

A Quantitative Approach to Assessing Legal Outcomes in Reported Sport and Recreation Negligence Cases Involving Assumption of Risk

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The purpose of this research was to study legal cases which utilised the assumption of risk defence in sport and recreation lawsuits employing a quantitative approach. Assumption of risk has traditionally been an important defence in sport and recreation cases. Generally, those who voluntarily accept a known and appreciated risk when injured while participating in a recreational activity will be held to have assumed the inherent risks associated with participation in the activity. This study sought to identify selected case factors and outcomes in sport and recreation cases where the assumption of risk defence was raised. Published court decisions were selected, and key factors coded and statistically analysed. Variables of interest were categorised as plaintiff characteristics, governing law and situational variables. The variables were analysed using frequencies and cross-tabulation. The results revealed that assumption of risk was a successful defence for sport and recreation providers in the majority (63.8 per cent) of cases. Defendants were especially successful where the defendant was an individual (81.3 per cent), where a statute specific to the risks assumed in a sport or recreation activity applied (77.8 per cent), where the incident occurred in an outdoor remote setting (75.0 per cent), where warnings were provided (72.5 per cent), and where there was no supervision (71.8 per cent). Further research, using regression analysis to determine the variables that best predict case outcomes and to develop a better understanding of assumption of risk for those involved with the management of sport and recreation activities, is recommended.

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Introduction

Assumption of risk is an important legal doctrine in the United States.¹ It has also become an important subject of interest in the entertainment context in other countries.² Historically, the intent of assumption of risk was to protect defendants from liability where a plaintiff voluntarily assumed the risk of injury. Thus, it has been an important defence to negligence for sport practitioners. Despite the simple and well-meaning intent of this legal doctrine, its application to case law is complex. One author has described assumption of risk as ‘a concept more difficult to understand and apply than almost any other in the law of torts’.³

Assumption of risk is a doctrine often applied to negligence cases.⁴ Negligence lawsuits involving injury from participation in sport and recreation are abundant in the United States. It is not difficult to imagine the myriad of circumstances where one could be injured participating in recreational sports.⁵ Recreational sport activities often involve an element of risk and it is this risk that brings enjoyment and excitement to recreation, as well as the potential for injury and lawsuits. Given the nature of recreational activities, negligence lawsuits will remain a cause of action that many injured plaintiffs in the United States will continue to bring.

A discussion of the history and background of assumption of risk will be provided followed by a quantitative analysis of factors relevant to assumption of risk cases from the United States. The purpose of this article is to provide the reader with both a better understanding of the doctrine of assumption of risk, and an alternative method of analysis to legal research that combines both a legal and social science perspective. Further, the results of the study are provided to inform the reader of the important and common components in assumption of risk cases involving sport and recreation cases.

History and Background of Assumption of Risk in the United States

History of Assumption of Risk

Early assumption of risk cases involved master–servant relationships where servants or employees were injured during the course of their employment.⁶ Where persons were injured while on the job, their claims were often defeated on the theory that they had assumed all risks incidental to their normal employment duties.⁷ The theory rested on the belief that there was an implied provision in an employment contract that risks that were a part of the job were assumed by the employee.⁸ Thus, some legal scholars believe that the original premise of assumption of risk in the early master–servant cases was contractual. Clearly, in the employment relationship, this theory favoured the employer, who would be relieved of liability by using the

assumption of risk defence where an employee was injured while on the job. As noted by an early court decision, ‘assumption of risk developed to insulate the employer as much as possible from bearing the human overhead which is an inevitable part of the cost to someone of the doing of industrial business’.⁹

Later, assumption of risk was extended beyond the master–servant relationship. The common law regarded ‘freedom of individual action as the keystone of the whole legal structure’.¹⁰ Freedom, it was felt, could best be achieved by allowing individuals to take responsibility for their own actions. Assumption of risk was premised, therefore, on the notion that a plaintiff who confronts a known danger necessarily must have chosen to do so.¹¹ In other words, a plaintiff could not recover in a negligence action because they had consented to undertake the risk of injury in a given situation. Assumption of risk was described by the maxim ‘*volenti non fit injuria*’, interpreted as the belief that no wrong is due to one who is willing.¹² This meant that a plaintiff was presumed to have consented to certain risks even in situations where they did not expressly agree to them.¹³ For example, the baseball fan who purchased a ticket to see a professional baseball game was presumed to have accepted the risks that were a part of the game, such as the possibility of being struck by a foul ball.¹⁴

Assumption of risk in these early days was a complete bar to recovery for an injured plaintiff. From its contractual roots, it began to acquire a separate identity as a tort defence. This new identity was one of implied consent; arising from the notion that a contract could be entered into not only expressly (orally or in writing) but also by the conduct of the individual. The latter type of contract is termed an implied contract. Thus, a person could be viewed as assuming the risk of a given situation either expressly or impliedly. This led to the formation of categories of assumption of risk that vary by jurisdiction in the United States.

