel that there is about the right amount of information in the place where they live. The Internet is their major source of environmental information while teachers are seen as the most reliable.

The analysis provided evidence to support or, more properly "failed to falsify," H1 explaining that students' subjective and objective knowledge is positively and statistically significant correlated and stays on a high level. Empirical evidence was provided leading to the rejection of H2. In this study, there are no distance between students' environmental awareness and environmental behavior.



Collectively, the results provide valuable insights on the green culture of college students and more specifically, on the relationship between environmental attitudes, knowledge and behavioral models, so often debated in the literature. The results confirm the fundamental role of environmental values as the key stimulus of environmentally sound behaviors, traditionally supported in the literature, as a background variable which affects behavior domain. Along with it, the present study highlights and statistically supports the importance of analyzing of cultural variables in shaping environmental behavior.

In general, the results presented here are consistent with the on-going literature on the subject and most of the findings offer empirical support for the environmental theories as mentioned in the literature review section. However, despite numerous studies on the same population (e.g., Scott & Willits, 1994; Unipan & Oskamp, 1997), this study does not observe much distance between the level of environmental concern and the level of actual proenvironmental behavior among students. This study demonstrates that CSU students are both sympathetic to environmental problems and willing to act consistently on their stated environmental beliefs either as consumers, voters or environmental activists.

High level of green culture of the CSU students is structured by many interrelated objective and subjective factors. Here are some of them:

(1) *Economic situation*. Economically self-sufficient region with a focus on local businesses and creation of jobs allows its citizens to better exercise post materialist values compared to the other US regions;

(2) *Infrastructural support*. The main institutions and green infrastructure already in the place allow performing such kinds of behaviors and provide cultural support;

(3) *Institutional support.* Solid environmental educational programs providing complex knowledge on the subject;

(4) *Measurement problems.* Besides, it is easier to report environmentally sound behaviors than to actually practice them as well as it is tempting to retrospectively over score the environmental acts. This ambiguity stresses some of the major problems with survey design. While the scales can be valid and the instrument is reliable, the true perception of the respondents is difficult to measure.

The following contextual factors can affect each other or in the language of experiment research they can interact and produce the synergetic affect that make Colorado a unique place for a sound level of green culture.

Overall, these findings suggest that environmentalism in the studied region has been institutionalized; became a mainstream and normal paradigm and is projected by the main social institutions and social agents.

### ***Limitations***

There are limitations that must be taken into account when considering the findings presented here. Sample size is one of them. In this study, the sample size is representative in terms of the whole college students' population. However, if we were to make analysis between and among particular groups of respondents, sample size should be enlarged. This produces more valid and reliable data for cross-group comparison and for generalization of results.

**Acknowledgements:** I give my grateful thanks to my primary supervisor Dr. Michael Carolan. Thanks also to Professors Sammy Zahran and Michael Long for their considerable help in data analysis.

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## The historical-cultural background of public administration values: the case of Slovenia

*Zgodovinsko-kulturno ozadje vrednot v javni upravi: primer Slovenija*

Dejan Jelovac<sup>1</sup>

### Abstract

The article analyses key aspects of historical-cultural bases of public administration values in Slovenia, a state founded after the disintegration of former Yugoslavia. Special attention is dedicated to the analysis of the transformation of old values which occurred during the period of post-socialist transition, when a *value vacuum* emerged due to an almost-overnight deposition of the old communist regime and its value system, while new modern values had not yet been accepted. Beck Jørgensen and Bozeman's *Public Administration Values Inventory* was used as a tool for determining the presence of modern public values in Slovenia's public administration. We found only a partial presence of these values in the normative sphere and a further gap between it and practice. We argue that this is due to the overemphasis on the harmonisation of legislation with European Union standards, while much needed changes in culture, education, civil society etc. have been lagging behind.

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**Keywords:** culture, public administration, administrative ethics, organisational values, values inventory

### **Povzetek**

*V članku se analizirajo ključni aspekti zgodovinsko-kulturnih ozadij vrednot v javni upravi v Sloveniji kot državi, ki je nastala po razpadu bivše Jugoslavije. Posebna pozornost je namenjena raziskovanju transformacije starih vrednot, ki se je dogajala v obdobju post-socialistične tranzicije, v katerem se je pojavil vrednostni vakuum zaradi hitre dekonstrukcije starega komunističnega režima skupaj z njegovim sistemom vrednot, nove moderne vrednote pa še niso bile splošno sprejete. Kot raziskovalno orodje za določanje prisotnosti modernih javnih vrednot v naši javni upravi se uporablja Beck Jørgensen in Bozemanov t. i. Inventar vrednot javne uprave. Odkriva se delna prisotnost le-teh v normativni sferi in predcejšnji razkol med njo in vsakdanjo prakso. Razlago tega pojava članek išče v pretiranem poudarku na harmonizaciji naše zakonodaje z pravnimi predpisi EU ob hkratnem zanemarjanju prepotrebnih sprememb v kulturi, izobraževanju, civilni družbi ipd.*

