

# Causal processes – a social policy example

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CHES Working Paper No. 2020-01

[Produced as part of the Knowledge for Use (K4U) Research Project]

Durham University

August 2020



The K4U project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 667526 K4U). The above content reflects only the author's view and that the ERC is not responsible for any use that may be made of the information it contains

# Causal processes – a social policy example

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The *Knowledge for Use* (K4U) project at Durham University has recently undertaken research leading to (1) a theory of change (Cartwright, Charlton, et al. forthcoming) and (2) an account of the underlying ontological features (i.e. the mechanism or system) that afford such change (Cartwright, Pemberton & Wieten 2020). This body of work aims to achieve a considerable degree of generality, and therefore embraces a fairly high level of abstraction. The aims of K4U are, though, oriented to the practical application of knowledge. The aim of this note is to help secure the link of this recent research to practical use by setting out a detailed example of how this research might apply in practice.

The example chosen is based on the exemplary recent work of Eileen Munro in child protection policy. At the peak of the ‘audit and accountability’ drive, child protection regulations in England increased the prescription of what child-protection social workers must do in interacting with families and children, what must be recorded and what deadlines must be met. This was intended to increase transparency, consistency and timeliness and thereby to improve outcomes for children and young people (CYP) who might be under threat. The *Munro Review of Child Protection* (Munro 2011) argues that this increased prescription also had harmful effects by initiating negative feedback loops acting in the contrary direction.

These negative causal processes are not self-standing, there is a reason why they obtain. This is equally true for those processes that exert positive influences. There is no general causal principle to the effect that issuing the particular kinds of mandates dictated in the child-protection regulations Munro discusses either improves, or harms, the welfare of children and young people. Each can be true in some settings and not others. Which these are depends on specific features and arrangements that hold in the settings, features that are not usually referred to in descriptions of the processes themselves. Whether positive or negative for the outcomes of interest, the reasons a causal process is possible, or probable, or not in a setting lie in the broader social, economic and cultural structures that obtain in that setting. As Eileen Munro claims, child protection is a systems’ problem. (Munro 2005)

We have developed slides, set out in the appendix, based on the increased prescription of practice impact loops identified by Munro. These slides have two aims. First, we provide a fuller description of the process itself, to supply for it a ‘causal-process-tracing theory of change’ (pToC) of the kind recommended in Cartwright, Charlton et al forthcoming. This description lays out step-by-step how this process unfolds, describes the causal principles under which each step leads to the next and catalogues the support factors necessary for this to happen.<sup>1</sup> Second, we identify features of the underlying system that could afford such a causal process and describe how they do so. We note that what we have done is an armchair activity. We tell one plausible story. A priori, there are other plausible stories that can also do the job. Which story is right for the settings Munro is concerned with depends on the actual facts. Just as it took serious empirical research to arrive at the causal process descriptions in the *Munro Review*, so too it takes serious empirical research to flesh out the process diagrams in the *Review* to a fuller pToC of the kind we offer. The same is true for the structural assumptions. The system features we sketch could give rise to the pToC we offer. But different structures can support the same cause-effect relations. Finding which is right is a matter for empirical investigation.

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<sup>1</sup> A good pToC will also chart possible derailers of the causal process and possible safeguards against these. For ease of illustration, we have omitted derailers and safeguards in our example.

Cartwright, Pemberton and Wieten (CPW) (*Mechanisms, laws and explanation*) suppose that for each causal process that occurs, there must be an underlying mechanism – or, in Munro’s language, a system – that affords it. Such a mechanism comprises a set *P* of parts displaying a specific set *Y* of features in an arrangement *A* which operating together in that arrangement without interference can give rise to that process.