Categories of Assumption of Risk

The assumption of risk defence has been classified as several different types or categories to assist the courts in applying the defence under various circumstances. In other words, the courts have identified certain categories of assumption of risk for situations relevant to a defendant’s conduct (that is, whether they had acted in a negligent manner) or where a written document was involved. Most jurisdictions recognise two general categories of assumption of risk: express and implied.¹⁵ Implied assumption of risk has been further categorised as primary and secondary implied assumption of risk.¹⁶

Express assumption of risk is the category that has been described in situations where there has been an agreement; either oral, or in most cases written, where the potential plaintiff has expressly agreed before entering into

the activity to assume the risks involved in the activity. Under this category, the plaintiff expressly contracts that the defendant owes no duty of care toward them. In other words, they contract not to sue for injuries that are caused by the negligence of the defendant.¹⁷ This negates the first element of the negligence cause of action. Where there is no duty owed, there can be no negligence. Under these circumstances, the courts continue to hold that an action for negligence is barred.¹⁸

Often, where express assumption of risk is at issue, there is a written document involved. Assumption of risk language will often be incorporated either into a waiver or into an agreement to participate. Where a waiver is used, principles of contract law will determine the outcome of the issue.¹⁹ However, an agreement to participate is not a contract but instead is used solely to inform participants of the nature of the activity, the risks in the activity and their expected behaviour. It is merely an affirmation by the participant that they knew of the inherent risks in the activity and chose to engage in the activity despite these risks.²⁰ The result is that a well-drafted agreement to participate might amount to an express assumption of (inherent) risks, thereby relieving the defendant of liability for injuries incurred by a plaintiff.

The second major category of assumption of risk involves situations where there has not been an express agreement to assume any risk. This category is termed implied assumption of risk. Two sub-categories of implied assumption of risk have been used by courts and legal scholars. These categories are implied primary assumption of risk and implied secondary assumption of risk. Implied primary assumption of risk has been utilised by courts in situations where a plaintiff is presumed to have consented to the inherent risks in an activity due to their voluntary participation in it.²¹

Sports often have inherent risks that cannot be eliminated without destroying the very essence of the activity. For example, active sports activities such as football, snow skiing, and white-water boating obviously contain an element of risk that is inherent to the experience. Additionally, even some passive activities such as watching hockey or baseball games have inherent risks such as being struck with an errant puck or foul ball. The New York Supreme Court addressed the issue of inherent risk in a rugby case where they stated: 'The risk inherent in the sport of rugby is apparent, as is the risk inherent in football, basketball, lacrosse and other sports that involve contact'.²²

By assuming the inherent risks in an activity, a plaintiff is barred from recovery in a negligence lawsuit where their injury involved an inherent risk. Many courts and scholars interpret implied primary assumption of risk, therefore, as a 'no duty' rule.²³ In other words, a defendant owes no duty to protect people from well-known, obvious, or inherent risks in an activity. Additionally, there can be no breach of duty owed to a plaintiff; the second

element in a cause of action for negligence. The rationale behind relieving the defendant of a duty to prevent injuries stemming from inherent risks in sports is that courts do not wish to deter vigorous participation in sports or alter the fundamental nature of the sport.²⁴ Additionally, there remains a duty not to increase the inherent risks in an activity or force participants to go beyond their experience or skill level in an activity.²⁵

The second sub-category of implied assumption of risk has been referred to as implied secondary assumption of risk. Under this sub-category, it is said that the plaintiff assumed the risk of the defendant's negligence. In other words, the plaintiff is judged as to whether they have voluntarily chosen to encounter a known and appreciated risk in a sport activity. As opposed to implied primary assumption of risk, there remains a duty owed the defendant. Some states look to the reasonableness of the plaintiff's conduct in determining whether the plaintiff has assumed the risk of a particular activity. If the decision by the plaintiff to participate in the activity was held to be unreasonable, then it is possible, upon submittal to a jury for consideration, that the plaintiff would be barred from recovery in the suit or limited in the amount of damages recoverable.²⁶

