This contribution examines the need to simplify legal decisions. More specifically, this article tackles a situation I refer to as ‘Factor Overload’. Legal rules are sometimes set in the form of ‘Laundry Lists’; that is, long sets of stipulated considerations that the judge must weigh. However, judges may encounter difficulty when trying to implement these checklist clauses. This difficulty is linked to our human cognitive limitations. Behavioural studies demonstrate that people struggle with the task of integrating a large number of factors. In order to test this phenomenon in the legal context, the article presents an investigation based on theoretical discussion, doctrinal analysis and the findings of an original experiment — a preliminary vignette study performed using the factual framework of a real case in which judges had to implement a Laundry List rule. The study uses CPR r 3.9 in England and Wales to demonstrate the unproductive complexity of checklist rules by comparing decisions that have been made when taking into account nine factors, three factors and no factors at all.

CONTENTS

I Introduction......................................................................................................................... 728
II The Importance of Simple Procedural Rules................................................................. 731
   A Procedural Rules Are Addressed to Judges .............................................................. 731
   B Procedure and Substance ...................................................................................... 733
   C Rules v Standards .................................................................................................... 734
   D Pervasive Application of Procedural Rules............................................................ 738
III Doctrinal Analysis: CPR Rule 3.9 ........................................................................... 738
IV Empirical Study............................................................................................................. 743
   A Background ............................................................................................................. 743

* LLB (Hons), LLM (Hons) (Hebrew University of Jerusalem), DPhil (Oxon); Lecturer, Melbourne Law School. I would like to thank Adrian Zuckerman, Andrew Higgins, Hazel Genn, Issi Rosen-Zvi, Raymond Duch, Eyal Zamir, Nigel Balmer, Avishalom Tor and Maya Bar-Hillel for their very helpful comments on earlier drafts of this project. I am also grateful to the participants of the Oxford Procedural Justice Discussion Group, the members of the Harvard Law School Visiting Scholars Program, and the participants of the CELS 10th Annual Conference on Empirical Legal Studies, for their comments on this project.
I Introduction

Procedural rules are sometimes set in the form of ‘Laundry Lists’; that is, long sets of stipulated considerations that a judge must weigh. This article will argue that judges may encounter difficulty when trying to implement these checklist exercises. This difficulty is directly related to a psychological aspect of the human mind. Human behaviour experiments show that too much information, too much choice or too many decision factors might do more harm than good. Product-marketing experiments demonstrate that limited options facilitate the consumer’s purchase decisions: studies showed that people were more likely to purchase jam or chocolate when offered a limited array of choices; for example, when they were presented with a display of only 6 flavours of jam rather than 24. People were also more willing to undertake optional class essay assignments with a limited range of choice and were more likely to write an essay for extra credit when they were provided with a list of only 6 potential essay topics, rather than 30.1

Clearly, there is a difference between choosing a jam or essay topic and integrating relevant considerations in legal decision-making. But, it has also been shown that even people who are established experts in their field are only good at choosing the relevant considerations to reach a decision, and are quite poor at then integrating the relevant considerations; that is, giving the most appropriate weight to each factor in the decision-making process.2


According to human behaviour theories a judge will recognise the relevant factors in the Laundry List but having done so will fail to give the optimal weight to each factor in the integration process. The more considerations, the more confusion caused. This problem exists in the instance of long checklist rules in civil procedure, where the considerations in a rule might be relevant but are simply too numerous for a non-rational decision maker to weigh and integrate. I will use the term ‘Factor Overload’ to describe such situations where procedural rules include too many considerations, which leads to cognitive overload.³

More generally, this article deals with the question of rule complexity and calls for the simplification of procedural rules. Indeed, sometimes the complexity in the rules is unavoidable since certain life situations require a more complex legal treatment. However, in other situations there are procedural rules that are unnecessarily complex. In those situations, the complexity leads to an unhelpful exercise that does not contribute to the goal of reaching the best result in a certain legal case, nor does it contribute to reducing the administrative costs of the legal system as a whole. When the complexity is counterproductive, there are ways to simplify the rule or the decision-making process in order to reach a better and a more efficient result.

Not only that, it could be argued that simple procedure should be promoted, even at the price of having less sophisticated rules, since judges may be limited in implementing complex rules due to their human cognitive architecture, as will be shown in the case of Laundry List rules.

The article will examine cases from England and Wales in which r 3.9 of the Civil Procedure Rules 1998 (UK) SI 1998/3132 (‘CPR’) was implemented. CPR r 3.9 is a good example of a potential situation of information overload since before it was amended it included a non-exhaustive list of nine different factors that the judge had to weigh in order to reach a decision. The analysis of the amendment of r 3.9 is important since the rule is an example of a more general phenomenon of legal rules that include many factors. To illustrate the general phenomenon, an experiment I performed will be presented in order to demonstrate the cognitive outcomes of Factor Overload. The experiment will simulate a case that utilises r 3.9 and will then compare decisions made under three different possible forms of the rule structure: a list that consists of nine factors, a list that consists of a limited number of factors (three), and a form with no factors at all, namely full judicial discretion.

³ Further elaboration on this argument can be found in the following paper: Inbar Levy, ‘Lightening the Overload of CPR Rule 3.9’ (2013) 32 Civil Justice Quarterly 139.
Since the phenomenon described in this article is general in terms of human behaviour, the assumption will be that the analysis is relevant for other rules that are structured in a similar form, including rules that belong to other legal systems. As observed by Cass Sunstein, the ‘open-ended multifactor test’ is a common phenomenon in the American legal system.\textsuperscript{4} There are other instances of legal rules that include many factors, while the effects of cognitive overload are derived from general insights about the human mind. Rule 3.9 is therefore used here merely as one example out of a whole range of rules in order to demonstrate a wide psychological phenomenon. In other words, my argument is not limited to a specific rule or a certain legal system; rather, it is universal.

In his book \textit{Simple Rules for a Complex World}, Richard Epstein observes that the world has become more complex, and that there has been a vast ‘increase in the frequency and complexity of the legal rules that govern society’.\textsuperscript{5} Epstein presents the crucial but often overlooked point that the proper response to a more complex world ‘should be an ever greater reliance on simple legal rules’.\textsuperscript{6} This idea could not be emphasised enough.

Interestingly, Epstein specifically mentions rules that are structured in the form of a Laundry List while discussing the nature of legal complexity. He explains that the simplest rules by the test of uncertainty (one of the variables of complexity) are those in which the answer to a single question of fact determines the legal outcome.\textsuperscript{7} On the other side of the spectrum are ‘those rules that are ever so much more common today: in order to decide whether a given product has a defective design, it is necessary to review a list of 6, 10, or 15 factors, all of which are relevant to the decision but none of which is decisive’.\textsuperscript{8} Epstein criticises the form of inquiry that results from these multi-factor rules and calls it ‘massive’ and ‘costly’.\textsuperscript{9} This article will confirm this insight and will present an analysis in support of the thesis that legal policy makers should avoid Laundry List rules when possible, as well as present a preliminary experiment that demonstrates the effect of these types of rules.