The CPW account makes heavy use of the fact that the arrangement of parts (as in a mechanism) may introduce new features that the parts do not have by themselves. A strong branch, or a shovel, balanced over a rock or a log becomes a lever, whether with its end wedged under a wheel to heave a car out of the mud or functioning as a seesaw. Such features will then be subject to new (causal) principles or laws that were not relevant to them before – a lever obeys the law of the lever wherever it is found. These principles are crucial to what happens; they govern what each step in the causal process will lead to at the next. So identifying clearly these principles is an important step in articulating the causal set-up in a way that facilitates the design and implementation of interventions. In social policy cases like those of concern in the *Munro Review* these principles will often refer to familiar individual or institutional psychological or sociological dispositions, like ‘People respond to incentives’ or institutional inertia – ‘The more people involved, the harder it is to produce change.’<sup>2</sup>

In order to identify these principles, it is helpful, perhaps necessary, to identify the parts salient to the operation of the mechanism/system, their arrangement, and the salient features. Identification of the mechanism/system in this way facilitates identification of the relevant causal principles, the support factors required for them to operate and the features that can derail the production of their effects, and the reverse. The causal principles identified invariably operate *ceteris paribus*. Recognizing the mechanism that grounds the causal principle is a starting point for identifying the *ceteris paribus* conditions relevant to its operation – and these CP conditions may in turn point to support factors and derailleurs and how they affect the chance of the causal process carrying through as envisaged. In general, coming up with an adequate empirically- and theoretically-grounded account will involve a back-and-forth process between the description of the pToC and that of the underlying mechanism/system that affords it.

In the pToC posited for the Munro negative loop represented in the slides we suppose that the following are descriptive of parts of the mechanism-underlying step 1 (see S1):

1. Economic & social system that makes jobs necessary for income and self-respect
2. Regulatory system that permits firing
3. People suitable to become social workers that are available for training and hire

Step 1 supposes that issuing a mandate for the new scheme to social workers results in their following the mandate. We could suppose that the causal principle involved is ‘Issuing mandates to people causes those people to follow them’. This is a weak principle full of exceptions, one we have learned not to rely on heavily in policy contexts. (Think of all those studies in development economics of various ways to ensure that village teachers show up and stay to do the work they are paid for.) But the underlying system that we have sketched calls on a stronger principle with fewer exceptions: ‘People follow mandates if incentives to do so are strong enough to overcome motives to do otherwise’. Notice that this principle employs concepts that don’t appear in the surface-level pToC. They can only be observed to obtain by looking at the broader

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<sup>2</sup> For more about these kinds of principles, see Cartwright, Charlton, et al. forthcoming.

mechanism/system in which the cause is inserted. The new causal principle involves incentivization – but none of 1-3 individually is an incentive. However, 1-3 together in the given context yield an incentive for the social worker to comply with work mandates. The incentive is a feature of the underlying system due to the features and arrangements of its parts – and the causal principle in play relates to this feature.

In other cases, the principles which underwrite the cause-effect relations at a given step may be apparent from the surface description alone without delving into further consideration of the nature of the broader system.<sup>3</sup>

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<sup>3</sup> Nevertheless, on the CPW account, the surface description of the change at the head of the causal arrow as well as of the effect at the end must still be allowed by the underlying system and will often be afforded by it. So those descriptions rely on generally unarticulated assumptions about that system.

## References

Cartwright, N., Charlton, L., Juden, M., Munslow, T., and Williams, R. B. (Forthcoming). *Making predictions of programme success more reliable*. CEDIL. <https://cedilprogramme.org/publications/>

