

Voluntary risk Seeking in the Risk Society: Explaining Involvement in Edgework

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Abstract

How does voluntary participation in dangerous leisure activities requiring skills ('edgework') compare, for example, to gambling and thrill seeking and why does edgework thrive in societies preoccupied with safety and security? Lyng (1990) assumes edgework constitutes an escape from alienating working conditions and disenchanting rationalism in risk societies bearing upon blue and white collar workers alike. He also distinguishes these structural forces as drivers of edgework from a cultural explanation tying participation in edgework to individualism and anti-institutionalism. Besides, according to Fletcher (2008) and others, although athletes themselves legitimize their engagement in edgework as an escape from alienating and disenchanting living conditions, this is actually not the real reason for their participation in edgework. Instead, edgework supposedly provides an arena for the accumulation and display of cultural capital needed for members of the professional middle class to sustain their position on the labor market. We refute Lyng's explanation and partly the cultural explanation as well and we validate the latter one based on two surveys among Dutch citizens (N=1,302; N=299). On the one hand, edgework cannot be explained by either perceived alienation, disenchantment, and institutionalism. On the other hand, it can be explained by individualism and the professional middle class is overrepresented in edgework, partly because its members cherish Protestant ethics such as the deferral of gratification and perseverance. This suggests that although edgeworkers resist the risk society in name, they in fact reproduce its underlying stratified class structure by investing in the symbolic capital needed to sustain and shield their own socio-economic position.

Introduction

Off-slope skiing, carting, bungee-jumping, wild water rafting, and kite surfing are examples of voluntary risk taking of which the control requires specific skills. According to Stephen Lyng (1990), these different activities can be subsumed under the more general heading of edgework. Supposedly, this is not only so because practitioners are inclined to participate in different forms of edgework or to take a positive stance towards these different activities (see also Fletcher 2008 and Atkinson 2008), but also because edgework can be analytically distinguished from other forms of voluntary risk taking such as gambling and thrill seeking (Lyng 1990, 2014).

During the last few decades, these and other varieties of edgework have become more popular than ever in the West (Lyng 1990, 2008; Fletcher 2008). Psychological studies of edgework have foregrounded the role of risk proneness, sensation-seeking, thrill-seeking, and the like (Kim & Kim 2012; Greaves & Ellison 2011; Watson & Pulford 2004; Ruedl et al. 2012), but such explanations do of course raise the question of why exactly character traits like these have apparently become more widespread or, alternatively, why they have become increasingly important drivers of human behavior. Addressing questions such as these require sociological theory. Two theories can be found in the literature which can link the popularity of edgework to the transition of industrial society to risk society, observed by Ulrich Beck (1992) at the end of the last century.

According to Beck, class struggles about the distribution of scarce resources are giving way to the mitigation of so-called 'new risks'. Beck conceives of new risks as those risks which cannot be sensed directly, cross borders and generations, and are men-made. The fact that these new risks can only be detected scientifically results in the transfer of responsibility for risk control from individual citizens and employees to formal management systems designed and controlled by an administrative, scientific, and technological elite. At the same time that these new risks have emerged, Beck also observes a process of individualization. Due to this process descent and traditional gender roles no longer exonerate individuals from the responsibility to acquire and maintain a position on an increasingly insecure labor market. Because of this process of individualization vulnerabilities and uncertainties previously limited to the lower classes, have expanded to the middle classes as well.

Both the transfer of responsibilities for the mitigation of man-made risks to formal bureaucratic systems and the increasing precariousness of the middle class can be linked to theories about participation in edgework. According to Lyng (1990: 873), the formalization and centralization of risk-management are symptomatic of dehumanizing tendencies in present societies such as loss of community, alienating working conditions, and disenchantment. Allegedly, in order to regain feelings of self-control, experiences of spontaneity and impulsiveness, and to re-enchant a world devoid of meaning, individuals are seduced by edgework. After all, surviving such dangerous leisure activities depends to a large degree on the personal skills needed to control these activities, enable transcending 'the voice of society,' and are inherently meaningful because they involve a matter of life and death. As such, participation in edgework can be conceived of as a form of resistance against the transition from industrial to risk societies. In turn, another explanation for the participation in edgework can be linked to the precariousness of the middle classes. According to this explanation edgework aligns with the habitus of the professional middle class and offers these professionals an arena wherein they can practice the skills they need to perpetuate their position on the labor market. As such,

participation in edgework can be conceived of as a necessary adaptation to the uncertainties posed by the risk society. According to this explanation, involvement in edgework is a way of adapting to the risk society instead of opposing it.

These two conflicting sociological explanations for participating in edgework can be found abreast in the literature. Both perspectives are derived from ethnographic research into a range of activities subsumed under the heading of edgework. As Lyng (2008: 134/5) concedes, although interpretive forms of analysis ‘offers many important insights into the problems of risk and uncertainty in the contemporary social order, it yields very little in the way of testable propositions relating to decision making in risk situations’. Moreover, ‘the usefulness of the edgework concept will depend on its rigorous application to empirical cases and the development of more refined conceptual distinctions between it and other concepts (“adventure”, “thrill-seeking,” etc.)’ (Lyng 2008: 113). The goal of this study is directly linked to these limitations of ethnographic research. The first goal is to test quantitatively whether the divergent activities that have been studied in ethnographic studies indeed have so much in common that they can be subsumed under the more general heading of edgework, while they concomitantly diverge sufficiently from other forms of voluntary risk taking such as gambling and thrill-seeking as to legitimize making a distinction between these forms of voluntary risk taking. The second goal is to test the tenability of the hypotheses derived from the two perspectives on the participation in edgework. In order to do so, we will undertake a first test of the extent to which participation in risky leisure activities can be conceived of as a form of resistance or adaptation to the risk society (or both) (as advised by Lyng 2008: 135). We will strive to achieve both goals with the help of two surveys among the Dutch population.

We first discuss the conceptualization of edgework, then continue with a more detailed discussion of the two perspectives mentioned above. Subsequently, we describe the data collection and the measurement instruments we used. After the presentation of our research findings we finish with our conclusions and a discussion about their more general relevance.

Edgework: opposed to or aligned with risk societies?