Assumption of Risk in the Sport and Entertainment Literature

The literature examining assumption of risk in the sport and entertainment context is abundant. One legal scholar notes that a negligence claim might be defeated where one is injured through an inherent risk in an activity that is voluntarily accepted, known and appreciated.²⁷ Where these inherent dangers are encountered, the primary assumption of risk would relieve the defendant from owing a duty of care to the plaintiff; thereby defeating a negligence claim.²⁸ Conversely, situations or conditions that are not inherent to an activity would thereby not be assumed by a plaintiff.²⁹ For example, 'Poor instruction, defective equipment, lack of safety devices, faulty layout or construction, poor officiating, and dangerous environmental conditions are all aspects of participation which occasion an undue risk of harm which the participant does not assume'.³⁰ A key component of the assumption of risk doctrine, the determination of whether a risk or danger in a particular sport or recreational activity is an inherent part of the activity, is essential to the viability of the assumption of risk doctrine and the negation of a negligence claim.³¹ Additionally, it has been suggested that some risks might not be viewed as inherent to the sport and therefore not known to the participant before performing the activity.³² These risks might include the unexpected acts of other participants, improper conduct by co-participants, a lack of skill on the part of other participants, or an activity that has been conducted improperly.³³

Another component of the assumption of risk doctrine within the sport and recreation context is the participant's knowledge or mental state. Assumption of risk involves the subjective mental state of a sport participant.³⁴ In other words, for a participant to assume certain risks:

he must knowingly and voluntarily encounter those risks which cause harm: he must also understand and appreciate the risks involved and accept the risk as well as the inherent possibility of the danger which could result from that risk. The necessary ingredient for plaintiff to assume risk is knowledge: there must be a knowing assumption of risk which means that the plaintiff has actual knowledge of the risk involved or that knowledge is imputed to him ...³⁵

A plaintiff's comprehension of the risk in relation to their mental and physical abilities is another factor in determining whether a plaintiff had assumed the risk of injury.³⁶ 'Implied assumption of risk occurs when one is explicitly aware of a risk or danger caused by the potential negligence of another and yet voluntarily proceeds to encounter it'.³⁷

The current literature pertaining to assumption of risk also reports general guidelines for practitioners. Steps can be taken to maximise the ability to use assumption of risk as a defence in the event of a negligence lawsuit. One suggestion is to 'develop a risk management plan and adhere to it so participants are not endangered by risks that exceed those inherent in an activity'.³⁸ Additionally, it is suggested that sport providers 'understand the level of experience and capability that a participant has in a particular activity and do not push the person beyond it'.³⁹

Much of the literature pertaining to assumption of risk in sports and recreation involves the analysis of a major case or several cases from a particular jurisdiction.⁴⁰ The literature that addresses the assumption of risk issue in the context of sport and recreation settings is primarily descriptive. Much of this literature provides a description of the assumption of risk doctrine as applied to sport and recreation negligence lawsuits. There are presently no known quantitative studies relevant to assumption of risk in the sport and recreation context and very few quantitative studies in the legal realm.

Method

Study Variables

In the present study, selected variables within reported legal cases were examined and analysed in light of case outcomes on the issue of assumption of risk. The variables used in the present study were broadly categorised as plaintiff characteristics, governing law and situational factors. Under the first

category, plaintiff characteristics, the independent variables were the plaintiff's age and gender, and the legal status of the plaintiff who had engaged in the sport or recreational activity in question. The second category, governing law, included jurisdiction, court level, state defensive scheme, and the type of assumption of risk recognised by the state whose law governed the decision of the case. The third category, situational factors, included supervision, the type of defendant in the lawsuit, the cause of the injury to the plaintiff, the severity of the plaintiff's injury, whether the plaintiff was a participant or a spectator, and whether warnings were at issue in the case.

Case Selection

Cases selected for the study contained a judicial analysis of assumption of risk where the facts giving rise to the suit were based on a sport or recreation scenario. A list of cases was identified through a comprehensive search resulting in published federal and state court decisions. Cases ranged from the earliest authoritative sport negligence case where assumption of risk was raised as a defence up to cases decided in the year 2002. These cases involved sport and recreational activities of numerous types. The analysis was limited only to published decisions of the higher courts, since unpublished decisions are often costly to acquire and do not have the precedent-setting value of published cases.

For a case to be included in the study, assumption of risk had to be raised as a defence in the case. Additionally, the issue of assumption of risk had to be given substantial consideration by the judges in determining the outcome of the case. Further, only cases from jurisdictions where assumption of risk substantially influenced the outcome were included. In other words, if assumption of risk only received passing reference in the determination of a case in a comparative negligence jurisdiction, it was not included in the study.