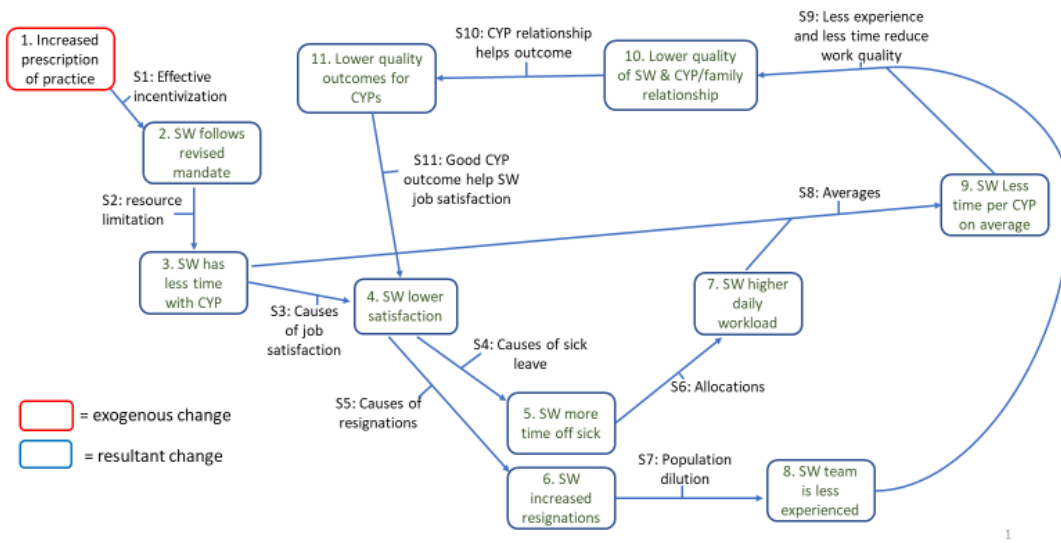
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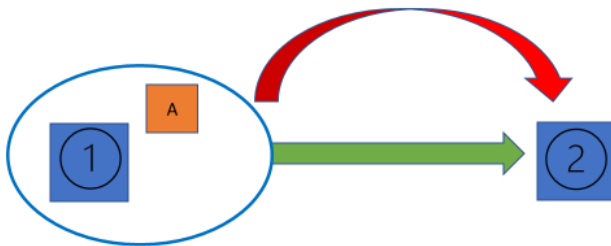
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**Appendix**

**Increased prescription of practice impact loops**



S1: Effective incentivization



Box 1: Mandate for new scheme issued to social workers

Box 2: Social workers follow mandate

**Causal principle:** People follow mandates if incentives to do so are strong enough to overcome motives to do otherwise

Support factors:

A. Weight of incentives favours compliance

## Underlying system parts with their characteristics

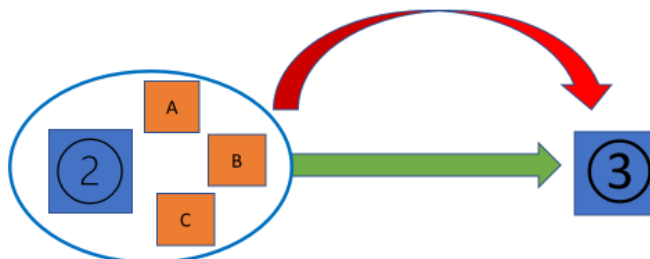
1. Complex system for training and hiring that selects those who care about CYP
2. Economic & social system that makes jobs necessary for income and self respect
3. Regulatory system that permits firing
4. People suitable to become social workers are available for training and hire
5. Child protection and social and economic systems that provide no obvious reasons that the new regulations are significantly harmful to CYP
6. Child protection and social and economic systems that provide no other incentives (e.g. bribes, pay for other jobs – which is often why teachers in poor settings don't show up for work) not to obey the mandate than what are seen as small costs of adjustment

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How the interaction of parts with their prescribed qualities creates the required support factors

- 2 + 3 + 4 → employed social workers face strong incentive to comply
- 1 → Caring about CYP → perceived significant harms to children = strong incentive not to comply
- 5 → perceived significant harm to children absent
- 6 → other big incentives not to comply absent
- 1 – 6 together → **Support factor A**

### S2: Resource limitation



Box 2: Social workers follow mandate

Box 3: Reduced amount of time spent on CYP contact

**Causal principle:** If more of a (roughly) fixed resource is used for one purpose, then less of that resource is available for other purposes

Support factors:

- A. Following mandates involves increased amount of time spent on form-filling
- B. Weekly working hours of social workers are roughly fixed
- C. Time spent on other tasks (i.e. not form-filling or CYP contact) of social workers is roughly fixed

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## Underlying system parts with their characteristics

1. SW mandated to fill in increased number of time consuming forms
2. Social workers weekly hours are fixed contractually
3. Workers tend to work for roughly their contractual hours each week, absent arrangements to the contrary
4. No provision for overtime or increase to contractual hours associated with increased form-filling mandate
5. No change to mandate in respect of tasks other than form-filling
6. Time taken for social worker tasks other than CYP contact is roughly fixed