Characterizing edgework

Lyng (1990) has done a secondary data analysis on data about a wide range of activities, including aircraft test piloting, sky diving, scuba diving, mountain climbing, combat soldiering, prostitution, drug use, gambling, rock climbing, ice climbing, auto racing, motorcycle racing, endurance sports, downhill skiing, and criminal behavior. He found a common core in these various activities that he designated as ‘edgework’, which he defined as ‘high-risk behavior

involving, most fundamentally, the problem of negotiating the boundary between chaos and order' (Lyng 1990: 855) and that he conceptualized along three dimensions.

The first dimension pertains to the kinds of activities that are involved, i.e., 'activities which all involve a clearly observable threat to one's physical or mental well-being or one's sense of an ordered existence' (Lyng 1990: 857). The second dimension pertains to the skills that are involved. Indeed, edgeworkers prove to consider opportunities for developing and using skills the most valuable aspect of their involvement. These skills pertain to 'the ability to maintain control over a situation that verges on complete chaos, a situation most people would regard as entirely uncontrollable' (Lyng 1990: 859). Edgeworkers often refer to this as an innate 'mental toughness' that prevents one from becoming paralyzed from fear and enables one to focus on what is needed for survival. Such beliefs are associated with an elitist orientation according to which only a select few possess this capacity, which may however be shared with those practicing very different forms of edgework (an opinion also shared by triathletes, Atkinson 2008: 173). Indeed, consistent with this, individuals who are accomplished in one type of edgework often try their hands at other types as well (Lyng 1990: 860). The third dimension of edgework distinguished by Lyng relates to the subjective sensations associated with involvement in it. Participants in different varieties of edgework virtually without exception claim that it produces experiences of "self-realization", "self-actualization", or "self-determination" (Lyng 1990: 860), whereas survival of a potentially lethal situation generates feelings of exhilaration and omnipotence.

Fletcher (2008) basically defines edgework in the same way as Lyng does. He has ethnographically studied 'adventure' sports like white water paddling, mountain biking, rock climbing and skiing/snowboarding – all sports that fall within Lyng's definition of edgework as discussed above. These sports do after all not only present a significant risk of injury or death, which can only be averted by mastery of a set of skills, but those involved do also understand them as producing a 'truly "transcendent" state, a sense of "hyperreality" in which athletes become intensely focused in the present moment: their perception of the passage of time is distorted; and they react to circumstances on a visceral level' (Fletcher 2008: 314). Much like Lyng, Fletcher notes moreover that many athletes practice several risk sports simultaneously, which leads him to consider them elements of an interconnected lifestyle (Fletcher 2008: 312).

Lyng has also compared edgework with other forms of voluntary risk taking such as gambling and thrill seeking. In his article from 1990, he argues all these activities belong to the broader category of activities that Goffman refers to as 'action' – 'behavior that is consequential for the individual, that has problematic outcomes, and is undertaken for its own sake' (Goffman 1967: 185 cited in Lyng 2008: 136, note 2). All of these actions entail 'flow', 'a state of focused attention or deep concentration on a limited set of stimuli, accompanied by a distorted sense of

time, a feeling of personal transcendence, and merging of the individual with the objects at hand' (Lyng 1990: 863). Even though clearly related, Lyng suggested in the same article that edgework does nonetheless differ from gambling and thrill seeking. This is so because of the edgeworkers' characteristic dislike of being exposed to conditions beyond personal control, which is central to the two other types of activities. What edgeworkers seek instead is 'the chance to exercise skill in negotiating a challenge rather than turn their fate over to the roll of dice' (Lyng 1990: 863, 872).

In a recent article, Lyng (2014) distinguishes edgework more fundamentally from action than he did in his 1990 article and he also compares edgework with Foucault's concept of 'limit-experience'. According to Lyng, the main difference between edgework and limit-experience is that the edgeworker attempts to approach the edge that differentiates order from chaos as near as possible, while the limit-experiencer deliberately transgresses the edge. In comparison with action, Lyng argues that edgework presents more degrees of freedom from constraints on the self. When defining action, Goffman basically alluded to character building whereby individuals try to prove others they are able to hold their composure even under extreme circumstances. However, supposedly, when participating in edgework the consciousness of a potential audience entirely recedes to the background. After all, controlling the edge demands full attention 'in transcendence of deeply-rooted corporeal inscriptions,' requires 'absolute presentness' unmediated by discursive categories, and cuts off all opportunities to rely on anyone else but oneself (Lyng 2014: 455). Therefore, edgework offers a more radical annihilation of 'the social mind' than action does.

A systematic comparison between forms of voluntary risk taking such as edgework, action, and limit-experience exceeds the scope of this study. However, we want to take a first step in measuring the convergent and divergent validity of the concept of edgework. Lyng and Fletcher both maintain that participants are involved in more than one single variety of edgework. Moreover, on the one hand Lyng suggests that involvement in (different forms of) edgework goes hand in hand with involvement in gambling and thrill seeking activities because these activities satisfy the desire for transcendent experiences. On the other hand, he assumes the combination of edgework, gambling and thrill seeking is unlikely because edgeworkers dislike being exposed to conditions beyond personal control while gamblers and thrill seekers do not. Our first goal is to test whether involvement in different forms of edgework converges with participation in gambling and thrill seeking on one dimension (*hypothesis 1a*) and diverges from the latter activities on a second dimension (*hypothesis 1b*).

Explaining edgework

Lyng (2008: 115) argues there exists a correspondence between edgework's seductiveness and three different socio-structural forces.

First, he uses George Herbert Mead's ideas about the 'I/me' dialectic to render understandable edgeworks' popularity. 'In this formulation "me" can be understood as the social self, or the "organized set of others which one himself assumes". The "I" refers to spontaneous, unpredictable, and creative elements in the *overt* phase of the act, standing in contrast to the *covert* phase of interpretation and assessment undertaken by the "me" (Lyng 2008: 120, italics originally). 'The relationship between the "spontaneous" and "constrained" is dialectic in the sense that the creative potential of the "I" can only be realized in the presence of a fully developed "me" capable of taking the attitude of the entire social community' (Lyng 2008: 123). Thus, 'spontaneous and constrained actions exist in an opposed and *necessary* relationship to each other' (Lyng 1990: 879, italics originally). In the absence of ideal constraining conditions, Lyng (1990) argues, it becomes difficult to develop a sense of self-determination. Supposedly, this is precisely what happens in modern capitalist societies. Loss of community and dehumanizing working conditions lead to oversocialization – feelings of being impelled by intangible social forces which are beyond personal understanding and action (Lyng 1990: 870). In oversocialized selves 'numerous institutional "me's" are present but ego is absent. [...] Edgework may offer an alternative way to develop the "I" as it calls out an anarchic self in which ego is manifest, but the personal, institutional self is completely suppressed' (Lyng 1990: 878).