Cases that met these criteria were then analysed in light of changes in the contributory or comparative negligence schemes of the particular states where the cases were decided. Only cases that were decided subsequent to the adoption date of the jurisdiction's most current defensive scheme (for example, contributory, comparative or pure comparative negligence) were included. Also, only cases that reflected the current judicial or legislative policy of the state toward assumption of risk were included. For example, if a state had made major revisions in its analysis of the assumption of risk doctrine, only cases decided subsequent to this change were included in the study. The determination of major changes in judicial philosophy toward assumption of risk was made on a case-by-case basis and subject to the judgement of the authors.

Cases were obtained primarily from a Lexis-Nexis computer database search. The computer search was given broad treatment to generate the largest possible list of cases. The terms used in the Lexis-Nexis search were

‘(RECREATION* OR SPORT*) AND (ASSUMPTION W/2 RISK)’. This search identified cases that included either the term recreation (with any suffix) or sport (with any suffix). Further, cases were only brought up where these terms were present and the term ‘assumption’ was found within two words of ‘risk.’ This broad search language allowed the researchers to gather the greatest number of potential cases. In addition to the computer search, legal journals and other relevant sources were used to find cases involving assumption of risk in sport and recreational activities.

The comprehensive search generated approximately 1,300 state and federal appellate level cases. This list, however, was reduced by the previously discussed search criteria. Cases were withdrawn that used the term sport or recreation but did not involve a sport or recreational activity as the basis for the case. For example, some cases merely referred to the term sport or recreation from a cited article, previous case or company name mentioned in the case. The list was further reduced by a manual examination of cases that did not meet the selection criteria. For example, some cases would merely mention that the doctrine of assumption of risk had been abolished in the state and therefore there was no analysis of the issue. Other cases might have only given it passing reference in a jurisdiction where assumption of risk had been severely limited in application. Additionally, early cases that had been overruled or substantially reduced in precedential value by subsequent cases were excluded from the study. The cases that met the selection criteria were retained for analysis.

Design of the Study

The selected cases were then analysed for content and the key variables were identified. Variables were chosen based upon their importance to the study and their availability from the published decisions. The data were analysed using SPSS 10.0 Windows. The variables selected for the study fell into three categories: (a) plaintiff characteristics; (b) governing law; and (c) situational factors. A description of these variables follows.

The dependent variable was the outcome of the case. This variable was dichotomous and referred to whether the defendant prevailed in the case. In other words, the variable represented a determination of whether the plaintiff was found to have assumed the risk of his or her injury while engaged in the sport or recreational activity and whether this led to a case outcome in favour of the defendant.

The categories of the independent variables used in the study were plaintiff characteristics, governing law and situational factors. Plaintiff characteristics consisted of the plaintiff’s age, gender and legal status. The first variable, age, referred to the legal age category to which a person belonged. The sub-categories consisted of minor and adult. The second plaintiff characteristic

was gender and the third was legal status. The legal status of the plaintiff was the relationship they held with the defendant as a visitor to their premises. Visitor status consisted of three categories: invitee, licensee and trespasser. A business invitee is someone who pays a fee to use defendant's services or facilities and therefore will produce direct or indirect economic gain for the defendant.⁴¹ The variable for invitees used in this study referred to 'business invitees'. A licensee is a social or business guest who has permission or consent of the defendant property owner. A trespasser is someone who enters the land of another without the consent or permission of the landowner.

The second group of variables represented the governing law. This heading referred to variables that were relevant to the law of the jurisdiction in which the case was decided. Governing law included the following variables: jurisdiction of the court, court level, the defensive scheme employed by the state, and the category of assumption of risk recognised by the court of the particular state. Jurisdiction referred to the place where the case was decided, either federal or state court. The second variable under 'governing law' was court level. This referred to the level of review and included the following categories: state and federal appellate court cases, state supreme court cases, and federal district court cases.

The defensive scheme employed by the state referred to the type of defence to negligence that the state recognised. The defensive schemes were categorised as: (a) contributory negligence where the plaintiff is denied recovery if they were at all at fault themselves; (b) comparative negligence where the plaintiff is denied recovery if they were over 50 per cent at fault; and (c) pure comparative negligence where a plaintiff may only recover for the percentage amount the defendant is found to be at fault. The last variable under governing law was the type of assumption of risk recognised by the jurisdiction. This variable included the common categories of assumption of risk as set forth in court decisions. These categories of assumption of risk were: (a) express assumption of risk; (b) implied assumption of risk; and (c) statutory assumption of risk. Express assumption of risk applied where inherent risks in an activity were stated verbally or in written form. Implied assumption of risk applied where inherent risks to an activity were assumed and a defendant was relieved of their duty, or where the inherent risks in an activity were assumed as determined by plaintiff's knowledge, appreciation and voluntary acceptance of the risks. Statutory assumption of risk was identified where state law applied.

