User Manual for the Injustice Experience Questionnaire

IEQ

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Perceived Injustice: The Construct

The negative effects of injustice have been discussed for millennia. For example, Plato asserted that injustice was a disease state that reflected an imbalance of the natural order (Annes, 1982). The 12th century philosopher, Anselm de Canterbury discussed injustice as a state of mind that demanded retribution; where injustice could only be resolved when the order of retribution was equal to that of experienced loss (Marenbon, 1997). Although concepts related to injustice have a long history in philosophy only recently has the topic of perceived injustice drawn the attention of psychosocial researchers.

The potential devastating consequences of debilitating injury have been well documented. At least for a certain percentage of individuals, life following injury will be characterized by persistent physical and emotional suffering (Berglund, Bodin, Jensen, Wiklund, & Alfredsson, 2006). In addition, post-injury life might be replete with losses such as the loss of employment, the loss of financial security, loss of independence and loss of sense of identity (Lyons & Sullivan, 1998; Sullivan, Sullivan, & Adams, 2002). Some of these losses might be temporary, while others might be permanent.

Particularly in situations where injury has occurred as a result of another's error or negligence, the injury victim might experience post-injury life with a sense of injustice (Miller, 2001). Clinical anecdotes abound of individuals who feel they have been victimized either as a direct result of their injury, or indirectly by the sequellae of their injury (Aceves-Avila, Ferrari, & Ramos-Remus, 2004; Bigos & Battie, 1987). Verbalizations such as "I wish he could see what he has done to my life", or "Nothing will ever make up for what I have gone through" reflect at once elements of unfairness and the irreparability of loss.

Perceptions of injustice can ensue from acts or conditions that might cause someone to suffer hardship or loss undeservedly (Hamilton & Hagiwara, 1992; Lind & Tyler, 1988). Research has shown that perceptions of injustice are likely to arise when an individual is exposed to situations that are characterized by a violation of basic human rights, transgression of status or rank, or challenge to equity norms and just world beliefs (Fetchenhauer & Huang, 2004; Hafer & Begue, 2005; Mohiyeddini & Schmitt, 1997). The experience of unnecessary suffering as a result of another's actions, or the experience of irreparable loss are likely to give rise to the perception of injustice (Miller, 2001).

Issues related to the defining features of justice have been debated in philosophy, and mechanisms for the resolve of injustice are represented at varying levels of social policy. In modern times, 'retribution' for losses incurred due to injury has taken the form of compensation or litigation. Central to the process of litigation within 'tort' systems is the determination of fault and

quantification of loss. While discussions have often addressed how financial compensation might reinforce disability, it is also possible that seeking compensation or litigation might be a proxy for perceived injustice.

Recent research suggests that perceived injustice consequent to injury might represent one of the strongest predictors of problematic outcomes. Injured individuals who report high levels of perceived injustice also experience more intense pain, more severe depression and are less likely to return to work. Individuals with high levels of perceived injustice display more pain behaviour and rate themselves as being more severely disabled. Perceptions of injustice are also associated with the persistence of post-traumatic stress symptoms consequent to injury.

The Development of the IEQ

The item content of the IEQ was derived primarily from two sources of information: 1) the research team's clinical practice in the treatment of individuals who had sustained musculoskeletal injuries, and 2) focus group discussions with psychologists providing intervention services for individuals for individuals who had sustained musculoskeletal injuries. The approach to scale development was similar to that adopted in our previous work where the items used in the scale were as close as possible to actual verbalizations of clients, as opposed to items phrased in relation to a particular theoretical framework (Sullivan, Bishop, & Pivik, 1995).

A series of focus group meetings were held with a total of 44 psychologists in Eastern Canada who specialized in the treatment of persistent pain disorders. The focus groups were held as part of a larger project examining psychologists' experiences as providers of insured services for individuals who sustained disabling injuries in occupational or motor vehicle accidents. For the purposes of the present report, clinicians were asked to discuss the impact of perceived injustice on the recovery process. In these discussions, perceived injustice was conceptualized as an appraisal cognition or set of cognitions comprising elements of attributions of blame, magnitude of loss and irreparability of loss (Beugre, 2006; Miller, 2001). Clinicians were provided with examples of items that were generated by members of the research team. Through these discussions, clinicians were encouraged to recall phrases expressed by their clients that mapped onto the different elements of perceived injustice. Twelve Items were retained for which consensus was achieved that the items reflected some aspect of perceived injustice.

On the IEQ, perceived injustice is construed as an appraisal cognition comprising elements of the severity of loss consequent to injury ("Most people don't understand how severe my condition is"), blame ("I am suffering because of

someone else's negligence"), a sense of unfairness ("It all seems so unfair"), and irreparability of loss ("My life will never be the same").