Lyng (1990: 879) follows Ralph Turner who argues that 'even in a predominantly impulse-oriented society, not everyone experiences self-actualization in the pursuit of impulsive, anarchic activities like edgework. There are still "institutionalists" who experience self-actualization in their commitment to family, occupation, or an ideology like Christian fundamentalism. This implies that the self-determining character of edgework is not universally applicable but specific to certain types of societies or groups in a given society. However, Lyng distances himself from Turner's cultural explanation entailing a shift in the anchoring of identity from the 'institution' pole of a continuum towards the 'impulse' pole. Turner assumes that in our culture institutions are increasingly perceived as oppressive constraints of personal freedom and self-determination and that individuals decreasingly derive a sense of security and recognition from complying to social roles, norms, and institutions. On the one hand, Lyng (1990: 879) concedes that the prevalence of 'individualism' and may drive edgeworks' popularity while 'institutionalism' may not, since 'spontaneity and impulsiveness reign in edgework, [while] discipline and normative control dominate conformism of role patterns in daily life' (Lyng 1990: 864). On the other hand, Lyng (1990: 879/80) offers a structural explanation for the variety in edgework's popularity instead of a cultural one. He argues that the dialectic relationship between the opposing ends of the polarity between spontaneous and constrained actions is disturbed

because the governing logic of capitalist production creates reifying and alienating conditions for most workers. However, he maintains, ‘a Marxian critique of capitalist society does not imply that work and social life are *uniformly* dehumanizing and degrading. Other structural factors (e.g., perhaps those that are involve in certain types of professional work) may stimulate possibilities for real human growth and community in the workplace and other domains’ (Lyng 1990: 879/80, italics originally). Hence, individuals who live under humanizing and upgrading conditions would not need edgework as an alternative route to self-determination, self-realization, and meaningfulness; only those living under reifying and alienating conditions would. So, instead of cultural value orientations, structural conditions allegedly explain edgework’s seductiveness.

Moreover, this implies the Meadian theory on ‘I/me’ and the Marxian theory on ‘work’ are inextricably linked, according to Lyng. This also explains why the second social force Lyng connects to the popularity of edgework in present society is alienation. ‘Marx’s critique of capitalist society is devoted to analytically unraveling the structural relations that maintain the dominance of the profit motive and other capitalist managerial interests over the interest of workers in achieving full creative freedom as human beings’ (Lyng 2008: 123). This prevalence of the profit motive results in work that is ‘trivialized’ and ‘degraded’ and has increasingly come to be understood as ‘a purely instrumental activity’ without room for self-expression rather than as ‘an end in itself’ (Lyng 1990: 876). Due to this impossibility to either use one’s full range of skills or control the productive process, work is experienced as alienating in the current capitalist economy. According to Lyng, these numbing work conditions transform leisure into a realm that enables an escape from the cold rationalized orders of contemporary work: a realm full of opportunities for ‘self-determination’, ‘self-expression’, and ‘play’, ‘particularly those forms of play that involve both risk and skill’ (Lyng 1990: 870-1). Hence, ‘one of the most alluring destinations for those seeking a sense of self-determination is the mystical space at the edge, where one’s individual skills, powers of concentration, capacities for control, and will to survive are the most critical determinants of one’s continued existence. As such, edgework offers an escape of the alienating working conditions of most workers active in a capitalist economy’ (Lyng 2008: 124).

Moreover, Lyng (1990: 876) states, ‘a crude and simplistic application of the Marxian notion of alienation may lead to the assumption that blue-collar workers are overrepresented amongst edgeworkers because these workers experience the highest levels of alienation in capitalist societies. However, Lyng maintains, ‘alienation is no longer archetypically represented by factory work.’ Hence, “deskilling” and the “degrading working conditions” that result from it are not exclusive to blue-collar work characterized by mass production, but do in today’s rationalized and bureaucratized settings also affect the work of higher middle class professionals

and managers.’ Because of this, Lyng argues, partaking in edgework is neither exclusively bound to the working class, nor to the professional middle class. More than that, ‘highly paid professional and managerial workers are just as likely as factory workers to value edgework as a response to conditions in their work lives that deny them an opportunity for creative, skillful, self-determining action’ (Lyng 1990: 876/7).

The third social force that Lyng connects to the appeal of edgework is Weber’s rationalization thesis of the modern Occident. This rationalization trend refers to ‘an expanding number of institutions configured to achieve formal rational standards of calculability, predictability, efficiency, and control. [...] This rationalization process shapes people’s daily affairs, irrespective of their class locations and their community interactions’ (Lyng 2008: 125). ‘The experiential consequences of the rationalization process are captured by Weber’s notion of “disenchantment”. [...] In modern society, [...] traditional sources of enchantment are steadily displaced by the expanding rational imperative. Uncertainty and surprise give way to predictability and boredom. Spiritual abandonment is replaced by rational control. Sensual involvement in the natural environment is shunned in favor of insulated protection from nature’s disturbances. Thus, what is lost in the rationalization process are those enchanting qualities of human experience that generate meaning and inspiration in people’s lives’ (Lyng 2008: 125/6). Lyng maintains, moreover, that white collar workers not only face alienating working conditions like blue collar workers do, they also have to deal with disenchantment. Professionals and managers ‘still confront the disenchanting consequences of a work world dominated by the principles of formal rationality. Consequently, they look for other opportunities to infuse magic and mystery into their lives. [...] As an experience that is deeply embodied, largely ineffable, and resistant to techniques of rational control, edgework is an especially powerful way to re-enchant the most disenchanted specialists of modern society’ (Lyng 2008: 127).