The last category encompassed situational variables within the cases. The situational variables in the study referred to case facts that were central to the cases and that were unique to each case. The relevant facts applicable to the cases analysed in this study fell under the following categories: (a) presence of supervision; (b) type of defendant; (c) cause of the injury; (d) severity of

injury; (e) participation; (f) type of facility; (g) warnings; and (h) sport category.

The first variable in this category was supervision and referred to the presence or absence of supervision by the defendant in the sport or recreation activity in question. The second variable was the type of defendant and included: (a) public entities; (b) individuals; (c) commercial organisations; and (d) schools. Schools were both public and private and included all grade levels from elementary school to college. The third variable was the cause of the injury. The categories which pertain to the causes of injury were: (a) facility/terrain/weather where the defendant is alleged to have been negligent in keeping the area under their supervision safe from hazards; and (b) other (which refers to an injury caused by another person or by an animal under the control of defendant).

The severity of injury variable referred to the level of injury incurred by the plaintiff due to the alleged negligence of the defendant. The categories were severe and other (moderate/slight). Injuries were coded as severe if they involved death, paralysis, permanent brain injury, and/or the loss of limb. The participation variable referred to whether the plaintiff was a spectator or an active participant in the sport or recreational activity in question. The facility variable referred to the physical environment in which the injury to the plaintiff occurred. The categories were: (a) indoor; (b) outdoor developed; and (c) outdoor remote. An outdoor remote area was one in which there had been no substantial human alterations to the environment. The warning variable indicated whether a warning was provided. Warnings were represented verbally, in written form or by signage. The final variable was the sport activity. This variable included the following categories: (a) educational sport; (b) recreational sport; and (c) athletic sport. Educational sport was defined as an activity performed in public or private school systems where students are taught certain aspects of sport for academic credit.⁴² For example, cases involving a student injured in a seventh-grade gymnastics class, a high school student injured in a physical education class, or a college student injured in a weight training class, would be classified as educational sport cases. Recreational sport was defined as an activity performed for fitness or fun and consisted of the following categories: instructional sport, informal sport, intramural sport, extramural sport, and club sport.⁴³ An athletic sport was defined as competing at the amateur level.⁴⁴

Data Analysis

Descriptive statistics were used to analyse the case variables. Frequencies were measured in number and per cent in reference to the total number of cases. Additionally, cross-tabulations were calculated with each independent variable against the dependent (outcome) variable to determine the frequency

of wins and losses for each category. For example, the category of legal status was cross-tabulated with the outcome of a case on the issue of assumption of risk to determine the percent and actual number of times that a defendant in an assumption of risk case prevailed against a licensee, invitee or trespasser.

Results

Approximately 1,300 published legal cases were initially produced through the previously described search methods. Each case was read and analysed to determine if it met the selection criteria. A total of 246 cases that involved educational, athletic or recreational sport were retained for analysis.

Frequency

The results revealed that the defendant prevailed in nearly two-thirds of the cases. Specifically, the defendant prevailed in 157 (63.8 per cent) of the cases and lost in 89 (36.2 per cent) of the cases. See Figure 1.

In the category of plaintiff characteristics, the results revealed that the majority of plaintiffs (64.2 per cent) in the cases were adults. Additionally, most (67.9 per cent) were males and the majority (67.1 per cent) had paid a fee to engage in the sport or recreational activity in which they were injured (invitees). These categories were mutually exclusive. In other words, even though the majority were adults and the majority were male, we cannot conclude that the majority were adult males. See Figure 2.

In the category of governing law, the majority of cases (89.8 per cent) were from state courts. Additionally, the majority of cases (66.7 per cent) analysed were from the middle level of judicial review or appellate courts. Additionally, the majority of cases (94.7 per cent) were from states with some type of comparative negligence scheme. Many of the cases with pure comparative negligence were from New York and California; two very litigious states which recognise assumption of risk. Last, the majority of cases (74.8 per cent) involved implied assumption of risk as opposed to express or statutory assumption of risk. See Figure 3.