It should be mentioned that one of the reasons that complexity occurs is the commitment to treating like cases alike, which leads to increasingly

\textsuperscript{6} Ibid.
\textsuperscript{7} Ibid 24–5.
\textsuperscript{8} Ibid 25.
\textsuperscript{9} Ibid.
nuanced rules or to a growing body of precedent or both. And indeed, Epstein does not argue that simplicity is the most important thing. As explained by Epstein, the objective of a sound system of legal rules is to maximise social utility. In establishing ideal legal rules there is a trade-off between social incentives and administrative costs. Administrative costs include all costs necessary to run the legal system, and the more complicated the legal rules, the greater the administrative costs are likely to be. The administrative costs should be balanced against the beneficial effects of the rule on human action. For that reason, simplicity cannot be the sole goal — ‘[s]imple legal rules should … [be] a presumption that can be overcome for [a] good cause’.10

Lastly, it is interesting that the need to simplify procedural rules has arisen recently in relation to the issue of litigants in person. Recent changes to legal aid and litigation funding in England and Wales have resulted in many people no longer being in a position to secure legal representation. Self-representation is therefore likely to increase over time and to present significant challenges to the litigants in person and to the courts. One of the proposals made to enable litigants in person to litigate effectively concerned the simplification of procedure and litigation.11 This recent debate demonstrates the importance of the simplicity discussion in relation to the law and to procedural rules in particular. Even though complexity is sometimes inevitable, simplifying Laundry List rules may be a step towards the desired simplicity.

II The Importance of Simple Procedural Rules

A Procedural Rules Are Addressed to Judges

Historically, rules of procedure were considered to be rules by which courts or other adjudicatory bodies resolved legal disputes. Procedural rules were distinguished from substantive rules, which directed how citizens were supposed to conduct themselves outside of the court room.12 This traditional distinction places the emphasis of procedure on helping the judges to reach decisions while the substantive law is targeted to influence the behaviour of all citizens. According to this classification, the procedural law and the substan-

---

10 Ibid 33.
11 'Litigants in Person: What Can Courts Do?' (Background Papers, University College London Judicial Institute and the University College of London Centre for Access to Justice Special Event, 18 June 2014).
tive law address different recipients. Therefore, when phrasing procedural rules, one should put the emphasis on setting rules that will ‘talk’ to judges and help them make the best possible decisions. Psychological scholarship could provide useful information on how to phrase rules of procedure that will enable judges to best perform their judicial roles.13

Today, it is clear that procedural rules are not only addressed to judges but to the litigants as well. As explained by Crifò:

Of the various functions that the rules of court as formalities addressed to litigants and litigants’ behaviour could have, the most important in this context is the standardizing function, or ‘channelling’ function in Fuller’s words. The rules provide a channel that facilitates the identification, investigation and resolution of a dispute or of law-given right.14

Even after the ‘recipients’ classification of procedural law for judges and substantive law for everyone had faded, procedural law was considered to be a tool to enforce the substantive law and was described as ‘the handmaid of justice’.15 The purpose of procedure as perceived today is to enforce substantive rights ‘with as little friction as possible’ and to ensure that the rights of individuals are respected in fair process.16 This purpose is represented in CPR r 1.1(1) that explicitly states: ‘These Rules are a new procedural code with the overriding objective of enabling the court to deal with cases justly and at appropriate cost.’ In this respect, procedural rules that are set in a way that does not allow their implementation by judges undermine the very goal of

13 Using psychological research in order to improve the communication between judges and the procedural rules under which they operate should not be an alien idea for the judiciary, since psychology has long been a natural part of the judicial work: Jerome Frank, Courts on Trial: Myth and Reality in American Justice (Princeton University Press, 1950) 157.
15 Tidmarsh (n 12) 882, citing Re Coles and Ravenshear [1907] 1 KB 1, 4. See also Thomas O Main, ‘The Procedural Foundation of Substantive Law’ (2010) 87 Washington University Law Review 801, 810, citing Sir John Salmond and JL Parker, Jurisprudence (Sweet & Maxwell, 9th ed, 1937) 648 § 172: ‘Substantive law is concerned with the ends which the administration of justice seeks; procedural law deals with the means and instruments by which those ends are to be attained.’
16 Tidmarsh (n 12) 883.
procedure: to be a helpful tool in enforcing the substantive law and to provide a mechanism for redress.

B Procedure and Substance

Historically, rules of civil procedure were treated as a pure mechanism to facilitate the application of substantive rules; procedural rules were considered to be ‘secondary, ancillary and devoid of any interest beyond the merely instrumental’.17 However, although ‘[r]ules of procedure represent the process of evaluating entitlements and valuing the claims that implicate them’,18 in fact procedure ‘changes entitlements and the values of the claims’,19 and directly ‘affects the nature and structure’ of the substantive law.20 In reality, procedural rules have a significant impact on the result of the litigation.21

Moreover, since procedure generally imposes costs and affects the probability or amount of recovery,22 a rule of procedure used in adjudication affects the value of the claim on which it operates and ‘also exercises a prospective effect on the expected values of future claims’.23 Even a typical procedural requirement that applications be submitted on a certain type of paper could change the substance of the parties’ entitlements if, for example, this type of paper were too costly for normal litigants to obtain.24

Not only that, there are legal scholars who argue that the distinction between procedural law and substantive law is context dependant.25 These scholars emphasise that procedures can interfere with important human rights. Therefore, they conclude that ‘[w]here procedure is as important as substance, procedural change requires the same degree of political accountability and economic and social foresight as reform of an equivalent rule of

17 Crifò (n 14) 327.
18 Tidmarsh (n 12) 884 (emphasis added).
19 Ibid 885.
20 Ibid 887.
21 As explained by Crifò (n 14) 328, ‘[t]he violation of mere procedural rules can effectively put substantive rights out of the reach of one or the other litigant’.
22 For example, a system that permits broad discovery might change the amount of recovery, as it ‘might lead to the uncovering of information that allows a litigant to pursue a new theory of recovery’: Tidmarsh (n 12) 889.
23 Ibid 892.
24 Ibid 891–2.
25 Ibid 904; see especially at 904 n 112. See also Adrian Zuckerman, Zuckerman on Civil Procedure: Principles of Practice (Sweet & Maxwell, 3rd ed, 2013) 53–4 [2.7]–[2.9].
substantive law'.

Considering the possible negative effects of complex procedural rules on substantive rights, it is necessary to aspire to simplify the rules as much as possible.

Other legal scholars take a more extreme approach and argue that the classic distinction between substantive law and procedural law should be abandoned entirely. Either way, under any of the current common perceptions of the relationship between substantive law and procedural law, there is no doubt that civil procedure rules are inherently and intrinsically significant. It is therefore important to pay attention to the way rules of procedure are designed and applied. For example, Crifò objects to the idea that judges should be given almost unlimited discretion to decide when to apply rules of procedure (while they have very little leeway to diverge from substantive rules), and suggests 'a formalist approach to civil procedure … whereby the rules [of procedure] bind' the judge in the same manner as any other state regulation. This criticism is directly related to our debate about Laundry List procedural rules, as those rules usually give judges a wide discretion, which may be counterproductive in the context of procedure, as will be explained in the following discussion.

C. Rules v Standards

In the field of procedure, the common perception is that certainty and predictability are even more important than in substantive law, since procedural rules ought to bring the parties to the realisation of their substantive rights. This role of procedure has led to the common view that procedure should usually be promulgated in the form of rules, while standards in procedure should be used only in special cases.

According to the definition adopted by Kaplow, the ‘distinction between rules and standards is the extent to which efforts to give content to the law are undertaken before or after’ the action occurs that is the subject of the legal case. That is to say, rules are ex ante (for example prohibiting driving in

28 Crifò (n 14) 326.
excess of 100 km/h on a highway), and standards are *ex post* (for example prohibiting driving at excessive speed on highways).\(^{31}\)

Julia Black explains the distinction between rules and standards as a representation of competing models of bureaucratic rationality.\(^{32}\) According to Black, while rules are ‘associated with “formalism” … and rigidity on the one hand, … [and] certainty and uniformity on the other’, standards allow flexibility in their application and greater discretion.\(^{33}\) By allowing individualised decisions, standards also entail uncertainty and risk of partiality.\(^{34}\)

There is an intuitive connection between the ‘Factor Overload’ debate and the ‘Rules v Standards’ debate, since the structure of Laundry List legal commands is presumably more similar to the usual structure of standards than to the usual structure of rules: intuitively, rules are perceived to be more simple and straightforward than standards. However, according to Kaplow, a rule could be structured as a long list of factors as well since there is no necessary connection between the number of factors and the classification of the legal command as a ‘rule’ or a ‘standard’.\(^{35}\) That is to say, the question of ‘Rules v Standards’ is separate from the question of the complexity of the legal command. A rule could be structured in a way that includes an extensive number of factors, and so could a standard.