To summarize, ‘the Meadian, Marxian, and Weberian analysis of edgework all assert that the core structural dynamics of the modern social order (the decline of community, alienation, rationalization) undermine self-development. A primary attraction of doing edgework in these interpretations is the experience of a fully determined self, which cannot be found in normal institutional routines’ (Lyng 2008: 131/2). ‘These modernist perspectives emphasize the compensatory character of edgework, seeing it as filling a void created by the dehumanizing forces of modernity’ (Lyng 2008: 128). Allegedly the structural forces these modernist perspectives focus on affect blue and white collar workers alike and must be distinguished from Ralph Turner’s cultural perspective signaling a shift away from valuing institutions and towards individualism and spontaneity. This means the following hypotheses can be derived from Lyng’s theory: feelings of alienation (*hypothesis 2*) and disenchantment (*hypothesis 3*) lead to participation in edgework while individualism (*hypothesis 4*) and anti-institutionalism

(*hypothesis 5*) do not. Moreover, neither the labor class nor the middle class is overrepresented amongst edgeworkers (*hypothesis 6*) because they equally confront feelings of alienation (*hypothesis 7*) and disenchantment (*hypothesis 8*). We now turn to the second perspective which considers how edgework may actually *align* with emerging structural forces.

Fletcher: Edgework as Display of Symbolic Capital

Fletcher (2008: 314, 321-3) agrees with Lyng that edgeworkers themselves describe their participation as a form of resistance to the alienating working conditions of highly industrialized societies. However, he denies that these feelings of alienation are either actually rooted in the socio-economic structure, or play a causal role in motivating those concerned to engage in edgework. Instead, Fletcher understands it as a class-bound phenomenon rooted in the professional middle class. He understands it as a display of the type of symbolic capital on which one's privileged position in the professional middle class is based. Indeed, most risk athletes claim membership of this professional middle class, the three most prominent features of which are 1) engagement in highly skilled non-manual labor (requiring at least an undergraduate college education), 2) a relatively high level of remuneration, and 3) substantial occupational self-direction (Fletcher 2008: 311). Fletcher does not understand the involvement of the members of this professional middle class in these sports as a response to embeddedness in bureaucratized post-industrial work, but precisely as emanating from, reaffirming, and securing such an embeddedness. Following the Bourdieusian notions of habitus and symbolic capital, he maintains that the social structure itself stimulates, or even compels, members of the professional middle class to participate in adventure sports (Fletcher 2008: 311).

Through their involvement in risk sports, those concerned seek to display, secure and accumulate 'symbolic capital' through appearance and behavior, because such sports resonate well with the habitus of their class. Central to this habitus are qualities and values like self-reliance, self-discipline, self-improvement, and deferral of gratification, all needed to accomplish long-term success in these occupations (Fletcher 2008: 318/9). Success in risk sports enables one to demonstrate that one possesses these qualities, i.e., to display possession of the relevant symbolic capital (Fletcher 2008: 319). Adventure athlete's status is hence largely predicated upon their ability to suffer and to take more risks than their compeers. They must be able to endure discomforts like exposure to the elements, uncomfortable sleeping conditions, and meager meals and they must be able to continuously stretch their own limits in a quest for relentless growth and progress. 'It seems apparent', Fletcher concludes, 'that risk sports are so valued by members of this class (...) because they provide an arena for the accumulation and display of cultural capital appropriate to class membership' (Fletcher 2008: 321).

Atkinson (2008) and Simpson (2005) offer similar interpretations for participating in triathlon respectively mountaineering. Atkinson (2008: 166) maintains that triathletes' desire to be a member of a special community of like-minded actors who uphold an interest in 'suffering' sports is a deep reflection of their life experiences *outside* of triathlon. On the one hand, triathletes have a tendency to construct the activities predominant in leisure spheres as divorced from their broader social roles and responsibilities, and frame it as an anti-dote for the anxiety, loneliness, boredom and frustration their predominantly white-collar jobs entail. On the other hand, purely free and spontaneous constructed leisure time is a myth since people habitually replicate the forms and content of their social identities within leisure spheres. The athletes promulgate the stereotypical Protestant ethics Weber described. 'Participants share preferences for personal goal-setting, attribute a degree of moral worth to health and vibrancy, preach self-responsibility and reliance and approach embodied performance with measured rationality. [...] The abilities to persevere through scripted forms of athletic suffering are therefore recognized social bonding capital among them' (Atkinson 2008: 173/4). Simon (2005) understands 'the "golden age" of mountaineering in the Alps from the 1840s through the 1870s' as a way for professionals to establish their reputation as the designers of 'laissez faire' societies wherein individual citizens were responsible for the management of financial risks from which they themselves were largely exempted. Simon (2005: 206) maintains that the same skills of negotiating the boundary between chaos and order that were promoted in Victorian England are esteemed in late modern societies yet again. After all, supposedly, we live in an era again wherein 'knowledge of how to respond rationally to risks without the shelter of comprehensive risk-spreading systems, [has] enormous applicability again.' Thus Simon argues 'Edgework is increasingly what institutions expect of many people.'

In sum, several studies have shown that members of the professional middle class construct their participation in edgework as relief and escape from the alienation and isolation they experience in their daily professional lives, while in fact these activities of heroic training measures increase their coping skills with the anxieties, ambivalence, restlessness, and risk taking that capitalism nowadays inevitably entails for these middle class professionals. This leads to our ninth and final hypothesis: the professional middle class is overrepresented amongst edgeworkers because participating helps them to enact and strengthen qualities such as perseverance and deferral of gratification which are needed to sustain their privileged positions on the labor market (*Hypothesis 9*).

Data and measurements

Data

Data have been collected by way of two surveys among Dutch citizens. We had two reasons for doing two surveys instead of one: first, in our first survey we focused on testing Lyng's theory only. Hence, in the first study we did not measure the habitus and the symbolic capital which characterizes the professional middle class. We used the second survey to operationalize these class traits in terms of valuing deferral of gratification and perseverance. Second, we wanted to test whether or not the second survey would replicate the findings of the first one.