FIGURE 1
DESCRIPTIVE STATISTICS FOR THE OUTCOME VARIABLE (N=246)

Variable	Category	N	%
Case Outcome	Defendant Wins	157	63.8
	Defendant Loses	89	36.2

FIGURE 2
DESCRIPTIVE STATISTICS FOR THE PLAINTIFF CHARACTERISTICS VARIABLES
(N=246)

Variable	Category	N	%
Gender	Male	167	67.9
	Female	79	32.1
Age of Plaintiff	Minor	88	35.8
	Adult	158	64.2
Legal Status of Plaintiff	Trespasser	6	2.4
	Licensee	75	30.5
	Invitee	165	67.1

FIGURE 3
DESCRIPTIVE STATISTICS FOR THE GOVERNING LAW VARIABLES (N=246)

Variable	Category	N	%
Jurisdiction	State	221	89.8
	Federal	25	10.2
Court Level	Appellate	164	66.7
	Supreme	63	25.6
	Federal District	19	7.7
State Defensive Scheme	Contributory	13	5.3
	Comparative	96	39.0
	Pure Comparative	137	55.7
Assumption of Risk Type	Express	44	17.9
	Implied	184	74.8
	Statutory	18	7.3

In the category of situational factors, the cases were fairly evenly distributed between those where supervision was present and those where it was not. As for the type of defendant in the cases, the majority (52.4 per cent) of named defendants were commercial organisations. The variable describing the cause of plaintiff's injury was also fairly evenly distributed between acts

of another person that gave rise to the lawsuit (43.9 per cent) or conditions in the surrounding environment (56.1 per cent) that caused the injury to the plaintiff. In the majority of cases (70.7 per cent), the plaintiff's injury was not severe. However, the types of cases one would expect to weigh in favour of the plaintiff and result in high damage awards (severe injuries or deaths) accounted for only 29.3 per cent of the injuries. As to the variables of participation and facility, it appears that the injured person was a participant in the overwhelming majority of cases (94.3 per cent), and the injury occurred most often (67.1 per cent) in an outdoor developed setting such as an American football field or ski slope. As for the final two situational variables, warnings were not at issue in the majority of cases (74.8 per cent) and the most common sport activity was recreational sport that accounted for 77.6 per cent of the cases. See Figure 4.

Relationship of Study Variables with the Outcome Variable

The frequency of wins and losses was measured for each variable and category within that variable using cross-tabulations. The defendants prevailed on the issue of assumption of risk in more cases than they lost (that is, the plaintiff was held to have assumed the risk) for all cases, and for each variable category. The largest disparity between wins and losses on the issue of assumption of risk was in the following categories. Where the defendant was sued as an individual and not as part of an organisation, the courts held that the plaintiff assumed the risk in 81.25 per cent of cases. Where the case involved the issue of assumption of risk in light of an applicable statute, the defendant prevailed in 77.8 per cent of the cases. Where the incident occurred in an outdoor remote setting, the courts held that the plaintiffs assumed the risk in 75 per cent of the cases. Where the case was decided in federal court, the defendant prevailed on the issue of assumption of risk in 76.0 per cent of the cases. Additionally, where warnings were at issue, the plaintiff was held to have assumed the risk in 72.5 per cent of cases. Finally, where there was no supervision, the defendant prevailed in 71.8 per cent of cases. See Figure 5.

The number of cases where the defendant prevailed on the issue of assumption of risk was approximately double for the following categories: (a) where the plaintiff was an adult; (b) where the plaintiff was a licensee; (c) where the case was decided in federal district court; and (d) where the injury to the plaintiff was not severe.

Conclusion and Recommendations

The results of this study suggest that assumption of risk appears to remain a viable defence in negligence lawsuits for sport and recreation providers in

FIGURE 4
DESCRIPTIVE STATISTICS FOR THE SITUATIONAL VARIABLES (N=246)

Variable	Category	N	%
Supervision	Yes	136	55.3
	No	110	44.7
Type of Defendant	Public	29	11.8
	Individual	48	19.5
	Commercial	129	52.4
	School	40	16.3
Cause of Injury	Other Person	108	43.9
	Environment	138	56.1
Severity of Injury	Severe	72	29.3
	Moderate/Slight	174	70.7
Participation	Participant	232	94.3
	Spectator	14	4.7
Setting	Indoor	49	19.9
	Outdoor Developed	165	67.1
	Outdoor Remote	32	13.0
Warnings	At Issue	62	25.2
	Not at Issue	184	74.8
Sport Category	Educational	8	3.3
	Recreational	191	77.6
	Athletic	47	19.1

jurisdictions that have retained this doctrine. This appears evident given the results of this study that indicate defendants prevailed on the issue of assumption of risk in nearly two-thirds of all sport- or recreation-related cases decided in the higher courts. In other words, plaintiffs were held to have assumed the risk of their injury in the majority of cases analysed.