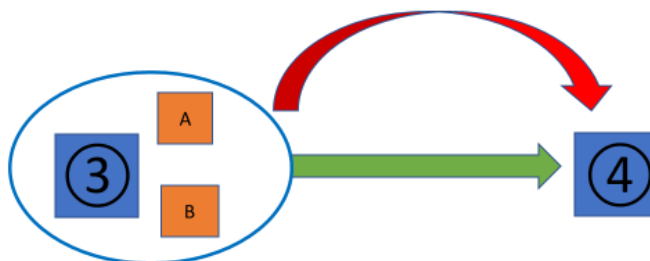
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How the interaction of parts with their prescribed qualities creates the required support factors

- 1 → Support factor A
- 2 + 3 + 4 → Support factor B
- 5 + 6 → Support factor C

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### S3: Exercising expertise and job satisfaction



Box 3: Reduced amount of time spent on CYP contact

Box 4: Reduced job satisfaction

**Causal principle:** Workers typically derive job satisfaction from exercising responsibility and expertise

Support factor:

- A. Social workers do not typically find form-filling to be satisfying
- B. Social workers find CYP contact to offer most job satisfaction

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## Underlying system parts with their characteristics

1. Form-filling offers little opportunity to exercise social workers' expertise or responsibility
2. Social workers see their expertise as developing relationships with CYPs and working with CYPs
3. Social workers typically have considerable scope to exercise their responsibility and expertise when they are spending time with CYPs

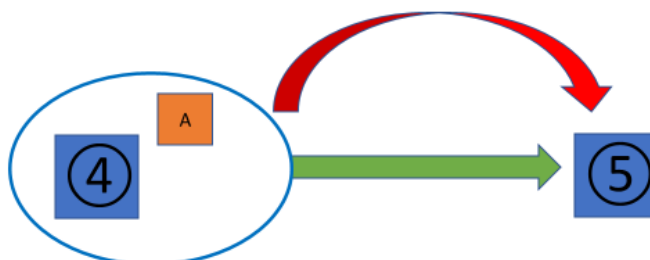
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How the interaction of parts with their prescribed qualities creates the required support factors

- 1 → Support factor A
- 2 + 3 → Support factor B

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### S4: Causes of sick leave



Box 4: Reduced job satisfaction

Box 5: Take more time off sick

**Causal principle:** ceteris paribus, the lower is job satisfaction, the higher is unpenalized sick leave

Support factors:

- A. Social workers can take some sick leave without penalty when they are not sick

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## Underlying system parts with their characteristics

1. Contractual terms allow social workers to take some days off sick without penalty
2. Social workers may take some days off sick without medical evidence

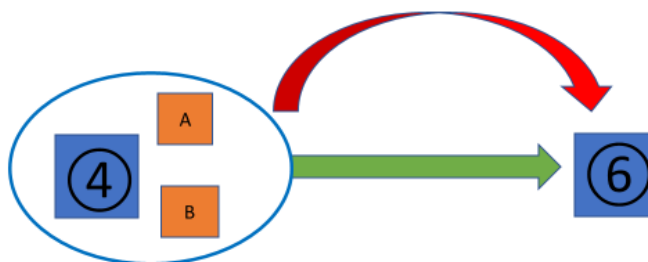
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How the interaction of parts with their prescribed qualities creates the required support factors

• 1 + 2 → Support factor A

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### S5: Causes of resignations



Box 4: Reduced job satisfaction

Box 6: More resignations

**Causal principle:** Workers seek to maximise their (job) satisfaction

Support factors:

- A. Very limited penalties for leaving social worker job
- B. Other jobs available which offer greater satisfaction

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## Underlying system parts with their characteristics

1. Social workers can generally resign without penalties (e.g. no repayment of training costs)
2. Contractual notice period of social workers is only a few weeks
3. There is a buoyant employment market
4. Social workers skills are attractive to other employers
5. Jobs are available which may offer some social workers greater job satisfaction