The first survey concerns a nationally representative sample of respondents aged 16 years and older, maintained by CentERdata (University of Tilburg, The Netherlands) (Achterberg et al., 2012). Panel members fill out questionnaires of social scientists on a regular basis by means of an Internet connection made available by CentERdata. The data collection has taken place in the summer of 2012. In all, 1,707 individuals were invited to participate in the study, 1,302 of whom filled in the questionnaire, which means that the response rate is 76.3 percent. The second survey concerns an online survey (www.thesistools.com) filled out in 2014. This survey was done by the last author for his master thesis under the supervision of the first author. Panel members of thesistools fill out digital questionnaires of students on a regular basis. Respondents are selected at random from the panel. Thesistools cannot account for how many respondents have received the questionnaire because it sends emails per bulk. This also implies the response percentage of the second survey is unknown. In total 298 respondents have filled in the questionnaire. In comparison to the figures of the Central Bureau of Statistics women, the category between 20 and 40 years of age, and the higher educated are overrepresented in the sample. This means the sample of the second survey is not representative of the Dutch population. However, as we will see, the findings of both samples are similar to a large degree. Therefore, there are no indications that the lack of representativeness has led to serious biases in the findings of the second survey.

Measurements

Edgework concerns activities challenging participants to voluntarily seek the edge between order and chaos, while the control of this edge depends to a considerable extent on the participants' skills themselves. In both surveys participation in edgework is measured with the help of seven items dealing with leisure activities satisfying these characteristics according to previous ethnographic research, like sky diving, scuba diving, and mountain climbing. We have asked respondents how often they have actually practiced concrete leisure activities (with the following answering categories: 1. 'Never and I wouldn't want to do so'; 2. 'Never but I would like to do so'; 3. 'Once'; 4. 'Two to five times'; 5. 'More than five times'). Frequencies of these types of activities are reported in table 1. Principal Component Analysis testing the correlations of the participation in different forms of edgework shows all items measuring participation in the

different leisure activities have something in common; they all load positively on the first factor. Moreover, the eight items measuring edgework constitute a reliable scale (Cronbach's alpha = 0.74 in both surveys). We have constructed a scale for the participation in edgework by adding up the mean of all respondents who answered the question to at least six items, whereby a high score signifies frequent participation in edgework.

– **Insert table 1 here** –

Thrill-seeking activities and gambling are activities that also seek the edge between order and chaos, but this type of activity differs from edgework in the extent to which participant can exert control on the situation and the extent to which it requires skills. In order to test hypotheses 1a and 1b we need to study the empirical relationship between participation in edgework activities on the one hand and gambling and thrill seeking activities on the other. This variable we have only measured in survey 1. As regards the latter two kinds of activities, we have asked, for example, how often respondents have played roulette in a casino or have gambled on a slot machine, have bungee-jumped, or have watched horror movies. Table 2 presents frequencies of these items.

Individualism has been measured by linearly combining five items in the first survey only. The respondents, first, have been asked to respond to the questions whether two qualities - self-reliance and independence - would describes their personality best. Each of the two questions were answerable on a five-point scale: 1: (almost) never, to 5: (almost) always. Secondly, the respondents have been asked to respond to three Likert-type items covering their views on economic individualism: 'The state should make social benefits higher', 'Large income differences are unfair because in essence everyone is equal', and 'The state should intervene to reduce income differences'. As higher scores on these three variables stood for more agreement with the issues (1- 'totally disagree'; 5 - 'totally agree') the responses have been recoded. A reliable scale (Cronbach's alpha = 0.65) could be constructed out of these five items by calculating the mean value on these items for each respondent. Higher scores on this scale stand for more individualism.

The scale for *Disenchantment* consists of four items which have been linearly combined. This variable has only been measured in survey 1. The scale combines two items tapping an anti-religious stance with two items tapping trust in science and scientists. The first item taps church attendance, which has been measured on a conventional 1 to 7 scale. Those respondents indicating never to attend church, or those who occasionally attend churches for funerals and weddings have been coded as 1, all other respondents, who hence attend churches more often, have been coded as 0. The second item taps into one's atheist beliefs. Respondents choosing the

option 'I do not think that there is some sort of force, God, or life force' when asked the question which statement comes closest to their personal conviction have been coded as 1 (atheists). Other respondents choosing either 'There is a personal God', 'There is a sort of force or life spirit', or 'I do not know what to think', have been coded as non-atheists (0). Next, respondents have been asked to indicate, on a five-point scale, their trust in science and in scientists. Respondents choosing 'no confidence at all' were coded as 1, and those who chose 'a lot of confidence' were coded as 5. A factor analysis on these four indicators for disenchantment yielded a first factor with an Eigenvalue of 1.91, explaining 48% of variance in the four items used. As the items have dissimilar ranges, before creating a scale, all items were standardized. A scale (Cronbach's $\alpha = 0.59$) was created by calculating the mean score over a least three out of the four items used. Higher scores on this scale indicate higher levels of disenchantment.

In his conceptualization of *alienation* Lyng focuses on the transfer of control over work from individual employees to technical and bureaucratic management systems. As such, perceived alienation is measured in both surveys with the help of eight Likert-items (with answering categories varying from: 1. 'Disagree strongly'; 2. 'Disagree', 3. 'Neither agree, nor disagree'; 4. 'Agree'; 5. 'Agree strongly'). These items have been used:

1. 'In the Netherlands life is too much predetermined from birth until death';
2. 'Nowadays employees have to account for their work achievements too much and too often';
3. 'In our society spontaneity and impulsiveness are quelled by an abundance of laws, rules, procedures, and permits';
4. 'Employees have not enough influence on the rules and procedures designed to prevent mishaps from happening';
5. 'Normal people like me have but little influence on the events surrounding us';
6. 'Eventually, one cannot do what one really wishes';
7. 'Regularly, I feel forced to do things I really do not want to do';
8. 'When the government treats us badly, we are unable to do something about it'.

As reliability analysis showed high internal consistency (Cronbach's $\alpha = 0.83$ study 1, 0.86 study 2), a scale has been constructed by calculating the mean of all eight items, whereby a high score signifies a high degree of perceived alienation.