Furthermore, defendants won more cases than they lost in every category of the independent variable. Additionally, it was held that plaintiffs assumed the risk of their injury in over 70 per cent of cases where: (a) warnings were present; (b) there was no supervision; (c) a person was sued in their individual capacity; (d) the incident occurred in an unimproved, remote

FIGURE 5
CROSS-TABULATION OF CASE OUTCOME WITH CASE VARIABLES (N=246)

Variable	Category	Case Outcome (Defendant)	
		Win	Lose
Gender	Male	107	50
	Female	50	29
Age of Plaintiff	Minor	48	40
	Adult	109	49
Legal Status of Plaintiff	Trespasser	4	2
	Licensee	51	24
	Invitee	102	63
Jurisdiction	State	138	83
	Federal	19	6
Court Level	Appellate	108	56
	Supreme	36	27
	Federal District	13	6
State Defensive Scheme	Contributory	8	5
	Comparative	63	33
	Pure Comparative	86	51
Assumption of Risk Type	Express	28	16
	Implied	115	69
	Statutory	14	4
Supervision	Yes	78	58
	No	79	31
Type of Defendant	Public	17	12
	Individual	39	9
	Commercial	81	48
	School	20	20
Cause of Injury	Other Person	70	38
	Environment	87	51
Severity of Injury	Severe/Death	41	31
	Moderate/Slight	116	58
Participation	Participant	149	83
	Spectator	8	6
Setting	Indoor	29	20
	Outdoor Developed	104	61
	Outdoor Remote	24	8
Warnings	At Issue	45	17
	Not at Issue	112	72
Sport Category	Educational	6	2
	Recreational	126	65
	Athletic	25	22

setting; (e) a state statute existed that addressed assumption of risk; and (f) the case was decided in federal court. These factors appeared to have had the greatest bearing on whether a court had determined that the plaintiff has assumed the risk of their injury. One implication of these findings is the importance of providing adequate warnings in sport and recreation settings where there is an element of risk. The results further indicate the efficacy of state statutes in providing protection from liability for sport and recreation providers.

Further study is recommended that examines the statistical significance of the relationship between these independent variables and the outcome variable. For example, a regression analysis might be conducted to determine the independent variables that act as the best predictors of the outcome in assumption of risk cases. Identified predictor variables might then be analysed further using a qualitative case study approach. Future quantitative research that examines the relationship between variables in other types of cases is also recommended. For example, it would be interesting to analyse variables within sport and recreation negligence cases not limited to assumption of risk to determine predictors of case outcomes. Specific activities such as aquatics or skiing might also be analysed using this approach.

Additionally, given sufficient resources, it is recommended that trial court records be analysed. This would enable the researcher to determine more accurately the skill and risk levels involved in assumption of risk cases, in addition to other case facts often not present in published decisions. Trial court records, though difficult and often costly to acquire, often contain more detailed information about the facts of a case than are available in published decisions. Finally, a study that would compare the results of this study with the perceptions of those in the legal community and those in the sport and recreation field to determine the level of understanding and perceptions of case outcomes concerning assumption of risk is recommended. Studies that employ the merger of legal and social science research are recommended to better our understanding of legal issues and concepts relevant to the field of entertainment law.

NOTES

1. See J. Goplerud, 'Liability of Schools and Coaches: The Current Status of Sovereign Immunity and Assumption of Risk', *Drake Law Review* 39/3 (1990), 759–74.
2. Australia's public liability laws are under review to create a new defence to negligence claims in situations involving recreational activities. This defence is termed voluntary assumption of risk and would be designed to shift responsibility to the recreation participant.
3. J. Mansfield, 'Informed Choice in the Law of Torts', *Louisiana Law Review* 22 (1961), 17–42.