It is also important to stress that a short rule is not necessarily a simple rule. Consider Epstein’s following example: ‘A legal rule that allows an employer to fire a worker only for “just cause” is not a simple rule, because … the list of relevant considerations that helps determine which firings are for cause and which are not is almost endless.’\(^{36}\) The distinction between the complexity of the law and whether it is *ex ante* or *ex post* has practical importance.\(^{37}\)

The choice between rules and standards depends on the environment in which the law is applied. Rules are considered to be ‘more costly to promul-
gate than standards because rules involve advance determinations of the law’s content.\textsuperscript{38} Respectively, standards are considered to be more costly to predict or apply since they ‘require later determinations of the law’s content’.\textsuperscript{39} A rule is preferable in settings with common characteristics and frequent behaviour, because, as explained by Kaplow, it is more efficient. The reason a rule is more efficient in an environment with common characteristics and frequent behaviour is that if there were to be many enforcement actions, it would cost less to resolve the issue on a wholesale basis at the rule promulgation stage than to repeatedly give content to a standard on a retail basis. In contrast, a standard is preferable in less frequent and less predictable environments.\textsuperscript{40} This is because ‘[d]esigning a rule that accounts for every relevant [situation is] wasteful, as most [situations] would never arise’.\textsuperscript{41}

The ‘Rules v Standards’ debate relates to a more general debate about the nature of legal rules and the process of rule formation. Rules are generalisations: that is, ‘simplifications of complex events’.\textsuperscript{42} It is impossible to make rules that address the contingencies of all specific cases.\textsuperscript{43} The process of making rules involves several dimensions other than the ‘Rules v Standards’ distinction, including what Black identifies as the ‘linguistic structure of the rule’.\textsuperscript{44} The rule’s linguistic structure ‘has three aspects: precision or vagueness, simplicity or complexity, and clarity or opacity’.\textsuperscript{45}

Precision or vagueness ‘refers to the degree to which the operative facts of the rule are specified’;\textsuperscript{46} for example, the meaning of a word could be ‘vague in that it is evaluative (“reasonable”, “fair”, “suitable”)’.\textsuperscript{47} The simplicity of a rule’s structure ‘refers to the number of factual situations or assessments involved in a determination of the rule’s applicability’ and ‘the clarity of a rule … refers to the extent to which the rule is understood by those applying the rule’.\textsuperscript{48} The issue of Laundry List rules discussed in this article is located mainly within the linguistic structure of rules debate. My argument is one

\textsuperscript{38} Ibid 562.
\textsuperscript{39} Ibid 562–3.
\textsuperscript{40} Ibid 563.
\textsuperscript{41} Ibid.
\textsuperscript{42} Black (n 32) 7.
\textsuperscript{43} Ibid.
\textsuperscript{44} Ibid 22.
\textsuperscript{45} Ibid (citations omitted).
\textsuperscript{46} Ibid.
\textsuperscript{47} Ibid 23.
\textsuperscript{48} Ibid.
example for a case in which greater precision in a rule may lead to complexity and, as a result, to uncertainty in the application of the rule.49

Even though the common perception with regards to procedure is that procedure should, generally, be promulgated in the form of rules rather than standards,50 it is possible to adopt a more nuanced approach. The differentiation between rules that apply to frequent situations and standards that are desirable for rare situations could be made in the procedural context as well. For example, in the context of CPR r 3.9, a rule may be preferable assuming there are many delays and a problem of noncompliance. In its previous form, r 3.9 was a standard, not a rule, because judges did not treat the list of factors as a checklist; they were required to consider ‘all the circumstances’ and, more generally, r 3.9 gave judges wide discretion.

Lastly, while it is said that ‘detailed rules lead to more predictable and more just outcomes’ than broad principles, this assumption has hardly been empirically examined.51 In an experiment conducted by Fred Ellinghaus and Ted Wright, law students and non-law students were given the facts of contract disputes and a statement of the relevant law, either in the form of a broad principle or a detailed rule, and were asked to decide the dispute.52 Predictability was measured according to the level of agreement between participants.53 It was found that decisions applying a detailed ruled are no more predictable than decisions applying broad principles — on the contrary, ‘decisions applying broad principles were … more predictable in easier cases’ used in the study.54

According to the argument presented in this article, rules of procedure should usually be formed as simple rules rather than complex standards (let alone principles), due to the unique purpose of procedure. While Ellinghaus and Wright assume rules are detailed,55 as previously explained the level of

49 Ibid 25.
52 Ibid 3, 14–15, 18, 28.
53 Ibid 18.
54 Ibid 28. Ellinghaus and Wright also found that broad principles are more likely to lead to just outcomes (based on the researchers’ assessment of how accurately participants applied the relevant statement of law), are more efficient (based on the time taken to arrive a decision) and are more accessible (less technical): at 21–2, 26–8.
55 Ibid 2.
detail of the legal command and whether it is a rule, a standard or a principle (principles are even less constraining than standards) are two separate characteristics. However, the results of their study go along with the argument presented here, as these results demonstrate that a simple principle is preferable to a complex rule. Ellinghaus and Wright’s data show that ‘broad principles make it easier to agree on the outcome, while detailed rules have a tendency to complicate even easier cases’.56

To conclude, Laundry List rules such as r 3.9 unfold two problems in the context of procedure. Firstly, their complexity makes the application of these rules unpredictable and unjust. Secondly, the fact that they are standards and not rules creates uncertainty and undermines important goals of procedure.

D Pervasive Application of Procedural Rules

Another important point in relation to civil procedure is that procedural rules control and affect the majority of civil disputes. This is significant because complex rules are considered to be more undesirable when they affect a wide range of social activities.57 According to Epstein, ‘[l]egal complexity is not merely a simple measure of the inherent or formal properties of legal rules. It is also a function of how deeply [rules] cut into the fabric of ordinary life.’58 For example, while the legal rules that regulate homicide are directed to the destructive activities of a very small portion of the population, ‘the rules regulating the use of property or the hiring and firing of workers … routinely intrude into the everyday lives of ordinary … people’.59 Employing Epstein’s definition, it is especially vital to regulate simple procedural rules and to avoid Laundry List civil procedure rules when possible, as procedural rules control many different civil disputes.

III Doctrinal Analysis: CPR Rule 3.9

Prior to April 2013, CPR r 3.9 ‘listed nine factors that the court must to take into consideration [when adjudicating] an application for relief from sanctions’.60 Judges struggled to apply r 3.9, as it required scrutinising all the

56 Ibid 21 (citations omitted).
57 Epstein (n 5) 28–9.
58 Ibid 29.
59 Ibid. Epstein gives the rules that regulate homicide as an example for complex rules that are unavoidable and not necessarily undesirable: at 28–9.
60 Levy (n 3) 139.
factors on the list and ‘demanded examination of all the circumstances of a particular case’\textsuperscript{61} Therefore, r 3.9 ‘did not offer sufficient protection against the problem of delays and noncompliance with procedural requirements in the civil justice system’.\textsuperscript{62}

Under the old r 3.9 the judge was obligated to consider ‘all the circumstances’ in order to decide whether to grant ‘relief from any sanction imposed for a failure to comply with any rule, practice direction or court order’, including the factors explicitly mentioned in r 3.9(1):

(a) the interests of the administration of justice;
(b) whether the application for relief has been made promptly;
(c) whether the failure to comply was intentional;
(d) whether there is a good explanation for the failure;
(e) the extent to which the party in default has complied with other rules, practice directions, court orders and any relevant pre-action protocol;
(f) whether the failure to comply was caused by the party or his legal representative;
(g) whether the trial date or the likely trial date can still be met if relief is granted;
(h) the effect which the failure to comply had on each party; and
(i) the effect which the granting of relief would have on each party.