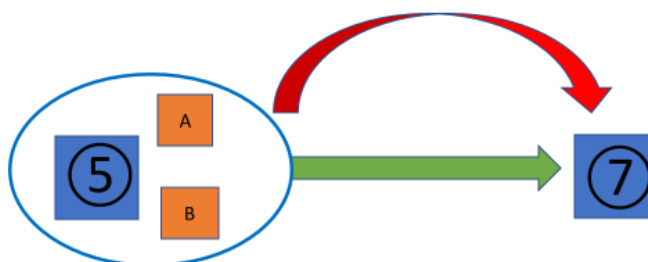
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How the interaction of parts with their prescribed qualities creates the required support factors

- 1 + 2 → Support factor A
- 3 + 4 + 5 → Support factor B

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### S6: Allocations



Box 5: Social workers take more time off sick

Box 7: Social workers have higher daily workload

**Causal principle:** If you allocate a fixed number of things to a reduced number of boxes, each box gets allocated more things on average

Support factors:

- A. Number of cases is fixed
- B. Taking time off sick reduces the number of working days available

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## Underlying system parts with their characteristics

1. The number of CYP cases for the social worker team to deal with is not affected by social workers taking days off sick
2. No change occurs to the number of social workers available to deal with the team's CYP cases as a result of social workers taking time off sick
3. No additional working days (i.e. total of days worked + days off sick) arise when social worker takes a day off sick

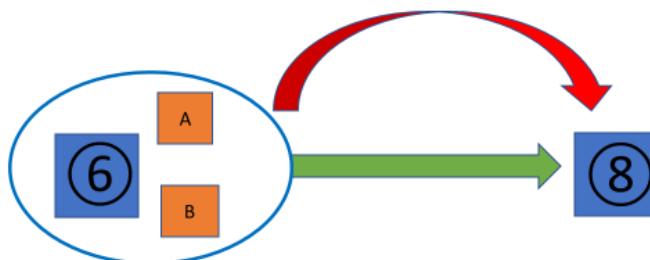
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How the interaction of parts with their prescribed qualities creates the required support factors

- 1 → Support factor A
- 2 + 3 → Support factor B

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### S7: Population dilution



Box 6: Social workers increased resignation

Box 8: Social workers team is less experienced

**Causal principle:** Removing a population member and replacing them with a member with a lower score, reduces the average score of the population

Support factors:

- A. Social workers are replaced when they resign
- B. Potential recruits are less experienced (on average) than existing social workers<sup>50</sup>

## Underlying system parts with their characteristics

1. Guidelines fix the number of social workers that should be employed in each given team
2. Workers gain experience from working in a job over time
3. Potential workers not working in a given job are not gaining experience in that job over time

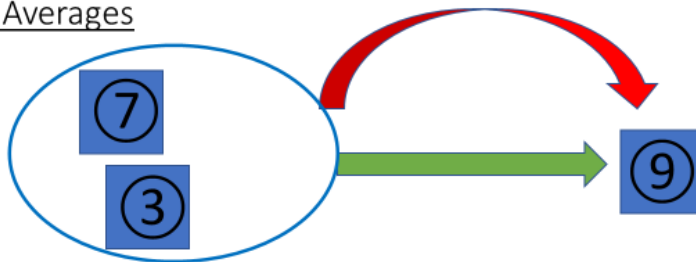
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How the interaction of parts with their prescribed qualities creates the required support factors

- 1 → Support factor A
- 2 + 3 → Support factor B

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### S8: Averages



Box 7: Social workers have higher daily workload

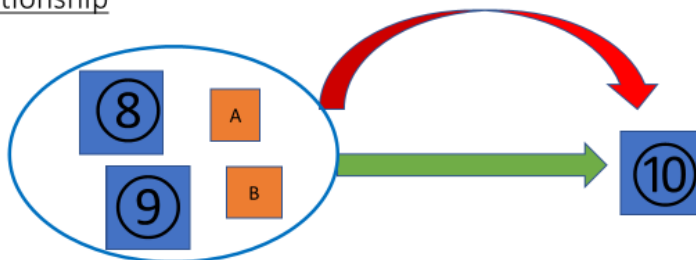
Box 3: Social workers have reduced time with CYP