**Ključne besede:** kultura, javna uprava, administrativna etika, organizacijske vrednote, inventar vrednot

### **Introduction**

Our starting point is that there is no such thing as a state of affairs without a value context. Thus, *public values* must always be understood in a historical, cultural, political, institutional, philosophical, ideological, etc. context. On other hand, *value*, in its essence, is valid in a certain *inter-subjective context*. Values are valid *only in relation to human beings*



and not *per se*. According to Nietzsche (in his *Thus Spake Zarathustra*) "man assigned values to things in order to preserve himself - he alone created the meaning of things, a *human meaning!* Therefore, he calls himself "man", that is, the *valuator*" (Nietzsche 1917, p. 61). Following this mode of thought, we try to understand and explain values in this article as: a) basic *beliefs* of people who conduct their judgement and behaviour in different circumstances; b) basic *positive principles* of living of individuals and groups; c) people's *attitude* towards something that has higher importance to them comparing to something else – *tendencies to prefer* certain states of affair over others; d) something we *aim for* (i.e. *aspiration*), and which we also carry out in everyday public and/or business life. There are two different categories of values - either *ideals* (objectives, maxims, possibilities etc.) or *norms* (moral, technical, political, religious, scientific, artistic, etc.) (Jelovac 2000). Finally, values are those types of human ideals or norms that satisfy a peculiar set of human needs, especially the need for *social integration* by collective approval of some types of behaviour and disapproval of other types. Hence, all values *depend on the human being* since a world without human beings is neither good nor evil. "Values are core ideas about how people should live and the ends they should seek. They are shared by a majority of people within a community or society. They are simply expressed generalities, often no more than single words such as peace and honesty. As they are very broad they do not give guidance on how particular things should be evaluated" (Fisher and Lovell 2006, p. 152).

Values and their systems are not eternal. Value systems are modified by changing the *spirit of time, social structures and dynamics*. Universal and particular aspects of values are flagrantly at odds with each other especially during historic periods of crisis. We presupposed that at least two symptoms indicate that antagonism: (1) members of the elite cease to live in accordance with their own moral rules; therefore, *immorality*,

*cynicism* and *hypocrisy* become widespread; (2) strong opposition emerges and members of this new *group-in-fusion* (in Sartre's terms) begin to criticize the dominant group and the existing social system from the standpoint of *universal human values*; at the same time, a new morality is emerging which *comprises traits of the universal morality and the new moral requests of the fused group* (see Sartre 1976, pp. 382-404).

In order to address our research question whether public values in post-socialist states are congruent with the values and moral principles of developed Western nations, Beck Jørgensen and Bozeman's *Public Administration Values Inventory* (2007) will be used as a methodological research tool for identifying public value concepts and for determining the presence, hierarchy, causality, and proximity of public values in the normative sphere as well as the reality. This will be done on the case study of Slovenian public administration. Our investigations into the aforementioned historical development and cultural processes will thus be strictly limited to the case of Slovenia.<sup>2</sup> At the same time, it will be

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<sup>2</sup> To our knowledge, no studies of the historical basis of public administration values in Slovenia have been carried until now. Studies which were partly concerned with public values have been conducted within other research areas such as administration science, organisational culture, organisational climate, quality management etc. There is a dearth of empirical research on public administration values; cross-cultural research of public values still less common. The exception to this is the recent empirical work by van der Wal, Pevkur and Vrangbaek (2008) on public sector value congruence among old and new EU member-states (Netherlands, Denmark, Estonia) and Vrangbaek (2009) on public sector values in Denmark. Recent empirical studies comparing public and private sector values include van der Wal, de Graaf, and Lasthuizen (2008), van der Wal and Huberts (2008), and de Graaf and van der Wal (2008). The former two quantitative studies reached the conclusion that value paradigms of contemporary managers in government and business are "*internally consistent and relatively traditional*" (van der

focused on public values because we agree with Beck Jørgensen and Bozeman's starting point that "there is no more important topic in public administration and policy than public values" (Beck Jørgensen and Bozeman 2007, p. 355).