In response to Lord Justice Jackson’s \textit{Review of Civil Litigation Costs}, the Civil Procedure Rules Committee approved an amendment to r 3.9:

(1) On an application for relief from any sanction imposed for a failure to comply with any rule, practice direction or court order, the court will consider all the circumstances of the case, so as to enable it to deal justly with the application, including the need —

(a) for litigation to be conducted efficiently and at proportionate cost; and
(b) to enforce compliance with rules, practice directions and orders.\textsuperscript{63}

\textsuperscript{61} Ibid.

\textsuperscript{62} Ibid. See also Rupert Jackson, \textit{Review of Civil Litigation Costs} (Final Report, December 2009) 386–7 [2.1], 397 [6.5].

\textsuperscript{63} Civil Procedure Rule Committee, Ministry of Justice, ‘Amendment of CPR 3.9’ (CPR Paper No 11(23), 8 July 2011) 2. The amendment was explored in greater detail in Levy (n 3).
I will begin by discussing a few cases in which the court implemented CPR r 3.9 and will then move on to describe my experiment. In regard to the old r 3.9, which required the court to consider all of the circumstances including nine factors, the court adopted the ‘stand back’ approach, whereby the application of r 3.9 is not performed using a ‘checklist’ exercise but rather by an estimation of the weight of all the factors overall. In the Hansom case, Mance LJ said: ‘Indeed, at the end of the day, the right approach is to stand back and assess the significance and weight of all relevant circumstances overall, rather than to engage in some form of “head-counting” of circumstances.’\(^{64}\) The old r 3.9 gave judges expansive discretion, as explained by Zuckerman: ‘the longer the list of considerations that must be taken into account, the less each of them is likely to count and the more open ended the court’s freedom of choice is likely to be.’\(^{65}\)

Just before the new r 3.9 came into force, the Court of Appeal articulated its strong approach towards changing the culture of delays and noncompliance by noting that the amended r 3.9 includes fewer factors than its predecessor.\(^{66}\) In the Perry case, Jackson LJ stated that after the new rule came into force ‘litigants who substantially disregard court orders or the requirements of the [CPR would] receive significantly less’ tolerance than before.\(^{67}\)

Shortly after the new rule became effective (in April 2013) the Court of Appeal gave another decision, in the Mitchell case, in which it gave guidance about the correct approach towards the revised version of CPR r 3.9.\(^{68}\) In the context of the Jackson reforms and the general requirement that courts adopt a more robust approach to granting relief to parties who default on court rules, practice directions and court orders, the Court of Appeal ruled that relief from sanctions would not be granted where deadlines were overlooked, so solicitors should not take on so much work that they were unable to meet them.\(^{69}\)

The Court of Appeal in the Mitchell case acknowledged that the new version of CPR r 3.9, which includes ‘the need (i) for litigation to be conducted efficiently and at proportionate cost and (ii) to enforce compliance with rules,
practice directions and court orders, … reflect[s] a deliberate shift of emphasis.\textsuperscript{70} The Court determined that the new \textit{CPR} r 3.9 considerations ‘should … be regarded as of paramount importance and be given great weight’ and that it was ‘significant that they [were] the only considerations which [were] singled out for specific mention in the rule.’\textsuperscript{71}

The Court of Appeal also recognised the requirement to consider ‘all the circumstances of the case, so as to enable it to deal justly with the application’ that is mentioned in the new \textit{CPR} r 3.9.\textsuperscript{72} It stressed that the two considerations specifically mentioned in the new \textit{CPR} r 3.9 should be given more weight than the other circumstances: “The reference to “all the circumstances of the case” in \textit{CPR} 3.9 might suggest that a broad approach should be adopted … But … the other circumstances should be given less weight than the two considerations which are specifically mentioned.”\textsuperscript{73}

But is the change of approach in the \textit{Mitchell} case a result of the new rule? Is the rule indeed clearer now that it does not include nine factors? Regrettably, the answer is no. In itself, the new rule does not add much to the current rules of procedure.\textsuperscript{74} The interpretation of r 3.9 in the \textit{Mitchell} case seems to be a result of a change in the Court of Appeal’s approach at the time, one that possessed the potential to lead to a change in the general judicial culture towards noncompliance. Furthermore, in the \textit{Mitchell} case the Court of Appeal mentioned that the considerations listed in the old rule could still be relevant but that now the primary consideration is enforcement.\textsuperscript{75} This means the Court of Appeal defined a dominant consideration and in that way avoided the complex multi-factor calculation that existed before. Singling out enforcement as the prominent consideration could have been accomplished in the wording of the rule itself, but because the rule does not say that, it was left for the Court of Appeal to set the tone of the new rule. Overall, the Court’s interpretation in the \textit{Mitchell} case was desirable, as enforcing compliance was the purpose of the amendment to r 3.9 to begin with.

However, the guidance that was given by the Court of Appeal in the \textit{Mitchell} case in relation to the new r 3.9 did not survive very long. Only eight months after the \textit{Mitchell} decision, the Court of Appeal revised its approach

\textsuperscript{70} Ibid 1021 [36].
\textsuperscript{71} Ibid.
\textsuperscript{72} Ibid 1021 [37].
\textsuperscript{73} Ibid.
\textsuperscript{75} \textit{Mitchell} (n 68) 1027 [49].
towards the new r 3.9 in the Denton case,\textsuperscript{76} giving more leeway to litigants, against the purpose of preventing noncompliance with process requirements.\textsuperscript{77} As Higgins argues, this experience demonstrates the failure of the drafters of the amended CPR r 3.9.\textsuperscript{78} It shows that the rule itself needs to give clear guidance to courts exercising their discretion. The ‘revised rule is virtually content free, doing little more than repeating the overriding objective, and yet it is still as open ended as the previous (heavily criticised) rule it was designed to replace’.\textsuperscript{79} Unfortunately, the current legal state is unlikely to lead to clarity:

The nine factors have been replaced by two factors but all of them and more may find their way back into the frame when the court considers ‘all the circumstances’ of the case during the ‘third stage’ of the Denton guidance. The purpose of the reforms to CPR r 3.9 was not to save words, but to provide better guidance to the courts in how to exercise their discretion. However, the Denton guidance provides only limited assistance to lower courts.\textsuperscript{80}

Higgins explains that, while the courts now know to normally grant relief if the breach was not significant or if there was a good reason for it, ‘if the breach is significant, and there is no good reason for it, they still have to weigh up all the circumstances’.\textsuperscript{81} This means the courts are provided with considerable discretion and little guidance.\textsuperscript{82}

As mentioned previously, certainty and simplicity are two important virtues when it comes to procedure. Even though the revised r 3.9 is shorter in length it is not necessarily simpler, as the court still has to consider ‘all the circumstances’. In addition, the revised r 3.9 is still closer to a standard than to a rule, despite the common perception that procedure should usually be


\textsuperscript{77} Higgins (n 76) 388–91.

\textsuperscript{78} Ibid 391.

\textsuperscript{79} Ibid.

\textsuperscript{80} Ibid.

\textsuperscript{81} Ibid.