Administering the IEQ

The IEQ can be completed and scored in less than 5 minutes, and thus is easily amenable to inclusion within standard clinical practice. Prior knowledge of a patient's level of perceived injustice, in addition to other pain-related variables, enables treatment plans to be more individually tailored.

The IEQ is a 12-item scale that asks respondents to indicate the frequency with which they experience different thoughts concerning the sense of unfairness in relation to their injury on a 5-point scale with the endpoints (0) *never* and (4) *all the time*.

Research suggests that the IEQ yields two correlated factors that have been labeled severity/irreparability of loss and blame/unfairness (Sullivan et al., 2008). The IEQ has been shown to be internally reliable and to predict prolonged disability following musculoskeletal injury (Sullivan et al., 2008).

The IEQ total score is computed by summing responses to all 12 items. PCS total scores range from 0 – 48. The IEQ subscales are computed by summing the responses to the following items:

Blame/Unfairness:	Sum of items 3, 7, 9, 10, 11, 12
Severity/Irreparability:	Sum of items 1, 2, 4, 5, 6, 8

Interpretation of IEQ Scores: Musculoskeletal Injury

Appendix A provides a table of IEQ raw scores and associated percentile scores. The percentile scores are derived from a sample of individuals who had sustained musculoskeletal injuries in work accidents or motor vehicle accidents.

General characteristics of the sample are as follows:

Sample size:	266
Sex distribution	123 men, 143 women
Age:	39.8 years (range 20 to 60 years)

Indices of central tendency and distribution are as follows:

	Mean	SD	Median	Range
IEQ Total	19.6	12.6	17	0 - 48
IEQ Blame	8.2	7.0	6	0 - 24
IEQ Severity	11.3	6.4	11	0 - 25

Once total scores have been computed, Appendix A can be consulted to obtain percentile equivalents.

Verbal descriptors for different ranges of percentile scores:

Greater 85th percentile:	very high range
75th to 85th percentile	high range
60th to 74th percentile	moderate to high range
40th to 59th percentile	average range
25th to 39th percentile	low to average range
15th to 24th percentile	low range
Less than 15th percentile	very low range

The percentile equivalents listed in Appendix A should be interpreted with caution when applied to asymptomatic samples, or individuals experiencing acute pain.

Although IEQ scores are normally distributed, suggesting that individuals vary in degree in their level of perceived injustice, it has been useful to consider 'cut-off scores' for clinically relevant levels of perceived injustice. Research at the University Centre for Research on Pain and Disability indicates that a total IEQ score of 30 represents clinically relevant level of perceived injustice. A total IEQ score of 30 corresponds to the 75th percentile of the distribution of IEQ scores in clinic samples of chronic pain patients. Appendix A provides the 75th percentile cut-off scores for the two IEQ subscales.

For the normative database described above, in the subsample of patients who scored above 30 (75th percentile) on the IEQ;

76% remained unemployed one year post injury

74% described themselves as totally disabled for occupationally-related activities

70% scored above 16 (moderate depression) on the BDI-II

Implications for Intervention

There is a dearth of literature on the effective management of perceived injustice in the treatment of individuals who have sustained musculoskeletal injuries. The results of recent research suggest that perceptions of injustice might be an important target of intervention for individuals recovering from whiplash injury.

The impact that blame cognitions have on feelings of anger and revenge motives suggests that interventions to alter the injured individual's perceptions of the offender might be useful. Forgiveness interventions have been described as potentially useful for accident or crime victims (Wade & Worthington, 2005). Essentially, forgiveness is a method of dealing with an offence or injustice that benefits victims through the reorientation of their thoughts, emotions and behaviors towards the offender (McCullough, 2000; Wade & Worthington, 2005). Reducing perceptions of blame and revenge might serve to decrease an individual's attentional focus on his or her pain and disability, which may have previously been seen as the only means to ensure accurate retribution for one's suffering (Sullivan et al., 2008). One issue surrounding forgiveness interventions, however, is that the continuation of suffering, as is likely to occur for victims of physical injury who have developed chronic pain, might serve to impede the forgiveness process (Baumeister, Exline, & Sommer, 1998)).

Anger management interventions might also be of benefit for individuals with high levels of perceived injustice (Bruehl, Chung, & Burns, 2003, 2006; Kerns, Rosenberg, & Jacob, 1994). While techniques targeting anger might help address injustice perceptions of blame and unfairness, other interventions might be needed to address cognitions of severity and irreparability. The growing literature detailing the benefits of pain acceptance on pain-related outcomes is suggestive of one such intervention (McCracken & Eccleston, 2003, 2005; Vowles, McCracken, & Eccleston, 2007). Essentially, acceptance entails continuing to pursue life goals and valued activities even when pain is experienced and the cessation of efforts to control or avoid pain (Vowles et al., 2007), and has been shown to decrease pain, disability, and depression, as well as to improve individuals' work status (McCracken & Eccleston, 2005). Based on the supposition that the severity/irreparability and unfairness facets of injustice perceptions are inherently linked (Sullivan et al., 2008), acceptance-based treatments aimed at reducing severity cognitions may also help to inadvertently reduce perceptions of unfairness.