## **Transformation of the public administration values in Slovenia**

The discussion on the foundations of the public administration value system in Slovenia certainly requires positioning within a historical perspective. We can only speak of public administration in Slovenia in the full meaning of the term from June 25<sup>th</sup> 1991 onwards, since only then did Slovenia become a sovereign state. In fact, the same date marked the embryo of the process which led to the disintegration of Yugoslavia, a process which, spanning across almost two decades, gradually gave birth to six other independent states beside Slovenia. However, this does not preclude us from discussing public administration on the territory of modern-day Slovenia at an earlier period. It is deeply rooted in the past, i.e. the time when Southern Slavs arrived in these parts of Europe during the 6<sup>th</sup> century AD. They founded an independent state under the rule of an elected prince, chosen by the assembly of free men. This state was called Carantania. Its head was an elected prince whose inauguration act held a special symbolic meaning. The ceremony went on as follows: first the throne was occupied by one of the free men. The prince approaches on foot. When he is near, the freeman asks: 'Who

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Wal & Huberts, 2008, p. 279) and rejected the notion of so-called *value intermixing*. The third study by de Graaf and van der Wal (2008) of so-called "sector switchers" found (using a qualitative methodology) that values differed in the two sectors, but that these perceived differences did not depend on whether the participant previously worked in the other sector.

goes there?’ The prince replies: ‘It is the prince.’ The freeman asks: ‘By what right are you coming?’ The prince replies: ‘Based on the right that I am elected by free men.’ The freeman then withdraws from the throne so that the prince may claim it. At the same time he slaps the prince on the face to warn and remind him of who has chosen him and whom he must serve. The prince then vows to rule justly, draws his sword and wields it in all four directions of the world, to symbolize his readiness to defend the freedom of his country. This selection ritual of a Caranthian prince was kept until the 15<sup>th</sup> century and inspired Thomas Jefferson, one of America's Founding Fathers. He often took it as a historical example of how a ruler is directly chosen by the people for the people.

During the 8<sup>th</sup> century, Slovenians embraced Christianity, which had, according to some sources, been introduced and disseminated by Irish missionaries. From approximately AD 820 to 1806, territories of present-day Slovenia belonged to the Holy Roman Empire. At the end of the 13<sup>th</sup> century, the Habsburg dynasty took over the domains, still within the framework of the Holy Roman Empire. The territories became the Habsburgs’ property which they ruled in a typically feudal manner. A short discontinuity in this rule occurred from 1809 to 1813 when Napoleon established the Illyrian Provinces. They were formed according to the French model of a newly-formed and arising civic society after the French Revolution of 1789. Thereafter, feudalism was entirely suspended for a short time in Slovenian provinces of Kranjska, Koroska, Istria, Goriska and Trieste. The Provinces had a governor assigned by Napoleon himself. Although each province had a centralized administration, it was nevertheless divided into municipalities, which were the embryos of local government in the modern sense. Official languages were French and Slovenian. In 1912, *Code civil* was put into place.

After the Congress of Vienna in 1815, Austria again re-established its rule

over present-day Slovenia and re-instituted its old administration, this time without feudal nobility assemblies. Former nobility assemblies were gradually transformed into *provincial parliaments* during the 19<sup>th</sup> century, forming a *provincial government* headed by a provincial leader, although still greatly dependent on the central authority in Vienna and on the Emperor himself. During this period the nobility lost their privileges to administrative positions, although they still obtained them more easily than others could. A new civil service 'caste' emerged that could earn aristocratic titles for their merits toward the monarchy. These *civil servants* would in their mindset and behaviour *always remain the Emperor's officers*. In appearance they looked like the Emperor, i.e. they wore high-rolled moustaches like Franz Joseph. During the Habsburg rule, the State was profoundly centralized, which had its effects on the position, role and ways of its administration. The civil servants' basic qualities were: *submissiveness, loyalty and subjugation* to the Emperor as a supreme authority. These values were strongly imprinted into the culture of civil administration and thereby into the culture of the Slovenian people.

Slovenian provinces remained within the Austro-Hungarian Monarchy until its final breakdown as a result of the defeat in the First World War in November 1918. Slovenians entered, as a constitutive nation, the Kingdom of Serbs, Croats and Slovenians (Kingdom SHS), established on the Uniting Day of Southern Slavs, December 1<sup>st</sup> 1918. Eleven years later, the state changed its name to Kingdom of Yugoslavia, a name to be kept until the end of the state. All of this led to certain changes in the state administration. The constitutional monarchy remained almost the same, with the small difference that its centre of authority had moved from Vienna to Belgrade. A major problem arose over a longer period, i.e. *fundamental and far-reaching changes in culture*. Some high government officials abandoned their positions in public administration