\textsuperscript{82} Ibid. See generally Stuart Sime, ‘Sanctions after Mitchell’ (2014) 33 Civil Justice Quarterly 133; Jack R Williams, ‘“Well, That’s a Relief (from Sanctions)!” Time to Pause and Take Stock of CPR r 3.9 Developments within a General Theory of Case Management’ (2014) 33 Civil Justice Quarterly 394.
promulgated in the form of rules rather than standards. It is therefore not surprising that legal academics criticised the revised rule and its application.\textsuperscript{83}

Another interesting point in relation to the application of r 3.9 is that standards can be transformed into rules once they are applied, through the creation of precedents.\textsuperscript{84} It may be the case that ‘the first enforcement proceeding essentially transforms the standard into a rule’: that is, in subsequent enforcement proceedings, courts simply apply the precedent rather than engaging in an inquiry concerning appropriate legal treatment — an access to this precedent costs no more than if the law had been promulgated as a rule in the first place.\textsuperscript{85}

It seems that this is exactly what the Court of Appeal tried to do in \textit{Perry}, as Jackson LJ’s opinion draws attention to the amendment of r 3.9 and to the concern that ‘relief against sanctions is being granted too readily’.\textsuperscript{86} Jackson LJ then moves on to emphasise that, after the amendment, the Court will be less tolerant towards litigants who did not comply with any rule, practice direction or court order.\textsuperscript{87} That is to say, the Court was declaring that it will use its discretion in order to enforce compliance, and in that respect it made the legal command closer to a rule than to a standard. This classification of r 3.9 depends on how later decisions interpreted the new r 3.9 and, as mentioned above, the Court does not seem to be continuing this development.

\section*{IV Empirical Study}

\subsection*{A Background}

As mentioned above, I use the term Factor Overload to describe a cognitive phenomenon that occurs when judges attempt to implement legal rules that include more than a few factors. In order to demonstrate the effects of Factor

\textsuperscript{83} See, eg, Higgins (n 76) 391.


\textsuperscript{85} Kaplow (n 30) 577.

\textsuperscript{86} \textit{Perry} (n 66) 1021 [49].

\textsuperscript{87} Ibid 1021–2 [49]–[50]. The Court here refers to a previous version of the rule amendment: ‘On an application for relief from any sanction imposed for a failure to comply with any rule, practice direction or court order, the court will consider the circumstances of the case, so as to enable it to deal justly with the application including the need — (a) for litigation to be conducted efficiently and at proportionate cost; and (b) to enforce compliance with rules, practice directions and court orders’: at 1021 [49].
Overload, I performed a preliminary experiment using a real case in which the court applied the old r 3.9 of the CPR. The previous CPR r 3.9 exemplifies information overload since it included at least nine different factors that the judge must weigh in order to reach a decision. And, as formerly explained, despite the amendment of the rule the nine factors may find their way back into the assessment when the court considers ‘all the circumstances’. It is therefore a suitable case study to examine the phenomenon of cognitive overload due to a large number of considerations in the legal context. The purpose of the experiment was to show that having to weigh a large number of factors is detrimental to the decision-making process by creating difficulties in applying legal rules.

Previous studies demonstrated that, while certain decision makers claim to consider a large number of factors, their decisions can be predicted from only a few of those considerations, making the rest practically irrelevant to the final decision.88 For example, in a study performed by Barton Beebe which examined multi-factor tests for the likelihood of consumer confusion in trademark infringement cases, it was found that when judges use the multifactor test, usually only two or three factors are sufficient to determine the result.89 Therefore, the study concludes that ‘judges tend to short-circuit the multifactor test’.90

The study examined ‘all reported federal district court opinions [in the United States] for [a] five-year period … in which a multifactor test for the likelihood of consumer confusion was used’.91 The results showed that only ‘[a] few factors prove to be decisive’ and that the rest of the factors are redundant or even irrelevant.92 ‘in practice, a limited number of core factors determine the outcome of the test’.93 Not only that, but Beebe found that ‘[j]udges tend to “stampede” these remaining factors to conform to the test outcome’.94

---

89 Ibid.
90 Ibid.
91 Ibid 1581.
92 Ibid.
93 Ibid 1581, 1600.
94 Ibid 1582. Beebe also found significant variation among the district court circuits in the application and outcome of their respective tests. Each circuit has developed its own formulation of the test, and the different tests consist of either 6, 7, 8, 10 or 13 factors: at 1581–4.
The results of this study match the results of previous studies.95 However, Beebe goes a step further and asks the question: ‘But in relying only on certain leading factors, are judges making flawed decisions?’96 His answer to this question is as follows:

If recent research in human decision making is any guide, then the answer is very likely no. Like any human decision makers, district judges attempt to decide both efficiently and accurately. In pursuit of efficiency, they consider only a few factors. In pursuit of accuracy, they consider the most decisive factors.97

Not only that, but Beebe refers to this judicial decision-making process as successful and even rational:

In essence, as consummate pragmatists, they ‘take the best’, a strategy which empirical work suggests is an altogether successful — and rational — approach to decision making.98

Thus, Beebe argues that the heuristic that judges employ when taking into account only a few factors ‘is evidence … of human ingenuity rather than human fallibility.’99 As will be shown later, Beebe’s conclusion may be too simplistic considering the wide range of psychological theories regarding the nature of heuristics and human decision-making. Beebe’s optimistic approach is consistent with the ‘fast and frugal’ school of thought, whose scholars believe that people have adopted strategies that work well for them;100 scholars from the ‘heuristics and biases’ school would be more concerned with errors caused by the use of heuristics.101

Beebe assumes that the judges’ tendency to consider only two or three factors is an indicator of their efficient behaviour. But in order to make this statement he presumes that the factors the judges have chosen to consider are indeed the most relevant and important ones.102 However, the mere fact that

96 Beebe (n 88) 1614.
97 Ibid (citations omitted).
98 Ibid (citations omitted).
99 Ibid 1603.
100 Ibid 1586 n 25, 1602, 1649.
102 Beebe (n 88) 1614.
the judges in this case study chose two or three specific considerations out of a long list of factors does not necessarily mean that they made the right choices; for example, they might have chosen these considerations because they were the easiest to take into account. Beebe assumes that the remaining considerations are irrelevant, but he may be wrong. The question becomes: Who determines which considerations are relevant and which are not?

Simply assuming that decisions made under multi-factor tests are not flawed is not enough. Therefore, this article presents a different methodology, the purpose of which is to address the quality of decisions made under multi-factor rules and not to merely address the question of whether judges ignore some of the considerations on the list. I do this by comparing decisions made under different rule structures and examining which of these rule structures leads to an optimum decision. More specifically, I identified a case in which there is wide legal agreement regarding the correct result, and I examined whether there is a deviation from this desirable result when a long list of factors is used. This provided means by which I could evaluate whether the decisions made under a multi-factor rule are indeed accurate.

B Experiment Description

My hypothesis was that given the same case facts, judicial decisions would be similar both when participants used a large number of factors and when they used no factors at all to decide a case. Once there became too many factors to consider the judge would encounter cognitive difficulty processing all of the information and would unconsciously omit some of the factors during the decision-making process. Due to the cognitive effects of information overload and the human tendency to simplify complex decisions, the list of factors would become practically meaningless when it was too long to implement. Therefore, instituting a rule with a long list of considerations would result in decisions that are not derived from the rules; rather, they would be closer to decisions made under maximal judicial discretion, without any clear direction.103 Thus, I anticipated that the decisions would be more consistent under the limited-number-of-factors scenario than under the long-list-of-factors scenario.