It is important to consider that perceptions on injustice are not merely mental constructions of the injured individual but might emerge from a reality that is characterized by some degree of injustice. Aspects of the work environment, such as unsafe working conditions, that have contributed to injury should be considered as potential targets of intervention as much as the individuals' perceptions of injustice. Intervention approaches that target both environmental and subjective sources of injustice might yield the most promising outcomes.

Appendix A

IEQ Percentile Tables

IEQ Total		Blame	Severity		Percentile
0		0	0		1
					2
					3
					4
1					5
					6
			1		7
2					8
					9
					10
3					11
					12
4			2		13
			3		14
5		1			15
					16
			4		17
					18
6					19
7					20
					21
			5		22
8					23
		2			24
					25
			6		26
9					27
					28
		3			29
10					30
					31
			7		32
					33
11					34
12			8		35
		4			36
					37
13					38
					39
14					40
			9		41
					42
15					43
		5	10		44
					45
16					46
			11		47
					48
					49
-17-		**6**	**12**		**-50-**

IEQ Total		Blame	Severity		Percentile
18		7			51
					52
19					53
20		8			54
					55
21					56
			13		57
22		9			58
					59
23					60
		10			61
24		11			62
25					63
26			14		64
27					65
					66
					67
28		12			68
					69
					70
29		13			71
			15		72
					73
					74
30		**14**	**16**		**75**
					76
					77
					78
31					79
		15	17		80
32					81
		16			82
33					83
					84
34					85
		17	18		86
					87
35			19		88
					89
36		18			90
					91
		19			92
37					93
38		20	20		94
39		21	21		95
40					96
41			22		97
42		22	23		98
43-47		23	24		99
48		24	25		100

IEQ

Name: _____ Age: _____ Gender: _____ Date: _____

When injuries happen, they can have profound effects on our lives. This scale was designed to assess how your injury has affected your life.

Listed below are twelve statements describing different thoughts and feelings that you may experience when you think about your injury. Using the following scale, please indicate how frequently you experience these thoughts and feelings when you think about your injury.

0 – never **1** – rarely **2** – sometimes **3** – often **4** – all the time

1. ☐ Most people don't understand how severe my condition is.
2. ☐ My life will never be the same.
3. ☐ I am suffering because of someone else's negligence.
4. ☐ No one should have to live this way.
5. ☐ I just want to have my life back.
6. ☐ I feel that this has affected me in a permanent way.
7. ☐ It all seems so unfair.
8. ☐ I worry that my condition is not being taken seriously.
9. ☐ Nothing will ever make up for all that I have gone through.
10. ☐ I feel as if I have been robbed of something very precious.
11. ☐ I am troubled by fears that I may never achieve my dreams.
12. ☐ I can't believe this has happened to me.

_____

…Total

IEQ-CF

Nom: _____ Âge: _____ Sexe: _____ Date: _____

Lorsqu'une blessure survient, notre vie peut être affectée de façon importante. Ce questionnaire a été construit pour évaluer à quel point votre vie a été affectée.

Voici 12 affirmations décrivant des pensées et des sentiments que vous pouvez avoir lorsque vous pensez à votre blessure. Veuillez compléter le questionnaire suivant en indiquant à quel point ces énoncés vous représentent lorsque vous pensez à votre blessure.

0 – pas du tout **1** – légèrement **2** – modérément **3** – de façon importante **4** – Extrêmement

1. ☐ La plupart des gens ne comprennent pas à quel point mon état est grave.
2. ☐ Ma vie ne sera plus jamais la même.
3. ☐ Je souffre à cause de la négligence de quelqu'un d'autre.
4. ☐ Personne ne devrait avoir à vivre ce que je vis présentement.
5. ☐ Je veux simplement retrouver ma vie d'avant.
6. ☐ J'ai le sentiment que ceci va m'affecter de façon permanente.
7. ☐ Tout ça me semble si injuste.
8. ☐ Je crains que mon état ne soit pas pris assez au sérieux.
9. ☐ Rien ne pourra compenser tout ce que j'ai enduré.
10. ☐ C'est comme si on m'avait volé quelque chose de très précieux.
11. ☐ J'ai peur de ne jamais pouvoir réaliser mes rêves.
12. ☐ Je ne peux pas croire ça m'arrive à moi.

_____

…Total

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