and moved to other countries such as Austria, while being replaced by new staff who spoke a similar yet different language (Serbian belongs to the same group of Southern Slavic languages), wrote in a different alphabet (Cyrillic as opposed to Latin), had different customs and believed in a different Christian faith (Orthodox rather than Roman Catholic). They emerged as 'newcomers' who come from a different cultural circle. Therefore, Slovenians became foreigners in their own land. Local civil servants did not quite understand the directives coming from the central government because they were alien to them. The directives stemmed from a different value system and a foreign tradition. Then the first major confusion in public administration occurred. In order to advance their careers, local civil servants had to have powerful patrons in Belgrade. As Serbia had already built up a strong civil service structure, it had no need for new staff and therefore it allowed no one into its circle but those with strong political protection. Consequently, local clerks became obedient servants to the ruling political elite and champions of their policies, while regular people named them '*servants of policy*' in defiance. As the Kingdom of Yugoslavia was over three times smaller than the Austro-Hungarian Empire, it meant the number of potential clerk positions was much lower in proportion. Furthermore, while in the Empire Austrians and Hungarians were outnumbered by other nations, in the Kingdom of Yugoslavia Serbs were an absolute majority. In such a blend of new circumstances, a radical shift occurred in the civil servants' thought pattern and public administration in general. We could easily say that fixed bureaucratic habits remained in place, preserving the qualities of submission, loyalty and subjugation as the most cherished values, however this time they were combined with some new ingredients from the Balkans, namely *carelessness* and a *relaxed, laid-back manner*. Such a specific phenomenon, created as a crossbreed of Central European and Southern European culture circles in the realm of present day Slovenia at the dawn of the 20<sup>th</sup> century, quickly

added to the degrading of civil servants' integrity and discrediting of public administration in the newly-established state of three constitutive nations. The Slovenian people do not trust this *mixed type of clerk* anymore; in fact they view him as a harmful parasite which is, above all, corrupted. The clerk in the former regime was deemed a necessary burden, and in the end, he was useful because he had achieved something by obeying the law, the strict rules and procedures; in other words, he acted within the framework of a *legal state (Rechtstaat)* and enabled it to exist in the everyday life of its citizens. In time people grew accustomed to this type of clerk and the civil service. The new clerk had to find his way in the new confusing circumstances, had to improvise and 'creatively' apply the rules in practice. Such a clerk who operates on the edge of the law quickly loses his dignity as well as respect from the people.

With the establishment of the Kingdom SHS, the division of administrative units in the territory of present-day Slovenia changed and divided in two *districts* (Ljubljana and Maribor). In the territory of the entire Kingdom, thirty-three districts were formed. All districts were strictly subjugated to central authority and had, in fact, no relevant self-managing powers. Within the district, there were smaller 'srez' divisions and municipalities. In 1929, new divisions occurred, introducing nine 'banovine' instead of districts. The entire Slovenian territory became '*Dravska Banovina*'. The 'srez' and municipal units remained as lower divisions in the local level until the outbreak of the Second World War in Yugoslavia on April 6<sup>th</sup> 1941. The war ended in Slovenia as well as the rest of Yugoslavia in May 1945 with the victory of the Bolshevik revolution. As a consequence it brought a *radical cut*, among all other things, in the public administration. The newly-born Yugoslav Federation consisted of six republics and two autonomous provinces, which were divided into districts and municipalities. Each republic had its own



constitution, its parliament and government, creating a veneer of self-management. However, the laws and practice were fully harmonized by the central authorities. Although the new communist regime promoted a self-imposed humanistic attitude, as well as atheism, human being as its ultimate value, social equity and equality, brotherhood and unity of all nations, 'bright future' for each worker, the government apparatus was nevertheless designed after the Soviet model. This meant in reality an *extended arm of repression*. The process of compromising the civil servants that had started in 1918 and continued after 1945 ended in their degradation in the eyes of the public.

The first reason for this was that for the first time in history of public administration, civil servants, especially those in higher positions, had to be active members of the ruling party. It was the same party that had carried out the revolution and seized the monopoly of power over a single-party ruled state, with one ideology and one leader. The consequence was that civil servants *remained totally responsible and dependent on their party, but not to their government or to their citizens whom they should serve*. Therefore, the impression that the people are there for the administration and not the other way around is still maintained in the Slovenian collective consciousness (above all in the minds of the middle-aged and older generations), even though nineteen years have passed since the fall of communism.