---

103 Multi-factor rules could intentionally be standards that give the judge wide discretion (in fact, this is usually the case). The point here is that using a long list of factors, even if the purpose were to give the judge a wide discretion, does not add anything to the decision, since, in cases in which the list is too long, judges cannot use it as a helpful tool in their decision-making process. Moreover, at least in the context of procedural rules such as r 3.9, I argue that limiting judicial discretion or using a rule instead of a standard is preferable.
scenario. I also expected that applying the rule to the facts of the case would be easier under the limited-number-of-factors case.

As previously mentioned, in order to support my theory I chose a real case that both utilised CPR r 3.9 and had wide legal agreement regarding the correct result. In the case I chose (Perry), the Court of Appeal decided unanimously that relief from sanctions should not be granted and that the case provided an example of situations in which the court should enforce compliance and not grant relief.104 Not only that, Jackson LJ, who gave one of the opinions (the appeal was heard before Maurice Kay, Jackson and Lewison LJJ), was involved in the amendment of r 3.9 as part of his review of civil litigation costs in England and Wales.105 He is therefore an expert on the subject.106 Lastly, the decision received positive treatment in later cases and in the legal literature. The method I chose examines the deviation from the optimum. I expected that when using the long list of factors participants would be more willing to grant relief from sanctions even though the correct decision should be not to grant relief.107

In the experiment, 148 subjects read a vignette describing the Perry case. I took the basic description of the factual chronology of the case from the decision given by the Court of Appeal. I then slightly modified the presentation of the case in order to ensure that other factors would not influence the premise which the experiment was attempting to examine. Firstly, I tried to keep the description of the facts as simple as possible without omitting any relevant details in order to make sure the facts of the case were clear to the participants who took part in the survey.

104 Perry (n 66) 1021–2 [48]–[50].
105 See Jackson (n 62).
106 The following quote from Jackson LJ’s opinion shows that the Court was convinced that in this case the relief from sanctions should not be granted. ‘Non-compliance with the Civil Procedure Rules and orders of the court on the scale that has occurred in this case cannot possibly be tolerated. Any further grant of indulgence to the defendants in this case would be a denial of justice to the claimants and a denial of justice to other litigants whose cases await resolution by the court’: Perry (n 66) 1021 [48].
107 It could be argued that, although in the Perry case the Court was dealing with the unreformed r 3.9, it was in essence deciding as if r 3.9 had already been reformed, meaning that the decision would not have gone that way had it not already been decided that r 3.9 must be amended. However, this is not the reasoning given by the Court at Perry (n 66) 1022 [50]: ‘It is currently anticipated that this revised rule will come into force on 1 April 2013. After that date litigants who substantially disregard court orders or the requirements of the Civil Procedure Rules will receive significantly less indulgence than hitherto. As I say, that rule amendment lies in the future. In the present case, on the rules as they stand, relief from sanction must be refused.’
Secondly, I presented both the plaintiff and defendant as companies, and I avoided presenting the plaintiff as a big company versus the defendant as a ‘weak’ small company, since I did not want the participants to rule in favour of the defendant simply because they felt more empathetic towards it. In fact, r 3.9 already touches on the sensitive issue of the right to present a defence (since the result of not granting relief from sanctions is that the defendant cannot submit a defence), and I suspected that even with my modifications participants would tend to give relief from sanctions despite the fact that in the case used in the survey the defendant did not comply with six court orders. Being too lenient with violations of process requirements was part of the problem of the old r 3.9, which did not put enough emphasis on enforcing compliance. For that reason, although I used a real case, I presented the facts of the case in a balanced way and avoided placing the emphasis on specific aspects of r 3.9. I am interested in examining the influence of the number of factors and not the specific goal of the rule. I therefore presented the parties as approximately equal entities.

Because the optimum decision in the case is to not grant relief in favour of the defendant, presenting the defendant as equal to the plaintiff (as opposed to a ‘weak’ litigant) should only encourage more optimum decisions. In any event, the case was presented in an identical way between all groups, the only difference being the number of considerations, which is the variable I wanted to investigate.

C. Method

The experiment was performed on Amazon’s Mechanical Turk (‘MTurk’) using ‘Qualtrics’ online survey software. Participants were given a descrip-

---

108 See, eg, ibid 1021 [49].

109 MTurk is an online crowdsourcing system that allows easy access to online research participants. MTurk workers were mostly from the United States and India. For more about the demographics of the participants at the relevant time, see Joel Ross et al, ‘Who Are the Crowdworkers? Shifting Demographics in Mechanical Turk’ (Conference Paper, CHI 2010: ACM Conference on Human Factors in Computing Systems, 10–15 April 2010) 2863. Despite differences between MTurk participants and traditional samples, it was found that generally ‘MTurk participants produce reliable results’ and that ‘MTurk offers a highly valuable opportunity for data collection’: Joseph K Goodman, Cynthia E Cryder and Amar Cheema, ‘Data Collection in a Flat World: The Strengths and Weaknesses of Mechanical Turk Samples’ (2013) 26 Journal of Behavioral Decision Making 213, 213. The participants were given the following instructions: ‘We are conducting an academic survey about legal decision making. We need you to perform as the judge in a legal case that will be presented to you and then answer a few questions. Select the link below to complete the survey. At the end of
tion of the modified *Perry* case, as mentioned above, and were divided into three groups (a between-subjects design). The first group was given the full list of factors in the former *CPR r 3.9* and was asked to reach a decision according to these factors; the second group was asked to reach a decision without any factors at all, according to their discretion, and given only the following quote from *r 3.9*: ‘On an application for relief from any sanction imposed for a failure to comply with any rule, practice direction or court order the court will consider all the circumstances’; and the third group was asked to reach a decision given only three of the factors from *r 3.9*. To avoid a state in which specific factors affect the results, I randomised the factors so that different subjects in this group received different factors. The results of the three different conditions (a long list of nine factors, a short list of three factors and full judicial discretion) were then compared.

The experiment was followed by a questionnaire in which participants were asked to provide some information about themselves and to explain how they had reached their decisions, as a tool to understanding their decision-making process. Participants were required to provide the following information: age, gender, native language, occupation, legal background, reason for granting or refusing the application, explanation of how they applied the legal rule that was mentioned in the survey, level of confidence in their decision, and level of difficulty in performing the task. I then used the answers to these questions to check whether any other factors influenced the participants’ decisions and to make sure that the participants indeed read the case and understood it. I also measured the time it took each subject to answer the survey as another tool to ensure that the case was read by the participant.

### D Results

The results showed that under the 3-factors condition subjects were more likely to make the optimal decision; that is, not to grant relief from sanctions, more than in any of the other groups. This difference was shown to be

---

110 MTurk participants do not possess a legal background. I chose to perform the experiment on MTurk for the following reason: I performed a pilot of this experiment with law students and they were influenced by their previous familiarity with the case and by their specific legal education (for example, students of Professor Zuckerman, who had influenced the amendment of *r 3.9*, tended not to grant relief in comparison to other students). By using MTurk, I could ensure that the participants were not familiar with the case or the amendment of *r 3.9* and that they were only affected by the number of factors.
statistically significant. The Chi Square test showed a significant result in relation to groups A (9 factors) and B (3 factors): \( P=0.035 \), as well as in relation to groups B (3 factors) and C (0 factors): \( P=0.02 \). The results are shown in Table 1.

**Table 1: Results**

<table>
<thead>
<tr>
<th>Group</th>
<th>9 factors (n=50)</th>
<th>3 factors (n=48)</th>
<th>0 factors (n=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant relief from sanctions</td>
<td>50%</td>
<td>29%</td>
<td>52%</td>
</tr>
<tr>
<td>Refuse relief from sanctions</td>
<td>50%</td>
<td>71%</td>
<td>48%</td>
</tr>
</tbody>
</table>

These preliminary results demonstrate not only that the long list of factors (group A) did not change the participants’ decisions in comparison to the condition of no factors at all (group C), but also that in this case having a long list of factors actually prevented participants from reaching the optimal result. As mentioned above, I identified the optimal result by using the unanimous decision of the Court of Appeal in this case, accompanied by a wide acceptance of the Court’s decision in following legal cases and in the legal scholarship.