4. Negligence is a type of lawsuit where personal injury (physical or emotional) is involved. It is a civil lawsuit under the umbrella of tort law for an unintentional act by the defendant where the plaintiff sues for monetary damages. It is brought by an injured plaintiff when there is a claim for damages resulting from the breach of the standard of care by the defendant where the injury is caused by an act or failure to act on the part of the defendant. This cause of action consists of four elements that a plaintiff must prove. The first is a legal duty owed by a defendant to conform to certain standards of care to protect others. The second element where one would find negligence is where there has been a failure by the defendant to conform to these standards. The third element is a causal connection between the defendant's conduct and the resulting injury or loss by the plaintiff. The final element is actual loss or injury to the plaintiff. See *Restatement (Second) of Torts* (St Paul, MN: West, 1965).
5. For example, spectators at baseball games have been hit with foul balls, climbers have fallen while top rope climbing, skiers have been injured in collisions with natural and man made objects on the slopes, white-water boaters have suffered lacerations and broken bones, and athletes have injured their lower extremities due to turf conditions.
6. *Thomas v. Quatermaine* [1887] 18 QBD 685.
7. *Farwell v. Boston & Worcester R.R.* [1842] 4 Metc. 49.
8. J. Wade, 'The Place of Assumption of Risk in the Law of Negligence', *Louisiana Law Review* 22 (1961), 5–32.
9. *Tiller v. American Coast Line R.R. Co.* [1943] 318 US 54.
10. F. Bohlen, 'Voluntary Assumption of Risk', *Harvard Law Review* 20 (1906), 14–38.
11. *Ibid.*
12. W. Prosser and J. Wade, *Cases and Materials on Torts*, 5th edn. (St Paul, MN: West, 1971)
13. *Farwell v. Boston & Worcester R.R.* [1842] 4 Metc. 49.
14. *Kavafian v. Seattle Baseball Club* [1919] 181 P. 679.
15. *American Jurisprudence*, 2nd edn. (Rochester, NY: Lawyers Co-operative Publishing Co., 1989).
16. In some states, an additional category of reasonable and unreasonable conduct has also been applied to implied secondary assumption of risk.
17. *Anderson v. Ceccardi* [Ohio 1983] 451 N.E.2d 780.
18. *Coates v. Newhall Land and Farming, Inc.* [1987] 236 Cal. Rptr.181.
19. See D. Cotten and M. Cotten, *Legal Aspects of Waivers in Sport, Recreation and Fitness Activities* (Canton, OH: PRC Publishing Inc., 2002). A waiver with assumption of risk language will generally relieve the defendant only of liability for acts of ordinary negligence. The defendant is generally not relieved of liability for conduct which was intentional, reckless, grossly negligent or wilful and wanton.
20. *Ibid.*
21. *Duffy v. Midlothian Country Club* [IL 1985] 481 N.E.2d 1037.
22. *Regan v. State of New York* [NY 1997] 654 N.Y.S.2d 488, 496.
23. See A. Drago, 'Assumption of Risk in the Arena, on the Field and in the Mosh Pit: What Protection Does it Afford?', *Entertainment and Sports Lawyer* 13/2 (1995), 3–8; *Morgan v. Scimeca* [NY 1997] 90 N.Y.S.2d 471; and S. Sugerman, 'Assumption of Risk (The Monsanto Lecture)', *Valparaiso University Law Review* 31/3 (1997), 833–78.
24. C. Dernis and L. Hanson, 'Revisiting Excessive Violence in the Professional Sports Arena: Changes in the Past Twenty Years?', *Seton Hall Journal of Sport Law* 6 (1996), 127–60.
25. L. Sharp, 'Fault Lines: A Recent Case Highlights the Nuances of the Assumption-of-Risk Doctrine', *Athletic Business* (September 1996), 10–14.
26. See Drago (note 23). The burden, therefore, shifts from the defendant to the plaintiff and has also led to confusion. For example, if the plaintiff is found to have made a reasonable judgement in accepting a known and appreciated risk, the court must decide whether to completely bar recovery, evaluate the issue under comparative negligence principles, or abolish implied secondary assumption of risk entirely.
27. B. van der Smissen, *Legal Liability and Risk Management for Public and Private Entities* (Cincinnati, OH: Anderson, 1990).
28. *Ibid.*

29. Ibid.
30. Ibid., 239.
31. Ibid.
32. J. Drowatzky, 'Assumption of Risk in Sport', *Journal of Legal Aspects of Sport* 2/1 (1992), 92–100.
33. Ibid.
34. W. Champion, *Sports Law in a Nutshell* (St Paul, MN: West, 1993).
35. Ibid., 158–9.
36. J. Peterson, and B. Hronek, *Risk Management in Recreation*, 3rd edn. (Champaign, IL: Sagamore, 2001).
37. R. Kaiser, *Liability and Law in Recreation, Parks and Sports* (Englewood Cliffs, NJ: Prentice-Hall, 1986), 71.
38. Sharp (note 25), 14.
39. Ibid.
40. See *ibid.*, for a discussion of a California rock climbing case; B. Koren, 'Who put that there? Developments in the Doctrine of Assumption of Risk in Sporting in New York', *Journal of Legal Aspects of Sport* 7/1 (1997), 38–54, for a discussion of assumption of risk cases involving sport in New York; and J. Wolohan, 'Assume Nothing: The Assumption of Risk Defense Takes a Beating in Florida', *Athletic Business* (January 1995), 10–12, for an analysis of Florida assumption of risk cases.
41. D. Cotten, T. Wolohan and J. Wilde, *Law for Recreation and Sport Managers*, 2nd edn. (Dubuque, IA: Kendall/Hunt, 2001).
42. R. Mull, K. Bayless, C. Ross and L. Jamieson, *Recreational Sport Management*, 3rd edn. (Champaign, IL: Human Kinetics, 1997).
43. Ibid.
44. Ibid.