The second reason for the compromising of the civil servants in the eyes of the people stems from their *incompetence*, which involved several issues. At the start, the staff had insufficient and inadequate training; many among them lacked the required abilities, skills and experience necessary for working in public service. This happened because of the artificially-induced shortage of staff due to the *radical cut*. Additionally, in public service, as in other spheres of society, careers could be made



mainly by loyalty and merits to the Party. Such clerks were convinced that their job was safe, that they were unmovable from their positions and completely protected due to the jobs they were doing 'in the name of the Party'. Very often some of them were arrogant toward the citizens, scornful, rude, etc. In time they became lazy, because nothing obliged them to work or to advance professionally. They were not worried by complaints from the citizens who used their poor services. They were afraid only of their bosses. Service users would not make complaints about their work because they knew the public administration was *just a transmission* of the Party's rule. Besides, rules were not clear because they had been prepared by insufficiently trained experts. This resulted in laws and regulations being too comprehensive, written unclearly, or imprecise, which made possible different, often quite varied, interpretations. Another difficulty was in contradictions and so-called *loopholes in the law*, which the *nomenclature* often made on purpose as an 'escape route', just in case they were needed. Lesser staff had no idea what this was about so they were kept in fear of making a mistake and risk of enraging their bosses. They applied the laws and regulations mainly by interpreting them against the citizens' best interests.

### ***Value system of public administration in the period of post-socialist transition***

If we now analyze the cultural, historical and socio-economic context of the value system which underlies the entire public sector and especially the public administration in Slovenia, we first notice that it has emerged as a result of influences from various cultures, one monotheistic religion and two major ideologies. For several centuries the major part of Slovenia was under the influence of the Central European Cultural Circle (Austria-Hungary), while the coastal part was for some time under the

influence of Romanic culture (Italy). During the 19<sup>th</sup> century, there was a strong of Pan-Slavic influence, but upon formation of the Kingdom of SHS, liberalism became the dominant ideology of the state. After World War II, the communists took over and proclaimed so called 'self-managerial socialism'. During the entire period the strongest religious influence was that of the Roman Catholic Church, while Protestantism achieved an influence only in a very limited historical period, from the beginning of the Reformation in 1517 until the end of the Council of Trent in 1563, after which the Counter-Reformation took place. The greatest influence of Protestantism on the Slovenian people has been expressed through its prominent role in the constitution of modern Slovenian written language. The heritage of Protestantism was deeply integrated into cultural memory or memories out of which Slovenian nation express its cultural identity (see Kerševan 2006, p. 8).

When Slovenia embarked on its independence on June 25<sup>th</sup> 1991, which eventually led to a full membership in the European Union in May 2004, it carried this historical heritage which gives it some advantages but also difficulties on the other hand. The newly-formed state completely took over the old administration, not even thoroughly replacing all the chiefs of administration units. A *hybrid* was thus formed where civil servants of the communist regime and socialist economy had to perform the policy of a new democratic state in a capitalist economy. This discrepancy occasionally had grotesque manifestations, and in the late 1990s, it slowed down the modernization and adoption of European standards in the public administration. According to a public hearing of the former chief of Slovenian Intelligence and Security Agency, during his mandate he had an impression that he was under surveillance and that there was a parallel management system in his agency. This means the new state had indeed established its administration according to the EU formula and, on the outside, arranged its rules to correspond to those in the

European environment. But on the inside, it was too weak to break the power of the '*continuity forces*' as they are called in Slovenia. This means that *it had not in fact successfully overcome its heritage*. Such anomalies are still present today, only on a smaller scale. In view of this, one of the former governments decided to make a substantial move in this area. 'Intensive development in the area of quality in Slovene public administration was observed especially from the year 1999, when in the Ministry of Interior, then responsible for public administration, the Quality Committee began its activity, the main purpose of its activity defined as *effective, citizen friendly, recognizable and responsible public administration*' (Žurga 2007, p. 45). The following government adopted the '*Strategy for further development in the Slovenian Public Sector 2003–2005*'. In order to secure its realization, a document was adopted on December 23<sup>rd</sup> 2003 named "*Quality Policy of Slovenian Public Administration*" (Vlada Republike Slovenije 2003). It started from the *administration users' needs and values* that all civil servants should respect and carry out in practice. It is all about being user-oriented, efficient management, partnership development, new employment in a continuous improvement process by continual education and innovations, social responsibility and orientation to results. It is obvious that Slovenian government in this respect was under the influence of the so-called *New Public Management* in its movement away 'from the traditional focus on procedural integrity to concentrate much more upon efficiency and performance measurement' (Pratchett and Wingfield 1994, p. 34). Brereton and Temple argue 'that this movement away from a concentration on procedural matters and towards greater concern with quality of output is defining aspect of the new public service ethos' (Brereton and Temple 1999, p. 460). These values are a compass that will make orientation in practice possible to all so that public administration may finally start functioning as a 'legal, independent, as politically neutral, impartial, responsible, open and ethical body' (Brereton and