Box 9: Social workers reduced time per individual CYP on average

**Causal principle:** If you increase the number of tasks and reduce the time available to do them, each task has less time on average

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### S9: Less experience and less time reduces quality of SW / CYP relationship



Box 8: Social worker team is less experienced at their jobs

Box 9: Social workers have less time per individual CYP

Box 10: Lower quality of social worker relationship with CYP

**Causal principle:** The less time one has for a demanding task, and the lower their experience at that task, the less good their performance at that task

Support factors:

- A. Working well with CYP requires experience
- B. Relating to CYP is a time demanding task

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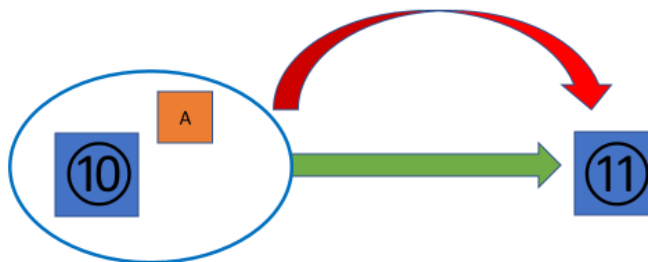
## Underlying system parts with their characteristics

1. People recruited to be social workers do not generally start with an ability to relate to CYPs who are having problems without a lot of practice at it
2. Relating to CYP is typically complex and requires time

How the interaction of parts with their prescribed qualities creates the required support factors

- 1 → Support factor A
- 2 → Support factor B

S10: CYP relationship helps outcome



Box 10: Lower quality of SW relationship with CYP

Box 11: Lower quality of CYP outcome

**Causal principle:** The better the SW relationship with the CYP, the better the CYP outcomes

Support factors:

- A. Whether CYP responds positively to SW, share their problems etc. depends on the quality of their relationship to the SW

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Underlying system parts with their characteristics

1. People, especially CYP, are not naturally inclined to respond positively to those with whom they have not established a good relationship, nor to share problems, etc.
2. Vulnerable people, like CYP in possibly abusive families, are likely to be fearful of others with whom they have no established relationship
3. CYP are often afraid to share information with social workers because they fear their family will get in trouble, etc. This is exacerbated when the CYP have no established relationship with the social worker

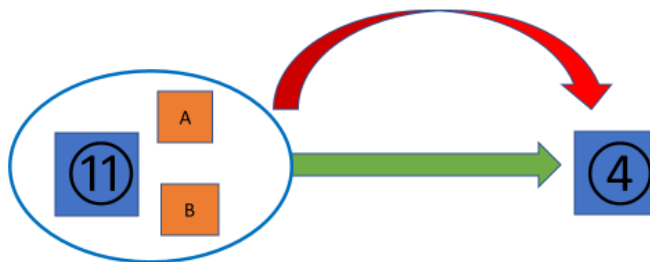
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How the interaction of parts with their prescribed qualities creates the required support factors

- 1 + 2 + 3 → Support factor A



## S11: Good CYP outcomes help SW job satisfaction



Box 11: Lower quality of CYP outcomes

Box 4: Lower SW job satisfaction

**Causal principle:** Workers doing a better job feel more satisfied (and vice versa)

Support factors:

- A. CYP outcomes are social worker's own main measure of success
- B. Blame culture exacerbates dissatisfaction when outcomes poor

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## Underlying system parts with their characteristics

1. Social workers generally regard achieving good CYP outcome as their overriding objective
2. Workers achieving their objective, especially their overriding objectives, tend to feel they are doing a good job
3. When a really bad CYP outcome occurs, e.g. the death of a CYP, the social worker responsible is often criticised by enquiry findings and media
4. The social worker is often blamed by supervisors for poor CYP outcomes – perhaps leading to lower pay awards or less promotion
5. Workers experiencing criticism of their work tend to be less satisfied

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How the interaction of parts with their prescribed qualities creates the required support factors

- 1 + 2 → Support factor A
- 3 + 4 + 5 → Support factor B

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