As shown in the table, when given only three randomised factors to consider from \( r 3.9 \) (group B), 71% of the participants decided *not* to grant relief from sanctions (n=48), the same decision given by the Court of Appeal (the optimal result). In contrast, when given nine factors, only 50% of the participants decided not to grant relief from sanctions (n=50). This result is despite the fact that the Court of Appeal ruled that the case presented in the survey is an example of a case in which the relief from sanctions should *not* be granted. As anticipated, the results of group A (the 9-factors condition) were similar to the results of group C (0-factors), as 48% of the participants in group C decided not to grant relief from sanctions (n=50).
V Discussion

The results of the experiment show that when subjects experienced Factor Overload they defaulted to a coin flip. In contrast, when they were led gently, they moved towards the optimal decision. Previous studies about multi-factor tests that have been conducted with real judges in real cases showed that judges ignore the majority of the considerations when presented with a long list.111 Not only that, earlier findings have shown that other experts do not manage the exercise of integrating factors well.112 This article therefore argues that it should not be assumed that judges perform optimally in Factor Overload situations. In order to show that judges differ from other experts by being able to identify the most relevant considerations on a long list, it would be necessary to conduct further empirical examination and to test whether judges use helpful intuition in Factor Overload situations or merely experience decision fatigue due to cognitive overload.113 More generally, it has already been demonstrated that judges, like everyone else, use their intuition and that this use of intuition may lead to erroneous and unjust outcomes. It was therefore suggested that the justice system take steps to increase more deliberate and systematic judicial decision-making.114

The purpose of the current analysis was to show that, as opposed to previous claims, a long list of factors might have detrimental effects in legal decision-making. As mentioned previously, it has been suggested that in relying only on certain factors out of a large number of factors, judges are not

111 See, eg, Beebe (n 88).

112 See, eg, Dawes (n 2) 573. For example, in the context of a medical decision, it was shown that physicians were less likely to prescribe a medication when deciding between two medications than when deciding about only one medication, meaning the difficulty in deciding between the two medications led some physicians to recommend not starting either. This study shows that the introduction of additional options can increase decision-making difficulty even in the case of experts. Adding new options can increase the probability of choosing a previously available alternative or maintaining the status quo: Redelmeier and Shafir (n 2). This is not to say that judicial expertise does not exist: Daniel Kahneman, Thinking, Fast and Slow (Farrar, Straus and Giroux, 2011) 240–1; Doron Teichman and Eyal Zamir, ‘Judicial Decision-Making: A Behavioral Perspective’ in Eyal Zamir and Doron Teichman (eds), The Oxford Handbook of Behavioral Economics and the Law (Oxford University Press, 2014) 664, 690.


making flawed decisions.\textsuperscript{115} The results of the current experiment suggest that simply assuming that decisions made under multi-factor tests are not flawed is not enough and that a long list of factors may prevent judges from reaching the optimal result.

As for the definition of the ‘optimal’ decision, it was determined here according to the wide agreement of legal experts about the correct result in the case study used in the experiment. The method of determining the optimal result according to consensus between experts was previously suggested in the psychological literature.\textsuperscript{116} Even if we were unable to identify the ‘optimal’ result in this case, the mere finding that a long list of factors does not add anything to the decision-making process is in itself significant. As the results showed, decisions were similar under the 9-factors condition and under the 0-factors condition, where subjects were equally divided. Subjects produced decisions that were closer to the decision of the Court of Appeal only under the 3-factors condition. Meaning, the only environment that led subjects towards any decision was the limited number of factors environment.\textsuperscript{117} This should be taken into consideration by drafters of rules of procedure in order to promote the desired implementation of these rules.

Lastly, this article calls for the simplification of procedural rules. But, as was stressed at the very beginning, complexity is sometimes required in order to allow adjustment for different, or more complicated, legal cases. The argument made in this article is not that procedure should always be simplified, but that sometimes rules are complex without merit. This ought to be a concern of policymakers who are responsible for phrasing the rules. Drafters of procedural rules must take into account not only the content of the rules but also the way the human decision-maker would apply them.

What are the practical conclusions from here onwards? Generally, there is a consensus that ‘it is often easier or preferable to change the environment in which decision makers function or to delegate decisions from a badly positioned to a well-positioned decision maker than to try to change how

\textsuperscript{115} Beebe (n 88) 1614.

\textsuperscript{116} For a more detailed account and critique, see David J Weiss and James Shanteau, ‘Empirical Assessment of Expertise’ (2003) 45 Human Factors 104.

\textsuperscript{117} An additional possible explanation for these results, other than ‘cognitive overload’, could be the ‘coherence effect’. The coherence effect is manifested in a cognitive process in which the decision maker perceives the chosen alternative to be supported by strong considerations, despite high levels of ambiguity. It is possible that under the 3-factors condition, the reason for the decision was made clearer and therefore it was easier for the subjects to determine the result, see Dan Simon, ‘A Third View of the Black Box: Cognitive Coherence in Legal Decision Making’ (2004) 71 University of Chicago Law Review 511.
each individual processes’ information. In the legal environment, it could be argued that improving judges’ decision-making processes (by, for example, using ‘debiasing’ techniques) should be a part of their professional training, as judges are required to make complex decisions on a regular basis. In any event, changing the environment in which judges make their decisions can certainly be helpful, and therefore the following possible solutions could be considered alongside judicial training.

Firstly, linear models could be used in order to help judges implement Laundry List rules. Generally speaking, a linear model is a statistical prediction based on input variables. Linear models are needed since ‘experts … are much better at selecting and coding information than they are at integrating it’. People are good at choosing the ‘right predictor variables’, but they ‘are bad at integrating information’, especially information ‘from diverse and incomparable sources’. The purpose of the linear model is therefore to integrate the information in an optimal manner, using a computational model.

There are several possible formulae for a linear model in the context of Laundry List rules. For instance, it is possible to build a model that requires the judge to rate each factor on a scale of 0–10. Taking the old CPR r 3.9 as an example, each consideration in r 3.9 with regards to granting relief from sanctions would receive a number: if ‘the failure to comply was intentional’ (r 3.9(c)), the judge would rate it ‘0’ (the lowest rating possible), but if ‘the application for relief has been made promptly’ (r 3.9(b)), the judge would rate it ‘10’ (the highest rating). If the answer was somewhere in the middle, the judge would rate it ‘5’, and so on. The model would set a numerical threshold for granting relief from sanctions that should be in accordance with the rules of evidence and the balance of probabilities. In the latter example, 51% of the 90-points rating range is 45.9 points and therefore any sum beyond this number would suggest that the judge should grant relief from sanctions. This calculation would of course only serve the judges as a tool, and they could deviate from the result as long as they gave reasons for doing so.

---

118 Kelman (n 101) 4. For example, if patients are more likely to understand medical information when it is ‘presented in one form rather than another, it might be better to present it in the fashion that most people typically understand rather than to attempt to train them’ to understand the other form: at 4 (citations omitted).