Temple 1999, p. 460). According to such a formulated quality policy, all civil servants should become partners to each individual, business or non-governmental organization, as well as to all other state or international organizations. The goal of these guided and continuous improvements in public administration is to achieve contemporary circumstances *comparable with those in Europe*. A detailed analysis of the cultural (in)compatibility of old and new EU member states, particularly in terms of their economic and organizational cultures, was already conducted elsewhere (see Adam, Jelovac and Rek 2008, pp. 107-134; Jelovac and Rek 2010). Finally, internationally recognized standards should be adopted in order to assess functioning in the public sector. Special care should be given to determine and follow up the accomplishment of publicly proclaimed and measurable goals and work results. In order to raise the *quality of public administration*, the former government established a Ministry for Public Administration in December 2004. From its initiation, the ministry was dedicated to 'incorporating the demands and quality performance standards of Slovene public administration into the legislation and in all the strategic documents, which it prepares and/or cooperates in preparing' (Žurga 2007, p. 45).

### ***Comparison of the normative sphere with the reality of day-to-day practice in Slovenia***

The introduction of new values, norms of conduct as well as the codes of behaviour in public administration would not have its full meaning or effect if it stayed only on paper. Therefore, the Ministry for Public Administration decided to introduce a *continuous system of quality control* to assess the services provided to the citizens. The key purpose of this system is *to measure satisfaction levels* of civil servants as well as citizens by polling all employees in administrative units. This is done

using a scientifically designed anonymous questionnaire. It is interesting to review the cumulative report from 58 administrative units plus five branch offices of the Ljubljana unit dated February 11<sup>th</sup> 2008. We shall limit our remarks only to the main findings.

Starting from the fact that employees were overburdened, the investigators wanted to know how they would react if they had to work overtime. Over a half of polled civil servants (58.2%) are prepared to finish their tasks after hours to make sure they are done correctly and in time. Considering the role and importance of knowledge for the working results of public servants, three in four (74.7%) believe they have enough knowledge to complete the tasks required in their workplace. From their replies it is obvious they are aware of the importance of continuous training and education. They would prefer to attend seminars on the ongoing changes in the law. Less than one in four wishes to change their work post. Around 70% do not wish to change their work post because they are satisfied; it is suitable for them, they perform their work happily and think that they are able to do it correctly. For those who wish to change their post, the most frequently quoted reason is that they wish to advance because they have fulfilled requirements for higher positions. Other reasons given are that they are not appreciated enough, that work is monotonous, that they are paid inadequately and that they think they know more and can do more than what they are doing now. Related to motivation factors, on a scale from 1 to 5 with an average of 3.92, the polled employees chose the most important factor – *good mutual relationship*, while *career* was least important to them. Marks also show how some values such as *efficiency* and *rewards* are achieved in practice. Less than a half (43.3%) think that they are underpaid for their work. Over a third of the rest think that they would be paid the same no matter how efficient they were. Research on satisfaction included determining the importance attributed to expertise when solving particular cases and

issues. Results show that less than half (41.4%) polled employees think their bosses would always give priority to expertise over subjective circumstances. Relating to the understanding of the administrative unit's goals in the working process, the goal selected as most important (3.84) was to satisfy the customers' needs. Interestingly, the least important was equity. To conclude, we should report how the employees identify individually with their administration unit. Over two thirds (69.2%) are proud to be employed in their administration unit, while 19.4% are not proud. The main reason of being proud is that they are doing their job well and are working for the people and their country. The main reason for those not proud is that their work is not appreciated and they have low wages.

The public administration also has a duty to regularly measure the satisfaction of its customers. This practice was introduced four years ago by the Decree on Amendment of the Decree on Administration Procedures (Slovenian Official State Gazette 2006). The questionnaire to be filled out by citizens at the public administration unit vows to guarantee full anonymity. Service teams must process them for each month until the 10<sup>th</sup> of the following month and report the results on the Ministry for Public Administration's webpage. On a scale from 1 to 5 the customers express how much their expectations were fulfilled in the administration unit when solving their claims or other issues, in other words how large the gap was between the expected and reality. The object of assessment includes tidiness of the premises, equipment and environment, availability and clarity of information, exemplary speed of solving the issues, provision of services according to promises, solving the claims in one place, readiness of clerks to assist the customer, knowledge of the clerk in service, trust of customers toward the clerks, willingness of clerks to intercede for the customer and clerk's diligence to satisfy the customer's needs. According to available results, average