Institutionalism is conceived of as the desire to enact roles embedded in traditional institutions like family, church, and work organizations. The opposite of institutionalism is the idea that institutions are unwelcome constraints on self-realization. In both surveys we have measured institutionalism by adding up three subscales consisting of 'religious orthodoxy', 'authoritarianism', and 'moral traditionalism'. Each of these subscales measures the support of traditional institutions: religion and official authorities. *Religious orthodoxy* measures support for the idea that religious rules ought to determine how people behave in the public sphere. It is

measured by calculating the mean of all seven Likert-items. Together these items form a reliable scale (Cronbach's alpha = 0.84 study 1, 0.76 study 2).¹ *Authoritarianism* pertains to the idea that rules and official authorities are needed in order to prevent individuals to give in to destructive desires and impulses. It is measured with seven items, selected from a short version of the classical F-scale (Adorno *et al.* 1950), that together constitute a reliable scale (Cronbach's alpha = 0.75 study 1, 0.70 study 2).² *Moral traditionalism* captures support of rules of conduct derived from Christian faith. It is measured with eight Likert-items concerning gender-relations, homosexuality, the family, and reproduction. The mean of these eight items, constitutes a reliable scale (Cronbach's $\alpha=0.75$ study 1, 0.63 study 2).³ Second order principal component analysis based on adding the three subscales and dividing them by three yields factor loadings for religious orthodoxy (0.77 study 1, 0.80 study 2), authoritarianism (0.44 study 1, 0.31 study 2), and moral traditionalism (0.86 study 1, 0.73 study 2). This shows the three subscales can be subsumed under the more general heading of institutionalism.

Valuing deferral of gratification and perseverance are deemed necessary qualities for the professional middle class to sustain their privileged position on the labor market and edgework is believed to be an arena which enables the training of these qualities. The valuing of these qualities is measured in study 2 with the help of ten Likert-items (with answering categories

¹. With the percentage 'agree (strongly)' and the loading on the first factor in brackets, the seven items that measure *religious orthodoxy* are: 1. 'Religious people should be allowed to require from the Dutch government to prohibit abortion' (16.4; 0.80); 2. 'Religious people should be allowed to require from the Dutch government to prohibit euthanasia' (16.4; 0.82); 3. 'Religious political parties should be allowed to refuse homosexuals in their government' (16.5; 0.80); 4. 'A religious leader should be allowed to refuse to shake hands with women' (9.2; 0.69); 5. 'Religious men should be allowed to require their wives to cover-up their whole bodies when they are located in the public sphere' (17.9; 0.59); 6. 'Religious elementary schools should be allowed to require from secular pupils to participate in praying during class' (25.9; 0.59); 7. 'A religious leader ought to be allowed to state that homosexuality is a disease that must be cured' (6.2; 0.70).

². With the percentage 'agree (strongly)' and the loading on the first factor in brackets, the seven items that measure *authoritarianism* are: 1. 'There are two kinds of people: strong and weak' (13.7; 0.65); 2. 'Most people are disappointing once one gets to know them better' (13.1; 0.64); 3. 'Young people get rebellious ideas sometimes, but ones they grow older, they ought to abandon them and to adjust to reality' (42.0; 0.62); 4. 'Our social problems would largely be solved when we could expel criminals, anti-socials, and morons from society in one way or the other' (29.6; 0.75); 5. 'What we need are less laws and institutions and more brave, never-ceasing, and devoted leaders in which the people can have confidence' (41.7; 0.58); 6. 'One can hardly except ill-mannered people to know how to deal with decent people' (35.8; 0.65); 7. 'Conformity and respect for authorities are the most important values parents can teach their children' (36.9; 0.58).

³. With the percentage 'agree (strongly)' and the loading on the first factor in brackets, the seven items that measure *moral traditionalism* are: 1. 'Homosexuals should be firmly dealt with' (4.8; 0.79); 2. 'Homosexuals should be left as free as possible to live their own life' (88.4; 0.72; reversed item); 3. 'In a firm, it is unnatural when women hold a position of authority over men' (1.6; 0.75); 4. 'It is not as important for a girl to get a good schooling as it is for a boy' (4.2; 0.59); 5. 'A woman is more capable of bringing up small children than a man is' (20.4; 0.57); 6. 'After all, boys can be educated more freely than girls' (5.1; 0.47); 7. 'If a woman so wishes, it should be possible for her to have an abortion' (56.1; 0.53; reversed item); 8. 'It ought to be possible for a physician to put someone out of his/her misery at his/her own request by giving him/her an injection' (68.8; 0.59; reversed item).

varying from: 1. 'Disagree strongly'; 2. 'Disagree', 3. 'Neither agree, nor disagree'; 4. 'Agree'; 5. 'Agree strongly'). These items have been used:

1. 'I am diligent and disciplined';
2. 'I can take care of myself';
3. 'I need to invest in my development before I will be rewarded';
4. 'I am continuously in search of progress and developing myself';
5. 'I recognize in myself the same eagerness to grow as I see in my friends, acquaintances, and colleagues';
6. 'I am prepared to sacrifice a lot in order to belong to the group of people who are eager to develop themselves';
7. 'I am prepared to take risks';
8. 'I take risks because it gives me a feeling of having control over my own life';
9. 'I take risks because it strengthens my feeling of self-determination';
10. 'I am prepared to persevere in case of setbacks and deprivations'.

As reliability analysis showed high internal consistency (Cronbach's alpha = 0.77 study 2), a scale has been constructed by calculating the mean of all eight items, whereby a high score signifies a high degree of perceived alienation.

Professional middle class. According to Fletcher (2008: 311), this class is composed of individuals who perform mental labor in relatively well-paid, white-collar professions requiring at least an undergraduate education and which tends to provide a substantial degree of self-direction. In both surveys, the highest completed *level of education* has been coded into two categories, with percentages between brackets: 1. 'Less than undergraduate education (i.e. primary education, lower secondary education, higher secondary education, and intermediary tertiary education (57.9)); 2. 'At least undergraduate education (i.e. college or university (42.1)). *Income*, which is measured as gross monthly family income, with percentages between brackets: 1. '2600 euro or less' (53.2); 2. 'More than 2600 euro' (46.8). Assuming subordinates have less autonomy than managers, *self-direction* is measured with the following two categories: 1. 'Subordinate' (68.9), 2. 'Manager' (31.1). Those belonging to the professional middle class have at least finished an undergraduate education, have an income of more than 2600 euro and have a management position. 14.2 (study 1) and 24.4 (study 2) percent fall into the category of the professional middle class, 85.8 percent (study 1) and 75.6 (study 2) does not.