120 Dawes (n 2) 574.
It should be stressed that ‘linear model[s] cannot replace the expert[s].’\textsuperscript{121} It is the expert who chooses the variables and determines what to look for, while the linear model is merely aimed towards integrating the information.\textsuperscript{122} The advantage of linear models over intuitive clinical judgment was shown in a variety of contexts, such as faculty rating of graduate students,\textsuperscript{123} the diagnosis of psychosis versus neurosis by clinical psychologists,\textsuperscript{124} bank loan officials’ prediction of bankruptcies,\textsuperscript{125} and even decisions about what type of bullet should be used by the police.\textsuperscript{126}

One possible way of building a linear model is to use an expert’s judgment, a court judge’s for instance, about an outcome criterion and then to use the model in place of the expert.\textsuperscript{127} Even though the models make use of the weights derived from the judges, they consistently perform better than the judges from whom they were derived. The models perform better in the sense of better correlation between predicted and actual values. Linear models work because they catch the essence of the judge’s valid expertise while eliminating unreliability. That is to say, ‘a linear model distills underlying policy … from … otherwise variable behaviour (eg, judgements affected by context effects or extraneous variables).’\textsuperscript{128} For example, if a statistical examination of cases that apply r 3.9 shows that applications for relief from sanctions that were submitted more than 10 days after the failure to comply were considered to be applications that were not made ‘promptly’ according to r 3.9(b), then the linear model would imitate the judges and grant a low score to that particular element and consequently a lower success rate to applications that were submitted after ten days from the failure to comply. The linear models therefore attempt to separate the human unreliability from the valid judgmental strategy.\textsuperscript{129}

It should be emphasised that the mathematical models are not aimed towards dehumanising legal decisions but rather at serving as a helpful tool in

\begin{thebibliography}{99}
\bibitem{121} Ibid 573.
\bibitem{122} Ibid.
\bibitem{123} Ibid 576–7.
\bibitem{124} Lewis R Goldberg, ‘Man versus Model of Man: A Rationale, Plus Some Evidence, for a Method of Improving on Clinical Inferences’ (1970) 73 Psychological Bulletin 422.
\bibitem{125} Dawes (n 2) 579.
\bibitem{126} Ibid 577–8.
\bibitem{127} Ibid 574.
\bibitem{128} Ibid 575.
\bibitem{129} Goldberg (n 124) 422, 423.
\end{thebibliography}
the complicated decision-making process.\textsuperscript{130} ‘Unaided individuals tend to have great difficulty incorporating quantified variables; they tend to ’base their decisions on less information ... than do mathematical models, and apply their decision policies inconsistently’.\textsuperscript{131} Mathematical models recognise the limitations of human information processing and are merely used as additional tools for decision-making and not as a substitute for human beings.\textsuperscript{132} Unlike the option of diminishing the number of considerations in Laundry List rules, the possible use of mathematical models would enable preservation of a relatively high number of considerations in a certain legal rule, while the integration would be accomplished with the assistance of a computerised mathematical model.

A second possible solution is to simply limit the number of factors. According to the psychological studies mentioned above, decision makers have difficulty managing a large number of considerations. The most obvious solution for this problem is to simply reduce the number of factors in legal rules. By limiting the number of factors, judges would be able to weigh the factors in an optimal way: that is, fully taking into account every factor.

However, limiting the number of factors could raise a serious difficulty, since it could be argued that there is a large number of relevant factors that \emph{should} be taken into account by the court. If indeed it were the case that there are more than a few important considerations, simply ignoring some of them seems to be unjust. The court should take into account relevant considerations and not take into account irrelevant considerations. Reducing the number of factors might have the effect of changing the legal question by removing important considerations that a court should be asking itself.

This may be true in a perfect world. But what if judges were not able to take into account all the relevant considerations? Should we still include all the relevant considerations in the legal rule even though we know the rule is impossible to implement? It could be argued that the number of factors should be reduced even with the price of relinquishing some of the relevant considerations, because this way judges at least would consider \emph{some} of the

\textsuperscript{130} In addition, the use of linear models could encourage judges to use a more deliberate attitude instead of relying on their intuition, by requiring them to engage in a methodological decision-making process. According to Guthrie, Rachlinski and Wistrich, ‘[a] judge who must review a script or checklist at each step in the decision-making process is less likely to rely on intuition when doing so is inadvisable’: Guthrie, Rachlinski and Wistrich (n 114) 40.


\textsuperscript{132} Saks and Kidd (n 131) 147–8.
relevant considerations (when the alternative is ignoring the long list of factors altogether and making an intuitive decision).

One of the enemies of simplicity is the wish to achieve perfect justice in an individual case. Simple rules (such as rules with one or two determinate factors) do not meet this aspiration since they are tests that work most of the time but are known to fail some of the time. However, as Epstein explains, ‘the gains from seeking perfection [through complex rules] are an illusion’. Therefore, the comparison between simple rules and complex rules should be conducted in the ‘language of realizable achievement[s]’ and not in the ‘language of aspiration’; and in the ‘language of realizable achievements’, simple rules have an advantage over complex rules. This approach would support reduction of the number of factors in legal rules for the sake of simplicity.

A third solution would be to use ‘chunks’ (factors sorted into groups) to help judges process the large number of considerations. In his well-known paper, George A Miller proposed that the capacity of short-term memory is limited to a ‘magical number’ of seven (plus or minus two) items. This limit is usually expressed in terms of ‘chunks’, namely groups of items that have been collected together and treated as a single unit. For example, the following sequences of single letters may serve as three individual chunks, rather than as nine separate items (these combinations would help people memorise the letters): USA, YYY, BBQ. The limit of the number of chunks a person can process ‘appears to be about 3 or 4 distinct chunks, consistent with many modern studies, but also equivalent to about 7 uncompressed items of typical compressibility, [which is] consistent with Miller’s famous magical number’.

The psychological studies regarding chunking offer another solution for the Laundry List problem other than simply reducing the number of factors. This solution is to arrange the factors in chunks so they will be easier for a human decision maker to process. For example, in the case of the old CPR r 3.9, the following considerations could be expressed in one chunk: r 3.9(h) (‘the effect which the failure to comply had on each party’) and r 3.9(i) (‘the effect which the granting of relief would have on each party’) as they both refer to the effect on the parties. In addition, r 3.9(c) (‘whether the failure to

133 Epstein (n 5) 38.
134 Ibid 38–9.
135 George A Miller, ‘The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information’ (1956) 63 Psychological Review 81.
comply was intentional’), r 3.9(d) (‘whether there is a good explanation for the failure’) and r 3.9(f) (‘whether the failure to comply was caused by the party or his legal representative’) could become one chunk as they all refer to the reason of the failure to comply.

Theoretically, the advantage of the chunking technique is that it could allow judges to ‘have their cake and eat it too’ — expressing a large number of factors in chunks lets them keep all of the considerations with a simpler decision-making mechanism.

Lastly, another similar, helpful solution would be to provide clear guidance on how to implement the long list of factors. For example, improvements could include identifying factors as primary or secondary, suggesting judges apply the rule in several stages, setting a unique threshold (for instance, granting relief from sanctions only when the party was not responsible for the delay), specifying the weight that should be given to each factor, highlighting the most important factor on the list and so on.

VI Conclusion

Complex procedural rules such as Laundry List rules impose a heavy cost on the civil legal process, while the benefit of these rules is questionable. This article has suggested applying cognitive psychological research to the debate regarding Laundry List procedural rules and examined the need to improve the structure of certain legal commands. People, including judges, have difficulty manipulating a large number of factors. This cognitive phenomenon referred to as Factor Overload raises a unique problem in the context of civil procedure. Even though simplicity is not always desirable, legal policymakers should consider not only the substance of procedural rules, but also how human decision makers would implement these rules. In situations of Factor Overload, a long list of factors might disrupt the judicial decision-making process. A detailed account of the possible solutions is beyond the scope of this article. However, the following options could be considered: (a) limiting the number of considerations in legal rules to a maximum of three to four factors; (b) chunking factors into groups so that they are easier for a decision maker to process; and (c) using computerised mathematical models to help judges give the appropriate weight to each factor.