mark for quality was 3 (good). Discrepancy between expected and actual status in quality services showed that in most administration units *expectations were higher* than what customers actually experienced. The same result occurred with customers' expectations related to the above stated characteristics of civil servants, which are crucial to the assessment of service quality. Considering that in the former government and administration system long waiting in queues at public service desks had become typical, it is now interesting to view data clearly showing that there have been substantial shifts in this area. Namely, 54.1% customers were served immediately upon arrival at the office; over 70% waited up to five minutes, while customers who had waited over 20 minutes were only 1.5% in total. Although this last piece of data may lift our spirits, an overall assessment of 3 (good) is a warning that there is still room for improvement in service quality. 'The key to success of the "anti-bureaucratic" process is in changing the organizational culture – i.e. the opinion of employees in Public Administration" (Virant 2006, p. 32). At this point the breakthrough will be the hardest, especially because the public administration is distinctly conservative toward introduction of changes. 'Civil servants often channel their energy into preserving the existing status, searching for reasons against making changes, rather than taking quick action to introduce the changes' (Virant 2006, p. 32).

#### *Comparison between Slovenian and developed Western countries' public values*

When a subsystem of a developed society (such as the public sector) wishes to assess itself, it is wise to compare it with more advanced ones. In this instance we will attempt to compare the system of public sector values in Slovenia to the *inventory of public values* in the developed Western countries which is found in Beck Jørgensen and Bozeman

(2007).

First let us consider things regarding the value category *public sector's contribution to society*. If we start from expectations that public sector must not serve partial interests but should serve society in total, then we should not be pleased with the current state of affairs. In the case of Slovenia, values such as *common good, public interest, social cohesion, altruism* and *human dignity* are either not given sufficient weight or have not been mentioned at all in relevant documents. In practice, a part of the political elite usually tries to transform the public sector into its group's or lobby's extended arm. Only when scandals occur and hit the public sphere via the media, it becomes obvious how much need to be done to improve the mechanisms for the promotion and implementation control of values belonging to this category in everyday life. Special attention must be dedicated to establishing social cohesion because the Slovenian society has been the battlefield of cultural clashes for two centuries, first between liberals and clerics, then between communists and 'enemies of the people' and today between so called 'left' and 'right' political options, with the consequence of an evident chasm between two polarized and mutually opposed subcultures. However, the goal should be to build a society that would not be a battlefield to warring factions, but a world where individuals and groups are connected and united by certain relations, needs, interests etc. The public sector could play a major part in the establishment of such conceived social coherence.

In view of our former empirical investigation where we outlined the values that motivate the public administration in its operation and those that are quoted in relation to the citizens, we now deem necessary to look into the '*constellations*' from the Beck Jørgensen and Bozeman inventory, which include value categories such as (1) inter-organizational aspects of public administration, (2) behaviour of public-sector



employees and (3) relationship between public administration and the citizens. The first category includes the following key values: *robustness, innovation, productivity and self development of employees*. The second category holds *accountability* as a key value. Third category is composed of the following key values: *legality, equity, dialogue, user orientation* (see Beck Jørgensen and Bozeman 2007, pp. 366-369). We can first notice in relation to the above three categories that instruments used by the Slovenian public administration to determine the degree of their fulfilment in day-to-day practice do not take into account some of them in the questionnaire or they are hidden within questions, relating to several values combined together. This means that many of the mentioned values are not treated clearly and distinctly. We are not sure whether this is because they are not given their due significance or because they are so vaguely understood that even the questionnaire creators could not turn them into correctly articulated questions for the respondents. Take for example robustness, which is linked to related values such as *adaptability, stability, reliability and timeliness*. Whether the public administration is organized on the basis of robustness or not, it cannot find this out based on the questionnaire for employees and customers, because the presence of this trait in practice is not investigated. *Timeliness* is partly explored, but in a very narrow meaning, i.e. adequate speed of solving cases and length of time spent waiting at the counter. Further research should extend in the direction of stronger evaluation of robustness as an organizational value, which is essential for the functioning of public administration. If we now look at *innovation*, we can see that this value is linked to *enthusiasm* and *readiness to take risks*. From both questionnaires it is apparent that this value does not play a part in Slovenian public administration, as nobody is asking about it. Citizens are asked whether the clerk is: "tidy, fair, careful, professional and pleasant" (see Quality Barometer of Ministry of Public Administration 2007). As expressed by Virant, the former minister for