Control variables. Lyng (1991: 872-873) and Fletcher (2008: 315) both observe that those engaged in the activities that they study are predominantly young men, according to them because the sense of adventure, experimentation, and exposing oneself to danger and chaos appeal more to adolescent and masculine identities than to other types of identity. Hence, age and gender have been included in the analysis as control variables. *Age* is measured in years.

This variable ranges from 16 through 90 years of age in study 1 and from 16 through 70 years of age in study 2. Of the respondents 48.6 (study 1) and 47.8 (study 2) percent is *male* and 51.4 (study 1) and 52.2 (study 2) *female*.

Results

Confirmatory factor analysis is performed on data of study 1 to test the hypotheses that participation in different forms of edgework converges with participation in gambling and thrill seeking on one dimension and diverges from the latter activities on a second dimension. Table 2 presents the results of a one and two-dimensional model of participation in twelve voluntary risk activities. The one-dimensional model shows all items measuring participation in the different voluntary risk activities load positively on one dimension, although the factor loadings of two activities are below 0.40. This supports hypothesis 1a pertaining to the communalities of the participation in these activities. The fact that respondents who report they participate in specific edgework activities are also inclined to gamble and to participate in thrill seeking activities and vice versa is congruent with the idea of action, which assumes edgework, gambling, and thrill seeking activities all fulfill the desire of transcendent experiences. The two-dimensional model is supportive of hypothesis 1b concerning the expected differences between edgeworkers on the one hand, and gamblers and thrill-seekers on the other hand. After all, all seven edgework items load positively on the first dimension, while the five thrill seeking and gambling items load positively on the second dimension. This suggests edgeworkers are less likely to participate in voluntary risk activities they cannot control the outcome of themselves than gamblers and thrill seekers. Although both models fit, the two-dimensional model fits the data better than the one-dimensional one.

– Insert table 2 here –

Table 3 presents the results of our linear regression analysis based on the first survey. This survey was done to test the hypotheses derived from Lyng's theory. It shows that neither alienation nor disenchantment impact on participation in edgework (Beta = -0.01; $p = n.s.$ and $\beta = 0.02$, $p = n.s.$). This means we have found no support for hypotheses 2 and 3 in our study. Moreover, we find that membership of the professional middle class *is* related to feelings of alienation, disenchantment and edgework, while Lyng predicted this would not be the case. Members of the professional middle feel less alienated than members of the labor class do (Beta = -0.16, $p < 0.01$), are more disenchanting (Beta = 0.08, $p < 0.01$), and are more likely to

participate in edgework (Beta = 0.10, $p < 0.01$). This means we do not find support for hypotheses 6, 7, and 8. Thus in our first study we find support for none to the hypotheses derived from Lyng's theory.

Besides, Lyng has distinguished his structural explanation for participation in edgework from Ralph Turner's cultural explanation for the turn towards the anchoring of identity on the spontaneity end of a continuum and away from the institutional end. This implies Lyng does not expect either individualism or anti-institutionalism to impact on the participation in edgework. Indeed, we find that institutionalism does not have an effect on the participation in edgework (Beta = -0.04), but we do find a positive effect of individualism on participation in edgework (Beta = 0.08, $p < 0.01$). In other words, people who value traditional institutions are not less likely to participate in the spontaneous, anarchic, impulsive character of edgework than those who consider institutions as unwelcome constraints on self-realization, but people who emphasize self-reliance and individual responsibility for prosperity are more likely to participate in edgework than those who value a prominent role of the state and collective responsibility for the distribution of wealth. This means we do find support for hypothesis 4 but not for hypothesis 5. Therefore, we conclude, first, that the findings of our first study do not support Lyng's theory at all. Second, our findings partly support the explanation Lyng derived from Turner's identity theory and which he opposed to.

– Insert table 3 about here –

As regards the control variables, table 3 shows we do find an age effect, as assumed by both Lyng and Fletcher (Beta = -0.42; $p < 0.01$). Furthermore, as assumed by both Lyng and Fletcher, women are less likely to participate in edgework than men are (Beta = -0.26; $p < 0.01$). Newmahr (2011) has convincingly argued that Lyng has basically studied masculine forms of edgework concentrating on individualism and competition (see also Laurendeau 2008). She argues that feminine forms of edgework – like Sado Masochism – which concentrates on emotions and relations are also conceivable. Possibly men are only overrepresented in the masculine forms of edgework focused on in the literature thus far, an issue we will return to in the concluding section.

– Insert table 4 about here –

The first aim of study 2 was to find out whether or not it would replicate the results of the first study. Table 4 shows the results are similar for all variables that have been included in both surveys. As in study 1, we find that neither feelings of alienation, nor institutionalism is related

to participation in edgework (Beta = -0.00, $p = \text{n.s.}$, beta = -0.12, $p = \text{n.s.}$) and we also find that members of the professional middle class (Beta = 0.23, $p < 0.01$), men (Beta gender = -0.24, $p < 0.01$), and youth (Beta age = -0.33, $p < 0.01$) are overrepresented in the participation of edgework.⁴

The second aim of the second study was to test the theory that conceives of participation in edgework as an adaptation of the professional middle class to the demands posed by the risk society. We find support for this explanation. Valuing deferral of gratification and perseverance lead to participation in edgework (Beta = 0.22, $p < 0.01$), while the members of the professional middle class value these skills more than members of the labor class do (Beta = 0.26, $p < 0.01$). When controlling for the valuation of deferral of gratification and perseverance, the positive effect of membership of the professional middle class on participation in edgework diminishes from 0.23 ($p < 0.01$) to 0.17 ($p < 0.01$). In other words, the professional middle class is partly overrepresented amongst edgeworkers because they value deferral of gratification and perseverance more than do members of the labor class. This means we find support for hypothesis 9. However, part of the overrepresentation of the professional middle class amongst edgeworkers cannot be explained by their specific habitus and symbolic capital. After all, there remains an independent effect of membership of the professional middle class that cannot be attributed to their valuing of deferral of gratification and perseverance (Beta = 0.17, $p < 0.01$).