public administration, shifts toward changes will be slow until the philosophy of civil servants is changed; the process will resemble that of “breaking concrete” (Virant 2006, p. 32). By that he means to say that the Slovenian public administration is hardened, deprived of enthusiasm and unready for innovations, risk-taking or changes. Productivity is also a doubtful value. General public opinion is that the public administration is *too large and not very efficient*. Thus, the following option offered in the questionnaire for employees is not surprising: *‘In our administrative unit, the quality of the job done is more important than the volume of solved cases’*. In the development of public administration it is very important to root the following typical values of New Public Management in the minds of civil servants: *productivity, efficiency, parsimony, professional attitude, business-like approach, and just-in-time philosophy*. Even Kickert (1997), who is a harsh critic of New Public Management, managerialism and entrepreneurial government ‘as evident trends, particularly in the American and Anglo-Saxon administrations, calling for more business-like and more market and client-oriented management in the public sector’ feels the need to warn us that it is not his ‘intention to give the impression that business-like values such as effectiveness, efficiency, productivity, and quality and value for money, play a less important role in the public sector. On the contrary, one would expect government to pay extreme attention to these values because it is not spending its own money, but the involuntarily paid taxpayer's money. Parsimony and diligence should be highly esteemed values in the public sector according to Kickert (1997, pp. 749-750). It will be a large undertaking due to the historical heritage of Slovenia in values such as egalitarianism, whose consequences were enshrined in the wage policy of so-called equally large stomachs. As a result, a third of public-sector employees today state that they are paid without regard to efficiency, and most think they should all be equally paid and that productivity should not be a measure of their earnings.

In the end we wish to point out that *responsibility* and *legality* are respected values in the public administration, and that values such as *dialogue* and *orientation to clients* have received quite a lot of attention in the last few years. Generally speaking, public administration is communicating with the public more intensively, especially when introducing new kinds of services based on IT technology. Citizens are better and more regularly informed about the functioning of e-administration, about simpler procedures required to open a business company, register a car, to obtain a personal ID card etc. Of course, all this is done with the goal of making the public administration more oriented toward satisfying the customers' needs.

## **Conclusion**

The discussion above highlighted the extent of the importance of historical framework and cultural basis in not only the shaping of an adequate system of values in public administration, but even more so for its successful implementation in practice. This is particularly transparent in unfavourable sets of socio-political circumstances such as post-socialist transition, which tend to contribute to a low level of political and legal culture. The process of increasing the level of these cultures will require much time and effort. Trpin (2006) believes this process should begin 'at the top of the societal structure and transmit itself through its administrative side throughout the society' (Trpin 2006, p. 1240). Although in this respect the state of affairs is infinitely better in Slovenia than in other parts of former Yugoslavia, where the process of *Europeanization* of public administration has only just begun (see for example Verheijen 2005; Eriksen and Solumsmoen 2005), we nevertheless cannot be altogether satisfied with the level, intensity of

changes and ethical improvements in our country (see Jelovac 2010). The main obstacle to the establishment of a modern public administration is the people who work in it. Bugarič (2006) claims that the 'socialist bureaucrat will not all of a sudden become a modern public servant thanks to "modern", new administrative legislation' (Bugarič 2006, p. 1260). The civil service reform has thus far been based on this incorrect assumption. It is clear that a serious reform cannot rely solely on changes in legal rules and norms, but on an entirely novel approach to education, recruitment and human resource development of civil servants given that '*civil service reform is primarily a reform of civil service personnel*' (Bugarič 2006, p. 1260).

Using Beck Jørgensen and Bozeman's inventory in the present study, it was possible to evaluate the degree of modernisation of Slovenian public administration. It became apparent that modern public values emerged in Slovenia at a time when the Slovenian people were fighting for independence. This process of modernisation coincided with the development of the civil society in late 1980s on the eve of independence. It also became evident that public values came to be and are used to serve as guidance during turbulent transitional times.

One of the reasons for the slow development of public administration values (and public values in general) in post-socialist countries is the *underdevelopment* of the civil society. The relationship between the civil society and the state is undoubtedly the most important question of any modern democratic political system. People are conscious of the birth pangs of any emergent political community and they know it is difficult to change old ideals and habits. It is very clear that time is needed for the releasing of the baggage of the former regime, but it also seems obvious that old mistakes should not be repeated again.

It is clear that public values depend on their bearers, i.e. people who are ready to subordinate their private interests to the public interest. Transition is only one step in that direction. Normative proclaiming of public values is useless if the cultural mindset and conduct of people are not being really changed. In such a case, democracy is a matter of *moral renaissance* of a nation. We obviously need a new renaissance in Slovenia, but in the “global village” also. Thus, democratic forces in Slovenia which are striving for modern public values in our society need support from *value-aware* public servants who know how to manage public services in a more ethically-conscious manner. Appropriate input is also required from strong organisations and individuals belonging to the civil society, educational system, independent media, autonomous researchers and institutes etc.

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