Conclusion and discussion

According to Fletcher, members of the professional middle class voluntarily seek out risks in leisure activities because the skills required to control these risks are also needed to safeguard their privileged class position, although participants themselves define edgework in terms of resistance to alienating work conditions. Our findings support his assumption, although we were not able to distinguish a clearly identifiable professional middle class position. We have established that edgework cannot be explained by perceived alienation, while highly educated people and managers are overrepresented in it. This suggests that while edgeworkers resist the risk society in name, they in fact reproduce its underlying stratified class structure by investing in the symbolic capital needed to sustain and shield their own socio-economic position.

However, our study is limited in one particular respect. We interpret our findings in ways we have not actually measured. This concerns, first, our finding that respondents tend to combine different risky leisure activities. We interpret this finding in terms of edgework. However, we have not actually measured whether respondents really participate in these activities because they want to approach the border between order and chaos, because they value self-control, and

4. Disenchantment and individualism were not measured in survey 2.

because they want to train their mental toughness. Second, we have found two factors underlying the participation in edgework, gambling and thrill-seeking activities. However, we have not tested whether the participation in these activities is distinct from participation in other kinds of leisure activities, such as relaxation. This implies we have established convergent validity but we have not yet tested whether divergent validity can also be established (Adcock & Collier 2001). Furthermore, we have interpreted the first factor in terms of the desire of transcendent experiences, and the second factor in terms of the preparedness to release personal control over one's own destiny. However, we do not know whether these interpretations are correct since we have not asked why respondents participate in edgework, gambling and thrill-seeking activities. Third, even though we have established that managers and highly educated people are most likely to participate in edgework activities, we have not explicitly studied the assumed mechanism underlying it. In order to do so, we should have asked respondents whether or not they believe participation in edgework enables them to accumulate the symbolic capital needed to sustain their class position. This means follow-up research is needed in order to test whether the interpretations of our findings are valid.

There is another reason why follow-up research is needed. We have found that perceived alienation does not lead to edgework, even though both Lyng and Fletcher have demonstrated edgeworkers define their participation as such. This raises the question why we have not found an effect of perceived alienation on edgework. Possibly the middle class is more sensitive to alienating working conditions than the labor class, while their actual working conditions are in fact less alienating. Therefore, it is important to actually test in a follow-up study whether alienation does have an effect on edgework when controlling for working conditions, or even for the conditions of those who do not participate on the labor market (Miller 1991). This would imply Lyng is right after all assuming alienation is a cause for edgework, but it would also imply he is still wrong in assuming the labor class is as likely to participate in edgework as the professional middle class is.

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Table 1. Factor analysis of participation in edgework (unrotated factor solution, N study 1 = , 25 missings study 1 = ; N study 2 = 285, 14 missings study 2).

Participating in:	≥ one time freq. % (1)	Factor 1 (1)	≥ one time freq. % (2)	Factor 1 (2)
• Sky diving	3.4	0.60	10.7	0.52
• Scuba diving with oxygen	12.5	0.69	35.5	0.63
• Mountain climbing	19.3	0.58	38.6	0.63
• Wild water kayaking, rafting, or canyoning	21.3	0.77	51.0	0.74
• Kite surfing or surfing with hard wind	6.7	0.65	17.4	0.68
• Car or motor racing, or carting	36.6	0.61	63.8	0.59
• Off-slope skiing or skiing black slopes	14.2	0.57	29.9	0.62
Eigen value		2.9		2.8
Explained variance (%)		40.9		40.0
Cronbach's alpha		0.73		0.74

Table 2. Confirmatory Factor Analysis showing one and two dimensionality in edgework, gambling, and thrill-seeking activities (N=1269).

	≥ one time freq. %	One-dimensional model	Two-dimensional model	
		Dimension 1	Dimension 1	Dimension 2
Sky diving	3.3	0.52	0.51	0
Scuba diving with oxygen	12.7	0.59	0.61	0
Mountain climbing	19.1	0.45	0.48	0
Wild water kayaking, rafting, or canyoning	21.3	0.68	0.72	0
Kite surfing or surfing with hard wind	6.6	0.53	0.55	0
Car or motor racing, or carting	36.6	0.59	0.57	0
Off-slope skiing or skiing black slopes	13.9	0.44	0.46	0
Amusement-park ride in a roller coaster or other fast amusement park or fair attraction	74.1	0.54	0	0.66
Playing roulette in a casino or gambling on a slot machine	51.8	0.38	0	0.49
Bungee-jumping	2.2	0.47	0	0.44
Spotting traffic accidents, fights, fires, or floods	38.0	0.31	0	0.38
Watching horror movies	48.2	0.44	0	0.55
CHI _{sq}		474.40		350.16
AIC		546.37		424.16
RMSEA		0.08		0.07
IFI		0.85		0.87
DF		54		53

Correlation between edgework and thrill-seeking activities in two-dimensional model: 0.73

Table 3. Participation in edgework explained by alienation, institutionalism, individualism, disenchantment, membership of the professional middle class, gender, and age (Betas, N study 1= 1,049; 253 missings).

	Alienation	Disenchantment	Edgework
Alienation	-	-	-0.01
Disenchantment	-	-	0.02
Institutionalism	-	-	-0.04
Individualism	-	-	0.08**
PMC	-0.16**	0.08**	0.10**
Gender	0.06*	-0.10**	-0.26**
Age	0.14**	-0.10**	-0.42**
R ² (%)	4.3	2.6	26.4
* p < 0.05	** p < 0.01		

Table 4. Participation in edgework explained by alienation, institutionalism, membership of the professional middle class, deferral of gratification, gender, and age (Betas, N study 2= 230, 69 missings study 2).

	Alienation	Valuing deferral of gratification and perseverance	Edgework model 1	Edgework model 2
Alienation	-	-	0.01	-0.00
Institutionalism	-	-	-0.10	-0.12
Gender	-0.10	-0.18**	-0.27**	-0.24**
Age	0.05	-0.22**	-0.37**	-0.33**
PMC	-0.19**	0.26**	0.23**	0.17**
Deferral of gratification	-	-	-	0.22**
R ² (%)	4.1		23.3	27.6

* p < 0.05

** p < 0.01